RECORD OF DECISION
FOR
EPA REVIEW OF

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 6 WATER QUALITY
PART 4 STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS

The revisions to the New Mexico standards are extensive, ranging from simple punctuation, adding terms for clarity to update definitions and phrasing, to more substantive changes such as establishing new provisions, physically relocating and merging others and establishing narrative and numeric criteria. Repetitive and/or non-substantive changes may not be addressed in detail after initial discussion. As seen here, EPA's discussion and action will be italicized to differentiate it from the State's provisions.

20.6.4.6 Objective:
B.

Paragraph B discusses modified to read ...water contaminants resulting from these activities will not be permitted to lower the quality of surface waters of the state below that [~~which is~~] 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. The change maintains the State's prohibition on lowering water quality and provides greater consistency with Clean Water Act (CWA) Section 101(a)(2) goals.

This change reflects the goals established in Section 101(a)(2) of the Clean Water Act.

Action: *EPA approves the modifications to this section.*

20.6.4.7 Definitions:

Changes range from new and modified definitions as well as a substantial re-lettering, retaining alphabetical order. Re-lettering is not considered a significant modification.

B. "**Adjusted gross alpha**" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample, including radium-226, but excluding radon-222 and uranium. Also excluded are source, special nuclear and by-product material as defined by the Atomic Energy Act of 1954.

This new definition of "adjusted" gross alpha is intended to reflect that it is does not include all alpha emissions. The word "adjusted" has also been added to those places in the standards where the term appears.

C. "**Aquatic life**" means any plant or animal life that uses surface water as primary habitat for at least a portion of its life cycle, but does not include avian or mammalian species.

The adoption of a definition of "aquatic life" replaces the term "fishery" in reference to designated uses in subsequent parts of the standards. Incorporating the term "aquatic life" in use subcategories is consistent with the CWA goal and EPA guidance to protect all organisms comprising the aquatic community, not just fish and shellfish.

D. "**Attainable"** means achievable by the imposition of effluent limits required under sections 301(b) and 306 of the Clean Water Act and implementation of cost-effective and reasonable best management practices for nonpoint source control.

This is used in the standards regulation at 40 CFR 131.10(d), and is intended to describe what controls are achievable by the imposition of effluent limits required under sections 301(b) and 306 of the CWA and through implementation of best management practices.

[~~B~~] **E. "Best management practices" or "BMPs"**
(1) For national pollutant discharge elimination system (NPDES) permitting purposes means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution of "waters of the United States." BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage; or
(2) For nonpoint source pollution control purposes means methods, measures or practices selected by an agency to meet its nonpoint source control needs. BMPs include but are not limited to structural and nonstructural controls and operation and maintenance procedures. BMPS can be applied before, during and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters. BMPs for nonpoint source pollution control purposes shall not be mandatory except as required by state or federal law.

The definition previously contained in the standards has been modified to be consistent with language used in EPA's NPDES regulations at 40 CFR §122.2 and with EPA's water quality planning regulations at 40 CFR § 130.2(m).

I. "**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.

The inclusion of this definition is intended to provide consistency with the use of Chemical Abstract Service (CAS) numbers to accurately identify numeric criteria in the standards document.

K. "cfu" means colony forming units.

Defines the abbreviation of "colony forming units" as part fo the State's transition from fecal coliform to EPA's recommended pathogen indicator.

[~~H~~]**M. "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 in [~~this part~~] 20.6.4.101 through 20.6.4.899 NMAC.

This definition has been modified to provide better clarity for this classification of waters. It provides consistency with the use of the term "criteria" elsewhere in the standards. The modification does not alter the meaning of the definition.

[~~I~~]N. "Coldwater [fishery]" 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~~] aquatic life.

By eliminating a reference to a specific type of fishery, this definition is broadened to include any "aquatic life" that may be present in coldwater streams. This change is consistent with the CWA goal and EPA guidance of protecting all organisms comprising the aquatic community, avoiding potential exclusion of other aquatic communities from protection because fish may not be present.

[~~K~~]**P. "Criteria"** are elements of state water quality standards, expressed as constituent concentrations, levels[~~,~~] or narrative statements, representing a quality of water that supports a use. When criteria are met, water quality will [~~generally~~] protect the designated use.

The word "generally" is has been struck to eliminate any subjectivity surrounding the revised definition and insure that criteria protect uses.

Q. "**DDT and derivatives**" means 4,4'-DDT (CAS number 50293), 4,4'-DDE (CAS number 72559) and 4,4'-DDD (CAS number 72548).

CAS numbers have been specified here to be consistent with the use of CAS numbers to accurately identify numeric criteria in the standards document.

[~~M~~]S. **"Designated use [~~or uses~~]"** means [~~those uses~~] a use 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.

The Uniform Statute and Rule Construction Act ("USRCA") Section 12-2A-5 provides that the use of the singular includes the plural. Eliminating the plural form of the word "use" and related wording does not change the meaning of the definition.

[~~N~~]T. **"Dissolved"** means a constituent of a water sample [~~which~~] that 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."

Striking the word "which" and replacing it with the word "that" is not substantive and does not change the meaning of the definition. This modification occurs throughout the standards document, and will not be addressed unless it represents a significant change in meaning of the definition or provision.

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

Replacing the word "may" with "could" is intended to eliminate ambiguity and avoid the implication that the standards convey authority to use water that isn't otherwise authorized.

V. "**Escherichia 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.

As part of the transition from a fecal bacteria indicator, this definition for EPA's recommended bacteria indicator was based on EPA guidance. That guidance recommends the use of the E. coli as more indicative of enteric disease than fecal coliform, providing better human health protection.

[~~P~~]W. **"Ephemeral [~~stream~~]"** when used to describe a surface water of the state means [~~a stream or reach of a stream that flows briefly~~] a water body that flows only in direct response to precipitation or snow melt in the immediate locality; its [~~channel~~] bed is

always above the water table of the adjacent region [~~adjoining the stream and does not support a self-sustaining population of fish~~]. 20.6.4 NMAC 10

The amended definition clarifies that ephemeral streams are considered waters of the State and insures coverage for these waters under the State's standards. Although the last phrase struck from the definition may be indicative of ephemeral waters, it suggests that ephemeral waters cannot support fish at any point and is not a necessary element of this definition.

[~~Q~~]X. **"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.

The federal definition describes existing use as those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards. (See 40 CFR 131.3(e)) The difference between the revised State and federal definition includes the use of the term "existing use" in singular compared to the plural "existing uses," and is not significant. In addition, striking the phrase "they are included in the water quality standards" and replacing it with "it is a designated use," is also related to the singular tense and does not create a functional difference - designated use are contained in a State's water quality standards.

[~~R~~]Y. **"Fecal coliform bacteria"** means the portion of the coliform group [~~which is~~] of bacteria present in the gut or the feces of warm-blooded 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.

The modification clarifies the definition, and is not considered a substantive change.

AA. "**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.

This term definition is intended to clarify what "early life stages" means in reference to the applicability of revised ammonia criteria.

[~~**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 instream flow may be interrupted or eliminated by dams and diversions~~.]

The term "four definitions of streams herein," is no longer used in the standards, making this definition unnecessary.

[~~U~~]**BB. "High quality coldwater [~~fishery~~]"** 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~~] 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~~] aquatic life population. 20.6.4 NMAC 11

This definition has been modified to ensure that in-stream protection is not limited to fish, but extends to all aquatic life that may be present in coldwater habitats.

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

Th modifications to this definition broaden the scope to recognize that lakes, ponds and playas may also can be intermittent and may contain water only in response to spring flow or precipitation.

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

The term "interrupted stream" is no longer used in the standards, making this definition unnecessary.

[~~Z~~] **FF. "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.

The revised definition recognizes that irrigation is a beneficial use, not a particular type of water. It also expands the term to mean other types of plant cultivation other than row crops.

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

This definition describes a new beneficial use where natural water quality conditions may not support a highly diverse aquatic community. As the definition states, this subcategory of use is intended to be applied to waters that are typically only capable of supporting tolerant aquatic species adapted to the conditions described that may be found in many nonperennial waters with naturally poor water quality or habitat characteristics.

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

The modification clarifies that "livestock watering" is a use, and not a type of surface water of the State.

[~~**DD**~~]**JJ. "Marginal coldwater [~~fishery~~]"** in reference to an aquatic life use means [~~a surface water of the state known to support a coldwater fish population during at least some portion of the year, even though~~] that natural intermittent or low flows, or other natural habitat conditions severely limit maintenance of a coldwater aquatic life population or historical data indicate that the maximum temperature in the surface water of the state may exceed [~~20~~]25°C ([~~68~~]77°F).

As described in the discussion of the definition of "aquatic life," the changes here are similar in scope. As before, the modifications are consistent with the CWA goal and EPA guidance of protecting all organisms comprising the aquatic community, not just fish and shellfish. As in previous definitions, the reference to "surface water of the State" has been eliminated because this definition is intended to describe a designated use, not a type of water. The addition of the phrase "or other natural habitat conditions" is significant because it allows consideration of natural physical or biological conditions that may limit use rather than anthropogenic impairments of a water body.

[~~**BB**~~]**KK. "[~~limited~~] Marginal warmwater [~~fishery~~]"** in reference to an aquatic life use means [~~a surface water of the state where~~] natural intermittent or low flow or other natural habitat conditions [~~may~~] severely limit the ability of the [~~reach~~] surface water of the state to sustain a natural [~~fish~~] 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 [~~exceed~~] exceeds 32.2°C (90°F).

The changes here are similar in scope to the previous definition. As before, a reference to "aquatic life" is consistent with the CWA goal and EPA guidance of protecting all organisms comprising the aquatic community. As in previous definitions, the reference to "surface water of the State" has been eliminated because this definition describes a designated use, not a type of water. And as seen previously, the addition of the phrase "or other natural habitat conditions" is significant because it gives consideration to natural physical or biological conditions that may limit use rather than anthropogenic impairments of a water body.

RR. "**Organoleptic**" means the capability to produce a detectable sensory stimulus such as odor or taste.

This provides a definition for the term as it is used in the revised Section 20.6.4.13.D.

SS. "**Playa**" means a shallow closed basin lake typically found in the high plains and deserts.

This provides a definition for the term as it is used in throughout the standards document.

[~~**KK**~~]**TT. "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. 20.6.4 NMAC 15

The revised definition is intended to describe a type of water body that includes perennial lakes, ponds and reservoirs. The revised definition also more accurately reflects the actual language used in the standards.

WW. "**Practicable**" means that which may be done, practiced or accomplished; that which is performable, feasible, possible.

The term "practicable" is often used in a legal context, meaning when something can be performed or done.

[~~**NN**~~]**XX. "Primary contact"** means any recreational or other water use in which there is prolonged and intimate human 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 human 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~~.]

The modifications to this definition provide some clarification by adding the word "human" in reference to contact and expand the definition to include cultural, religious or ceremonial uses by persons other than Native Americans. Repetitive language has been struck.

[~~OO~~]YY. **"Secondary contact"** means any recreational or other water use in which human contact with the water may occur and in which the probability of ingesting appreciable quantities of water is minimal, such as fishing, wading, commercial and recreational boating and any limited seasonal contact.

As with the previous definition, adding the word "human" before "contact" provides clarification as to applicability. The addition of the term "human" is reasonable since humans may use many types of waters, including irrigation ditches, streams and lakes when water is present.

[~~PP~~]ZZ. **"Segment"** means [~~a water quality standards segment, the surface waters of which have common~~] 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, 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.

The modification to this definition indicate where classified segment descriptions are contained in the standards document. The definition retains the descriptive that waters within those segments will likely have the same uses but recognizes that while their characteristics will be similar, there may be some variation.

AAA. "**Specific conductance**" means conductivity adjusted to 25°C.

This definition defines the term as it is used in the standards.

[~~RR~~]CCC. **"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 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 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 [~~§~~] Section 518 of the Clean Water Act. Waste treatment systems, including treatment ponds or lagoons designed and actively used to meet requirements of the Clean Water Act

(other than cooling ponds as defined in 40 CFR Part 423.11(m) [~~which~~] that also meet the criteria of this definition), are not surface waters of the state, unless they were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state.

Through the modification of this definition, New Mexico is expressly describing how it intends to exercise its jurisdiction over waters within its own borders. The intent appears to be to clarify that isolated intrastate waters are protected by the State. This is a reasonable approach since the SWANCC decision did not limit State, but only federal jurisdiction in isolated waters in some instances. The definition also adds an explicit reference to the federal definition of "waters of the United States" to ensure that the State's definition is broad enough to include all waters subject to federal jurisdiction and as defined in 40 CFR 122.2.

The modifications also add the phrase "and actively used" to clarify that an exemption for waste treatment systems does not apply after deactivation of the system to ensure that standards apply to these waters once they are no longer used as treatment systems. The definition also ensures that waste treatment systems created in a surface water of the state or resulting in impoundment of surface waters of the state are not exempt from the State's definition. (Also, please note that the definition of "cooling pond" at 40 CFR 423.11(m) is no longer found in the federal regulation.)

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

The revised definition is intended to more accurately reflect the term used in the standards.

GGG. "**Total PCBs**" means the sum of all homolog, all isomer, all congener or all aroclor analyses.

This is a new definition that is derived from EPA guidance that is intended to accurately define the term as it is used in the standards.

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

The changes to this definition have been made to clarify the type of effects that may be caused by toxic pollutants.

III. "**Tributary**" means a perennial, intermittent or ephemeral waterbody that flows into a larger waterbody, and includes a tributary of a tributary.

This is a new definition, intended to define the term as it is used in the standards.

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

As described for previous designated use definitions, by eliminating a reference to a specific type of fishery, the definition is broadened to include any aquatic life that may be present in a stream. This change is consistent with the CWA goal and EPA guidance of protecting all aquatic organisms in an assemblage, not just fish. This approach avoids potential exclusion of aquatic communities from protection because fish were not present.

[~~**BBB**~~]**OOO. "Wetlands"** means those areas [~~which~~] that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico. [~~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 a surface water of the state are not included in this definition.

The revised definition replaces the phrase "constructed wetlands used for wastewater treatment purposes" to clarify that wetlands constructed outside a water of the State for purposes of wastewater treatment are not considered waters of the State and by extension waters of the U.S.

Action: *EPA approves the modifications to* ***20.6.4.7 DEFINITIONS****.*

20.6.4.8 ANTIDEGRADATION POLICY AND IMPLEMENTATION:

A. Antidegradation Policy

(3) No degradation shall be allowed in high quality waters designated by the commission as outstanding national resource waters (ONRWs). [~~ONRWs may include, but are not limited to, surface waters of the state within national and state monuments, parks, wildlife~~

~~refuges, waters of exceptional recreational or ecological significance, and waters identified under the Wild and Scenic Rivers Act.~~]

~~[**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.]~~

*The description of outstanding national resource waters (ONRW) that has been struck from paragraph **(3)** and has been moved to a new section, **20.6.4 B**. In addition, provisions for nominating ONRWs has been placed in a new Section **20.6.4.9 A**.*

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) 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;

(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, such implementation shall not be mandatory except as provided by federal or state law;

(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~~]20.6.4.15 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.
[20.6.4.8 NMAC - Rp 20 NMAC 6.1.1101, 10-12-00; A, 05-23-05]

*EPA interprets 40 CFR 131.12(a)(2) as requiring States to adopt an antidegradation policy that includes a provision that will assure that all cost effective and reasonable BMPs established under State authority are implemented for nonpoint sources before the State authorizes degradation of high quality waters by point sources (see USEPA, 1994a). Since the Standards Regulation does not require States to establish BMPs for nonpoint sources where BMP requirements do not currently exist, the language added to paragraph **(13)** is consistent with the Regulation.*

*EPA disapproved the portion of Subsection **B. Implementation Plan** referencing (then nonexistent) antidegradation methodology and implementation procedures in the State's Continuing Planning Process (CPP) document on January 23, 2001. On December 14, 2004, the Commission adopted a revised CPP that included the references methodology and implementation. That document was submitted to EPA for review on January 25, 2005. Given the direct reference in this provision to implementation procedures now in the CPP, those procedures are considered to be a WQS requiring EPA approval under the CWA 303(c), (See section **20.6.4.12** for further discussion). Those provisions are currently under review.*

***Action:** EPA approves these modifications to **20.6.4.8 ANTIDEGRADATION POLICY AND IMPLEMENTATION**.*

20.6.4.9 OUTSTANDING NATIONAL RESOURCE WATERS:

A. 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 and evidence based on scientific principles in support of the nomination, including specific reference to one or more the applicable ONRW criteria listed in Subsection B of this section;

(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 a discussion of the economic impact of the designation on the local and regional economy within the state of New Mexico and the benefit to the state; 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. Criteria for ONRWs: A surface water of the state, or a portion of a surface water of the state, may be designated as an ONRW where the commission determines that the designation is beneficial to the state of New Mexico, and:

(1) the water is a significant attribute of a state gold medal trout fishery, national or state park, national or state monument, national or state wildlife refuge or designated wilderness area, or is part of a designated wild river under the federal Wild and Scenic Rivers Act; or

(2) the water has exceptional recreational or ecological significance; or

(3) the existing water quality is equal to or better than the numeric criteria for protection of aquatic life uses, recreational uses and human health uses, and the water has not been significantly modified by human activities in a manner that substantially detracts from its value as a natural resource.

C. Pursuant to a petition filed under Subsection A of this section, the commission may classify a surface water of the state or a portion of a surface water of the state as an ONRW if the criteria set out in Subsection B of this section are met.

D. Waters classified as ONRWs: Rio Santa Barbara, including the West, Middle and East Forks from their headwaters downstream to the boundary of the Pecos Wilderness.

*The procedures for nominating an ONRW have been relocated from section **20.6.4.8 B** to **20.6.4.9 A.** In addition, the provision has been modified. In Section **A. Procedures for nominating an ONRW**, the phrase "if available" has been added regarding water quality data requirements for ONRW nomination. This removes the need for a detailed water quality assessment to support nomination as an ONRW. Similarly, in reference to the economic effect of ONRW designation, replacing the term "analysis" with "discussion," lessens the rigor of the analysis for nomination from the previously held language. Both changes address EPA concerns that the previously held language required what amounted to a formal assessment of water quality and other factors that effectively barred the general public from nominating any waters for ONRW status.*

*The criteria for designating an ONRW that are described in **20.6.4.9 B** generally reflect they types and characteristics of waters that EPA believes should be maintained and protected (see 40 CFR 131.12(a)(3)). Section **20.6.4.9 D** identifies the Rio Santa Barbara as an ONRW based the Rio Santa Barbara's exceptional ecological and recreational significance. EPA commends the State for providing additional protection to the Rio Santa Barbara.*

***Action:** EPA approves the modifications to **20.6.4.9 OUTSTANDING NATIONAL RESOURCE WATERS**.*

[~~20.6.4.9~~]20.6.4.10 REVIEW OF STANDARDS; NEED FOR ADDITIONAL STUDIES:

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

B. It is recognized that, in some cases, numeric [~~standards~~] criteria have been adopted [~~which~~] that reflect use designations rather than existing conditions of surface waters of the state. Narrative [~~standards~~] criteria are required for many constituents because accurate data on background levels are lacking. More intensive water quality monitoring may identify surface waters of the state where existing quality is considerably better than the established [~~standards~~] criteria. When justified by sufficient data and information, the water quality [~~standards~~] criteria will be modified to protect the [~~designated~~] attainable uses [~~which are attainable~~].

