

Presented below are water quality standards that are in effect for Clean Water Act purposes.

EPA is posting these standards as a convenience to users and has made a reasonable effort to assure their accuracy. Additionally, EPA has made a reasonable effort to identify parts of the standards that are not approved, disapproved, or are otherwise not in effect for Clean Water Act purposes.

August 7, 2013

**Standards for Interstate and Intrastate Surface Waters, Title 20 Chapter 6 Part 4
Effective June 5, 2013**

The following provisions are in effect for Clean Water Act purposes with these few exceptions:

- Section 20.6.4.52 referencing salinity benchmarks in the Pecos River are not water quality standards and are not effective for CWA purposes, but are effective as State law.
- Section 20.6.4.10 D. Site-specific criteria are not water quality standards and are not effective for CWA purposes, but are effective as State law. EPA retains authority to act on site-specific criteria developed using these procedures.
- EPA has approved the hardness-based equation for aluminum for only those waters of the State where pH is equal to or greater than 6.5, but has disapproved these equations for waters where the pH is less than 6.5. To resolve this disapproval, EPA recommends that the State adopt a footnote for these equations specifying the following:

"Where pH is equal to or greater than 6.5 in the receiving water after mixing, the chronic hardness-dependent equation will apply. Where pH is 6.5 or less in the receiving water after mixing, either the 87 µg/l chronic total recoverable aluminum criterion or the criterion resulting from the chronic hardness-dependent equation will apply, whichever is more stringent."

In the interim, for waters of the State where pH is 6.5 or less, in the receiving water after mixing, as the permitting authority for New Mexico, EPA will apply the 304(a) recommended 87 µg/L chronic dissolved aluminum criterion.

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

20.6.4.1 ISSUING AGENCY: Water Quality Control commission.
[20.6.4.1 NMAC - Rp 20 NMAC 6.1.1001, 10-12-00]

20.6.4.2 SCOPE: Except as otherwise provided by statute or regulation of the water quality control commission, this part governs all surface waters of the state of New Mexico, which are subject to the New Mexico Water Quality Act, Sections 74-6-1 through 74-6-17 NMSA 1978.
[20.6.4.2 NMAC - Rp 20 NMAC 6.1.1002, 10-12-00; A, 05-23-05]

20.6.4.3 STATUTORY AUTHORITY: This part is adopted by the water quality control commission pursuant to Subsection C of Section 74-6-4 NMSA 1978.
[20.6.4.3 NMAC - Rp 20 NMAC 6.1.1003, 10-12-00]

20.6.4.4 DURATION: Permanent.
[20.6.4.4 NMAC - Rp 20 NMAC 6.1.1004, 10-12-00]

20.6.4.5 EFFECTIVE DATE: October 12, 2000, unless a later date is indicated in the history note at the end of a section.
[20.6.4.5 NMAC - Rp 20 NMAC 6.1.1005, 10-12-00]

20.6.4.6 OBJECTIVE:

A. The purpose of this part is to establish water quality standards that consist of the designated use or uses of surface waters of the state, the water quality criteria necessary to protect the use or uses and an antidegradation policy.

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

C. Pursuant to Subsection A of Section 74-6-12 NMSA 1978, this part does not grant to the water quality control commission or to any other entity the power to take away or modify property rights in water.
[20.6.4.6 NMAC - Rp 20 NMAC 6.1.1006, 10-12-00; A, 05-23-05]

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

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

(1) **"4T3 temperature"** means the temperature not to be exceeded for four or more consecutive hours in a 24-hour period on more than three consecutive days.

(2) **"6T3 temperature"** means the temperature not to be exceeded for six or more consecutive hours in a 24-hour period on more than three consecutive days.

(3) **Abbreviations** used to indicate units are defined as follows:

(a) **"cfu/100 mL"** means colony-forming units per 100 milliliters;

(b) **"cfs"** means cubic feet per second;

(c) **"µg/L"** means micrograms per liter, equivalent to parts per billion when the specific gravity of the solution equals 1.0;

(d) **"µS/cm"** means microsiemens per centimeter; one µS/cm is equal to one µmho/cm;

(e) “**mg/kg**” means milligrams per kilogram, equivalent to parts per million;
(f) “**mg/L**” means milligrams per liter, equivalent to parts per million when the specific gravity of the solution equals 1.0;

(g) “**NTU**” means nephelometric turbidity unit;

(h) “**pCi/L**” means picocuries per liter.

(4) “**Acute toxicity**” means toxicity involving a stimulus severe enough to induce a response in 96 hours of exposure or less. Acute toxicity is not always measured in terms of lethality, but may include other toxic effects that occur within a short time period.

(5) “**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.

(6) “**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.

(7) “**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.

B. Terms beginning with the letter “B”.

(1) “**Best management practices**” or “**BMPs**”:

(a) 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

(b) 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.

(2) “**Bioaccumulation**” refers to the uptake and retention of a substance by an organism from its surrounding medium and food.

(3) “**Bioaccumulation factor**” is the ratio of a substance’s concentration in tissue versus its concentration in ambient water, in situations where the organism and the food chain are exposed.

(4) “**Biomonitoring**” means the use of living organisms to test the suitability of effluents for discharge into receiving waters or to test the quality of surface waters of the state.

C. Terms beginning with the letter “C”.

(1) “**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.

(2) “**Chronic toxicity**” means toxicity involving a stimulus that lingers or continues for a relatively long period relative to the life span of an organism. Chronic effects include, but are not limited to, lethality, growth impairment, behavioral modifications, disease and reduced reproduction.

(3) “**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 criteria in 20.6.4.101 through 20.6.4.899 NMAC.

(4) “**Coldwater**” 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 aquatic life.

(5) “**Coolwater**” in reference to an aquatic life use means the water temperature and other characteristics are suitable for the support or propagation of aquatic life whose physiological tolerances are intermediate between and may overlap those of warm and coldwater aquatic life.

(6) “**Commission**” means the New Mexico water quality control commission.

(7) “**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 protect the designated use.

D. Terms beginning with the letter “D”.

(1) “**DDT and derivatives**” means 4,4’-DDT (CAS number 50293), 4,4’-DDE (CAS number 72559) and 4,4’-DDD (CAS number 72548).

- (2) **“Department”** means the New Mexico environment department.
 - (3) **“Designated use”** means a use specified in 20.6.4.97 through 20.6.4.899 NMAC for a surface water of the state whether or not it is being attained.
 - (4) **“Dissolved”** refers to the fraction of a constituent of a water sample that passes through a 0.45-micrometer pore-size filter. The “dissolved” fraction is also termed “filterable residue.”
 - (5) **“Domestic water supply”** means a surface water of the state that could be used for drinking or culinary purposes after disinfection.
- E. Terms beginning with the letter “E”.**
- (1) **“E. coli”** means the bacteria Escherichia coli.
 - (2) **“Ephemeral”** when used to describe a surface water of the state means the water body contains water briefly only in direct response to precipitation; its bed is always above the water table of the adjacent region.
 - (3) **“Existing use”** means a use actually attained in a surface water of the state on or after November 28, 1975, whether or not it is a designated use.
- F. Terms beginning with the letter “F”.**
- (1) **“Fish culture”** means production of coldwater or warmwater fishes in a hatchery or rearing station.
 - (2) **“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.
- G. Terms beginning with the letter “G”. [RESERVED]**
- H. Terms beginning with the letter “H”.**
- (1) **“High quality coldwater”** in reference to an aquatic life use means a perennial surface water of the state in a minimally disturbed condition with considerable aesthetic value and superior coldwater 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 aquatic life population.
 - (2) **“Human health-organism only”** means the health of humans who ingest fish or other aquatic organisms from waters that contain pollutants.
- I. Terms beginning with the letter “I”.**
- (1) **“Industrial water supply”** means the use or storage of water by a facility for process operations unless the water is supplied by a public water system. Industrial water supply does not include irrigation or other agricultural uses.
 - (2) **“Intermittent”** when used to describe a surface water of the state means the water body contains water for extended periods only at certain times of the year, such as when it receives seasonal flow from springs or melting snow.
 - (3) **“Interstate waters”** means all surface waters of the state that cross or form a part of the border between states.
 - (4) **“Intrastate waters”** means all surface waters of the state that are not interstate waters.
 - (5) **“Irrigation”** means application of water to land areas to supply the water needs of beneficial plants.
- J. Terms beginning with the letter “J”. [RESERVED]**
- K. Terms beginning with the letter “K”. [RESERVED]**
- L. Terms beginning with the letter “L”.**
- (1) **“LC-50”** means the concentration of a substance that is lethal to 50 percent of the test organisms within a defined time period. The length of the time period, which may vary from 24 hours to one week or more, depends on the test method selected to yield the information desired.
 - (2) **“Limited aquatic life”** as a designated use, means the surface water is capable of supporting only a limited community of aquatic life. This subcategory includes surface waters that support aquatic species selectively adapted to take advantage of naturally occurring rapid environmental changes, ephemeral or intermittent water, high turbidity, fluctuating temperature, low dissolved oxygen content or unique chemical characteristics.
 - (3) **“Livestock watering”** means the use of a surface water of the state as a supply of water for consumption by livestock.
- M. Terms beginning with the letter “M”.**
- (1) **“Marginal coldwater”** in reference to an aquatic life use means that natural intermittent or low flows, or other natural habitat conditions severely limit maintenance of a coldwater aquatic life population or historical data indicate that the temperature in the surface water of the state may exceed 25°C (77°F).
 - (2) **“Marginal warmwater”** in reference to an aquatic life use means natural intermittent or low flow or other natural habitat conditions severely limit the ability of the surface water of the state to sustain a natural

aquatic life population on a continuous annual basis; or historical data indicate that natural water temperature routinely exceeds 32.2°C (90°F).

(3) **“Maximum temperature”** means the instantaneous temperature not to be exceeded at any time.

(4) **“Minimum quantification level”** means the minimum quantification level for a constituent determined by official published documents of the United States environmental protection agency.

N. Terms beginning with the letter “N”.

(1) **“Natural background”** means that portion of a pollutant load in a surface water resulting only from non-anthropogenic sources. Natural background does not include impacts resulting from historic or existing human activities.

(2) **“Natural causes”** means those causal agents that would affect water quality and the effect is not caused by human activity but is due to naturally occurring conditions.

(3) **“Nonpoint source”** means any source of pollutants not regulated as a point source that degrades the quality or adversely affects the biological, chemical or physical integrity of surface waters of the state.

O. Terms beginning with the letter “O”.

(1) **“Organoleptic”** means the capability to produce a detectable sensory stimulus such as odor or taste.

(2) **“Oversight agency”** means a state or federal agency, such as the United States department of agriculture forest service, that is responsible for land use or water quality management decisions affecting nonpoint source discharges where an outstanding national resource water is located.

P. Terms beginning with the letter “P”.

(1) **“Playa”** means a shallow closed basin lake typically found in the high plains and deserts.

(2) **“Perennial”** when used to describe a surface water of the state means the water body typically contains water throughout the year and rarely experiences dry periods.

(3) **“Point source”** means any discernible, confined and discrete conveyance from which pollutants are or may be discharged into a surface water of the state, but does not include return flows from irrigated agriculture.

(4) **“Practicable”** means that which may be done, practiced or accomplished; that which is performable, feasible, possible.

(5) **“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 cultural, religious or ceremonial purposes in which there is intimate human contact with the water, including but not limited to ingestion or immersion, that could pose a significant health hazard.

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

Q. Terms beginning with the letter “Q”. [RESERVED]

R. Terms beginning with the letter “R”. [RESERVED]

S. Terms beginning with the letter “S”.

(1) **“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.

(2) **“Segment”** means a classified 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 regimes, and natural physical, chemical and biological characteristics and exhibit similar reactions to external stresses, such as the discharge of pollutants.

(3) **“Specific conductance”** is a measure of the ability of a water solution to conduct an electrical current.

(4) **“State”** means the state of New Mexico.

(5) **“Surface water(s) of the state”** means all surface waters situated wholly or partly within or bordering upon the state, including lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, reservoirs or natural ponds. Surface waters of the state also means all tributaries of such waters, including adjacent wetlands, any manmade bodies of water that were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state, and any “waters of the United States” as defined under the Clean Water Act that are not included in the preceding description. Surface waters of the state does not include private waters that do not combine with other surface or

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

T. Terms beginning with the letter “T”.

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

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

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

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

U. Terms beginning with the letter “U”. [RESERVED]

V. Terms beginning with the letter “V”. [RESERVED]

W. Terms beginning with the letter “W”.

(1) **“Warmwater”** with reference to an aquatic life use means that water temperature and other characteristics are suitable for the support or propagation or both of warmwater aquatic life.

(2) **“Water contaminant”** means any substance that could alter if discharged or spilled the physical, chemical, biological or radiological qualities of water. “Water contaminant” does not mean source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, but may include all other radioactive materials, including but not limited to radium and accelerator-produced isotopes.

(3) **“Water pollutant”** means a water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or to unreasonably interfere with the public welfare or the use of property.

(4) **“Wetlands”** means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico. Wetlands 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.

(5) **“Wildlife habitat”** means a surface water of the state used by plants and animals not considered as pathogens, vectors for pathogens or intermediate hosts for pathogens for humans or domesticated livestock and plants.

X. Terms beginning with the letters “X” through “Z”. [RESERVED]

[20.6.4.7 NMAC - Rp 20 NMAC 6.1.1007, 10-12-00; A, 7-19-01; A, 05-23-05; A, 07-17-05; A, 08-01-07; A, 12-01-10; A, 01-14-11]

20.6.4.8 ANTIDegradation Policy and Implementation Plan:

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

(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected in all surface waters of the state.

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

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

(a) After providing a minimum 30-day public review and comment period, the commission determines that allowing temporary and short-term degradation of water quality is necessary to accommodate public health or safety activities in the area in which the ONRW is located. Examples of public health or safety activities include but are not limited to replacement or repair of a water or sewer pipeline or a roadway bridge. In making its decision, the commission shall consider whether the activity will interfere with activities implemented to restore or maintain the chemical, physical or biological integrity of the water. In approving the activity, the commission shall require that:

(i) the degradation shall be limited to the shortest possible time and shall not exceed six months;

(ii) the degradation shall be minimized and controlled by best management practices or in accordance with permit requirements as appropriate; all practical means of minimizing the duration, magnitude, frequency and cumulative effects of such degradation shall be utilized;

(iii) the degradation shall not result in water quality lower than necessary to protect any existing use in the ONRW; and

(iv) the degradation shall not alter the essential character or special use that makes the water an ORNW.

(b) Prior to the commission making a determination, the department or appropriate oversight agency shall provide a written recommendation to the commission. If the commission approves the activity, the department or appropriate oversight agency shall oversee implementation of the activity.