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

The modifications to this section provide clarification, but do not change the meaning or intent of the provision.

***Action:** EPA approves the modifications to **20.6.4.10 REVIEW OF STANDARDS, NEED FOR ADDITIONAL STUDIES**.*

[~~20.6.4.10~~] 20.6.4.11 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 nonclassified,~~] to an otherwise ephemeral or intermittent, non-classified 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, enters a classified~~] causes water to enter a surface water of the state with criteria [~~which~~] that are more restrictive than [~~those necessary to protect livestock watering and/or wildlife habitat, the numeric standards established for the classified surface water of the state~~] the criteria listed in 20.6.4.97 or 20.6.4.98 NMAC, the more restrictive criteria 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 or intermittent, non-classified waters 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 20.6.4.97 or 20.6.4.98 NMAC shall apply.

The previously held language for this provision was considered the source for the default livestock and wildlife uses and associated criteria that have historically been applied to non-classified or nonperennial waters of the State. The previously held language provided for the application of more protective uses and criteria when a discharge creates a sustained flow in non-classified or ephemeral water that reaches a confluence with a classified water. It also allowed for a reversion to the default uses if the discharge ends or is diverted.

*EPA has generally agreed with this approach for nonperennial or unclassified perennial waters, but found that the universe of waters that this applied to as being unclear. The modifications to this provision address that issue to some degree. The basic intent of the revised provision is the same, in that it specifies that in instances where a discharge to an otherwise ephemeral, intermittent or non-classified water enters another surface water that has more restrictive criteria, the more protective criteria will apply. The revised provision strikes language referencing to historically assumed default uses, and is intended to conform with Sections **20.6.4.97** and **20.6.4.98**, which establish categories of uses and criteria applicable to ephemeral and intermittent waters (see discussion on those Sections below).*

B. Critical Low Flow: The numeric standards set under Subsection F of [~~20.6.4.12~~] 20.6.4.13 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~~], but narrative criteria in 20.6.4.13 NMAC will continue to apply. The critical low flow of a stream at a particular site shall be:

(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;

$$\text{Harmonic Mean} = \frac{n}{\sum 1/[x]\ Q}$$

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

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 N_0 = number of zero flow values

(2) for all other narrative and numeric criteria, the minimum average four consecutive day flow [~~which~~] that 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.

*Acknowledging that in low-flow situations, criteria are often unattainable, the language added to this provision insures that when those numeric criteria are unattainable, narrative criteria will apply. In paragraph **(1)**, "Q" substituted for "x" in equation for harmonic mean for consistency with formula for a modified harmonic mean. Both terms are also defined.*

C. Guaranteed Minimum Flow: [~~On a case-by-case basis and upon consultation with the interstate stream commission, the~~] The commission may allow the use of a contractually guaranteed minimum stream flow 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.

This is a nonsubstantive change to avoid confusion between the two commissions, the New Mexico Water Quality Control Commission (WQCC or Commission) and the Interstate Stream 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 allow the application of a dilution factor in calculations of effluent limitations. Effluent limitations shall be developed [~~which~~] that 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 set under Subsection F of [~~20.6.4.12~~] 20.6.4.13 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 set under Subsection F of [~~20.6.4.12~~] 20.6.4.13 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, as set out in Paragraph (1) of Subsection [~~J~~]I, Subsection [~~M~~]J, [~~Paragraph (1) of Subsection N, and Paragraph (1) of~~] and Subsection [~~O~~] K 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~~] aquatic life use.

(3) The general [~~standards~~] criteria set out in Subsections A, B, C, D, E, G, H[~~,~~] and J of [~~20.6.4.12~~] 20.6.4.13 NMAC, and the provision set out in Subsection D of [~~20.6.4.13~~] 20.6.4.14 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 set under Subsection F of [~~20.6.4.12~~]20.6.4.13 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC, [~~except Paragraph (1) of Subsection J, acute aquatic life criteria of Subsection M, Paragraph (1) of Subsection N, and Paragraph (1) of Subsection O 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 and allows the migration of aquatic life presently common in surface waters of the state with no effect on their populations.

The modifications here clarify the provision and revise internal references to other provisions contained in the standards document. The provision also deletes references that are no longer necessary and clarifies point of discharge and mixing zone boundary limitations.

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

G. Human health [~~standards~~] criteria in Subsection J of Section 20.6.4.900 NMAC shall apply to those waters with a designated, existing or attainable [~~fishery~~] aquatic life use. 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 for persistent toxic pollutants, as identified in Subsection [~~M~~]J of Section 20.6.4.900 NMAC, shall also apply to all tributaries of waters with a designated, existing or attainable [~~fishery~~] aquatic life use.

The modifications here are intended to conform to internal references elsewhere in the revised standards. As noted in discussions on revised definitions above, eliminating a reference to a "fishery" and using the term "aquatic life" is consistent with the CWA goal and EPA guidance of protecting all organisms comprising the aquatic community, not just fish.

This provision also includes new language indicating that human health criteria will only apply in limited aquatic life streams when adopted on a segment-specific basis, except that human health criteria for persistent toxic pollutants apply to all waters. EPA interprets this to mean that such segment-specific designations would be made in response to discharges to otherwise ephemeral and/or intermittent streams that create an effluent dependent or dominated water where secondary contact is likely and primary contact is possible and where aquatic life may be taken and consumed. EPA considers this to be a reasonable approach to providing adequate water quality to protect human health.

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 and specific criteria have been designated on a segment-specific basis, or when otherwise provided in this part, chronic aquatic life criteria listed in Subsection J of 20.6.4.900 NMAC are applicable to all perennial surface waters of the state, and acute aquatic life criteria listed in Subsection J of 20.6.4.900 NMAC are applicable to all surface waters of the state.

*This new provision states that the New Mexico will apply aquatic life criteria to all waters of the State with some exceptions. EPA interprets this to mean that the State will apply both acute and chronic aquatic life criteria to all surface waters except when the "limited aquatic life" use subcategory has been designated with site-specific criteria or in situations where the standards specifically limit application of chronic criteria such as in mixing zones. (See Sections **20.6.4.97** and **900** for further discussion of the applicable use subclassification and criteria).*

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 division dams except for emergency actions necessary to protect health and safety of the public are not covered by this exception.

[20.6.4.11 NMAC - Rp 20 NMAC 6.1.1103, 10-12-00; A, 10-11-02; Rn, 20.6.4.10 NMAC, 05-23-05; A, 05-23-05]

*This provision was moved from Section **20.6.4.12** of the previously held standards and is not a substantive change.*

***Action:** EPA approves the modifications to **20.6.4.11 APPLICABILITY OF WATER QUALTIY STANDARDS**.*

[~~20.6.4.11~~] 20.6.4.12 COMPLIANCE WITH WATER QUALITY STANDARDS: The following provisions apply to determining compliance for enforcement purposes; they do not apply for purposes of determining attainment of uses. The department has developed assessment protocols for the purpose of determining attainment of uses that are available for review from the department's surface water quality bureau.

This new preamble language is self-explanatory, stating that the provisions within this section are only used to guide enforcement determinations and are not intended to be used for use attainment decisions. The provision also indicates that the State has developed specific assessment protocols for use attainment decisions. Assessment protocols that affect attainment decisions that define, change or establish the level of protection to be applied in those decisions, or affect existing standards implemented under Section 303(c) of the Act are used by EPA to determine the adequacy of the affected standards provision. Such provisions may be considered water quality standards and reviewed as such. The State must ensure that assessment protocols and/or methodologies are consistent with the standards document.

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

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

C. Compliance with water quality standards for total ammonia shall be determined by performing the biomonitoring procedures set out in Subsections D and E of [~~20.6.4.13~~]20.6.4.14 NMAC, or by attainment of applicable ammonia [~~standards~~] criteria set out in Subsections [~~N and O~~] K, L and M of 20.6.4.900 NMAC.

D. Compliance with water quality [~~standards~~] criteria 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 shall not be exceeded.

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

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

G. For compliance with hardness-dependent numeric [~~standards dependent on hardness~~] criteria, 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~~].

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 for 0°C shall apply; for temperatures above 30°C, the total ammonia [~~standards~~] criteria for 30°C shall apply. For pH values below 6.5, the total ammonia [~~standards~~] criteria for 6.5 shall apply; for pH values above 9.0, the total ammonia [~~standards~~] criteria 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 NMAC - Rp 20 NMAC 6.1.1104, 10-12-00; A, 10-11-02; Rn, 20.6.4.11 NMAC, 05-23-05; A, 05-23-05]

*The modifications include the revision of internal references in subsection **C** to conform the section with Section **20.6.4.900**. They also simplify language in subsection **G** related to hardness-dependent criteria and deletes the last phrase in subsection G to ensure that the hardness determination is based on sampling data. Other terminology modifications are similar to those noted previously and are not substantive.*

***Action:** EPA approves the modifications to **20.6.4.12 COMPLIANCE WITH WATER QUALITY STANDARDS**.*

[~~20.6.4.12~~] 20.6.4.13 GENERAL [~~STANDARDS~~] CRITERIA: General [~~standards~~] criteria are established to sustain and protect existing or attainable uses of surface waters of the state. These general [~~standards~~] criteria apply to all surface waters of the state at all times, unless a specified [~~standards~~] criteria 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.~~]

*The deleted language was moved to a preceding section (**20.6.4.11.I**). The re-ordering is not considered a substantive change.*

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.

This provision has been restructured to provide some clarity and more accurately reflect the difference between suspended and settled materials in addition to a prohibition on suspended or settleable solids from anthropogenic sources.

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[~~, or~~].

(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.

The title change and restructuring of this section, including subsection titles are intended to more accurately reflect the meaning of organoleptic effects. It also clarifies natural verses anthropogenic contaminants that affect the taste of fish and taste and odor of water.

F. Toxic Pollutants:

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

(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~~] 20.6.4.11, 20.6.4.12 and [~~20.6.4.13~~] 20.6.4.14 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) using the appropriate formula specified in *methodology for deriving ambient water quality criteria for the protection of human health (2000)*, EPA-822-B-00-004.

(3) Pursuant to this section, the chronic aquatic life standard shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for aquatic life with no chronic standard 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~~] 20.6.4.11, 20.6.4.12 and [~~20.6.4.13~~] 20.6.4.14 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 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 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 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.~~]

*The exemption referred to is for the use of picicides and is discussed in detail in Section **20.6.4.16 F.(1)** below. Specifically, paragraph **F.(6)**, concerning the use of picicides, has been moved to **20.6.4.16**. New language has been added in paragraph **F.(2)**, referencing formulae in EPA's Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (2000), EPA-822-B-00-004.*

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 set forth in the New Mexico Radiation Protection Regulations, [~~20.3.1.400 through 20.3.1.499~~] 20.3.1 and 20.3.4 NMAC[~~ (5-3-95)~~].

*The changes here update regulatory references to the New Mexico Administrative Code, including "General Provisions" and "Standards for Protection Against Radiation" (**20.3.1** and **20.3.4** NMAC, respectively).*

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.~~]

The word "virtually" has been deleted from the phrase "virtually free" to make the provision more specific. In its Statement of Reasons (paragraph 162), dated October 1, 2003, the WQCC explained that the sentence referring to specific pathogens has been deleted because it may impinge the authorities of the New Mexico Department of Agriculture and Department of Health regarding the quality of table crops. EPA believes it is reasonable for the WQCC to ensure that the State's standards don't adversely effect the authority of sister agencies and don't adversely impact the overall structure of interrelated regulations throughout the State.

*Although not directly addressed in this provision, it should be noted that the State has adopted EPA's recommended E. coli bacteria indicator for the protection of human health, transitioning from the previously held fecal coliform indicator. The approach the State has taken in establishing applying EPA's recommended indicator criteria are discussed in detail later in this document under Section **20.6.4.900**.*

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 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.

The phrase specifying temperature limits for some types of aquatic life uses has been deleted. It is not necessary to include here, since individual segments include those limitations.

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 dredging, construction or other similar activities and that cause the criterion to be exceeded may be

authorized provided all practicable turbidity control techniques have been applied and all appropriate permits and approvals have been obtained.

The new language in this provision describes uniform turbidity requirements that are applicable to all surface waters in the State. While protecting all waters from anthropogenic activities that may cause turbidity to exceed background levels, EPA believes that this approach will also prevent streams from inappropriate impairment determinations when the source of the sediment is naturally occurring.

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 set forth in 20.6.4.14 NMAC.

~~**[(1)** 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)** 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)** 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.~~]

*As part of the Commission's restructuring of the standards document, the salinity provisions specific to the Colorado River Basin are now found in Section **20.6.4.54**. The new language in this provision provides a narrative criterion for total dissolved solids (TDS). The language that has been struck did not actually establish TDS criteria, but only indicated that numeric criteria for specific stream segments are identified elsewhere in the standards document and was not necessary.*

***Action:** EPA approves the modifications to **20.6.4.13 GENERAL CRITERIA**.*

[~~20.6.4.13~~] 20.6.4.14 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 methods described in the following references unless otherwise specified by the commission pursuant to a petition to amend these standards:

(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;

(3) *Methods for chemical analysis of water and waste*, and other methods published by EPA office of research and development or office of water;

(4) *techniques of water resource investigations of the U.S. geological survey*;

(5) *annual book of ASTM standards*: volumes 11.01 and 11.02, water (I) and (II), latest edition, ASTM international;

(6) *federal register*, latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations;

(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.

The modifications found here restructure and expand the section to allow additional test procedures to be identified and removes the phrase "or in other references" because it is somewhat vague. The procedures outlined here identify EPA or other accepted standard test methods used by the New Mexico Environment Department (NMED) bureaus.

The State should correct capitalization errors for federal agencies, offices and publications that have been highlighted in the preceding redline text.

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.

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

The phrase "waste discharge" has no regulatory meaning. Further, EPA believes that deleting the word "waste" from the phrase "waste discharge" gives the provision more clarity.

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 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 if adopted by EPA at 40 CFR Part 136, 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~~] aquatic life use.

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 if adopted by EPA at 40 CFR Part 136, 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~~] aquatic life use more than once every three years.

[20.6.4.14 NMAC - Rp 20 NMAC 6.1.1106, 10-12-00; Rn, 20.6.4.13 NMAC, 05-23-05, A, 05-23-05]

*The modifications to both paragraphs **D** and **E** update these provisions, referencing the latest EPA guidance, as well as adding the phrase referring to EPA's latest analysis procedures under 40 CFR Part 136.*

As noted in the preceding section, the State should correct capitalization errors in titles of referenced publications that have been highlighted in the preceding text.

***Action:** EPA approves the modifications to **20.6.4.14 SAMPLING AND ANALYSIS**.*

[~~20.6.4.14~~] 20.6.4.15 USE ATTAINABILITY ANALYSIS:

A. A use attainability analysis is a scientific study [~~which~~] that 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~~].

(1) [~~The department must conduct a use attainability analysis whenever it~~] Any person who proposes to classify, or reclassify to a designated use with less stringent criteria, a surface water of the state with designated uses [~~which~~] that 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.

(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.~~

~~**C.** Any person may submit a petition 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 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 for review and approval. A copy of the petition 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 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.~~

~~**D.**~~**]** 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~~]:

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

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

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

~~**(5)**~~] a physical [~~and biological~~]evaluation of the surface water of the state to be reviewed to identify [~~any~~] factors [~~unrelated to water quality which~~] that 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~~];

[~~(6)~~](5) an evaluation of the water chemistry of the surface water of the state to be reviewed to identify chemical constituents [~~which~~] that impair the designated uses [~~which~~] that 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.

E. Any person may submit notice to the department stating that they intend to conduct a use attainability analysis or equivalent study. The 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 EPA staff for review 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 notice and the work plan must be submitted concurrently to the commission. Upon approval of the work plan by the department, the 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 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.

[**~~G~~**]**F.** [~~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.

[20.6.4.15 NMAC - Rp 20 NMAC 6.1.1107, 10-12-00; Rn, 20.6.4.14 NMAC, 05-23-05; A, 05-23-05; A, 07-17-05]

There are a number of changes to this provision as well as some restructuring that is intended to clarify the State's use attainability analysis (UAA) process. This provision provides a general definition of what a UAA or water body assessment is and their purpose by referencing EPA regulations at 40 CFR 131. The State's revisions provide some clarity on how the State intends "third-party" UAAs or water body assessments to be carried out. The following discussions address the significant modifications:

***Subsection A(1)**:*

*The revision to paragraph **(1)** expands the provision, allowing any individual to propose classification or reclassification of any water of the State by conducting a UAA. Based on the Commission's Statement of Reasons (SoR) (paragraph 178), dated May 13, 2005, EPA believes that the Commission based this broad application on the CWA and EPA regulations, where neither limit the category of persons who may conduct a UAA. See the more detailed discussion on Subsections E and F below.*

***Subection B**:*

This section has been deleted, eliminating a requirement to provide broad public notice of the intent to carry out a UAA or equivalent study. Although the requirement may not have prevented any entity from carrying out a UAA or equivalent study, it created an unnecessary burden, particularly given that there is no similar federal requirement.

*Language previously held in Subsection **D** is now contained in this renumbered subsection, referencing EPA's Technical Support Manual: Water Body Surveys and Assessments for Conducting Use Attainability Analyses, 1983 as guidance for developing a UAA. This subsection also allows use of alternative methodology that must be approved by the NMED.*

***Subsection C**:*

*This subsection has also been deleted. [See related discussion under re-lettered Section **E** below.]*

***Subsection D**:*

*(Re-lettered) Subsection **D** describes the specific information and types of analyses that should be included in a UAA or equivalent study. Subsection **D(3)** has been modified, removing language on the analysis of treatment options, adding language referring to the factors in 40 CFR 131.10(g). In a related change, language referring to technological and economic analyses in Subsection **D(4)** is now redundant, since those factors are included in 40 CFR 131.10(g) and has been deleted. Subsection **D(5)** has also been reworded, focusing on physical factors to avoid duplication with section **D(6)**. Other phrases have been reworded to make them less ambiguous and to remove unnecessary wording.*

***Subsection E** and re-lettered **Section F**:*

*In effect, the new language in re-lettered Subsection **E** and Section **F** replace what was struck from the sections originally lettered as **B** and **C** that were discussed above. This language*

provides a general clarification of the process for the development of workplans for a UAA or equivalent studies, their review and submission.

Although 40 CFR 131.10(j) refers specifically to States carrying out a UAA, EPA has accepted new and revised use designations based on UAA's or assessments developed by "third parties" that were submitted by the State. Since the Regulation is specific to States, there is no regulatory language that requires a third party to consult with any State of federal agency in the development of a workplan for a UAA. However, Chapter 2.9, of the Water Quality Standards Handbook: Second Edition, 1994, notes that a close working relationship between EPA and States (and Tribes) is essential to enable EPA to assist in determining the appropriate analyses to be used in support of any water quality standards revisions. EPA believes that retaining this requirement for review and technical approval of a workplan will be prove beneficial to not only the party proposing a UAA, but to the State and federal agencies involved as well. Working together early in the process to resolve problems with the approach or execution of a UAA will prevent conflicts that can lead to unintended outcomes and wasted resources.

As noted previously, the State should correct capitalization errors in titles of referenced publications that have been highlighted in the preceding text.

Action**: EPA approves the modifications to Section **20.6.4.15 USE ATTAINABILITY ANALYSIS.

20.6.4.16 PLANNED USE OF A PISCICIDE: 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) in a surface water of the state, shall not be a violation of Subsection F of 20.6.4.13 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 piscicide under this section to further a Clean Water Act objective to restore and maintain the physical or biological integrity of surface waters of the state, including restoration of native species.

A. Any person seeking commission approval of the use of a piscicide shall file a written petition concurrently with the commission and the surface water bureau of the department. The petition shall contain, at a minimum, the following information:

(1) petitioner's name and address;

(2) identity of the piscicide and the period of time (not to exceed five years) or number of applications for which approval is requested;

(3) documentation of registration under FIFRA and NMPCA and certification that the petitioner intends to use the piscicide according to the label directions, for its intended function;

(4) target and potential non-target species in the treated waters and 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 piscicide use;

(9) post-treatment assessment monitoring protocol; and

(10) any other information required by the commission.

B. Within thirty days of 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 sent to the petitioner by certified mail.

C. The commission shall review the petition and the department's recommendation and shall within 90 days of receipt of the department's recommendation hold 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.

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

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

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

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

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

(5) "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."

E. 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 and provide notice to the public in the immediate and near downstream vicinity of the application prior to and during the application.

[20.6.4.16 NMAC - Rn, Paragraph (6) of Subsection F of 20.6.4.12 NMAC, 05-23-05; A, 05-23-05]

*This provision consolidates language with that was previously held in **20.6.4.13 General Standards**, paragraph **F.(6)**. The provision is not intended to and does not create a regulatory requirement, but establishes a voluntary process by which a proposed piscicide applicator may obtain "safe harbor" from direct enforcement of the State's toxics criteria. EPA does not currently regard application of piscicides in accordance with FIFRA requirements a matter subject to the regulatory requirements of the CWA because properly used piscicides are not "pollutants" as defined at CWA 502(6). See 70 Fed. Reg. 5093 (February 1, 2005) (proposing to codify previously issued interpretive rule at 40 C.F.R. 122.3). EPA considers this provision to be a process for implementing State law and does not consider it to be a WQS requiring EPA approval under the CWA 303(c); it appears to be a "State only" process not required by the CWA. See Defenders of Wildlife v. U.S. EPA, 415 F.3d 1121 (10th Cir. 2005); American Wildlands v. Browner, 260 F.3d 1192 (10th Cir. 2001).*

Further, EPA believes that this provision is consistent with the CWA objective of restoring and maintaining the biological integrity of the nations waters as the State works to remove non-native species that may adversely effect native/threatened and endangered species in the State.

***Action:** EPA takes no action on this State provision on the basis that it is not a WQS subject to CWA 303(c)(3).*

20.6.4.17 - 20.6.4.49: [RESERVED]

No response is required for this reserved section.

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 NMAC.
[20.6.4.50 NMAC - N, 05-23-05]

In its SoR (paragraph 183), dated May 13, 2005, the WQCC indicated that this section was reserved for future development of basin-specific standards.

***Action:** EPA approves **Section 20.6.4.50**.*

20.6.4.51 - 20.6.4.53: [RESERVED]

No response is required for this reserved section.

20.6.4.54 COLORADO RIVER BASIN - 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 most current "review, water quality standards for salinity, Colorado river system" or equivalent report by the Colorado river salinity control forum.

A. 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.

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.

[20.6.4.54 NMAC - Rn, Paragraphs (1) through (3) of Subsection K of 20.6.4.12 NMAC, 05-23-05; A, 05-23-05]

*This State developed this basin-specific provision to conform to the language used by the Colorado River Basin Salinity Control Forum and its member States. The provision references the "most current" and "equivalent report by the Colorado river salinity control forum" to allow the State to simplify the rulemaking process and allow New Mexico to keep its standards current with the most recent revision of the Water Quality Standards for Salinity, Colorado River System. Section **A** of the provision includes basin-specific standards for the San Juan River.*

***Action:** EPA approves **Section 20.6.4.54**.*

20.6.4.55 - 20.6.4.96: [RESERVED]

No response is required for this reserved section.

New Mexico has taken a significant step in addressing a long-standing EPA concern by creating provisions containing designated uses for unclassified nonperennial and perennial waters in an effort to ensure that all waters are protected in compliance with the CWA. These provisions are individually discussed in detail below.

20.6.4.97 EPHEMERAL WATERS - All ephemeral 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, with the exception of 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 cfu/100 mL, no single sample shall exceed 2507 cfu/100 mL (see Subsection B of 20.6.4.14 NMAC). [20.6.4.97 NMAC - N, 05-23-05]

As noted in the introduction, this new provision addresses a long-standing EPA concern by establishing standards that clearly describe the uses and criteria applicable to unclassified ephemeral surface waters. This provision includes specific default designated uses that apply to all unclassified ephemeral waters in New Mexico, including livestock watering, wildlife habitat, secondary contact and limited aquatic life, as well as use-specific contaminant and pathogen criteria.

In its SoR, dated May 13, 2005, the WQCC expressed the intent to ensure that all unclassified nonperennial waters are protected in compliance with the CWA. The Commission also explains in its SoR, (paragraph 188(a)), that this provision formalizes its presumption that the livestock watering and wildlife habitat uses are default uses for all unclassified nonperennial waters. EPA believes that this recognition that livestock will tend to use any water source when available will ensure water quality benefits throughout the State. In addition, EPA believes that the wildlife habitat use is a reasonable approach to provide protections as required by the CWA.

In designating a limited aquatic life use subcategory for ephemeral waters, the WQCC explained in its SoR (paragraph 188), that:

> *"...the limited aquatic life subcategory "fits" the type of aquatic communities likely to be found in nonperennial waters. Finally, the limited aquatic life subcategory is appropriate because it satisfies the CWA and EPA regulations while avoiding the substantial burden on the state of preparing UAAs to justify not designating another subcategory of the aquatic life use for nonperennial waters."*

EPA supports the concept, but disagrees with the Commission's interpretation that adopting a limited aquatic life use subcategory satisfies the CWA and EPA regulations. Although ephemeral waters may only be capable of supporting a limited aquatic community selectively adapted to the conditions typical of these waters, this limited use does not "serve the purposes of the Act" as defined in CWA sections 101(a)(2) and 303(c). These statutes require water quality standards to provide, wherever attainable, water quality for the protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water - functions commonly referred to as "fishable/swimmable" uses. EPA's current water quality regulation effectively establishes a rebuttable presumption that "fishable/swimmable" uses are attainable and therefore should apply to a water body unless it can be demonstrated that such uses are not attainable. EPA does not expect the State to adopt uses for ephemeral waters that cannot be attained, but in those instances, the State must submit a UAA to support an aquatic life designation that does not meet the CWA §101(a)(2) objective as required by 40 CFR 131.10(j)(1).

With regard to the secondary contact use applicable to ephemeral surface waters, NMED's Proposed Closing Legal Arguments (WQCC Exhibit 65), and the Commission's SoR (paragraph 188(c)) explain the State's logic in adopting a secondary contact recreation use. The following statement concerning the contact recreation use is found in WQCC Exhibit 65:

> *"Regarding the primary contact use, the CWA and EPA regulations require the protection of recreation in and on the water. Although this goal could be met by designating primary contact use and criteria for all surface waters, NMED testified that this was not appropriate for nonperennial waters. EPA recognizes another option: the state can designate secondary contact and establish criteria that protect for primary contact. Primary contact criteria for E. coli bacteria are calculated using the specified formulae based upon an illness rate and the extent of anticipated use. In the case of nonperennial waters, both the likelihood of exposure by ingestion and the frequency of use for recreation are low. According to EPA guidance, an illness rate between eight and fourteen illnesses per thousand exposed persons is approvable. Therefore, NMED proposes criteria that protect primary contact at the rate of 14 illnesses per thousand (assuming infrequent use). The resulting criteria are a monthly geometric mean of 548/100 mL, and a single sample criterion 2507/100 mL. These criteria are adopted because they satisfy EPA's goal of protecting primary contact while taking into consideration the less frequent use of these waters."*

Based on this statement, the WQCC recognizes that the CWA and EPA regulations require protection of primary contact uses, and that this regulatory requirement can be met by designating a secondary use supported by primary use criteria. An important part of this statement is the WQCC's explanation of how it derived what it believed to be primary contact use criteria. Primary contact criteria for E. coli bacteria were calculated using the specified formulae based upon an illness rate of 14 illnesses per one thousand and an assumption of infrequent use. EPA recognizes that New Mexico based its proposed criteria for nonperennial waters on a risk level included in EPA's draft Implementation Guidance for Ambient Water Quality Criteria for Bacteria (EPA-823-B-02-003, May 2002). However, that guidance does not reflect EPA's current thinking. In the proposed Water Quality Standards for Coastal and Great Lakes Recreation Waters (or BEACH Act) rule (69 FR 41719, July 9, 2004), EPA explained why the Agency would not consider criteria based on risk levels above 1% to be protective of the primary contact recreation use, unless a State provided EPA with additional information to show that a scientifically sound relationship exists between risk levels higher than 1% and their corresponding indicator concentrations. (69 FR 41724-41725).

*Although New Mexico initially proposed these criteria before the current guidance was available, the more important issue is that the "primary use criteria" the State has applied to ephemeral waters are not consistent with the primary contact criteria found in the revised section **20.6.4.900 D. Primary Contact**. That provision establishes a geometric mean of 126 cfu/100 mL and a single sample maximum of 410 cfu/100 mL. Since the criteria the State has adopted for ephemeral waters are consistent with **20.6.4.900 E. Secondary Contact**, EPA has*

*interpreted the secondary use designation for this subcategory to be consistent with the secondary contact provision and supporting criteria found in **20.6.4.900 E**.*

Designating a secondary contact use is likely to be appropriate for ephemeral waters. However, following the same logic explained in the discussion of the limited aquatic life use, EPA's current water quality regulation effectively establishes a rebuttable presumption that "fishable/swimmable" uses are attainable unless it can be demonstrated that such uses are not attainable. As noted in that earlier discussion, 40 CFR 131.10(j)(1) requires that a UAA be submitted supporting designated uses for waters that are lower than the goal uses described in CWA Section 101(a)(2).

20.6.4.98 INTERMITTENT WATERS - All 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, aquatic life and secondary contact.

B. Criteria:

(1) The use-specific criteria in 20.6.4.900 NMAC.

(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 20.6.4.14 NMAC).

[20.6.4.98 NMAC - N, 05-23-05]

This provision establishes standards for all unclassified intermittent surface waters of the State. The provision establishes default designated uses of livestock watering, wildlife habitat, aquatic life and secondary contact and use-specific contaminant and pathogen criteria. The significant difference between the standards applicable to unclassified ephemeral waters and to unclassified intermittent waters is the aquatic life designation.

In this provision, the State has used the term "aquatic life" to describe the aquatic life use for intermittent surface waters. In it's SoR, (paragraph 41 and 42), the Commission explains that the term "aquatic life" is intended to replace the term "fishery" in use subcategories to avoid confusion, because using the term had the effect of excluding aquatic communities from protection because fish were not present. The Commission also explains that using the term "aquatic life" in this way addresses the CWA objectives of restoring and maintaining biological integrity and that the goal of protection and propagation requires the consideration of all the organisms comprising the aquatic community, not just the fish and shellfish. Although the term does address CWA objectives by including all organisms that comprise an aquatic community through its use in place of the term "fish," EPA does not believe this term in and of itself defines a subcategory of use. Unlike other use subcategory definitions the State holds, this definition does not describe characteristics such as flow, temperature, habitat or other factors that would be necessary for the support and/or propagation of an aquatic community.

*The application of chronic aquatic life criteria appears to be an important part of the State's approach to provide protection for the many perennial reaches of unclassified intermittent streams where aquatic life tend to have longer-term exposures. The Commission established section **20.6.4.11**, **H. Aquatic Life**, to clarify the circumstances in which the aquatic life criteria are applicable. The provision indicates that chronic criteria are applicable to all surface waters of the state containing an aquatic life community. More important to the discussion here, the definition limits the application of chronic aquatic life criteria listed in **20.6.4.900, Subsection J** to all perennial surface waters, which means that it would not cover nonperennial reaches. (See **20.6.4.11 APPLICABILITY OF WATER QUALITY STANDARDS, H. Aquatic Life**) Although the Commission's approach provides additional protection for the perennial portions of intermittent waters, it is unclear what protections apply to the nonperennial portions of those streams although they may support an important aquatic community that may be important to the overall health of an intermittent system.*

EPA believes that the Commission was looking for a reasonable way to protect aquatic life in highly variable intermittent surface waters where there is typically a shifting demarcation between periodic and perennial flow regimes. However, the use of the term "aquatic life" as a use designation and the lack of chronic criteria for intermittent reaches does not appear to provide adequate protections for aquatic life that may be found in these types of surface waters. As defined, the State's marginal warmwater aquatic life use designation notes that natural intermittent or low flow or other natural habitat conditions, including temperature, may severely limit the ability of the surface water of the state to sustain a natural aquatic life population on a continuous annual basis. Until a specific aquatic life use subcategory is designated for intermittent waters, EPA interprets the use of the term "aquatic life" as it relates to intermittent surface waters to mean that a "marginal warmwater aquatic life" use applies.

EPA agrees that a secondary contact use may be appropriate for unclassified intermittent waters, but the same logic outlined in the previous discussion applies here. EPA must rely on the rebuttable presumption that "fishable/swimmable" uses are attainable and apply to intermittent surface waters unless it can be demonstrated that such uses are not attainable. As discussed for the previous provision, EPA does not expect the State to adopt uses and criteria for intermittent waters that cannot be attained, but in those instances, the State must submit a UAA to support an aquatic life designation that does not meet the CWA §101(a)(2) objective as required by 40 CFR 131.10(j)(1).

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 cfu/100 mL, no single sample shall exceed 2507 cfu/100 mL (see Subsection B of 20.6.4.14 NMAC). [20.6.4.99 NMAC - N, 05-23-05]

This provision establishes standards for all unclassified perennial surface waters of the State. This provision includes specific default designated uses including livestock watering, wildlife habitat, secondary contact, use-specific contaminant, temperature and pathogen criteria, and again uses the term "aquatic life" to describe the designated aquatic life use for unclassified perennial surface waters.

The concerns EPA raised in the discussion for the two previous provision are also issues here, but the focus is somewhat different. Based on the SoR (paragraph 194), the Commission intended this provision to provide a default designated uses for unclassified perennial waters until individual waters can be studied and appropriately classified. EPA believes that these surface waters represent a broad spectrum of perennial waters and some will likely be found to be more appropriately defined as intermittent, supporting less than full aquatic life and contact recreation uses. But many may be found to be capable of supporting a very diverse aquatic community and primary contact recreation.

As discussed in the previous provision, EPA does not believe the term "aquatic life" describes a subcategory of use. As noted in that discussion, this definition does not describe characteristics such as flow, temperature, habitat or other factors that would be necessary for the support and/or propagation of an aquatic community as do other use subcategory definitions held by the State. As defined, the State's warmwater aquatic life use designation notes that water temperature and other characteristics are suitable for the support or propagation or both of warmwater aquatic life. Until a specific aquatic life use subcategory is designated for unclassified perennial surface waters, EPA interprets the use of the term "aquatic life" as it relates to these waters to mean that a "warmwater aquatic life" use applies. In addition, EPA found no basis for a secondary contact use designation for the perennial surface waters that would be covered by this provision. EPA must rely on the rebuttable presumption that "fishable/swimmable" uses are attainable and apply to perennial surface waters unless it can be demonstrated that such uses are not attainable. The State must submit a UAA to support an aquatic life or contact recreation use designation that does not meet the CWA §101(a)(2) objective as required by 40 CFR 131.10(j)(1).

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*EPA believes that New Mexico has taken a significant step in addressing a long-standing EPA concern by creating provisions containing designated uses for unclassified nonperennial and perennial waters in an effort to ensure that all waters are protected in compliance with the CWA. However, based on review of the 2005 Triennial Submission record supplied by New Mexico, EPA did not find adequate supporting documentation to be able to act on the limited aquatic life, "aquatic life" or the secondary contact recreation uses that have been designated for surface waters covered by Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**, or the closely related revisions to a number of classified segments where the State has specified designated use*

*limitations to the perennial reaches and/or tributaries. See discussions for segments **20.6.4.108, 113, 115, 116, 118, 123, 202, 206, 208, 209, 215, 217, 305, 309, 407** and **804**.*

40 CFR 131.6 describes the minimum requirements for a water quality standards submission. Without adequate supporting documentation as required by the regulation, EPA considers aquatic life and contact recreation use provisions described in the preceding paragraph as not actionable under CWA §303(c). Specifically, 40 CFR 131.6(b) and (f) require State submissions to include the methods used and analyses conducted to support water quality standards revisions, and general information which will aid the Agency in determining the adequacy of the scientific basis of the standards which do not include the uses specified in §101(a)(2) of the Act, as well as information on general policies applicable to State standards which may affect their application and implementation.

*To comply with the regulation, New Mexico must submit supporting documentation to demonstrate why surface waters covered by Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**, including nonperennial reaches or tributaries that may have been previously covered by a classified segment, cannot attain §101(a)(2) uses. EPA recommends that New Mexico develop a comprehensive or categorical UAA that demonstrates why these uses are not feasible based on one of the factors listed in 40 CFR 131.10(g).*

EPA recommends that this comprehensive or categorical UAA not only address the §101(a)(2) use issue, but also speak to the differences between ephemeral surface waters from one basin to another. For example, the most logical factor common to nonperennial surface waters is found in 40 CFR 131.10(g)(2) - natural, ephemeral, intermittent, or low-flow conditions or water levels that prevent attainment of the use. Support for this factor may come from historical flow/gauging station data or similar sources to support lack of flow. Although ephemeral streams can be defined as a water body where the bed is always above the water table of the adjacent region and flow only in direct response to precipitation in the immediate locality, there are differences. Ephemeral waters in more alpine and those found semi-arid to arid watersheds have differences in frequency of flow and the aquatic community potential. These differences and how they effect the State's determination should be discussed.

For intermittent surface waters, EPA would expect the approach in the UAA to be similar. Here, the most logical factor is also likely to 40 CFR 131.10(g)(2). However, as defined, intermittent surface waters flow at certain times of the year as the result of springs, snow melt and other forms of precipitation. The influence of sustained spring or other surface flow at various times during the year means that this type of stream would be much more variable in duration of flow and the aquatic community that may be supported, particularly in watersheds encompassing different climates and elevations.

Supporting less than CWA §101(a)(2) uses in unclassified perennial waters will likely be the most difficult of the conditions discussed. Since these surface waters represent a broad spectrum of surface waters, broad assumptions will be difficult to apply. With further study, some of these waters may prove to be more appropriately defined as intermittent, where the most

logical factor to support that designation may be found in 40 CFR 131.10(g)(5) - where physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses. However, others may be found to be capable of supporting full CWA §101(a)(2) uses, which is the default that EPA must assume.