(c) Where an emergency response action that may result in temporary and short-term degradation to an ONRW is necessary to mitigate an immediate threat to public health or safety, the emergency response action may proceed prior to providing notification required by Subparagraph (a) of this paragraph in accordance with the following:

(i) only actions that mitigate an immediate threat to public health or safety may be undertaken pursuant to this provision; non-emergency portions of the action shall comply with the requirements of Subparagraph (a) of this paragraph;

(ii) the discharger shall make best efforts to comply with requirements (i) through (iv) of Subparagraph (a) of this paragraph;

(iii) the discharger shall notify the department of the emergency response action in writing within seven days of initiation of the action;

(iv) within 30 days of initiation of the emergency response action, the discharger shall provide a summary of the action taken, including all actions taken to comply with requirements (i) through (iv) of Subparagraph (a) of this paragraph.

(d) Preexisting land-use activities, including grazing, allowed by federal or state law prior to designation as an ONRW, and controlled by best management practices (BMPs), shall be allowed to continue so long as there are no new or increased discharges resulting from the activity after designation of the ONRW.

(e) Acequia operation, maintenance, and repairs are not subject to new requirements because of ONRW designation. However, the use of BMPs to minimize or eliminate the introduction of pollutants into receiving waters is strongly encouraged.

(4) This antidegradation policy does not prohibit activities that may result in degradation in surface waters of the state when such activities will result in restoration or maintenance of the chemical, physical or biological integrity of the water.

(a) For ONRWs, the department or appropriate oversight agency shall review on a case-by-case basis discharges that may result in degradation from restoration or maintenance activities, and may approve such activities in accordance with the following:

(i) the degradation shall be limited to the shortest possible time;

(ii) the degradation shall be minimized and controlled by best management practices or in accordance with permit requirements as appropriate, and all practical means of minimizing the duration, magnitude, frequency and cumulative effects of such degradation shall be utilized;

(iii) the degradation shall not result in water quality lower than necessary to protect any existing use of the surface water; and

(iv) the degradation shall not alter the essential character or special use that makes the water an ORNW.

(b) For surface waters of the state other than ONRWs, the department shall review on a case-by-case basis discharges that may result in degradation from restoration or maintenance activities, and may approve such activities in accordance with the following:

- (i) the degradation shall be limited to the shortest possible time;
- (ii) the degradation shall be minimized and controlled by best management practices or in accordance with permit requirements as appropriate, and all practical means of minimizing the duration, magnitude, frequency and cumulative effects of such degradation shall be utilized; and
- (iii) the degradation shall not result in water quality lower than necessary to protect any existing use of the surface water.

(5) In those cases where potential water quality impairment associated with a thermal discharge is involved, this antidegradation policy and implementing method shall be consistent with Section 316 of the federal Clean Water Act.

(6) In implementing this section, the commission through the appropriate regional offices of the United States environmental protection agency will keep the administrator advised and provided with such information concerning the surface waters of the state as he or she will need to discharge his or her responsibilities under the federal Clean Water Act.

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 existing data and 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 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;
- (5) develops water quality based effluent limitations and comments on technology based effluent limitations, as appropriate, for inclusion in any federal permit issued to a discharger pursuant to Section 402 of the federal Clean Water Act;
- (6) requires that these effluent limitations be included in any such permit as a condition for state certification pursuant to Section 401 of the federal Clean Water Act;
- (7) coordinates its water pollution control activities with other constituent agencies of the commission, and with local, state and federal agencies, as appropriate;
- (8) develops and pursues inspection and enforcement programs to ensure that dischargers comply with state regulations and standards, and complements EPA's enforcement of federal permits;
- (9) ensures that the provisions for public participation required by the New Mexico Water Quality Act and the federal Clean Water Act are followed;
- (10) provides continuing technical training for wastewater treatment facility operators through the utility operators training and certification programs;
- (11) provides funds to assist the construction of publicly owned wastewater treatment facilities through the wastewater construction program authorized by Section 601 of the federal Clean Water Act, and through funds appropriated by the New Mexico legislature;
- (12) conducts water quality surveillance of the surface waters of the state to assess the effectiveness of water pollution controls, determines whether water quality standards are being attained, and proposes amendments to improve water quality standards;
- (13) encourages, in conjunction with other state agencies, 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 20.6.4.15 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; A, 08-01-07; A, 01-14-11]

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 designate 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 of 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 special trout water, 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 and contact uses and the human health-organism only criteria, 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: The following waters are classified as ONRWs:

(1) Rio Santa Barbara, including the west, middle and east forks from their headwaters downstream to the boundary of the Pecos Wilderness; and

(2) the waters within the United States forest service Valle Vidal special management unit including:
(a) Rio Costilla, including Comanche, La Cueva, Fernandez, Chuckwagon, Little Costilla, Powderhouse, Holman, Gold, Grassy, LaBelle and Vidal creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit;

(b) Middle Ponil creek, including the waters of Greenwood Canyon, from their headwaters downstream to the boundary of the Elliott S. Barker wildlife management area;

(c) Shuree lakes;

(d) North Ponil creek, including McCrystal and Seally Canyon creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit; and

(e) Leandro creek from its headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit.

(3) the named perennial surface waters of the state, identified in Subparagraph (a) below, located within United States department of agriculture forest service wilderness. Wilderness are those lands designated by the United States congress as wilderness pursuant to the Wilderness Act. Wilderness areas included in this designation are the Aldo Leopold wilderness, Apache Kid wilderness, Blue Range wilderness, Chama River Canyon wilderness, Cruces Basin wilderness, Dome wilderness, Gila wilderness, Latir Peak wilderness, Pecos wilderness,

San Pedro Parks wilderness, Wheeler Peak wilderness, and White Mountain wilderness.

(a) The following waters are designated in the Rio Grande basin:

(i) in the Aldo Leopold wilderness: Byers Run, Circle Seven creek, Flower canyon, Holden Prong, Indian canyon, Las Animas creek, Mud Spring canyon, North Fork Palomas creek, North Seco creek, Pretty canyon, Sids Prong, South Animas canyon, Victorio Park canyon, Water canyon;

(ii) in the Apache Kid wilderness Indian creek and Smith canyon;

(iii) in the Chama River Canyon wilderness: Chavez canyon, Ojitos canyon, Rio Chama;

(iv) in the Cruces Basin wilderness: Beaver creek, Cruces creek, Diablo creek, Escondido creek, Lobo creek, Osha creek;

(v) in the Dome wilderness: Capulin creek, Medio creek, Sanchez canyon/creek;

(vi) in the Latir Peak wilderness: Bull creek, Bull Creek lake, Heart lake, Lagunitas Fork, Lake Fork creek, Rito del Medio, Rito Primero, West Latir creek;

(vii) in the Pecos wilderness: Agua Sarca, Hidden lake, Horseshoe lake (Alamitos), Jose Vigil lake, Nambe lake, Nat lake IV, No Fish lake, North Fork Rio Quemado, Rinconada, Rio Capulin, Rio de las Trampas (Trampas creek), Rio de Truchas, Rio Frijoles, Rio Medio, Rio Molino, Rio Nambe, Rio San Leonardo, Rito con Agua, Rito Gallina, Rito Jaroso, Rito Quemado, San Leonardo lake, Santa Fe lake, Santa Fe river, Serpent lake, South Fork Rio Quemado, Trampas lake (East), Trampas lake (West);

(viii) in the San Pedro Parks wilderness: Agua Sarca, Cañon Madera, Cave creek, Cecilia Canyon creek, Clear creek (North SPP), Clear creek (South SPP), Corralitos creek, Dove creek, Jose Miguel creek, La Jara creek, Oso creek, Rio Capulin, Rio de las Vacas, Rio Gallina, Rio Puerco de Chama, Rito Anastacio East, Rito Anastacio West, Rito de las Palomas, Rito de las Perchas, Rito de los Pinos, Rito de los Utes, Rito Leche, Rito Redondo, Rito Resumidero, San Gregorio lake;

(ix) in the Wheeler Peak wilderness: Black Copper canyon, East Fork Red river, Elk lake, Horseshoe lake, Lost lake, Sawmill creek, South Fork lake, South Fork Rio Hondo, Williams lake.