In the interim, EPA will presume that at a minimum, CWA §101(a)(2) uses are attainable for all unclassified ephemeral, intermittent and perennial surface waters in New Mexico, including those nonperennial reaches or tributaries that may have been previously included in revised classified surface water segments, as required by the CWA and standards regulation. Specifically, EPA interprets the use of the term "aquatic life" in reference to intermittent and unclassified perennial surface waters to mean that a "marginal warmwater aquatic life" use is attainable for intermittent surface waters in New Mexico, and that a "warmwater aquatic life" use is attainable for unclassified perennial surface waters in New Mexico.

Action: *EPA approves the majority of the revisions to these Sections, but takes no action on the designation of limited aquatic life, aquatic life and/or secondary contact recreation use designations for Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**, and presumes that CWA §101(a)(2) uses are attainable for all unclassified ephemeral, intermittent and perennial surface waters of the State, until additional supporting documentation is provided to demonstrate that CWA §101(a)(2) uses are not attainable.*

20.6.4.100: [RESERVED]

No response is required for this reserved section.

20.6.4.101 through 20.6.4.806

Establishing new and modifying existing segment descriptions is generally considered to be part of the State's efforts to insure that surface water segments are clearly defined and to ensure that appropriate designated uses and criteria are applied. Most surface water segments contain language changes for compatibility with definitions or other provisions discussed elsewhere, such as renamed aquatic life and contact recreation use designations, and use specific contaminant and pathogen criteria. Where these and other similar changes have been

discussed previously, they will typically not be repeated in the following surface water segment descriptions unless there is a unique issue that warrants additional discussion. Other modifications that have not been discussed elsewhere may only be discussed once, unless the change has a substantive effect on how it the provision is interpreted for a particular regulatory segment.

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

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

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

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.

[20.6.4.101 NMAC - Rp 20 NMAC 6.1.2101, 10-12-00; A, 12-15-01; A, 05-23-05]

This segment description has been modified to include the reach that lies between the International Boundary and Water Commission sampling station above American Dam and the International Boundary.

*In this and succeeding segment descriptions, the State has deleted imperative phrases such as "shall be", "shall not exceed", and "shall be less than" to clarify that criteria represent a statement of the applicable numbers. These changes are intended to make it clear that Section **20.6.4.11** controls the applicability of criteria for compliance and assessment purposes. This discussion will not be repeated for remaining segment descriptions.*

*Modifications to the aquatic life use designation in this and the following segment descriptions reflect changes in terminology used to describe all organisms comprising a particular aquatic community. The specific changes for individual aquatic life use definitions have been discussed previously (see Section **20.6.4.7**). Detailed discussion of aquatic life use designations that have been modified will be limited to instances where the use has been changed. For example, in this segment, the term "marginal warmwater aquatic life" use is equivalent to the previously held term, "limited warmwater fishery," and is not a use change for this segment.*

This segment retains a secondary contact use. Here, as in other classified segments, the State has historically designated a secondary use to discourage use for contact recreation, but retains primary contact criteria. The applicable bacteria criteria in this segment reflect EPA's

*1986 criteria recommendations for primary contact for waters lightly used for full body contact. The criteria applicable to this and subsequent segments will be discussed in more detail in Section **20.6.4.900**, but will not be discussed in this or subsequent segment descriptions unless it is warranted. This approach is consistent with the State's long held position that physical features such as bed substrate and the highly variable flows at different depths in some segments of the Rio Grande and other waters make swimming physically dangerous and thus precludes primary contact use.*

*EPA recognizes that in situations like this, primary contact may not be attainable or appropriate and that States may designate secondary contact, but set bacteriological criteria sufficient to support primary contact based on frequency of use as New Mexico has done here. EPA believes that designating a secondary contact recreational use, with criteria sufficient to support primary contact recreation, is consistent with the CWA section 101(a)(2) goal. Similar determinations are made for segments in Sections **20.6.4.105**, **106** and **110**, below.*

***Action:** EPA approves the revisions to this Section.*

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.

B. [~~Standards~~]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) or less[~~, and turbidity shall not exceed 50 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 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.

[20.6.4.102 NMAC - Rp 20 NMAC 6.1.2102, 10-12-00; A, 05-23-05]

*This segment description has been amended to eliminate the Rio Grande above the Caballo Dam (headwaters of the Caballo Reservoir) and move it into Section **20.6.4.104** (see below). In addition, subparagraph **C**. now contains descriptive remarks concerning the segments dependence on releases from Caballo reservoir for flow during certain times of the year.*

*The segment-specific numeric turbidity criterion in this and subsequent segments have been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The intent is to ensure uniform protection of the State's waters from activities that cause turbidity to exceed background levels, while avoiding an inappropriate impairment determination during periods of naturally high sediment transport. Discussion of segment-specific numeric turbidity criterion will not be repeated in detail for other segments with the revised criterion, since the basis for adoption is the same.*

This segment retains the previously held primary contact recreational use. The applicable criteria reflect EPA's recommended E. coli criteria for waters with a high frequency of full body contact. Other modifications for this segment have been discussed previously.

***Action:** EPA approves the revisions to this 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~~] aquatic life, secondary contact[~~,~~] and warmwater [~~fishery~~] aquatic life.

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

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

[20.6.4.103 NMAC - Rp 20 NMAC 6.1.2103, 10-12-00; A, 05-23-05]

*This segment has been amended, moving the Caballo Reservoir to Section **20.6.4.104**, since the reservoir is actually contained in that portion of the Rio Grande. This segment retains the secondary contact use and incorporates EPA's recommended E. coli criteria for waters with a low likelihood of full body contact.*

*As discussed for the previous segment, subparagraph **C**. now contains descriptive remarks concerning the segment's dependence on releases from Elephant Butte dam for flow*

during certain times of the year. Other modifications for this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

20.6.4.104 RIO GRANDE BASIN - Caballo and Elephant Butte reservoir.

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

B. [~~Standards~~]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) or less[~~, and turbidity shall not exceed 50 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.104 NMAC - Rp 20 NMAC 6.1.2104, 10-12-00; A, 05-23-05]

*The segment-specific numeric turbidity criterion applicable to this segment has been replaced with the narrative criterion discussed for previous segments and in Section **20.6.4.13.J**. The State has adopted EPA's recommended bacteriological criteria to support primary contact recreation with a high frequency of use. Other modifications for this segment have been discussed previously.*

Action: *EPA approves the revisions to this Section.*

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~~] water below the perennial reaches of the Rio Puerco [~~and Jemez river which~~]that enters the main stem of the Rio Grande.

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

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

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

[20.6.4.105 NMAC - Rp 20 NMAC 6.1.2105, 10-12-00; A, 05-23-05]

*The State's revisions to this segment remove the 20-mile reach of the Jemez River that runs above the northern boundary of Jemez Pueblo to the Rio Guadalupe, and adds this reach to Section **20.6.4.107**. Since this northern reach of the Jemez runs contiguous to other reaches in that segment, this configuration is reasonable. In addition, the intermittent flow from the Jemez has been moved to segment **106**. Additional discussion follows in Section **20.6.4.106** and **107**.*

*As discussed previously in Section **20.6.4.101**, the State has retained a secondary contact recreation designation to discourage swimming, but set revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications for this segment have been discussed previously.*

***Action:** EPA approves the revisions to this Section.*

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 water in the Jemez river below the Jemez pueblo boundary that enters the main stem of the Rio Grande.

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

B. [~~Standards~~]Criteria:

(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 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 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

(3) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS [~~shall be less than~~] 1,500 mg/L or less, sulfate [~~shall be less than~~] 500 mg/L or less[~~,~~] and chloride [~~shall be less than~~] 250 mg/L or less.

[20.6.4.106 NMAC - Rp 20 NMAC 6.1.2105.1, 10-12-00; A, 05-23-05]

This segment has been revised to include intermittent reaches of the Jemez River here because this reach physically enters the Rio Grande in segment, fifteen miles from the upstream

*end of Section **20.6.4.105**. This includes only portions of the Jemez River that lie outside of the Jemez Pueblo boundaries.*

*As discussed previously in Section **20.6.4.105**, the State has retained a secondary contact recreation designation to discourage swimming, but set revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications for this segment have been discussed previously.*

***Action:** EPA approves the revisions to this Section.*

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~~] aquatic life, primary contact, irrigation, livestock watering[~~,~~] and wildlife habitat.

B. [~~Standards~~]Criteria:

(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~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.107 NMAC - Rp 20 NMAC 6.1.2105.5, 10-12-00; A, 05-23-05]

*As discussed in Section **20.6.4.105**, the 20-mile reach of the Jemez River that runs above the northern boundary of Jemez Pueblo to the Rio Guadalupe has been added to this segment. Given that this reach is physically 30 miles from Section **20.6.4.105** and runs contiguous to other reaches in this segment, the modification is appropriate. The State has also made another minor change, using the geologic feature of Soda Dam to mark the end of the segment rather than State highway 4. The temperature criteria for the coldwater aquatic life use are 20℃ (68℉) or less. However, the contributions from natural hot springs that enter this segment at Soda Dam, make the site-specific criteria here reasonable.*

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. Other clarifying language has been discussed previously. This segment also retains the previously held primary contact use designations. The State has adopted EPA's recommended bacterial indicator to protect for primary contact based on a light frequency of use.*

***Action:** EPA approves the revisions to this Section.*

20.6.4.108 RIO GRANDE BASIN - [~~The~~] Perennial reaches of the 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 the Guadalupe river and all its tributaries.

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

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 400 µmhos/cm or less, pH [~~shall be~~] within the range of 6.6 to 8.8[,] and temperature [~~shall not exceed~~] 20°C (68°F) or less[~~, and turbidity shall not exceed 25 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.108 NMAC - Rp 20 NMAC 6.1.2106, 10-12-00; A, 05-23-05]

*This segment description has been modified to apply designated uses and use-specific contaminant and pathogen criteria to only the perennial reaches of the Jemez and Guadalupe River watersheds. The original segment description included all tributaries to the Jemez and Guadalupe Rivers with no distinction as to flow regime. The State has also made a minor change in this segment description using a geologic feature. Here, rather than use the State Hwy. 4 to mark the end of the segment, it is now described as extending to Soda Dam. In addition, Sulphur Creek has been removed from this segment and established as a separate segment and is discussed later (see Section **20.6.4.124**).*

*Based on a plain reading of the revised segment description, it's reasonable to assume that the limitation to perennial reaches and tributaries may have excluded some nonperennial reaches, or more likely, tributaries to the Jemez and/or Guadalupe River mainstems that may exist in this segment. EPA believes that it is the State's intent for reaches that may have been excluded from this segment to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. By definition, the State's high quality coldwater aquatic life use only applies to perennial waters and would not apply to nonperennial waters that may have been included in this segment. For any nonperennial surface waters that may have been excluded from this segment, EPA must assume that they are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The State retained the secondary contact designated use, but has adopted EPA's recommended bacteriological criteria to support primary contact recreation based on a high frequency of use. Other clarifying language has been discussed previously.*

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

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~~] aquatic life, domestic water supply, fish culture, irrigation, livestock watering, wildlife habitat[~~,~~] and primary contact.

B. [~~Standards~~]Criteria:

(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) or less[~~,~~] and total phosphorus (as P) [~~shall not exceed~~] 0.1 mg/L[~~, and turbidity shall not exceed 25 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.109 NMAC - Rp 20 NMAC 6.1.2107, 10-12-00; A, 05-23-05]

*The description for this segment has been modified to include perennial reaches downstream from the Santa Fe National Forest boundary (above Cuba), because these perennial reaches were previously either unclassified or included as part of Section **20.6.4.105**. It's reasonable to include them with the adjacent segment and use a hydrologic feature like the Arroyo San Jose as a division point.*

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The segment retains the primary use designation. As previously discussed, the State has adopted EPA's recommended bacteriological criteria to support primary contact recreation based on high frequency of use. Other clarifying language has been discussed previously.*

***Action:** EPA approves the revisions to this Section.*

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~~] aquatic life[~~,~~] and warmwater [~~fishery~~] aquatic life.

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

(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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.110 NMAC - Rp 20 NMAC 6.1.2108, 10-12-00; A, 05-23-05]

*As discussed previously in Section **20.6.4.101**, the State has retained a secondary contact recreation designation to discourage swimming, but set revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications for this segment have been discussed previously.*

Action: *EPA approves the revisions to this Section.*

20.6.4.111 RIO GRANDE BASIN - Perennial reaches of Las Huertas [~~and San Pedro creeks~~]creek.

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

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.111 NMAC - Rp 20 NMAC 6.1.2108.5, 10-12-00; A, 7-25-01; A, 05-23-05]

[**NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.125 NMAC**.]

The Commission's SoR (paragraph 217) explains that Los Placitas Association proposed a designated use change for the perennial reaches of Las Huertas Creek from coldwater to high

*quality coldwater aquatic life. The Commission agreed that the evidence presented indicates that high quality coldwater aquatic life is an existing use in this reach. The revised designation does not include the perennial reaches of San Pedro Creek, requiring San Pedro Creek to be broken out into a separate segment with its current use or coldwater aquatic life and associated criteria (see Section **20.6.4.125**).*

The State has retained a secondary contact recreation designation, but set revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications for this segment have been discussed previously.

***Action:** EPA approves the revisions to this Section.*

20.6.4.112 RIO GRANDE BASIN - Cochiti reservoir.

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

B. [~~Standards~~]Criteria:

(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~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.112 NMAC - Rp 20 NMAC 6.1.2109, 10-12-00; A, 05-23-05]

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The segment retains a primary use designation and the State has adopted EPA's recommended bacteriological criteria to support contact recreation based on a high frequency of use. Other modifications for this segment have been discussed previously.*

***Action:** EPA approves the revisions to this Section.*

20.6.4.113 RIO GRANDE BASIN - The Santa Fe river and perennial reaches of 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~~] aquatic life, secondary contact[~~,~~], and warmwater [~~fishery~~] aquatic life.

B. [~~Standards~~]Criteria:

(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) or less[~~, turbidity shall not exceed 50 NTU,~~] and dissolved oxygen

[~~shall not be less than~~] 4.0 mg/L or more. Dissolved oxygen [~~shall not be less than~~] 5.0 mg/L or more 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 Subsection [~~P~~]N of 20.6.4.900 NMAC. The use-specific numeric [~~standards~~] 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 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 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.113 NMAC - Rp 20 NMAC 6.1.2110, 10-12-00; A, 10-11-02; A, 05-23-05]

This segment description has been modified to limit application of designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of tributaries to the Santa Fe River included in this segment. Both the State's marginal coldwater aquatic life and warmwater aquatic life use apply to this segment.

*Based on a plain reading of the revised segment description, it's reasonable to assume that the limitation to perennial waters in this segment may have excluded some nonperennial tributary reaches of the Santa Fe River that may exist. EPA believes that it is the State's intent that reaches and/or tributaries that may have been excluded from this segment to be covered by standards applicable to ephemeral or intermittent surface waters found in Sections **20.6.4.97** and **98**. As defined, the marginal coldwater aquatic life use recognizes that natural intermittent, low flows may limit maintenance of coldwater aquatic population, but does not exclude the possibility that those uses may be supported and could be appropriate for nonperennial tributaries that may have been excluded from this segment. EPA assumes that the State's marginal coldwater aquatic life use is applicable to all perennial reaches and tributaries and nonperennial reaches and/or tributaries that may have been excluded from this segment unless the State demonstrates that other uses are applicable through a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The State has retained a secondary contact recreation designation and set revised bacteriological criteria sufficient to protect secondary contact based on low frequency of use. Other modifications for this segment have been discussed previously.*

***Action:** EPA approves the revisions to this Section and assumes any nonperennial reaches that may have been excluded from this segment are capable of supporting the State's marginal coldwater aquatic life use until the State demonstrates that other uses are applicable.*

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~~]aquatic life, primary contact[~~,~~]and warmwater [~~fishery~~] aquatic life.

B. [~~Standards~~]Criteria:

(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) or less[~~, and turbidity shall not exceed 50 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

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

[20.6.4.114 NMAC - Rp 20 NMAC 6.1.2111, 10-12-00; A, 05-23-05]

*As discussed in Sections **20.6.4.107** and **108**, the State has also made another minor change in this segment description using a geologic feature. Here, rather than use the Taos Junction bridge to mark the end of the segment, it is now described as extending to the Rio Pueblo de Taos. The confluence of Rio Pueblo de Taos is in close proximity to the bridge (approximately 1/4 mile upstream), making this a minor change.*

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The State has retained a primary contact recreation designation and has adopted EPA's recommended bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other clarifying language has been discussed previously.*

***Action:** EPA approves the revisions to this Section.*

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

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

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 300 µmhos/cm or less, pH [~~shall be~~] within the range of 6.6 to 8.8[~~,~~] and temperature [~~shall not~~

~~exceed~~] 20°C (68°F) or less[~~, and turbidity shall not exceed 10 NTU~~]. The use-specific numeric [~~standards~~] 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 fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.115 NMAC - Rp 20 NMAC 6.1.2112, 10-12-00; A, 05-23-05]

The amended segment description has been modified, extending the limitation of designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of Rio del Oso and El Rito Creek.

*Based on a plain reading of the original segment description and the modifications, the revised segment excludes any nonperennial reaches of Rio del Oso and El Rito Creek that may exist from this segment. EPA believes that it's the State's intent for any nonperennial reaches of Rio del Oso and/or El Rito Creek to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. By definition, the high quality coldwater aquatic life use would not apply to nonperennial waters that may have been included in this segment. EPA must assume that any nonperennial surface waters that may have been excluded from this segment are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The State has retained a secondary contact recreation designation and has adopted EPA's recommended bacteriological criteria sufficient to support primary contact based on a high frequency of use. Other clarifying language has been discussed previously.*

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

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

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

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.116 NMAC - Rp 20 NMAC 6.1.2113, 10-12-00; A, 05-23-05]

The amended segment description has been modified, limiting designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of the Rio Tusas, Rio Ojo Caliente, Abiquiu and El Rito creeks.

*Based on the segment description and modifications, the limitation excludes any nonperennial reaches of Rio Tusas, Rio Ojo Caliente, Abiquiu and El Rito creeks that may exist from coverage under this segment. EPA believes that it's the State's intent for any nonperennial reaches to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. The State's definition of coldwater aquatic life does not specify a flow regime, but depends on water temperature and "other characteristics" for the support or propagation (or both) of coldwater aquatic life. Although not clearly specified, EPA assumes that these "other characteristics" could refer to flow characteristics, which could be interpreted as meaning that this designation may not apply to nonperennial reaches or tributaries. EPA must assume that any nonperennial surface waters that may have been excluded from this segment are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

The State has retained a secondary contact recreation designation and set revised bacteriological criteria sufficient to protect secondary contact based on low frequency of use. Other clarifying language has been discussed previously.

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

20.6.4.117 RIO GRANDE BASIN - Abiquiu reservoir.

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

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.117 NMAC - Rp 20 NMAC 6.1.2114, 10-12-00; A, 05-23-05]

The State has retained a primary contact recreation designation and has adopted EPA's recommended bacteriological criteria sufficient to support contact based on a light frequency of use. Other clarifying language has been discussed previously.

Action: *EPA approves the revisions to this Section.*

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 the Rio Gallina and Rio Puerco de Chama north of state highway 96.

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

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.118 NMAC - Rp 20 NMAC 6.1.2115, 10-12-00; A, 05-23-05]

The amended segment description limits designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of the Rio Gallina and Rio Puerco de Chama.

*Based on a plain reading of the revised segment description and modifications, it's reasonable to assume that the limitation could exclude nonperennial reaches of the Rio Gallina and Rio Puerco de Chama that may exist from this classified segment. EPA believes that it's the State's intent for any nonperennial reaches to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. The State's definition of coldwater aquatic life does not specify a flow regime, but depends on water temperature and*

"other characteristics" for the support or propagation (or both) of coldwater aquatic life. Although not clearly specified, EPA assumes that these "other characteristics" could refer to flow characteristics, which could be interpreted as meaning that this designation may not apply to nonperennial reaches or tributaries. For any nonperennial surface waters that may have been excluded from this segment, EPA must assume that they are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections ***20.6.4.97, 98*** *and* ***99****.*

In addition, the State has also retained a secondary contact recreation designation to discourage swimming, but set revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications for this segment have been discussed previously.

Action: *EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

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~~] aquatic life, irrigation, livestock watering, wildlife habitat[~~,~~] and secondary contact.

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~]specific conductance 500 µmhos/cm or less (1,000 µmhos or less for Coyote creek), pH [~~shall be~~] within the range of 6.6 to 8.8[~~,~~] and temperature [~~shall not exceed~~] 20°C (68°F) or less[~~, and turbidity shall not exceed 25 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.119 NMAC - Rp 20 NMAC 6.1.2116, 10-12-00; A, 05-23-05]

The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section ***20.6.4.13.J****. The segment retains a primary contact recreation designation and contains EPA's recommended bacteriological*

criteria sufficient to support primary contact based on a high frequency of use. Other clarifying language has been discussed previously.

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life.

B. [~~Standards~~]Criteria:

(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) or less[~~, and turbidity shall not exceed 25 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.120 NMAC - Rp 20 NMAC 6.1.2117, 10-12-00; A. 05-23-05]

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The State has retained a primary contact recreation designation and has adopted EPA's recommended bacteriological criteria sufficient to support primary contact based on a high frequency of use. Other clarifying language has been discussed previously.*

Action: *EPA approves the revisions to this Section.*

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~~]aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, secondary contact[~~,~~] and primary contact.

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 300 µmhos/cm or less, pH [~~shall be~~] within the range of 6.6 to 8.8[~~,~~] and temperature [~~shall not exceed~~] 20°C (68°F) or less[~~, and turbidity shall not exceed l0 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).
[20.6.4.121 NMAC - Rp 20 NMAC 6.1.2118, 10-12-00; A. 05-23-05]
[**NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segments are under 20.6.4.126, 20.6.4.127 and 20.6.4.128 NMAC.**]

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The State has retained a primary contact recreation designation and has adopted EPA's recommended bacteriological criteria sufficient to support primary contact based on a high frequency of use. Other clarifying language has been discussed previously.*

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life, fish culture, irrigation, livestock watering, wildlife habitat[~~,~~] and primary contact.

B. [~~Standards~~]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) or less[~~, and turbidity shall not exceed 50 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).
[20.6.4.122 NMAC - Rp 20 NMAC 6.1.2119, 10-12-00; A, 05-23-05]

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The State has retained a primary contact recreation designation and has adopted EPA's recommended bacteriological criteria sufficient to support primary contact based on high frequency of use. Other clarifying language has been discussed previously.*

Action: *EPA approves the revisions to this Section.*

20.6.4.123 RIO GRANDE BASIN - [~~The~~] Perennial reaches of the Red river upstream of the mouth of Placer creek, all perennial reaches of 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~~] aquatic life, irrigation, livestock watering, wildlife habitat[~~,~~] and secondary contact.

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 400 µmhos/cm or less (500 µmhos or less for the Rio Fernando de Taos)[~~,~~] and pH [~~shall be~~] within the range of 6.6 to 8.8, temperature [~~shall not exceed~~] 20°C (68°F) or less[~~, and turbidity shall not exceed 25 NTU~~]. For the Red river in this segment, total phosphorus (as P) less than 0.1 mg/L. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.123 NMAC - Rp 20 NMAC 6.1.2120, 10-12-00; A, 05-23-05]

The amended segment description limits designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of the Red River upstream of Placer Creek and perennial reaches of tributaries to the Red River. The description retains the perennial limitation for all tributaries to the Rio Grande in Taos and Arriba counties.

*The revised description limitation excludes any nonperennial reaches of the Red River that may exist from application of designated uses applicable to this classified segment. EPA believes that it's the State's intent for any nonperennial reaches and/or tributaries to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. The State's the high quality coldwater aquatic life use definition applies to perennial waters, but would not apply to nonperennial waters that may be excluded from this segment. For any nonperennial surface waters that may have been excluded from this segment, EPA must assume that they are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The State has retained a secondary contact recreation designation and has adopted EPA's recommended bacteriological criteria sufficient to support contact based on high frequency of use. Other clarifying language has been discussed previously.*

Action: *EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

20.6.4.124 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 within the range of 2.0 to 9.0 and temperature 30ºC (86ºF) or less. 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 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) The chronic aquatic life criteria of Subsections I and J of 20.6.4.900 NMAC shall also apply.

[20.6.4.124 NMAC - N, 05-23-05]

*The State has broken Sulphur Creek out of Section **20.6.4.108**, establishing a new segment based on this stream's unique characteristics. Use designation(s) for Sulphur Creek, as with many of the smaller headwater streams in the State, were initially made based on very little water quality data. Historically, New Mexico assumed that waters above a certain elevation in a given watershed or drainage would essentially the same water quality and be capable of supporting the same designated uses. As a result, many higher-elevation streams in New Mexico were typically classified as a subcategory of coldwater fishery.*

*Both the aquatic life and contact recreation uses designated for this segment are less protective than were previously applied to Sulphur Creek. (see Section **20.6.4.108**) The State has provided a UAA that indicates that the volcanic geologically in the Jemez Mountains resulted in numerous thermal springs that contribute naturally high pH water to Sulphur Creek. The UAA shows that historical and more recent data indicate that this geological influence results in naturally high pH levels that make it very unlikely that Sulphur Creek could support a support any type of fishery. The biological data shows that the stream can only support a limited aquatic community of tolerant benthic species. Based on the supporting UAA, EPA agrees that the original coldwater fishery designation is not an existing use and that the limited aquatic life, wildlife habitat, livestock watering and secondary contact uses that have been adopted are appropriate.*

Action: *EPA approves this new Section.*

20.6.4.125 RIO GRANDE BASIN - Perennial reaches of San Pedro creek.

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

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 25°C (77°F) or less. 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.125 NMAC - N, 05-23-05]

*This new segment for the perennial reaches of San Pedro Creek was broken out of Rio Grande Section **20.6.4.111**, which previously contained the perennial reaches of both Las Huertas and San Pedro Creeks. As seen in that discussion, Las Huertas Creek has been shown to be capable of supporting a high quality coldwater aquatic life designation. The Commission indicates in its SoR (paragraph 217), that no evidence was presented to indicate that San Pedro Creek is capable of supporting that high quality coldwater use. Since this segment simply breaks San Pedro Creek out from segment **111**, retaining its coldwater aquatic life and secondary contact uses and associated criteria, no supporting documentation is necessary.*

Action: *EPA approves this new Section.*

20.6.4.126 RIO GRANDE BASIN - Perennial portions of Cañon deValle from Los Alamos national laboratory (LANL) stream gage E256 upstream to Burning Ground spring, Sandia canyon from Sigma canyon upstream to LANL NPDES outfall 001, Pajarito canyon from Arroyo de La Delfe upstream into Starmers gulch and Starmers spring and Water canyon from Area-A canyon upstream to State Route 501.

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

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 24°C (75.2°F) or less. 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 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.126 NMAC - N, 05-23-05]

This new segment was established to classify perennial waters within or near Los Alamos National Labs (LANL) property. The State based use designations for these segments on an intensive study by US Fish and Wildlife Service (Lusk and MacRae 2002). The US Fish and Wildlife Service's (Service) study demonstrated the presence of shellfish, which is indicative of a coldwater aquatic community although fish are not present in these segments. The Service's

study documented existing macroinvertebrate communities in all of the streams in this segment with the exception of Water Canyon. The study also indicated that these macroinvertebrate communities generally compare favorably to the coldwater aquatic community in the upper reaches of Los Alamos Canyon, further supporting the coldwater designation.

Although a waterbody may not support a reproducing fishery, it does not mean that it may not be supporting an aquatic life protection function. EPA agrees that an existing cold water aquatic community composed of invertebrates like that found in this stream should be protected whether or not the stream supports a fishery. The coldwater aquatic life designation is consistent with the 101(a)(2) interim goal of the Act, providing for protection of aquatic life uses. See 40 CFR 131.10(k). The State also established default uses of livestock watering and wildlife habitat. The use designations for these segments are consistent with the use in adjacent tributaries of the Rio Grande in Bandelier National Monument.

The basis for designating a secondary contact recreation use is unclear given that the Service's study indicates that there is evidence of pools of sufficient size for primary contact in the Sandia canyon stream. As discussed previously, EPA's current water quality regulation effectively establishes a rebuttable presumption that "fishable/swimmable" uses are attainable unless it can be demonstrated that such uses are not attainable. A secondary contact use does not meet that presumption.

Based on a review of the 2005 Triennial Submission record supplied by the State, the secondary contact use is not adequately supported. 40 CFR 131.6(b) and (f) requires the submission of supporting analyses and other general information that will assist EPA in determining the adequacy of standards that don't include uses specified in Sec. 101(a)(2) of the Act. To comply with the regulation, New Mexico must submit a UAA to demonstrate why attaining the secondary contact recreation uses are not feasible based on one of the factors listed in 40 CFR 131.10(g). The most logical factor is 40 CFR 131.10(g)(2) - natural, ephemeral, intermittent, or low-flow conditions or water levels prevent attainment of the use. Although the Service's intensive study is not a UAA in itself, the State could draw on information in that and other related intensive studies or information to support the secondary contact recreation use designation.

Action: *EPA takes no action on this Section.*

20.6.4.127 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 and primary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.127 NMAC - N, 05-23-05]

As with the previous segment, this new segment was also established to classify perennial waters within or near LANL property. The use designations for this segment were also based on the Service's study of these waters. (Lusk and MacRae 2002). The reaches in this segment have been designated for coldwater aquatic life and primary contact recreation uses. The historical livestock watering and that wildlife habitat have been designated for this segment. The coldwater aquatic life designation and primary contact designations are consistent with the 101(a)(2) interim goals of the Act.

Action: *EPA approves this new Section.*

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

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

B. Criteria:

(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 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) The acute total ammonia criteria set forth in Subsection K of 20.6.4.900 NMAC (salmonids absent) are applicable to this use.

[20.6.4.128 NMAC - N, 05-23-05]

As with the two previous Sections, New Mexico has established this segment, classifying waters within LANL property. The State based use designations for this segment on the same intensive study by the Service (Lusk and MacRae 2002) mentioned in the previous sections. This segment has been designated for limited aquatic life and secondary contact based on likelihood of exposure by ingestion and a light frequency of use, as well as the State's default livestock watering and wildlife habitat uses that have been applied.

*The limited aquatic life and secondary contact uses may be the highest uses that can be attained in this segment. However, as discussed in Section **20.6.4.126**, such designations are not compatible with the uses specified in section 101(a)(2) of the Act and must be supported by a UAA based on one of the factors listed in 40 CFR 131.10(g). Again, the most logical factor is 131.10(g)(2) - natural, ephemeral, intermittent, or low-flow conditions or water levels prevent attainment of the use. The supporting UAA for waters in this segment and Section **20.6.4.126** may be combined.*

Action: *EPA takes no action on this Section.*

20.6.4.129 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 400 µmhos/cm or less, pH within the range of 6.6 to 8.8, total phosphorous (as P) less than 0.1 mg/L and temperature 20°C (68°F) or less. 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.129 NMAC - N, 05-23-05]

*The State has established a new segment for the Rio Hondo in the Rio Grande Basin, breaking this tributary out of Section **20.6.4.123**. The total phosphorus 0.1 mg/L total phosphorus criterion that was re-established for segment **123** is being carried over to this new segment. The coldwater aquatic life designation and secondary contact designations are also being carried over from the original segment designation.*

The secondary contact designation is supported by revised bacteriological criteria sufficient to support primary contact recreation based on a light frequency of use. EPA recognizes that primary contact recreation may not be attainable or appropriate in all waters and that States may designate secondary contact recreation, but set bacteriological criteria sufficient to support primary contact based on frequency of use as New Mexico has done here.

Action: *EPA approves this new Section.*

20.6.4.130 - 20.6.4.200: [RESERVED]

No response is required for this reserved section.

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~~] aquatic life.

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

(3) At all flows above 50 cfs: TDS [~~shall not exceed~~] 20,000 mg/L or less, sulfate [~~shall not exceed~~] 3,000 mg/L[~~,~~] or less and chloride [~~shall not exceed~~] 10,000 mg/L or less. [20.6.4.201 NMAC - Rp 20 NMAC 6.1.2201, 10-12-00; A, 05-23-05]

The secondary contact designation is supported by revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications for this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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 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~~] aquatic life.

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

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

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.

[20.6.4.202 NMAC - Rp 20 NMAC 6.1.2202, 10-12-00; A, 05-23-05]

[**NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.218 NMAC**.]

The State has amended this segment description removing language concerning the potential effect of irrigation. This modification has no bearing on designated uses as they apply to this or other perennial reaches. The amended provision also limits the application of designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of the Black River, Delaware River, and Blue Spring.

*The revised segment description limitation excludes any nonperennial reaches of the Black River, Delaware River, and Blue Spring that may exist from application of designated uses applicable to this segment. EPA believes that it's the State's intent for any nonperennial reaches to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. The State's warmwater aquatic life use definition is not specific as to flow regime, but does note water temperature and "other characteristics" that are necessary for the support or propagation or both of warmwater aquatic life. Although not clearly specified, EPA assumes that these "other characteristics" could refer to flow characteristics, which could be interpreted as meaning that this designation may not apply to nonperennial reaches or tributaries. Since the warmwater aquatic life use designated for this segment is essentially equivalent to CWA §101(a)(2) uses, the State's designated use will continue to be applied to any nonperennial reaches that may have been excluded from this segment. If the State believes that the warmwater aquatic life and primary contact use are not appropriate, the State may address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

The State has retained a secondary contact recreation designation and set revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications for this segment have been discussed previously.

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

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~~] aquatic life.

B. [~~Standards~~]Criteria:

(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) or less[~~, and turbidity shall not exceed 25 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~] NMAC).

[20.6.4.203 NMAC - Rp 20 NMAC 6.1.2203, 10-12-00; A, 05-23-05]

[**NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.219 NMAC**.]

*This segment description has been modified breaking out Tansil Lake. In its SoR (paragraph 264), the Commission explains that placing reservoirs in separate sections is reasonable because the definition of "segment" in Section **20.6.4.7.PP** indicates that the waters within a segment should have similar hydrologic characteristics or flow regimes, and natural physical, chemical and biological characteristics, and exhibit similar reactions to external stresses. Streams and reservoirs do not share many of these characteristics and therefore should not be included in the same segment. EPA agrees with that reasoning. The designated uses and associated criteria have been carried forward from the original segment; see Section **203**, above.*

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The State has retained a primary contact recreation designation and has adopted EPA's recommended bacteriological criteria sufficient to support contact based on high frequency of use. Other clarifying language has been discussed previously.*

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life.

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 548 cfu/100 mL or less, single sample 2880 cfu/100 mL or less (see Subsection B of

[~~20.6.4.13~~]20.6.4.14 NMAC).
[20.6.4.204 NMAC - Rp 20 NMAC 6.1.2204, 10-12-00; A, 05-23-05]

*The basis for separating stream reaches and reservoirs into separate segments was discussed under the previous Section (**20.6.4.203**). This segment retains the secondary contact use and includes revised bacteriological criteria sufficient to protect for secondary contact based on infrequent use.*

***Action:** EPA approves the revisions to this Section.*

20.6.4.205 PECOS RIVER BASIN - Brantley reservoir.

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

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).
[20.6.4.205 NMAC - Rp 20 NMAC 6.1.2205, 10-12-00; A, 05-23-05]

This segment retains a primary use designation and adopted EPA's recommended bacteria criteria to support that use based on a light frequency of use. All other modifications that affect this segment have been discussed previously.

***Action:** EPA approves the revisions to this Section.*

20.6.4.206 PECOS RIVER BASIN - The main stem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, [~~any flow at the mouth of~~] perennial reaches of the Rio Hondo and its tributaries below Bonney canyon and [~~any flow from~~] perennial reaches of 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~~] aquatic life.

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~]

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 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 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

(3) At all flows above 50 cfs: TDS [~~shall not exceed~~] 14,000 mg/L or less, sulfate [~~shall not exceed~~] 3,000 mg/L or less[~~,~~] and chloride [~~shall not exceed~~] 6,000 mg/L or less. [20.6.4.206 NMAC - Rp 20 NMAC 6.1.2206, 10-12-00; A, 05-23-05]

*The State has amended this segment description limiting the application of designated uses to perennial reaches of the Rio Peñasco, the Rio Hondo and its tributaries, and the Rio Felix. EPA believes that it's the State's intent for any nonperennial reaches to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. The State's warmwater aquatic life use definition is not specific as to flow regime, but does note water temperature and "other characteristics" that are necessary for the support or propagation or both of warmwater aquatic life. Although not clearly specified, EPA assumes that these "other characteristics" could refer to flow characteristics, which could be interpreted as meaning that this designation may not apply to nonperennial reaches or tributaries. Since the warmwater aquatic life use designated for this segment is essentially equivalent to CWA §101(a)(2) uses, the State's designated use will continue to be applied to any nonperennial reaches that may have been excluded from this segment. If the State believes that the warmwater aquatic life and primary contact use are not appropriate, the State may address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**. The description also revises the termination of the segment at Bonney Canyon to avoid a possible conflict with Section **20.6.4.208**.*

This segment retains a secondary use designation and adopted EPA's recommended bacteria criteria to support that use based on infrequent use. The State has adopted EPA's recommended bacteria criteria. Other modifications that affect this segment have been discussed previously.

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

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

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

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

[20.6.4.207 NMAC - Rp 20 NMAC 6.1.2207, 10-12-00; A, 05-23-05]

This segment retains a secondary use designation and adopted EPA's recommended bacteria criteria to support secondary contact based on infrequent use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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 Agua Chiquita.

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

B. [~~Standards~~]Criteria:

(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) or less and total phosphorus (as P) [~~shall be~~] less than 0.1 mg/L. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.208 NMAC - Rp 20 NMAC 6.1.2208, 10-12-00; A, 05-23-05]

The State has amended this segment description to the Rio Hondo upstream of Bonney Canyon and limiting designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of Aqua Chaquita.