(b) The following waters are designated in the Pecos River basin:

(i) in the Pecos wilderness: Albright creek, Bear creek, Beatty creek, Beaver creek, Carpenter creek, Cascade canyon, Cave creek, El Porvenir creek, Hollinger creek, Holy Ghost creek, Horsethief creek, Jack's creek, Jarosa canyon/creek, Johnson lake, Lake Katherine, Lost Bear lake, Noisy brook, Panchuela creek, Pecos Baldy lake, Pecos river, Rio Mora, Rio Valdez, Rito Azul, Rito de los Chimayosos, Rito de los Esteros, Rito del Oso, Rito del Padre, Rito las Trampas, Rito Maestas, Rito Oscuro, Rito Perro, Rito Sebadillosos, South Fork Bear creek, South Fork Rito Azul, Spirit lake, Stewart lake, Truchas lake (North), Truchas lake (South), Winsor creek;

(ii) in the White Mountain wilderness: Argentina creek, Aspen creek, Bonito creek, Little Bonito creek, Mills canyon/creek, Rodamaker creek, South Fork Rio Bonito, Turkey canyon/creek.

(c) The following waters are designated in the Gila River basin:

(i) in the Aldo Leopold wilderness: Aspen canyon, Black Canyon creek, Bonner canyon, Burnt canyon, Diamond creek, Falls canyon, Fisherman canyon, Running Water canyon, South Diamond creek;

(ii) in the Gila wilderness: Apache creek, Black Canyon creek, Brush canyon, Canyon creek, Chicken Coop canyon, Clear creek, Cooper canyon, Cow creek, Cub creek, Diamond creek, East Fork Gila river, Gila river, Gilita creek, Indian creek, Iron creek, Langstroth canyon, Lilley canyon, Little creek, Little Turkey creek, Lookout canyon, McKenna creek, Middle Fork Gila river, Miller Spring canyon, Mogollon creek, Panther canyon, Prior creek, Rain creek, Raw Meat creek, Rocky canyon, Sacaton creek, Sapillo creek, Sheep Corral canyon, Skeleton canyon, Squaw creek, Sycamore canyon, Trail canyon, Trail creek, Trout creek, Turkey creek, Turkey Feather creek, Turnbo canyon, West Fork Gila river, West Fork Mogollon creek, White creek, Willow creek, Woodrow canyon.

(d) The following waters are designated in the Canadian River basin: in the Pecos wilderness Daily creek, Johns canyon, Middle Fork Lake of Rio de la Casa, Middle Fork Rio de la Casa, North Fork Lake of Rio de la Casa, Rito de Gascon, Rito San Jose, Sapello river, South Fork Rio de la Casa, Sparks creek (Manuelitas creek).

(e) The following waters are designated in the San Francisco River basin:

(i) in the Blue Range wilderness: Pueblo creek;

(ii) in the Gila wilderness: Big Dry creek, Lipsey canyon, Little Dry creek, Little Whitewater creek, South Fork Whitewater creek, Spider creek, Spruce creek, Whitewater creek.

(f) The following waters are designated in the Mimbres Closed basin: in the Aldo Leopold wilderness Corral canyon, Mimbres river, North Fork Mimbres river, South Fork Mimbres river.

(g) The following waters are designated in the Tularosa Closed basin: in the White Mountain

wilderness Indian creek, Nogal Arroyo, Three Rivers.

(h) The wetlands designated are identified on the *maps and list of wetlands within United States forest service wilderness areas designated as outstanding national resource waters* published at the New Mexico state library and available on the department's website.

[20.6.4.9 NMAC - Rn, Subsections B, C and D of 20.6.4.8 NMAC, 05-23-05; A, 05-23-05; A, 07-17-05; A, 02-16-06; A, 12-01-10; A, 01-14-11]

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

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

D. Site-specific criteria.

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

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

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

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

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

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

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

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

(a) identify the specific waters to which the site-specific criteria would apply;

(b) explain the rationale for proposing the site-specific criteria;

(c) describe the methods used to notify and solicit input from potential stakeholders and from the general public in the affected area, and present and respond to the public input received;

(d) present and justify the derivation of the proposed criteria.

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

(a) the recalculation procedure, the water-effect ratio for metals procedure or the resident species procedure as described in the water quality standards handbook (EPA-823-B-94-005a, 2nd edition, August 1994);

(b) the streamlined water-effect ratio procedure for discharges of copper (EPA-822-R-01-005, March 2001);

(c) the biotic ligand model as described in aquatic life ambient freshwater quality criteria - copper (EPA-822-R-07-001, February 2007);

(d) the methodology for deriving ambient water quality criteria for the protection of human health (EPA-822-B-00-004, October 2000) and associated technical support documents; or

(e) a determination of the natural background of the water body as described in Subsection E of 20.6.4.10 NMAC.

E. Site-specific criteria based on natural background. The commission may adopt site-specific criteria equal to the concentration resulting from natural background where that concentration protects the

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

- (1) consider natural spatial and seasonal to interannual variability as appropriate;
- (2) document the presence of natural sources of the pollutant;
- (3) document the absence of human sources of the pollutant or quantify the human contribution; and
- (4) rely on analytical, statistical or modeling methodologies to quantify the natural background.

[20.6.4.10 NMAC - Rp 20 NMAC 6.1.1102, 10-12-00; Rn, 20.6.4.9 NMAC, 05-23-05; A, 05-23-05; A, 12-01-10]

20.6.4.11 APPLICABILITY OF WATER QUALITY STANDARDS:

A. [RESERVED]

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

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

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

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

$$\text{Modified Harmonic Mean} = \left[\frac{\sum_{i=1}^{Nt-N_0} \frac{1}{Q_i}}{Nt - N_0} \right]^{-1} \times \left[\frac{Nt - N_0}{Nt} \right]$$

where, Q_i = 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 critical low flow is the minimum average four consecutive day flow that occurs with a frequency of once in three years (4Q3). The critical low flow may be determined on an annual, a seasonal or a monthly basis, as appropriate, after due consideration of site-specific conditions.

C. **Guaranteed Minimum Flow:** The commission may allow the use of a contractually guaranteed minimum streamflow in lieu of a critical low flow determined under Subsection B of this section on a case-by-case basis and upon consultation with the interstate stream commission. Should drought, litigation or any other reason interrupt or interfere with minimum flows under a guaranteed minimum flow contract for a period of at least thirty consecutive days, such permission, at the sole discretion of the commission, may then be revoked. Any minimum flow specified under such revoked permission shall be superseded by a critical low flow determined under Subsection B of this section. A public notice of the request for a guaranteed minimum flow shall be published in a newspaper of general circulation by the department at least 30 days prior to scheduled action by the commission. These water quality standards do not grant to the commission or any other entity the power to create, take away or modify property rights in water.

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 that allow the application of a dilution factor in calculations of effluent limitations. Effluent limitations shall be developed 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 criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.97 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 lakes, reservoirs, or playas; these effluents shall meet all applicable criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.97 through 20.6.4.899 NMAC and 20.6.4.900 NMAC at the point of discharge.

(2) The acute aquatic life criteria, as set out in Subsection I, Subsection J, and Subsection 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 aquatic life use.

(3) The general criteria set out in Subsections A, B, C, D, E, G, H and J of 20.6.4.13 NMAC, and the provision set out in Subsection D of 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 criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.97 through 20.6.4.899 NMAC and 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 criteria and allows the migration of aquatic life presently common in surface waters of the state with no effect on their populations.