The revised segment description limitation excludes any nonperennial reaches of the Aqua Chaquita that may exist from application of the coldwater aquatic life use applicable to

*this segment. EPA believes that it's the State's intent for any nonperennial reaches to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. The State's definition of coldwater aquatic life does not specify a flow regime, but depends on water temperature and "other characteristics" for the support or propagation (or both) of coldwater aquatic life. Although not clearly specified, EPA assumes that these "other characteristics" could refer to flow characteristics, which could be interpreted as meaning that this designation may not apply to nonperennial reaches or tributaries. For any nonperennial surface waters that may have been excluded from this segment, EPA must assume that they are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

The State has retained a secondary contact recreation designation and set revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

20.6.4.209 PECOS RIVER BASIN - Perennial reaches of Eagle creek above Alto reservoir, perennial reaches of the Rio Bonito and its tributaries upstream of state highway 48 (near Angus)[~~,~~] and perennial reaches of 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~~] aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply[~~,~~] and secondary contact.

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 600 µmhos/cm or less in Eagle creek, 1,100 µmhos or less in Bonito creek, and 1,500 µmhos or less in the Rio Ruidoso, pH [~~shall be~~]within the range of 6.6 to 8.8, total phosphorus (as P) less than 0.1 mg/L and temperature [~~shall not exceed~~] 20°C (68°F) or less[~~, and turbidity shall not exceed 10 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.209 NMAC - Rp 20 NMAC 6.1.2209, 10-12-00; A, 05-23-05]

The State has amended this segment description limiting the application of designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of Eagle Creek above Alto reservoir, the Rio Bonito and its tributaries upstream of State Hwy, 48, and the Rio Ruidoso and its tributaries upstream of U.S. Hwy. 70 bridge.

*Based on a plain reading of the segment description and the modifications, it's reasonable to assume that the limitation could exclude nonperennial reaches, and more likely, tributaries to the Rio Bonito and/or Rio Ruidoso that may exist from this segment. EPA believes that it is the State's intent for reaches and/or tributaries that may have been excluded from this segment to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. By definition, the high quality coldwater aquatic life use applies to perennial waters and would not apply to nonperennial waters included in this segment. For any nonperennial surface waters that may have been excluded from this segment, EPA must assume that they are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The secondary contact recreation designation is supported by revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. In addition, the phosphorous criteria that were inadvertently removed in the State's 1998 revision has been restored. Other modifications have been discussed previously.*

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

20.6.4.210 PECOS RIVER BASIN - Sumner reservoir.

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

B. [~~Standards~~]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) or less[~~, and turbidity shall not exceed 25 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.210 NMAC - Rp 20 NMAC 6.1.2210, 10-12-00; A, 05-23-05]

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The primary contact recreation designation is supported by revised bacteriological criteria sufficient to support the use based on a high frequency of use. Other modifications have been discussed previously.*

Action: *EPA approves the revisions to this Section.*

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

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

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

[20.6.4.211 NMAC - Rp 20 NMAC 6.1.2211, 10-12-00; A, 05-23-05]

The amended segment description uses Tecolote Creek as a break point rather than "Anton Chico," because it serves as a more distinct geographical feature. The State has retained a secondary contact recreation designation and set revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life, livestock watering, wildlife habitat[~~,~~] and primary contact.

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).
[20.6.4.212 NMAC - Rp 20 NMAC 6.1.2211.1, 10-12-00; A, 05-23-05]

The State has retained a primary contact recreation designation and set revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. The modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

20.6.4.213 PECOS RIVER BASIN - McAllister lake.

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

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).
[20.6.4.213 NMAC - Rp 20 NMAC 6.1.2211.3, 10-12-00; A, 05-23-05]

The State has retained a secondary contact recreation designation and set revised bacteriological criteria sufficient to support secondary contact based on infrequent use. This segment retains the secondary contact use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

20.6.4.214 PECOS RIVER BASIN - Storrie lake.

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

B. [~~Standards~~]Criteria:

(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) or less[~~, and turbidity shall not exceed 25 NTU~~]. The

use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.214 NMAC - Rp 20 NMAC 6.1.2211.5, 10-12-00; A, 05-23-05]

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The State has retained a primary contact recreation designation and set revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. Other modifications that affect this segment have been discussed previously.*

Action: *EPA approves the revisions to this Section.*

20.6.4.215 PECOS RIVER BASIN - [~~The~~] Perennial reaches of the 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~~] aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply[~~,~~] and secondary contact.

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 300 µmhos/cm or less except [~~conductivity shall not exceed~~] specific conductance 450 µmhos/cm or less 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) or less[~~, and turbidity shall not exceed 10 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.215 NMAC - Rp 20 NMAC 6.1.2212, 10-12-00; A, 05-23-05]

The State has amended this segment description limiting the application of designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of the Gallinas River and its tributaries above the diversion for the Las Vegas municipal reservoir.

Based on a plain reading of the segment description and modifications, it's reasonable to assume that the limitation could exclude nonperennial reaches to the Gallinas River that may exist from this classified segment. As discussed previously, EPA believes that it is the State's

*intent for reaches and/or tributaries that may have been excluded from this segment to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. The State's high quality coldwater aquatic life use would not apply to nonperennial waters that may have been included in this segment. For any nonperennial surface waters that may have been excluded from this segment, EPA must assume that they are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The State has retained a secondary contact recreation designation and set revised bacteriological criteria sufficient to support primary contact based on high frequency of use. Other modifications that affect this segment have been discussed previously.*

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

20.6.4.216 PECOS RIVER BASIN - 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 Mazanita[~~, 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~~] aquatic life[~~,~~] and [~~secondary~~]primary contact.

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less, single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

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

[20.6.4.216 NMAC - Rp 20 NMAC 6.1.2213, 10-12-00; A, 05-23-05]

[**NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segments are under 20.6.4.220 and 20.6.4.221 NMAC**.]

*As discussed in Section **20.6.4.211**, this amended segment description uses Tecolote Creek as a break point rather than "Anton Chico," because it serves as a more distinct geographical feature. In a similar modification, changing the boundary from the "Pecos National Historical Park" to" Cañon de Manzanita" relies on a hydrologic rather than a cultural feature. This is reasonable because the park boundary doesn't appear on many maps, while the nearest downstream tributary is Cañon de Manzanita. In addition, the Gallinas River, from its mouth to the Las Vegas diversion has been broken out into a new segment and is discussed below. (See Section **20.6.4.220**, below)*

The State has retained a primary contact recreation designation and adopted revised bacteriological criteria sufficient to support primary contact based on light frequency of use. Other modifications have been discussed previously.

***Action:** EPA approves the revisions to this Section.*

20.6.4.217 PECOS RIVER BASIN - Perennial reaches of Cow creek and all perennial reaches of its 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 all tributaries thereto.

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

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 300 µmhos/cm or less, pH [~~shall be~~] within the range of 6.6 to 8.8[,] and temperature [~~shall not exceed~~] 20°C (68°F) or less[~~, and turbidity shall not exceed 10 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.217 NMAC - Rp 20 NMAC 6.1.2214, 10-12-00; A, 05-23-05]

The State has amended this segment description limiting the application of designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of Cow Creek and all perennial reaches of its tributaries. As discussed in the previous segment, the boundary for the Pecos River has been changed from the "Pecos National Historical Park" to" Cañon de Manzanita" to rely on a hydrologic rather than a cultural feature. The segment description also limits application to all perennial tributaries of the Pecos.

Based on a plain reading of the segment description and the modifications, it's reasonable to assume that the limitation could exclude nonperennial reaches of Cow Creek, and

*more likely, tributaries to the Pecos River from this segment. EPA believes that it is the State's intent for reaches and/or tributaries that may have been excluded from this segment to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. As discussed previously, by definition, the high quality coldwater aquatic life use applies to perennial waters and would not apply to nonperennial waters that are no longer be included in this segment. For any nonperennial surface waters that may have been excluded from this segment, EPA must assume that they are capable of supporting "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

The segment retains a secondary contact recreation designation and set revised bacteriological criteria sufficient to support primary contact based on high frequency of use. Other modifications that affect this segment have been discussed previously.

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

20.6.4.218 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 within the range of 6.6 to 9.0 and temperature 34°C (93.2°F) or less. 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.218 NMAC - N, 05-23-05]

*This new segment has been established for Tansil Lake and Lake Carlsbad, breaking these lakes out from Section **20.6.4.203**. As discussed there, placing reservoirs in separate segments is reasonable given the State's definition of "segment" (see Section **20.6.4.7.PP**) The significant differences in hydrologic and other characteristics between flowing streams and reserviors make this new segment appropriate. The designated uses and associated criteria have been carried forward from the original segment.*

***Action:** EPA approves the new Section.*

20.6.4.219 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 within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. 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 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.219 NMAC - N, 05-23-05]

*As discussed for the previous segment, breaking out Avalon reservoir into a new segment is consistent with other aspects of the State's standards and is a reasonable approach to protecting reservoirs. The designated uses and associated criteria have been carried forward from the original segment above. (See revised segment **204**)*

Action: *EPA approves the new Section.*

20.6.4.220 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 within the range of 6.6 to 9.0 and temperature 30°C (86°F) or less. 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 20.6.4.14 NMAC)

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 410 cfu/100 mL or less.

[20.6.4.220 NMAC - N, 05-23-05]

*This new segment includes the perennial reaches of the Gallinas from its mouth to the Las Vegas diversion and its tributaries, which have been broken out from Section **20.6.4.116**. The marginal coldwater aquatic life designation has been carried over from the original segment, and a primary contact use has been designated and EPA's revised bacteriological criteria have been adopted based on light frequency of use.*

As explained in the Commission's SoR (paragraph 270), the chemical quality of water in the lower reaches of the Gallinas River is attributable to the hot springs found above the Village of Pecos and from the Pecos Arroyo. The SoR (paragraph 271) indicates that the chloride, sulfate and TDS criteria that apply to the lower Gallinas were derived from data developed for

*the main stem of the Pecos River, and are not appropriate for this reach of the Gallinas River. By removing criteria for TDS, chloride, and sulfate that previously applied to the original segment (see Section **20.6.4.216**), in effect, less protective criteria now apply to the Gallinas River. The important issue from EPA's perspective is which uses and criteria previously applied to this reach of the Gallinas River, and how effectively less protective criteria will serve to protect uses. 40 CFR 131.10(j)(2) requires that a use attainability analysis as described in Sec. 131.3(g) be developed when a State wishes to remove a designated use that is specified in section 101(a)(2) of the Act or to adopt subcategories of uses specified in section 101(a)(2) of the Act which require less stringent criteria.*

*The 2005 Triennial Submission record supplied by New Mexico, includes NMED Exhibit 44, Evaluation of Site-specific Criteria for the Gallinas River Below the Las Vegas Municipal Diversion (Hopkins, 2003). The document explains that as the Gallinas enters the Las Vegas plain, characterized by the saline vermejo soil group, salts are directly contributed by these soils, or indirectly via the Pecos Arroyo, significantly elevate natural chloride, sulfate and TDS concentrations. This information appears to have been drawn from the Soil Survey of San Miguel County Area, New Mexico, USDA Soil Conservation Service and Forest Service, (1981). Although NMED Exhibit 44 did not specifically address how deleting chloride, sulfate and TDS criteria may impact aquatic life in this segment of the Gallinas, EPA does not believe that such a discussion is necessary in this instance, since the new segment retains the marginal coldwater aquatic life designation and associated criteria that applied under Section **20.6.4.216**, as well as the designating a primary contact recreation use.*

***Action:** EPA approves this Section.*

20.6.4.221 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 within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. 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 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.221 NMAC - N, 05-23-05]

*This new segment for the Pecos Arroyo has been broken out as a unique segment from Section **20.6.4.216** because of naturally high salinity. Although related to Section **20.6.4.220**, there is a significant difference. In breaking out the Pecos Arroyo, not only are the chloride, sulfate and TDS criteria no longer applicable, but the marginal coldwater aquatic life use has also been downgraded to warmwater aquatic life. Although EPA could accept the NMED Exhibit 44 in support of changes to segment **220**, that document does not provide adequate*

support/documentation for the lower use designation in this segment as required by 40 CFR 131.6(b).

40 CFR 131.10(j)(2) requires that a use attainability analysis as described in section 131.3(g) be developed when a State wishes to remove a designated use that is specified in section 101(a)(2) of the Act or to adopt subcategories of uses specified in section 101(a)(2) of the Act which require less stringent criteria. New Mexico must submit a UAA to demonstrate why attaining the marginal coldwater aquatic life and primary contact recreation uses consistent with CWA Section 101(a)(2) are not feasible based on one of the factors listed in 40 CFR 131.10(g). The most logical factor is 40 CFR 131.10(g)(1) - where naturally occurring pollutant concentrations prevent the attainment of the use.

Action: *EPA takes no action on this Section.*

20.6.4.222 - 20.6.4.300: [RESERVED]

No response is required for this reserved section.

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 enters the main stem from Revuelto creek.

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

B. [~~Standards~~]Criteria:

(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) or less[~~,~~] and TDS [~~shall not exceed~~] 6,500 mg/L or less at flows above 25 cfs. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.301 NMAC - Rp 20 NMAC 6.1.2301, 10-12-00; A, 05-23-05]

The segment retains a secondary contact recreation designation and revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life.

B. [~~Standards~~]Criteria:

(1) At any sampling site: pH [~~shall be~~] within the range of 6.6 to 9.0[~~, turbidity shall not exceed 25 NTU~~] and temperature [~~shall not exceed~~] 32.2°C (90°F) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.302 NMAC - Rp 20 NMAC 6.1.2302, 10-12-00; A, 05-23-05]

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The segment retains a primary contact recreation designation and revised bacteriological criteria sufficient to support this designation based on a high frequency of use. Other modifications that affect this segment have been discussed previously.*

Action: *EPA approves the revisions to this Section.*

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~~] and Ute creeks and their perennial tributaries.

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

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.303 NMAC - Rp 20 NMAC 6.1.2303, 10-12-00; A, 05-23-05]

The modifications to the segment description appear intended to clarify that more than one Ute Creeks is included in this segment. The segment retains a secondary contact recreation designation and sets revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves this Section.*

20.6.4.304 CANADIAN RIVER BASIN - Conchas reservoir.

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

B. [~~Standards~~]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) or less [~~, and turbidity shall not exceed 25 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.304 NMAC - Rp 20 NMAC 6.1.2304, 10-12-00; A, 05-23-05]

*The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. The segment retains a primary contact recreation designation and specifies revised bacteriological criteria sufficient to support this designation based on a high frequency of use. Other modifications that affect this segment have been discussed previously.*

Action: *EPA approves the revisions to this Section.*

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 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 Uña de Gato creeks.

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

B. [~~Standards~~]Criteria:

(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) or less[~~,~~] and TDS [~~shall not exceed~~] 3,500 mg/L or less at flows above 10 cfs. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.305 NMAC - Rp 20 NMAC 6.1.2305, 10-12-00; A, 05-23-05]

The State has amended this segment description breaks the Vermejo River at Rail canyon into upper and lower reaches, with the downstream reach being retained in this segment. A

*discussion of the reach above Rail canyon can be found in Section **20.6.4.309**. The segment description has also been amended limiting the application of designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of the Conchas River.*

*Based on a plain reading of the segment description and the modifications, it's reasonable to assume that the limitation excludes nonperennial reaches of the Conchas River that may exist from this segment. EPA believes that it's the State's intent for any nonperennial reaches that may have been excluded from this classified segment to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. For any nonperennial surface waters that may have been excluded from this segment, EPA must assume that they are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

The segment retains a secondary contact recreation designation and sets revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

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~~] aquatic life, livestock watering, wildlife habitat[~~,~~] and secondary contact.

B. [~~Standards~~]Criteria:

(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) or less[~~,~~] and TDS [~~shall not exceed~~] 3,500 mg/L or less at flows above 10 cfs. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.306 NMAC - Rp 20 NMAC 6.1.2305.1, 10-12-00; A, 7-19-01; A, 05-23-05]

The segment retains a secondary contact recreation designation and sets revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life, warmwater [~~fishery~~] aquatic life, secondary contact, irrigation, livestock watering[~~,~~] and wildlife habitat.

B. [~~Standards~~]Criteria:

(1) [~~At any sampling site~~]In any single sample: temperature [~~shall not exceed~~] 25°C (77°F)[~~,~~] or less and pH [~~shall be~~] within the range of 6.6 to 9.0. The use-specific numeric [~~standards~~]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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.307 NMAC - Rp 20 NMAC 6.1.2305.3, 10-12-00; A, 05-23-05]

The State has changed the phrase "at any sampling site" to "in any single sample" to be consistent with the language in other stream segments. The segment retains a secondary contact recreation designation and sets revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

20.6.4.308 CANADIAN RIVER BASIN - Charette lakes.

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

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).
[20.6.4.308 NMAC - Rp 20 NMAC 6.1.2305.5, 10-12-00; A, 05-23-05]

The segment retains a secondary contact use designation and incorporates EPA's recommended criteria to support the use based on a low frequency of use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

20.6.4.309 CANADIAN RIVER BASIN - The Mora river and perennial reaches of its tributaries upstream from the state highway 434 bridge in Mora, all perennial reaches of tributaries to the Mora river upstream from the USGS gaging station at La Cueva, perennial reaches of Coyote creek and its tributaries, the Cimarron river and its perennial tributaries above state highway 21 in Cimarron, all perennial reaches of tributaries to the Cimarron river north and northwest of highway 64, perennial reaches of Rayado creek and its tributaries above Miami lake diversion, Ocate creek and perennial reaches of its tributaries upstream of Ocate, perennial reaches of the Vermejo river upstream from Rail canyon and all other perennial reaches of tributaries to the Canadian river northwest and north of U.S. highway 64 in Colfax county unless included in other segments.

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

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 500 µmhos/cm or less[~~(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 25 NTU~~] or less. The use-specific numeric [~~standards~~] 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 fecal coliform bacteria shall not exceed 100/100 m/L; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).
[20.6.4.309 NMAC - Rp 20 NMAC 6.1.2306, 10-12-00; A, 7-19-01; A, 05-23-05]
[**NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.310 NMAC**.]

The amendments to this segment limit the application of designated uses and use-specific contaminant and pathogen criteria to the perennial tributaries of the Mora River upstream from the state highway 434 bridge in Mora; all perennial reaches of tributaries to the Mora river

upstream from the USGS gaging station at La Cueva; all perennial reaches of tributaries to the Cimarron river north and northwest of highway 64 and the perennial reaches of the Vermejo river upstream from Rail canyon.