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

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

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

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

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

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

[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; A, 12-01-10]

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.

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

B. Compliance with chronic water quality criteria shall be determined from the arithmetic mean of the analytical results of samples collected using applicable protocols. Chronic 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 20.6.4.14 NMAC, or by attainment of applicable ammonia criteria set out in Subsections K, L and M of 20.6.4.900 NMAC.

D. Compliance with the human health-organism only criteria shall be determined from the analytical results of representative grab samples, as defined in the water quality management plan. Human health-organism only criteria shall not be exceeded.

E. The commission may establish a numeric water quality criterion 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. For compliance with hardness-dependent numeric criteria, dissolved hardness (as mg CaCO₃/L) shall be determined from a sample taken at the same time that the sample for the contaminant is taken.

G. 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 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 or wasteload allocation. Compliance schedules may be included in NPDES permits at the time of permit renewal or modification and shall be written to require compliance at the earliest practicable time. Compliance schedules shall also specify milestone dates so as to measure progress towards final project completion (e.g., design completion, construction start, construction completion, date of compliance). [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; A, 12-01-10]

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

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 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.

B. Floating Solids, Oil and Grease: Surface waters of the state shall be free of oils, scum, grease and other floating materials resulting from other than natural causes that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

C. Color: Color-producing materials resulting from other than natural causes shall not create an aesthetically undesirable condition nor shall color impair the use of the water by desirable aquatic life presently common in surface waters of the state.

D. Organoleptic Quality:

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

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

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

F. Toxic Pollutants:

(1) Except as provided in 20.6.4.16 NMAC, surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, concentrations or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic

environments for habitation or aquatic organisms for food, or that will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels that will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.

(2) Pursuant to this section, the human health-organism only criteria shall be as set out in 20.6.4.900 NMAC. When a human health-organism only criterion is not listed in 20.6.4.900 NMAC, the following provisions shall be applied in accordance with 20.6.4.11, 20.6.4.12 and 20.6.4.14 NMAC.

(a) The human health-organism only 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 for the consumption of organism only 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 criteria shall be as set out in 20.6.4.900 NMAC. When a chronic aquatic life criterion is not listed in 20.6.4.900 NMAC, the following provisions shall be applied in sequential order in accordance with 20.6.4.11, 20.6.4.12 and 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 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 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 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. When an acute aquatic life criterion is not 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.

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 criteria set forth in the New Mexico Radiation Protection Regulations, 20.3.1 and 20.3.4 NMAC.

H. Pathogens: Surface waters of the state shall be free of pathogens from other than natural causes in sufficient quantity to impair public health or the designated, existing or attainable uses of a surface water of the state.

I. Temperature: Maximum temperatures for surface waters of the state have been specified in 20.6.4.97 through 20.6.4.900 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 would thereby be exceeded. These temperature 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 criteria.

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. Activities or discharges shall not cause turbidity to increase more than 10 NTU over background turbidity when the background turbidity, measured at a point

immediately upstream of the activity, is 50 NTU or less, nor to increase more than 20 percent when the background turbidity is more than 50 NTU. However, limited-duration turbidity increases caused by dredging, construction or other similar activities may be allowed provided all practicable turbidity control techniques have been applied and all appropriate permits, certifications and approvals have been obtained.

K. 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.

L. Dissolved Gases: Surface waters of the state shall be free of nitrogen and other dissolved gases at levels above 110 percent saturation when this supersaturation is attributable to municipal, industrial or other discharges.

M. Biological integrity: Surface waters of the state shall support and maintain a balanced and integrated community of aquatic organisms with species composition, diversity and functional organization comparable to those of natural or minimally impacted water bodies of a similar type and region. [20.6.4.13 NMAC - Rp 20 NMAC 6.1.1105, 10-12-00; A, 10-11-02; Rn, 20.6.4.12 NMAC, 05-23-05; A, 05-23-05; A, 12-01-10]

20.6.4.14 SAMPLING AND ANALYSIS:

A. 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.

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

C. Sampling Procedures:

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

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

(3) Lakes: Except for the restriction specified in Paragraph (2) of this subsection, lake sampling stations shall be located at any site where the attainment of a water quality criterion is to be assessed. Water quality measurements taken at intervals in the entire water column at a sampling station shall be averaged for the epilimnion, or in the absence of an epilimnion, for the upper one-third of the water column of the lake to determine attainment of criteria, except that attainment of criteria for toxic pollutants shall be assessed during periods of complete vertical mixing, e.g., during spring or fall turnover, or by taking depth-integrated composite samples of the water column.

D. Acute toxicity of effluent to aquatic life shall be determined using the procedures specified in U.S. environmental protection agency “methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms” (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 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” (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 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; A, 12-01-10]

20.6.4.15 USE ATTAINABILITY ANALYSIS:

A. A use attainability analysis is a scientific study conducted for the purpose of assessing the factors affecting the attainment of a use. Whenever a use attainability analysis is conducted, it shall be subject to the requirements and limitations set forth in 40 CFR Part 131, Water Quality Standards; specifically, Subsections 131.3(g), 131.10(g), 131.10(h) and 131.10(j) shall be applicable.

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

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

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

(1) *technical support manual: waterbody surveys and assessments for conducting use attainability analyses*, volume I (November 1983) and volume III (November 1984) or latest editions, United States environmental protection agency, office of water, regulations and standards, Washington, D.C., for the evaluation of aquatic life or wildlife uses;

(2) the department’s *hydrology protocol*, latest edition, approved by the commission, for identifying ephemeral and intermittent waters; or

(3) *interim economic guidance for water quality standards - workbook*, March 1995, United States environmental protection agency, office of water, Washington, D.C. for evaluating economic impacts.

C. If a use attainability analysis based on the department’s *hydrology protocol* (latest edition), approved by the commission, demonstrates to the satisfaction of the department that Section 101(a)(2) uses are not feasible in an ephemeral water body, the department shall post the use attainability analysis on its water quality standards website and notify its interested parties list of a 30-day public comment period. After reviewing any comments received, the department may proceed by submitting the use attainability analysis and response to comments to region 6 EPA for technical approval. If technical approval is granted, the water shall be subject to 20.6.4.97 NMAC. The use attainability analysis, the technical approval, and the applicability of 20.6.4.97 NMAC to the water shall be posted on the department’s water quality standards website. The department shall periodically petition the commission to list ephemeral waters under Subsection C of 20.6.4.97 NMAC and to incorporate changes to classified segments as appropriate.

D. Use attainability analysis conducted by an entity other than the department. Any person may submit notice to the department stating the intent to conduct a use attainability analysis. The proponent shall develop a work plan to conduct the use attainability analysis and shall submit the work plan to the department and region 6 EPA for review and comment. The work plan shall identify the scope of data currently available and the scope of data to be gathered, the factors affecting use attainment that will be analyzed and provisions for public notice and consultation with appropriate state and federal agencies. Upon approval of the work plan by the department, the proponent shall conduct the use attainability analysis in accordance with the approved work plan. The cost of such analysis shall be the responsibility of the proponent. Upon completion of the use attainability analysis, the proponent shall submit the data, findings and conclusions to the department. The department or the proponent may petition the commission to modify the designated use if the conclusions of the analysis support such action.

[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; A, 12-01-10]

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]

20.6.4.17 - 20.6.4.49: [RESERVED]

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]

20.6.4.51: [RESERVED]

20.6.4.52 PECOS RIVER BASIN - In order to protect existing and designated uses, it is a goal of the state of New Mexico to prevent increases in TDS in the Pecos river above the following benchmark values, which are expressed as flow-weighted, annual average concentrations, at three USGS gaging stations: at Santa Rosa 500 mg/L; near Artesia 2,700 mg/L; and near Malaga 3,600 mg/L. The benchmark values serve to guide state action. They are adopted pursuant to the New Mexico Water Quality Act, not the Clean Water Act.