*Based on a plain reading of the revised segment description, it's reasonable to assume that the limitation to perennial waters may have excluded some nonperennial reaches, or more likely, nonperennial reaches of the Mora and tributaries to the Cimarron rivers that may exist from this segment. EPA believes that it is the State's intent for reaches and/or tributaries that may have been excluded from this segment to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. As discussed previously, by definition, the high quality coldwater aquatic life use applies to perennial waters and would not apply to nonperennial waters that may have been included in this segment. For any nonperennial surface waters that may have been excluded from this segment, EPA must assume that they are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

*The segment retains a secondary contact recreation designation and sets revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. The segment-specific numeric turbidity criterion in this segment has been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. Other modifications that affect this segment have been discussed previously.*

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

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 within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. 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 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.310 NMAC - N, 05-23-05]

*The State has established this segment for the perennial reaches of Corrumpa Creek and perennial reaches of tributaries to the Canadian River. In it's SoR (paragraph 286), the Commission indicates that Corrumpa, Seneca, Apache, Perico, Carrizo and Tramperos and other tributary creeks were misclassified in the Dry Cimarron River in Section **20.6.4.701**. However, only the perennial portions of the Dry Cimarron River [in Union and Colfax counties] and perennial reaches of Oak creek, Long Canyon, and Corrumpa and Carrizozo creeks were specifically included in the original segment **701**, making it unclear what waters this segment actually includes.*

*The new segment is designated as a warmwater aquatic community, whereas the original segment **701** that this segment was derived from, was designated as a coldwater aquatic community, which provides more protective criteria for dissolved oxygen, temperature, pH, chloride, sulfate and TDS. Although the warmwater aquatic life designation for this new segment is consistent with the §101(a)(2) goals of the Act, the criteria are less protective than the coldwater aquatic life use that originally applied to Corrumpa Creek and other waters that were originally included in Section **20.6.4.701**. The secondary contact use has been carried over from Section **20.6.4.701**, and is not affected.*

*As described in Sec. 131.10(j)(2), when a State wishes to remove a designated use specified in Sec. 101(a)(2) of the Act or adopt subcategories of those uses that require less stringent criteria, they must conduct a UAA. The State may have intended NMED Exhibit 34 (Water Quality Assessment of the Dry Cimarron River (Hopkins, 2000)) to support the less protective uses designated for this new Section. But based on a review of the document, it's unclear how it can be utilized, since the document only contains limited data on dissolved oxygen and temperature specific to Corrumpa Creek, and not those streams identified by the WQCC in its SoR (paragraph 286) as being included in segment **310**. Although the document provides water chemistry and conventional parameter data, and some discussion of riparian condition and channel stability for the Dry Cimarron River, Carrizozo Creek, Long Canyon Creek, Oak Creeks in Union and Colfax counties, it does not provide any information on aquatic life that are present in these segments to base a decision on what is attainable in Corrumpa Creek or the Canadian, or those streams identified by the WQCC in its SoR (paragraph 286).*

*EPA did not find adequate supporting documentation justifying the less protective warmwater aquatic life designation and associated criteria being applied to segment **310** as required by 40 CFR 131.6(b). The State must provide a UAA as required by 40 CFR 131.10(j)(2). That UAA may address both this segment and issues related to Section **20.6.4.310**.*

***Action:** EPA takes <u>no action</u> on this Section.*

<u>20.6.4.311</u> - 20.6.4.400: [RESERVED]

No response is required for this reserved section.

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~~] Navajo Nation boundary at the Hogback upstream to [~~U.S. highway 64 at Blanco, and any flow which enters the San Juan river from the Mancos and Chaco rivers~~] its confluence with the Animas river.

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

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.401 NMAC - Rp 20 NMAC 6.1.2401, 10-12-00; A, 05-23-05]

[**NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.408 NMAC**.]

*This segment of the San Juan River has been modified, splitting the segment at the confluence of the Animas River because water quality in the San Juan changes at this confluence. The upper portion of the San Juan is now contained in Section **20.6.4.408**, and will be discussed there. The main stem of the San Juan below the Hogback, the Mancos and Chaco Rivers have also been removed from this segment because these waters are entirely within the Navajo Nation. In addition, division point between Sections **20.6.4.401** and **405** has been modified to from U.S. Highway 64 at Blanco to Canyon Largo to rely on hydrologic rather than cultural features.*

The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.

***Action:** EPA approves the revisions to this Section.*

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

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.402 NMAC - Rp 20 NMAC 6.1.2402, 10-12-00; A, 05-23-05]

The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life, [~~secondary~~] primary contact[~~,~~] and warmwater [~~fishery~~] aquatic life.

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.403 NMAC - Rp 20 NMAC 6.1.2403, 10-12-00; A, 05-23-05]

As seen previously, this segment description has been modified to rely on hydrologic rather than a cultural feature. The State has modified the designated use from secondary to primary contact recreation. Other language and criteria modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply[~~,~~] and secondary contact.

B. [~~Standards~~]Criteria:

(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) or less or less[~~,~~] and total phosphorus (as P) [~~shall not exceed~~]0.l mg/L or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.404 NMAC - Rp 20 NMAC 6.1.2404, 10-12-00; A, 05-23-05]

Here again, this segment description has been modified to rely on hydrologic rather than a cultural feature. The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply[~~,~~] and secondary contact.

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 400 µmhos/cm or less[~~(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~~] or less. The use-specific numeric [~~standards~~]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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.405 NMAC - Rp 20 NMAC 6.1.2405, 10-12-00; A, 05-23-05]

As in the previous segment, this description has been modified to rely on hydrologic rather than a cultural feature. The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a

high frequency of use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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

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

B. [~~Standards~~]Criteria:

(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) or less and[~~,~~] total phosphorus (as P) [~~shall not exceed~~] 0.1 mg/L or less[~~, and turbidity shall not exceed 25 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.406 NMAC - Rp 20 NMAC 6.1.2406, 10-12-00; A, 05-23-05]

The State has retained a primary contact recreation designation and set revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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

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

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

(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) or less and total phosphorus (as P) [~~shall not exceed~~] 0.1 mg/L or less. The use-specific numeric [~~standards~~] 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 fecal coliform bacteria 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~] 20.6.4.14 NMAC).

[20.6.4.407 NMAC - Rp 20 NMAC 6.1.2407, 10-12-00; A, 05-23-05]

This segment description has been amended limiting the specified designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of the Navajo and Los Pinos rivers.

The revised segment description limitation could exclude any nonperennial reaches of the Navajo and Los Pinos rivers that may exist in this segment from application of designated uses. EPA believes that it's the State's intent for any nonperennial reaches to be covered by standards applicable to ephemeral or intermittent waters found in Sections ***20.6.4.97*** *and* ***20.6.4.98****. The State's definition of coldwater aquatic life does not specify a flow regime, but depends on water temperature and "other characteristics" for the support or propagation (or both) of coldwater aquatic life. Although not clearly specified, EPA assumes that these "other characteristics" could refer to flow characteristics, meaning that this designation may not apply to nonperennial reaches or tributaries. For any nonperennial reaches of the Navajo or Los Pinos rivers that may have been excluded from this segment, EPA must assume that they are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections* ***20.6.4.97****,* ***20.6.4.98*** *and* ***20.6.4.99****.*

The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. Language clarifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

20.6.4.408 SAN JUAN RIVER BASIN - The main stem of the San Juan river from its confluence with the Animas river upstream to its confluence with Canyon 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 within the range of 6.6 to 9.0, and temperature 32.2°C (90°F) or less. 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.408 NMAC - N, 05-23-05]

*As discussed previously for Section **20.6.4.401**, this is a new segment of the San Juan River. This new segment was created to acknowledge the influence of the Animas River at its confluence with the San Juan River. The designated uses and criteria associated with the original segment (see seg,emt **401**) have been designated for this newly created segment.*

The secondary contact recreation designation is supported by revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. Language clarifications that affect this segment have been discussed previously.

***Action:** EPA approves the revisions to this Section.*

20.6.4.409 - 20.6.4.500: [RESERVED]

No response is required for this reserved section.

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 warmwater [~~fishery~~]aquatic life, livestock watering, wildlife habitat[~~,~~] and primary contact.

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.501 NMAC - Rp 20 NMAC 6.1.2501, 10-12-00; A, 05-23-05]

As discussed for other segments, this description has been modified to rely on hydrologic rather than a cultural feature. The primary contact recreation designation has been retained and is supported by revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Language clarifications that affect this segment have also been discussed previously.

***Action:** EPA approves the revisions to this Section.*

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~~] aquatic life, primary contact[~~,~~] and warmwater [~~fishery~~] aquatic life.

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.502 NMAC - Rp 20 NMAC 6.1.2502, 10-12-00; A, 05-23-05]

The segment description has been amended to clarify that the main stem of the Gila ends at the confluence of the East and West forks of the Gila. As discussed described for the previous segment, this description has been modified to rely on hydrologic rather than a cultural feature. The primary contact recreation designation has been retained and is supported by revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Language clarifications that affect this segment have also been discussed previously.

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life, irrigation, livestock watering, wildlife habitat[~~,~~] and secondary contact.

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 300 µmhos/cm or less for the main stem of the Gila river above Gila hot springs and 400 µmhos or less for other reaches, pH [~~shall be~~] within the range of 6.6 to 8.8[~~,~~] and temperature [~~shall not exceed~~] 20°C (68°F) or less except 32.2°C (90°F) or less 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~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).
[20.6.4.503 NMAC - Rp 20 NMAC 6.1.2503, 10-12-00; A, 05-23-05]

*The segment description has been amended to include all perennial tributaries to the Gila River although not the mainstem. The portion of the Gila mainstem that was previously included in this segment is covered by the previous segment. (See Section **20.6.4.502**) And as discussed in the previous segment, this description has been modified to rely on hydrologic feature of Mogollon creek rather than a cultural feature. The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. Other modifications that affect this segment have also been discussed previously.*

Action: *EPA approves the revisions to this Section.*

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

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

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 300 µmhos/cm or less, pH [~~shall be~~] within the range of 6.6 to 8.8[~~,~~] and temperature [~~shall not exceed~~] 22°C (72°F) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).
[20.6.4.504 NMAC - Rp 20 NMAC 6.1.2504, 10-12-00; A, 05-23-05]
[**NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.806 NMAC**.]

*Bear Canyon Lake has been removed from this segment because it lies in the Mimbres River basin, not the Gila basin. (See discussion in Section **20.6.4.806**). As has been discussed previously, the aquatic life use designation terminology does not represent a use change for this segment. The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.*

Action: *EPA approves the revisions to this Section.*

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

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.601 NMAC - Rp 20 NMAC 6.1.2601, 10-12-00; A, 05-23-05]

The aquatic life use designation terminology does not represent a use change for this segment. The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life, irrigation, livestock watering, wildlife habitat[~~,~~] and primary contact.

B. [~~Standards~~]Criteria:

(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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.602 NMAC - Rp 20 NMAC 6.1.2602, 10-12-00; A, 05-23-05]

The segment retains the primary contact recreation designation and includes revised bacteriological criteria sufficient to support the use based on a light frequency of use. Other language modifications that affect this segment have been discussed previously.

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life, irrigation, livestock watering, wildlife habitat[~~,~~] and secondary contact.

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

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 400 µmhos/cm or less, pH [~~shall be~~] within the range of 6.6 to 8.8[~~,~~] and temperature [~~shall not exceed~~] 20°C (68°F) or less except 25°C (77°F) or less in Tularosa creek[~~, where the temperature shall not exceed 25°C (77°F), and turbidity shall not exceed 10 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.603 NMAC - Rp 20 NMAC 6.1.2603, 10-12-00; A, 05-23-05]

As discussed for other segments, this description has been modified to rely on hydrologic rather than a cultural feature. The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. Other language modifications that affect this segment have also been discussed previously.

Action: *EPA approves the revisions to this Section.*

20.6.4.701 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~~] aquatic life, warmwater aquatic life, irrigation, livestock watering, wildlife habitat[~~,~~] and secondary contact.

B. [~~Standards~~]Criteria:

(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) or less, TDS [~~shall not exceed~~] 1,200 mg/L or less, sulfate [~~shall not exceed~~] 600 mg/L or less, and chloride [~~shall not exceed~~] 40 mg/L or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.701 NMAC - Rp 20 NMAC 6.1.2701, 10-12-00; A, 05-23-05]

[**NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.702 NMAC.**]

*This segment description has been modified to rely on a hydrologic rather than a cultural feature by specifying the perennial portion of the Dry Cimarron above Oak Creek. The segment description also deletes Long Canyon, Corrumpa and Carrizozo Creeks. Corrumpa Creek has been moved to Section **20.6.4.310**, which was discussed above. EPA believes that the modifications to this segment and Section **20.6.4.310** are intended to correct an inadvertent inclusion of Corrumpa Creek in the Dry Cimarron basin rather than the Canadian River basin. Long Canyon and Carrizozo Creeks have been broken out into another new Section, **20.6.4.702**, discussed below.*

*The designated aquatic life use for this segment has been downgraded from coldwater to marginal coldwater and warmwater aquatic life uses. As described in 40 CFR 131.10(j)(2), when a State wishes to adopt subcategories of §101(a)(2) uses, those uses that require less stringent criteria, those uses must be supported by a UAA. The Commission's SoR (paragraph 300), indicates that a UAA was performed by the Surface Water Quality Bureau in 2000, that indicates that the designation for this segment is erroneous. As discussed in Section **20.6.4.310**, EPA believes the Commission is referring to NMED Exhibit 34, (Water Quality Assessment of the Dry Cimarron River (Hopkins, 2000)). Based on a review of that document, EPA does not believe that it provides adequate information to support a downgrade from a coldwater to marginal coldwater aquatic life use. Although the document provides water chemistry and conventional parameter data and some discussion of riparian condition and channel stability for the Dry Cimarron River, Carrizozo Creek, Long Canyon Creek and Oak Creeks in Union and Colfax counties, it does not provide adequate information on aquatic life that is present in these segments to base a decision on what aquatic life use designation is attainable.*

*EPA did not find adequate supporting documentation justifying the less protective marginal coldwater and warmwater aquatic life designations and associated criteria being applied to segment **310** as required by 40 CFR 131.6(b). As discussed in **20.6.4.310**, the State must provide a UAA as required by 40 CFR 131.10(j)(2). That UAA may address both segment **310** and this segment.*

***Action:** EPA takes no action on this Section.*

20.6.4.702 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 within the range of 6.6 to 8.8, temperature 32.2°C (90°F) or less, TDS 1,200 mg/L or less, sulfate 600 mg/L or less and chloride 40 mg/L or less.

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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.702 NMAC - N, 05-23-05]

*This new segment contains the perennial portions of the Dry Cimarron River below Oak Creek and the perennial portions of Long Canyon and Carrizozo creeks, which have been broken out of the original Section **20.6.4.701**, above.*

*EPA's concerns with this segment are essentially the same as discussed in Section **20.6.4.310**. In that segment, the warmwater aquatic life designation for this new segment are consistent with the 101(a)(2) interim goals of the Act, but the criteria are less protective than the coldwater aquatic life use that originally applied to Section **20.6.4.701**. The coldwater aquatic life use provides more protective criteria for dissolved oxygen, temperature, pH, chloride, sulfate and TDS. As before, the secondary contact use has been carried over from Section **20.6.4.701**, and is not affected.*

As discussed earlier, when a State wishes to remove a designated use specified in Section 101(a)(2) of the Act or adopt subcategories of those uses that require less stringent criteria, the standards regulation at 40 CFR 131.10(j)(2) requires a UAA. NMED Exhibit 34 (Water Quality Assessment of the Dry Cimarron River (Hopkins, 2000)), provides water chemistry and conventional parameter data, and some discussion of riparian condition and channel stability for the Dry Cimarron River and Carrizozo Creek, it does not provide adequate information on aquatic life that are present in these waters that can be used as a basis for designating an appropriate aquatic life use.

*EPA did not find adequate supporting documentation justifying the less protective warmwater aquatic life designation and associated criteria being applied to segment **702** as required by 40 CFR 131.6(b). The State must provide a UAA as required by 40 CFR 131.10(j)(2). That UAA may address both this segment and Sections **20.6.4.310** and **20.6.4.701**.*

***Action:** EPA takes no action on this Section.*

20.6.4.703 - 20.6.4.800: [RESERVED]

No response is required for this reserved section.

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~~] aquatic life, fish culture, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply[~~,~~] and secondary contact.

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.801 NMAC - Rp 20 NMAC 6.1.2801, 10-12-00; A, 05-23-05]

The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. Other language modifications that affect this segment have also been discussed previously.

Action: *EPA approves the revisions to this Section.*

20.6.4.802 CLOSED BASINS - Perennial reaches of Three Rivers.

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

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 500 µmhos/cm or less, pH [~~shall be~~] within the range of 6.6 to 8.8[~~,~~] and temperature [~~shall not exceed~~] 20°C (68°F) or less[~~, and turbidity shall not exceed l0 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.802 NMAC - Rp 20 NMAC 6.1.2802, 10-12-00; A, 05-23-05]

The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. Other language modifications that affect this segment have also been discussed previously.

Action: *EPA approves the revisions to this Section.*

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~~] aquatic life, irrigation, livestock watering, wildlife habitat[~~,~~] and secondary contact.

B. [~~Standards~~]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) or less. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.803 NMAC - Rp 20 NMAC 6.1.2803, 10-12-00; A, 05-23-05]

This segment description has been modified to rely on hydrologic rather than a cultural feature. The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. Other language modifications that affect this segment have also been discussed previously.

Action: *EPA approves the revisions to this Section.*

20.6.4.804 CLOSED BASINS - [~~The~~] Perennial reaches of the 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~~] aquatic life, livestock watering, wildlife habitat[~~,~~] and secondary contact.

B. [~~Standards~~]Criteria:

(1) In any single sample: [~~conductivity shall not exceed~~] specific conductance 300 µmhos or less, pH [~~shall be~~] within the range of 6.6 to 8.8[~~,~~] and temperature [~~shall not exceed~~] 20°C (68°F) or less[~~, and turbidity shall not exceed 10 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.804 NMAC - Rp 20 NMAC 6.1.2804, 10-12-00; A, 05-23-05]

This segment description has been revised, limiting the designated uses and use-specific contaminant and pathogen criteria to the perennial reaches of the Mimbres River. In addition, the segment has been modified to rely on hydrologic at Willow Springs rather than a cultural feature.

*Based on a plain reading of the revised segment description and modifications, it's reasonable to assume that the limitation could exclude nonperennial reaches of the Mimbres that may exist from this classified segment. EPA believes that it is the State's intent for reaches that may have been excluded from this segment to be covered by standards applicable to ephemeral or intermittent waters found in Sections **20.6.4.97** and **20.6.4.98**. By definition, the high quality coldwater aquatic life use only applies to perennial waters and would not apply to nonperennial waters that may have been broken out of this segment. For any nonperennial surface waters that may have been excluded from this segment, EPA must assume that they are capable of supporting the "fishable/swimmable" uses described in CWA Section 101(a)(2) unless supported by a UAA as required by 40 CFR 131.10(j)(1). EPA recommends that the State address the applicability of less protective uses for nonperennial surface waters that may have been excluded from this classified segment in a comprehensive or categorical UAA addressing Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**.*

The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a high frequency of use. Other language modifications that affect this segment have also been discussed previously.

***Action:** EPA approves the revisions to this Section, and assumes any nonperennial reaches or tributaries that may have been excluded from this segment are capable of supporting the uses described in CWA Section 101(a)(2).*

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~~] aquatic life [~~,~~] and secondary contact.

B. [~~Standards~~]Criteria:

(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) or less[~~, and turbidity shall not exceed 10 NTU~~]. The use-specific numeric [~~standards~~] 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 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of [~~20.6.4.13~~]20.6.4.14 NMAC).

[20.6.4.805 NMAC - Rp 20 NMAC 6.1.2805, 10-12-00; A, 05-23-05]

The segment retains a secondary contact recreation designation and includes revised bacteriological criteria sufficient to support primary contact based on a light frequency of use. Other language modifications that affect this segment have also been discussed previously.

Action: *EPA approves the revisions to this Section.*

20.6.4.806 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 300 µmhos/cm or less, pH within the range of 6.6 to 8.8 and temperature 22°C (72°F) or less. 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 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.806 NMAC - N, 05-23-05]

*Bear Canyon Lake was previously misclassified as being in the Gila River Basin. This new segment has been established creating a segment specific to Bear Canyon Lake within the Mimbres River Basin. (See Section **20.6.4.504**)*

The aquatic life and contact recreation designated uses have been carried over form the original segment. Revised bacteriological criteria sufficient to support primary contact based on a low frequency of use apply. Other modifications that affect this segment have been discussed previously.

Action: *EPA approves the new Section.*

20.6.4.807 - 20.6.4.899: [RESERVED]

No response is required for this reserved section.

The following Section of the standards document has been restructured significantly which is intended to simplify the use of the document. As with previous segment descriptions, once a provision has been addressed, it will not be discussed in detail again unless some unique issue requires a more in-depth discussion.

20.6.4.900 [~~STANDARDS~~]CRITERIA APPLICABLE TO ATTAINABLE OR DESIGNATED USES UNLESS OTHERWISE SPECIFIED IN [~~20.6.4.101~~]20.6.4.97 THROUGH 20.6.4.899 NMAC.

*Changing Section **20.6.4.101** to **20.6.4.97** in the title line reflects the addition of the new categories for unclassified waters in Sections **20.6.4.97**, **20.6.4.98** and **20.6.4.99**, and is not a substantive modification. The specific fishery designations that were previously held in paragraphs A, C, E, F and H, below have been relocated to a new single paragraph H and specific subparagraphs. A more detailed discussion follows the new paragraph H and numbered subparagraphs below.*

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.~~] **Fish Culture, Water Supply and Storage:** Fish culture and municipal and industrial water supply and storage are designated uses in particular classified waters of the state where these uses are actually being realized. However, no numeric criteria apply uniquely to these uses. Water quality adequate for these uses is ensured by the general criteria and numeric criteria for bacterial quality, pH and temperature that are established for all classified waters of the state listed in 20.6.4.97 through 20.6.4.899 NMAC.

*As part of the restructuring of Section **20.6.4.900**, the description of the Fish Culture, Water Supply and Storage uses have been moved this section to the reordered paragraph I. This broad statement describes designated uses that apply to classified waters. As the provision notes, criteria to support these uses include general criteria an numeric criteria for the conventional parameters listed that are applicable to all classified waters.*

Action: *EPA approves the modification.*

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 those standards~~] Those criteria listed under domestic water supply in Subsection [~~M~~]J of this section [~~shall not be exceeded:~~] apply to this use.

[~~**(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~~]

*In this paragraph, the significant change in language is the replacement of the phrase "shall not be exceeded" with the phrase "apply to this use." This change prevents a potential conflict with the compliance and implementation provisions in Section **20.6.4.11**. This change in terminology is also made in other paragraphs below without further comment. In addition, the criteria contained in this paragraph have been consolidated with other criteria in Section **20.6.4.900.J**.*

Action: *EPA approves the modification.*

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 ɕmhos/cm and 1,500 ɕmhos/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.~~

The high quality coldwater (aquatic life) designation has been relocated and consolidated with other (aquatic life) use designations in a paragraph H and specific subparagraphs.

~~**D.**~~]**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 and those [~~standards~~] criteria listed under irrigation in Subsection [~~M~~]J of this section [~~shall not be exceeded~~] apply to this use:

(1)	dissolved selenium	0.13	mg/L
(2)	dissolved selenium in presence of >500 mg/L SO_4	0.25	mg/L

The State has deleted previously held fecal coliform criteria. EPA has developed guidance on protecting the irrigation use for certain parameters can be found in the "Green Book" (FWPCA, 1968) and the "Blue Book" (NAS/NAE, 1973), but has not been specifically developed section 304(a) criteria for protecting these uses. In the Water Quality Standards Handbook: Second Edition (1994), EPA states that where criteria have not been specifically developed for agricultural and industrial uses, the criteria developed for human health and aquatic life are usually sufficiently stringent to protect these uses. Given that the agricultural use classifications such as these are intended to define waters that are suitable for irrigation and other uses in support of farming and ranching, E. coli criteria are not necessary to directly support the irrigation use.

The Handbook notes that States may establish criteria specifically designed to protect these uses as the State has done here for selenium. In its SoR, (paragraph 316), the Commission noted that selenium criteria will be retained in this Section rather than consolidated into a table with other criteria to avoid the need to use a footnote that would otherwise be required by State regulation.

Action: *EPA approves the modification.*

[~~**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.~~

The limited warmwater and marginal coldwater (aquatic life) use designations have been relocated and consolidated with other (aquatic life) use designations in a paragraph H and specific subparagraphs.

~~**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~~] E. coli bacteria of 126 cfu/100 mL and single sample of 410 cfu/100 mL, apply to this use and pH shall be within the range of 6.6 to 9.0.

To protect for primary contact recreation, the State has adopted EPA's recommended bacteriological criteria an indicator of recreational water quality. In its SoR (paragraph 319), the Commission references EPA's Implementation Guidance for Ambient Water Quality Criteria for Bacteria (Draft), EPA-823-B-02-003, May 2002, as the basis for the E. coli criteria applicable to primary contact recreation in New Mexico. And as recommended, in it's SoR, the Commission indicates that the State is basing its primary contact criteria on an illness rate of 8 illnesses per 1000 exposed persons. And at this level of exposure, calculated a maximum geometric mean of 126/100 mL.

This provision specifies a single-sample maximum of 410/100 mL, which represents a low frequency of use at a 90% confidence limit. EPA believes this to be roughly equivalent to the primary contact criteria previously held by the State. However, there are a number of classified

segments that specify both primary and secondary contact uses with a maximum geometric mean of 126/100 mL and a single-sample maximum of 235/100 mL, which is protective of a high frequency of use that may be seen on bathing beaches. By opting to protect primary contact recreation waters with criteria associated with illness rates within this range, it indicates that the Commission recognizes that this is a risk management decision and that the single-sample maximum used is a function of the anticipated frequency or extent of use. This approach follows the State's long-standing practice of adopting a secondary use but applying primary criteria to protect for actual swimming or other direct contact without encouraging those activities where the stream flow or bed characteristics make such activities unsafe. Given this approach, EPA considers those waters where a illness rate of 8 per one thousand, a maximum geometric mean of 126/100 mL and a single-sample maximum of 235/100 or 410/100 mL to be protective of primary contact whether the use is specified as primary contact or secondary contact. In those waters specified for secondary with criteria sufficient to support primary contact are considered to be consistent with the CWA §101(a) goal uses and would not require a use attainability analysis.

Action: *EPA approves the new provision.*

E. Secondary Contact: The monthly geometric mean of E. coli bacteria of 548 cfu/100 mL and single sample of 2507 cfu/100 mL apply to this use.

EPA recognizes that primary contact recreation may not be attainable or appropriate in certain waters. In situations where a State or authorized Tribe has demonstrated through a use attainability analysis that removing a primary contact recreation use is justified - where natural, ephemeral, intermittent, or low flow conditions prevent attainment, or high levels of natural and uncontrollable pollution exist - or other applicable conditions described in 40 CFR 131.10(g), a primary contact use my be removed or a secondary use designated. EPA also recognizes that in certain circumstances, people will use whichever water bodies that are available, regardless of the physical conditions, necessitating protection for contact recreation.

In developing its implementation guidance for the 1986 recommended water quality criteria for bacteria for E. coli and enterococci, EPA looked at the of possibility of developing criteria for secondary contact and found that it was not feasible because the epidemiological data that formed the basis for its 1986 criteria recommendations were unsuitable because the exposure data was associated with primary contact, which involved immersion. Secondary contact recreation generally doesn't involve immersion and the likelihood of contracting gastrointestinal illness is low, illness or conditions are much more likely to affect the eye, ear, skin, and upper respiratory tract. Because of the different exposure scenarios for the two different types of uses, EPA was unable to derive a national criterion for secondary contact recreation based upon existing data.

As a result, EPA guidance recommends that States and Tribes use the same approach that has historically been used for secondary contact for the fecal coliform indicator, adopting a

criterion five times that of the geometric mean component to protect primary contact recreation. Following this recommendation, New Mexico has specified a secondary contact use and adopted a monthly geometric mean of 548/100 mL In it's SoR (paragraph 320), the Commission indicated that this geometric mean density is associated with an illness rate of 14 per one thousand. The guidance also indicates that when evaluating attainment with this criterion, States and Tribes may calculate geometric mean values based on samples taken over a 30 day period or on a seasonal or annual basis. Another approach suggested in the guidance which New Mexico has taken, is the adoption of a single sample maximum value protective of the secondary contact recreation use. This is an appropriate approach where it is impractical to collect sufficient monitoring data to calculate a geometric mean value. Following this approach, New Mexico has specified a single sample criterion 2507/100 mL for waters where the likelihood of full body contact is infrequent.

Action: *EPA approves the new criteria.*

~~[**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.~~

The warmwater (aquatic life) use designation has been relocated and consolidated with other (aquatic life) use designations in a paragraph H and specific subparagraphs.

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

See discussion under paragraph A, above.

~~**J.** The following schedule of equations for the determination of numeric standards for the substances listed and those standards listed in Subsection M for aquatic life shall apply to the subcategories of fisheries identified in this section:~~

~~**(1) Acute standards**~~

~~**(a)** dissolved silver $e^{(1.72[\ln(\text{hardness})]-6.6825)}$ µg/L~~

~~**(b)** dissolved cadmium $(e^{(1.128[\ln(\text{hardness})]-3.6867)})\text{cf}$ 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 $e^{(0.819[\ln(\text{hardness})]+2.5736)}$ µg/L~~

~~**(d)** dissolved copper $e^{(0.9422[\ln(\text{hardness})]\ 1.7408)}$ µg/L~~

~~**(e)** dissolved lead $(e^{(1.273[\ln(\text{hardness})]\ 1.46)})$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 $e^{(0.8460[\ln(\text{hardness})]+2.253)}$ µg/L~~

~~**(g)** dissolved zinc $e^{(0.8473[\ln(\text{hardness})]+0.8618)}$ µg/L~~

~~**(2) Chronic standards**~~

~~**(a)** dissolved cadmium $(e^{(0.7852[\ln(\text{hardness})]\ [2.715)})$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 $e^{(0.819[\ln(\text{hardness})]+0.534)}$ µg/L~~

~~**(c)** dissolved copper $e^{(0.8545[\ln(\text{hardness})]\ 1.7428)}$ µg/L~~

~~**(d)** dissolved lead $(e^{(1.273[\ln(\text{hardness})]\ 4.705)})$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 $e^{(0.846[\ln(\text{hardness})]+0.0554)}$ µg/L~~

~~**(f)** dissolved zinc $e^{(0.8473[\ln(\text{hardness})]+0.8699)}$ µg/L~~

~~**K]**~~**F. Livestock Watering**: [~~The following numeric standards and those standards~~]The criteria listed in Subsection [~~M~~]J for livestock watering [~~shall not be exceeded:~~]apply to this use.

[~~**(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~~]

The criteria found in these paragraphs have been moved to the table in the new Section ***20.6.4.900.I*** *and will be discussed there.*

[~~**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 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 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 are discharged. The numeric criteria listed in Subsection J for wildlife habitat apply to this use except when a site-specific or segment-specific criterion has been adopted under 20.6.4.101 through 20.6.4.899 NMAC.

The CWA and EPA's Standards Regulation requires States to specify the appropriate water uses to be achieved and protected in the State's waters. In addition, section 304(a)(1) of the Act also requires EPA to "...develop and publish criteria for water quality accurately reflecting . . . the kind and extent of all identifiable effects on health and welfare including . . . wildlife." However, EPA has traditionally focused on criteria for chemical pollutants, and a limited number of physical and biological parameters. EPA is developing methodologies and criteria in areas beyond the traditional chemical specific type criteria to include criteria to protect wildlife. As part of that effort, in 1993, EPA published Water Quality Guidance for the Great Lakes System (50 FR 50802) and the Great Lakes Initiative Technical Support Document for Wildlife Criteria, which provide guidance on the development of new criteria and a methodology specifically protect wildlife.

New Mexico's efforts in developing wildlife criteria represent a reasonable approach given limited EPA recommended criteria. While New Mexico has a number of high quality waters, in general, these waters do not contain as high a variety of trophic levels, body weights, and food and water ingestion rates for representative species as would be found in the Great Lakes. It is a reasonable assumption that there is little biomagnification in nonperennial streams as compared perennial waters such as the Great Lakes, where the food web is complex, and biomagnification more significant. As a result, the State's approach in using EPA's recommended aquatic life criteria as a basis for wildlife criteria in their efforts to protect wildlife in these and other types of waters is reasonable and does not preclude the development of site-specific criteria where appropriate.

*The Wildlife Habitat provision has been reworded to give better clarity and for consistency with other sections. The criteria applicable to this use that are referenced in the here are now contained in Section **20.6.4.900.J**.*

***Action:** EPA approves the modification.*

H. Aquatic Life: Surface waters of the state with a designated, existing or attainable use of aquatic life shall be free from any substances at concentrations that can impair the community of plants and animals in or the ecological integrity of surface waters of the state. Except as provided in paragraph 6 below, the acute and chronic aquatic life criteria set out in subsections I and J of this section are applicable to this use. In addition, the specific criteria for aquatic life subcategories in the following paragraphs shall apply to waters classified under the respective designations

(1) High Quality Coldwater: Dissolved oxygen 6.0 mg/L or more, temperature 20°C (68°F) or less, pH within the range of 6.6 to 8.8 and specific conductance 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.

(2) Coldwater: Dissolved oxygen 6.0 mg/L or more, temperature 20°C (68°F) or less and pH 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 than 6 mg/L or more, on a case by case basis maximum temperatures may exceed 25°C (77°F) 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 5 mg/L or more, temperature 32.2°C (90°F) or less, and pH 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 5 mg/L or more, pH within the range of 6.6 to 9.0 and on a case by case basis maximum temperatures may exceed 32.2°C (90°F). 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.

(6) Limited Aquatic Life: Criteria shall be developed on a segment-specific basis. The acute aquatic life criteria of Subsections I and J of this section shall apply. Chronic aquatic life criteria do not apply unless adopted on a segment specific basis.

This Section provides a general narrative statement describing protections for aquatic life that clarifies the intent of this section and specifies applicability of numeric criteria. As discussed in reference to the new definition of "aquatic life", this term is consistent with the CWA goal and EPA guidance to protect all organisms comprising the aquatic.

*As noted earlier, the use designations that where previously held in paragraphs A, C, E, F and H, have been moved into this single section to simplify locating the specific subcategories and criteria. Segment-specific numeric turbidity criteria applicable to these use designations have been replaced with the narrative criterion discussed previously in Section **20.6.4.13.J**. In addition, the new subcategory of limited aquatic life is intended to allow the development of segment-specific criteria for waters that support an aquatic life population under conditions that would otherwise result in natural exceedences of aquatic life criteria. As discussed earlier, human health criteria will only apply to such streams when adopted on a segment-specific basis.*

*In reference to the Limited Aquatic Life use, see discussed in Section **20.6.4.97**. As noted there, EPA does not expect the State to adopt uses for ephemeral waters that cannot be attained.*

In those instances where CWA §101(a)(2) uses cannot be attained, the State must submit a UAA to support an appropriate aquatic life designation as required by 40 CFR 131.10(j)(1).

Action: *EPA approves this modification.*

(1) Acute criteria:

(a) dissolved silver $0.85\ e^{(1.72(\ln(\text{hardness}))-6.59)}$ µg/L

(b) dissolved cadmium $(e^{(1.0166(\ln(\text{hardness}))-3.924)})\text{cf}$ 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 $0.316\ e^{(0.819(\ln(\text{hardness}))+3.7256)}$ µg/L

(d) dissolved copper $0.960\ e^{(0.9422(\ln(\text{hardness}))-1.700)}$ 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 $0.998\ e^{(0.8460(\ln(\text{hardness}))+2.255)}$ µg/L

(g) dissolved zinc $0.978\ e^{(0.8473(\ln(\text{hardness}))+0.884)}$ µg/L

(2) Chronic criteria:

(a) dissolved cadmium $(e^{(0.7409(\ln(\text{hardness}))-4.719)})\text{cf}$ 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 $0.860\ e^{(0.819(\ln(\text{hardness}))+0.6848)}$ µg/L

(c) dissolved copper $0.960\ e^{(0.8545(\ln(\text{hardness}))-1.702)}$ 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 $0.997\ e^{(0.846(\ln(\text{hardness}))+0.0584)}$ µg/L

(f) dissolved zinc $0.986\ e^{(0.8473(\ln(\text{hardness}))+0.884)}$ µg/L

These hardness-dependent formulae do not represent new criteria, but only the relocation of these values that were previously held in the original Section ***20.6.4.900.J****.*

[~~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~~] are found in Subsections A through [~~L~~] I of this section.

The State's new tables have not been reproduced for the following discussion. EPA has reviewed all new and revised numeric criteria contained in the consolidated tables. Changes to these criteria tables are detailed in the Commissions SoR (paragraphs 332 through 343), with some of the most significant being discussed where appropriate below:

*Domestic Water Supply criteria for nitrate, radium, strontium, tritium and gross alpha have been moved from Section **20.6.4.900.B** to be consistent with the restructured criteria, and to add the criteria for priority toxic pollutants because to protect human health from exposure in organisms and water. The State has adopted criteria are based on the consumption of fish, shellfish and two liters of water per day. The domestic water supply use is based upon the use of untreated water for drinking purposes. As a result, it is appropriate to consider the consumption of two liters of water per day without the benefit of treatment.*

The Commission has adopted revised chronic and acute criteria for mercury consistent with EPA's recommended criteria pursuant to 40 CFR §131.11. In addition, a criterion for methylmercury of 0.3 mg/kg has been adopted for protection of human health, as recommended by EPA. EPA encourages NMED to continue working with Region's Monitoring and Assessment and Permitting staff on implementing both the water column and fish tissue criteria. Following EPA's withdrawal of its recommended beryllium aquatic life criteria, the State has deleted its criteria.

The State has amended its human health criteria based upon the current EPA recommendations in National Recommended Water Quality Criteria: 2002, EPA-822-R-02-047. The recalculated criteria integrate an updated national default fish consumption rate (17.5 g/day) and, in some cases, relative source contribution values obtained from primary drinking water standards and new cancer potency information from EPA's Integrated Risk Information System. The Commission has adopted a New Mexico-specific criterion using the updated national default fish consumption rate applied to site-specific data collected during a 1997 joint agency study of arsenic in the middle Rio Grande in the vicinity of Albuquerque. The recalculation resulted in an arsenic criterion of 9.0 µg/L for consumption of organisms only, and 2.3 µg/L for consumption of water plus organisms. The site-specific data and assumptions used to develop this criterion are detailed in the Commission's SoR (paragraph 340). EPA is currently re-evaluating its recommended criteria for arsenic. In the interim, EPA considers New Mexico's approach to be appropriate.

***EPA action:** EPA approves these modifications and all other new or modified criteria represented in Section **20.6.4.900.J.**, the revised ammonia criteria represented in **20.6.4.900.K** through **M,** and the reformatted tables for Dissolved Oxygen in **20.6.4.900.N**.*

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, 20th 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.

These modifications do not represent a substantive change.

EPA action: *EPA approves these modifications.*