[20.6.4.52 NMAC - N, 12-01-10]

20.6.4.53: [RESERVED]

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]

20.6.4.55 - 20.6.4.96: [RESERVED]

20.6.4.97 EPHEMERAL WATERS - Ephemeral unclassified waters of the state as identified below and additional ephemeral waters as identified on the department’s water quality standards website pursuant to Subsection C of 20.6.4.15 NMAC.

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

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

C. Waters:

[20.6.4.97 NMAC - N, 05-23-05; A, 12-01-10]

[NOTE: Effective 12-01-10, no waters are yet approved for listing in Subsection C of this section.]

20.6.4.98 INTERMITTENT WATERS - All non-perennial unclassified waters of the state, except those ephemeral waters included under 20.6.4.97 NMAC.

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

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

[20.6.4.98 NMAC - N, 05-23-05; A, 12-01-10]

20.6.4.99 PERENNIAL WATERS - All perennial unclassified waters of the state.

- A. **Designated Uses:** warmwater aquatic life, livestock watering, wildlife habitat and primary contact.
- B. **Criteria:** the use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following site-specific criteria apply: the monthly geometric mean of E. coli bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.
[20.6.4.99 NMAC - N, 05-23-05; A, 12-01-10]

20.6.4.100: [RESERVED]

20.6.4.101 RIO GRANDE BASIN - The main stem of the Rio Grande from the international boundary with Mexico upstream to one mile below Percha dam.

- A. **Designated Uses:** irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.
- B. **Criteria:**
 - (1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criterion applies: temperature 34°C (93.2°F) or less.
 - (2) At mean monthly flows above 350 cfs, the monthly average concentration for: TDS 2,000 mg/L or less, sulfate 500 mg/L or less and chloride 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; A, 12-01-10]

20.6.4.102 RIO GRANDE BASIN - The main stem of the Rio Grande from one mile below Percha dam upstream to Caballo dam.

- A. **Designated Uses:** irrigation, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.
- B. **Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL 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.
[20.6.4.102 NMAC - Rp 20 NMAC 6.1.2102, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.103 RIO GRANDE BASIN - The main stem of the Rio Grande from the headwaters of Caballo reservoir upstream to Elephant Butte dam and perennial reaches of tributaries to the Rio Grande in Sierra and Socorro counties, excluding waters on tribal lands.

- A. **Designated Uses:** irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, secondary contact and warmwater aquatic life.
- B. **Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
- C. **Remarks:** flow in this reach of the Rio Grande main stem is dependent upon release from Elephant Butte dam.
[20.6.4.103 NMAC - Rp 20 NMAC 6.1.2103, 10-12-00; A, 05-23-05; A, 12-01-10]

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 aquatic life.
- B. **Criteria:** the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.104 NMAC - Rp 20 NMAC 6.1.2104, 10-12-00; A, 05-23-05; A, 12-01-10]

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), excluding waters on Isleta pueblo.

- A. **Designated Uses:** irrigation, marginal warmwater aquatic life, livestock watering, public water supply, wildlife habitat and primary contact.

B. Criteria:

- (1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
- (2) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS 1,500 mg/L or less, sulfate 500 mg/L or less and chloride 250 mg/L or less.
[20.6.4.105 NMAC - Rp 20 NMAC 6.1.2105, 10-12-00; A, 05-23-05; A, 12-01-10]

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, excluding waters on Santa Ana pueblo, and intermittent water in the Jemez river below the Jemez pueblo boundary, excluding waters on Santa Ana and Zia pueblos, that enters the main stem of the Rio Grande. Portions of the Rio Grande in this segment are under the joint jurisdiction of the state and Sandia pueblo.

A. Designated Uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact; and public water supply on the Rio Grande.

B. Criteria:

- (1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
- (2) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS 1,500 mg/L or less, sulfate 500 mg/L or less and chloride 250 mg/L or less.
[20.6.4.106 NMAC - Rp 20 NMAC 6.1.2105.1, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.107 RIO GRANDE BASIN - The Jemez river from the Jemez pueblo boundary upstream to Soda dam near the town of Jemez Springs and perennial reaches of Vallecito creek.

A. Designated Uses: coldwater aquatic life, primary contact, irrigation, livestock watering and wildlife habitat; and public water supply on Vallecito creek.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F).
[20.6.4.107 NMAC - Rp 20 NMAC 6.1.2105.5, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.108 RIO GRANDE BASIN - Perennial reaches of the Jemez river and all its tributaries above Soda dam near the town of Jemez Springs, except San Gregorio lake and Sulphur creek above its confluence with Redondo creek, and perennial reaches of the Guadalupe river and all its tributaries.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 µS/cm or less (800 µS/cm or less on Sulphur creek); the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less; and pH within the range of 2.0 to 8.8 on Sulphur creek.
[20.6.4.108 NMAC - Rp 20 NMAC 6.1.2106, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.124 NMAC. The standards for San Gregorio lake are in 20.6.4.134 NMAC, effective 07-10-12]

20.6.4.109 RIO GRANDE BASIN - Perennial reaches of Bluewater creek excluding Bluewater lake and waters on tribal lands, Rio Moquino upstream of Laguna pueblo, Seboyeta creek, Rio Paguete upstream of Laguna pueblo, the Rio Puerco upstream of the northern boundary 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 excluding waters on tribal lands.

A. Designated Uses: coldwater aquatic life, domestic water supply, fish culture, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on La Jara creek.

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

[20.6.4.109 NMAC - Rp 20 NMAC 6.1.2107, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[NOTE: The standards for Bluewater lake are in 20.6.4.135 NMAC, effective 07-10-12]

20.6.4.110 RIO GRANDE BASIN - The main stem of the Rio Grande from Angostura diversion works upstream to Cochiti dam, excluding the reaches on San Felipe, Santo Domingo and Cochiti pueblos.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: pH within the range of 6.6 to 9.0 and temperature 25°C (77°F) or less.

[20.6.4.110 NMAC - Rp 20 NMAC 6.1.2108, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.111 RIO GRANDE BASIN - Perennial reaches of Las Huertas creek from the San Felipe pueblo boundary to the headwaters.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

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

[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.]

20.6.4.112 [RESERVED]

[20.6.4.112 NMAC - Rp 20 NMAC 6.1.2109, 10-12-00; A, 05-23-05; Repealed, 12-01-10]

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

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

B. Criteria: The use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 30°C (86°F) or less.

[20.6.4.113 NMAC - Rp 20 NMAC 6.1.2110, 10-12-00; A, 10-11-02; A, 05-23-05; A, 12-01-10; A, 02-14-13]

20.6.4.114 RIO GRANDE BASIN - The main stem of the Rio Grande from the Cochiti pueblo boundary upstream to Rio Pueblo de Taos excluding waters on San Ildefonso, Santa Clara and Ohkay Owingeh pueblos, Embudo creek from its mouth on the Rio Grande upstream to the Picuris Pueblo boundary, the Santa Cruz river from the Santa Clara pueblo boundary upstream to the Santa Cruz dam, the Rio Tesuque except waters on the Tesuque and Pojoaque pueblos, and the Pojoaque river from the San Ildefonso pueblo boundary upstream to the Pojoaque pueblo boundary. Some Rio Grande waters in this segment are under the joint jurisdiction of the state and San Ildefonso pueblo.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact and warmwater aquatic life; and public water supply on the main stem Rio Grande.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: 6T3 temperature 22°C (71.6°F) and maximum temperature 25°C (78.8°F). In addition, the following criteria based on a 12-month rolling average are applicable to the public water supply use for monitoring and public disclosure purposes only:

Radionuclide	pCi/L
Americium-241	1.9
Cesium-137	6.4
Plutonium-238	1.5
Plutonium-239/240	1.5
Strontium-90	3.5
Tritium	4,000

(2) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS 500 mg/L or less, sulfate 150 mg/L or less and chloride 25 mg/L or less.
[20.6.4.114 NMAC - Rp 20 NMAC 6.1.2111, 10-12-00; A, 05-23-05; A, 12-01-10]

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

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

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

[20.6.4.115 NMAC - Rp 20 NMAC 6.1.2112, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[NOTE: The standards for Hopewell lake are in 20.6.4.134 NMAC, effective 07-10-12]

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 aquatic life, warmwater aquatic life and secondary contact.

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

[20.6.4.116 NMAC - Rp 20 NMAC 6.1.2113, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.117 RIO GRANDE BASIN - Abiquiu reservoir.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.117 NMAC - Rp 20 NMAC 6.1.2114, 10-12-00; A, 05-23-05; A, 12-01-10]

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. Some Rio Chama waters in this segment are under the joint jurisdiction of the state and the Jicarilla Apache tribe.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 26°C (78.8°F) or less.

[20.6.4.118 NMAC - Rp 20 NMAC 6.1.2115, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.119 RIO GRANDE BASIN - All perennial reaches of tributaries to the Rio Chama above Abiquiu dam, except Canjilon lakes a, c, e and f and the Rio Gallina and Rio Puerco de Chama north of state highway 96 and excluding waters on Jicarilla Apache reservation, and the main stem of the Rio Chama from the headwaters of El Vado reservoir upstream to the New Mexico-Colorado line. Some Cañones creek and Rio Chama waters in this segment are under the joint jurisdiction of the state and the Jicarilla Apache tribe.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the Rio Brazos and Rio Chama.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 500 μ S/cm or less (1,000 μ S or less for Coyote creek); the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.119 NMAC - Rp 20 NMAC 6.1.2116, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[NOTE: The standards for Canjilon lakes a, c, e and f are in 20.6.4.134 NMAC, effective 07-10-12]

20.6.4.120 RIO GRANDE BASIN - El Vado and Heron reservoirs.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, public water supply, primary contact and coldwater aquatic life.

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

[20.6.4.120 NMAC - Rp 20 NMAC 6.1.2117, 10-12-00; A. 05-23-05; A, 12-01-10]

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 and excluding waters on tribal lands.

A. Designated uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on Little Tesuque creek, the Rio en Medio, and the Santa Fe river.

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

[20.6.4.121 NMAC - Rp 20 NMAC 6.1.2118, 10-12-00; A. 05-23-05; A, 12-01-10; A, 02-14-13]

[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.]

20.6.4.122 RIO GRANDE BASIN - The main stem of the Rio Grande from 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. Some Rio Grande and Rio Pueblo de Taos waters in this segment are under the joint jurisdiction of the state and Taos pueblo.

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

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

[20.6.4.122 NMAC - Rp 20 NMAC 6.1.2119, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.123 RIO GRANDE BASIN - 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 and excluding waters on Santa Clara, Ohkay Owingeh, Picuris and Taos pueblos.

A. Designated Uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the Rio Pueblo and Rio Fernando de Taos.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 μ S/cm or less (500 μ S/cm or less for the Rio Fernando de Taos); the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less; and phosphorus (unfiltered sample) less than 0.1 mg/L for the Red river.

[20.6.4.123 NMAC - Rp 20 NMAC 6.1.2120, 10-12-00; A, 05-23-05; A, 12-01-10]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.129 NMAC.]

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: the use-specific criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: pH within the range of 2.0 to 9.0, maximum temperature 30°C (86°F), and the chronic aquatic life criteria of Subsections I and J of 20.6.4.900 NMAC.

[20.6.4.124 NMAC - N, 05-23-05; A, 12-01-10]

20.6.4.125 RIO GRANDE BASIN - Perennial reaches of San Pedro creek from the San Felipe pueblo boundary to the headwaters.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less. [20.6.4.125 NMAC - N, 05-23-05; A, 12-01-10]

20.6.4.126 RIO GRANDE BASIN - Perennial portions of Cañon de Valle from Los Alamos national laboratory (LANL) stream gage E256 upstream to Burning Ground spring, Sandia canyon from Sigma canyon upstream to LANL NPDES outfall 001, Pajarito canyon from 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: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.126 NMAC - N, 05-23-05; A, 12-01-10]

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

[20.6.4.127 NMAC - N, 05-23-05; A, 12-01-10]

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: the use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the acute total ammonia criteria set forth in Subsection K of 20.6.4.900 NMAC (salmonids absent).

[20.6.4.128 NMAC - N, 05-23-05; A, 12-01-10]

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 primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 µS/cm or less and phosphorus (unfiltered sample) less than 0.1 mg/L.

[20.6.4.129 NMAC - N, 05-23-05; A, 12-01-10]

20.6.4.130 RIO GRANDE BASIN - The Rio Puerco from the Rio Grande upstream to Arroyo Chijuilla, excluding the reaches on Isleta, Laguna and Cañoncito Navajo pueblos. Some waters in this segment are under the joint jurisdiction of the state and Isleta, Laguna or Cañoncito Navajo pueblos.

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

B. Criteria:

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

(2) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS 1,500 mg/L or less, sulfate 500 mg/L or less and chloride 250 mg/L or less.
[20.6.4.130 NMAC - N, 12-01-10]

20.6.4.131 RIO GRANDE BASIN - The Rio Puerco from the confluence of Arroyo Chijuilla upstream to the northern boundary of Cuba.

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

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

[20.6.4.131 NMAC - N, 12-01-10]

20.6.4.132 RIO GRANDE BASIN - Rio Grande (Klauer) spring

A. Designated uses: domestic water supply, wildlife habitat, livestock watering, coldwater aquatic life use and primary contact.

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

[20.6.4.132 NMAC - N, 12-01-10]

20.6.4.133 RIO GRANDE BASIN - Bull Creek lake, Cow lake, Elk lake, Goose lake, Heart lake, Hidden lake (Lake Hazel), Horseshoe lake, Horseshoe (Alamitos) lake, Jose Vigil lake, Lost lake, Middle Fork lake, Nambe lake, Nat II lake, Nat IV lake, No Fish lake, Pioneer lake, San Leonardo lake, Santa Fe lake, Serpent lake, South Fork lake, Trampas lakes (east and west) and Williams lake.

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

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

[20.6.4.133 NMAC - N, 07-10-12]

20.6.4.134 RIO GRANDE BASIN - Cabresto lake, Canjilon lakes a, c, e and f, Fawn lakes (east and west), Hopewell lake and San Gregorio lake.

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

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

[20.6.4.134 NMAC - N, 07-10-12]

20.6.4.135 RIO GRANDE BASIN - Bluewater lake.

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

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: phosphorus (unfiltered sample) 0.1 mg/L or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.135 NMAC - N, 07-10-12]

20.6.4.136 RIO GRANDE BASIN - The Santa Fe river from the outfall of the Santa Fe wastewater treatment facility to Guadalupe street.

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

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

[20.6.4.136 NMAC - N, 02-14-13]

20.6.4.137 RIO GRANDE BASIN - The Santa Fe river from Guadalupe street to Nichols reservoir.
A. Designated uses: coolwater aquatic life, wildlife habitat, primary contact, livestock watering, and irrigation.

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

[20.6.4.137 NMAC - N, 02-14-13]

20.6.4.138 RIO GRANDE BASIN - Nichols and McClure reservoirs.

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

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

[20.6.4.138 NMAC - N, 02-14-13]

20.6.4.139 RIO GRANDE BASIN - Perennial reaches of Galisteo creek and perennial reaches of its tributaries from Kewa pueblo upstream to 2.2 miles upstream of Lamy.

A. Designated uses: coolwater aquatic life, primary contact, irrigation, livestock watering, domestic water supply and wildlife habitat; and public water supply on Cerrillos reservoir.

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

[20.6.4.139 NMAC - N, 02-14-13]

20.6.4.140 - 20.6.4.200: [RESERVED]

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, primary contact and warmwater aquatic life.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: dissolved boron for irrigation use 2,000 $\mu\text{g}/\text{L}$ or less.

(2) At all flows above 50 cfs: TDS 20,000 mg/L or less, sulfate 3,000 mg/L or less and chloride 10,000 mg/L or less.

[20.6.4.201 NMAC - Rp 20 NMAC 6.1.2201, 10-12-00; A, 05-23-05; A, 12-01-10]

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, including perennial reaches of the Black river, the Delaware river and Blue spring.

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

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 34°C (93.2°F) or less.

(2) At all flows above 50 cfs: TDS 8,500 mg/L or less, sulfate 2,500 mg/L or less and chloride 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; A, 12-01-10]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for Lower Tansil Lake and Lake Carlsbad are under 20.6.4.218 NMAC.]

20.6.4.203 PECOS RIVER BASIN - The main stem of the Pecos river from the headwaters of Lake Carlsbad upstream to Avalon dam.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: temperature 34°C (93.2°F) or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.203 NMAC - Rp 20 NMAC 6.1.2203, 10-12-00; A, 05-23-05; A, 12-01-10]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for Lower Tansil Lake and Lake Carlsbad are under 20.6.4.218 and for Avalon Reservoir are under 20.6.4.219 NMAC.]

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

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

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

[20.6.4.204 NMAC - Rp 20 NMAC 6.1.2204, 10-12-00; A, 05-23-05; A, 12-01-10]

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

20.6.4.205 PECOS RIVER BASIN - Brantley reservoir.

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

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

[20.6.4.205 NMAC - Rp 20 NMAC 6.1.2205, 10-12-00; A, 05-23-05; A, 12-01-10]

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

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

B. Criteria:

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

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

[20.6.4.206 NMAC - Rp 20 NMAC 6.1.2206, 10-12-00; A, 05-23-05; A, 12-01-10]

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

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

B. Criteria:

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

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

[20.6.4.207 NMAC - Rp 20 NMAC 6.1.2207, 10-12-00; A, 05-23-05; A, 12-01-10]

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 aquatic life and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: temperature 30°C (86°F) or less, and phosphorus (unfiltered sample) less than 0.1 mg/L.
[20.6.4.208 NMAC - Rp 20 NMAC 6.1.2208, 10-12-00; A, 05-23-05; A, 12-01-10]

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

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

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

[20.6.4.209 NMAC - Rp 20 NMAC 6.1.2209, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[NOTE: The standards for Bonito lake are in 20.6.4.223 NMAC, effective 07-10-12]

20.6.4.210 PECOS RIVER BASIN - Sumner reservoir.

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

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

[20.6.4.210 NMAC - Rp 20 NMAC 6.1.2210, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.211 PECOS RIVER BASIN - The main stem of the Pecos river from the headwaters of Sumner reservoir upstream to Tecolote creek excluding Santa Rosa reservoir.

A. Designated Uses: fish culture, irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria:

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

(2) At all flows above 50 cfs: TDS 3,000 mg/L or less, sulfate 2,000 mg/L or less and chloride 400 mg/L or less.

[20.6.4.211 NMAC - Rp 20 NMAC 6.1.2211, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[NOTE: The standards for Santa Rosa reservoir are in 20.6.4.225 NMAC, effective 07-10-12]

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 aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.212 NMAC - Rp 20 NMAC 6.1.2211.1, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.213 PECOS RIVER BASIN - McAllister lake.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.213 NMAC - Rp 20 NMAC 6.1.2211.3, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.214 PECOS RIVER BASIN - Storrie lake.

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

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

[20.6.4.214 NMAC - Rp 20 NMAC 6.1.2211.5, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.215 PECOS RIVER BASIN - 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 aquatic life, irrigation, livestock watering, wildlife habitat, industrial water supply and primary contact; and public water supply on the Gallinas river.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 μ S/cm or less (450 μ S/cm or less in Wright Canyon creek); the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.215 NMAC - Rp 20 NMAC 6.1.2212, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.216 PECOS RIVER BASIN - The main stem of the Pecos river from Tecolote creek upstream to Cañon de Manzanita.

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

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 30°C (86°F) or less.

(2) At all flows above 10 cfs: TDS 250 mg/L or less, sulfate 25 mg/L or less and chloride 5 mg/L or less.

[20.6.4.216 NMAC - Rp 20 NMAC 6.1.2213, 10-12-00; A, 05-23-05; A, 12-01-10]

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 Cañon de Manzanita upstream to its headwaters, including perennial reaches of all tributaries thereto except lakes identified in 20.6.4.222 NMAC.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the main stem of the Pecos river.

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

[20.6.4.217 NMAC - Rp 20 NMAC 6.1.2214, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[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.]

20.6.4.218 PECOS RIVER BASIN - Lower Tansil lake and Lake Carlsbad.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 34°C (93.2°F) or less.

[20.6.4.218 NMAC - N, 05-23-05; A, 12-01-10]

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

[20.6.4.219 NMAC - N, 05-23-05; A, 12-01-10]

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: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 30°C (86°F) or less.
[20.6.4.220 NMAC - N, 05-23-05; A, 12-01-10]

20.6.4.221 PECOS RIVER BASIN - Pecos Arroyo.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL, single sample 940 cfu/100 mL.
[20.6.4.221 NMAC - N, 05-23-05; A, 12-01-10]

20.6.4.222 PECOS RIVER BASIN - Johnson lake, Katherine lake, Lost Bear lake, Pecos Baldy lake, Spirit lake, Stewart lake and Truchas lakes (north and south).

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

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.222 NMAC - N, 07-10-12]

20.6.4.223 PECOS RIVER BASIN - Bonito lake.

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

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: specific conductance 1100 µS/cm or less; phosphorus (unfiltered sample) less than 0.1 mg/L; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.223 NMAC - N, 07-10-12]

20.6.4.224 PECOS RIVER BASIN - Monastery lake.

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

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.
[20.6.4.224 NMAC - N, 07-10-12]

20.6.4.225 PECOS RIVER BASIN - Santa Rosa reservoir.

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

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
[20.6.4.225 NMAC - N, 07-10-12]

20.6.4.226 PECOS RIVER BASIN - Perch lake.

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

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.226 NMAC - N, 07-10-12]

20.6.4.227 PECOS RIVER BASIN - Lea lake.

A. Designated Uses: warmwater aquatic life, primary contact and wildlife habitat.
B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.227 NMAC - N, 07-10-12]

20.6.4.228 PECOS RIVER BASIN - Cottonwood lake and Devil's Inkwell.

A. Designated Uses: coolwater aquatic life, primary contact and wildlife habitat.
B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.
[20.6.4.228 NMAC - N, 07-10-12]

20.6.4.229 PECOS RIVER BASIN - Mirror lake.

A. Designated Uses: warmwater aquatic life, primary contact and wildlife habitat.
B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.
[20.6.4.229 NMAC - N, 07-10-12]

20.6.4.230 - 20.6.4.300: [RESERVED]

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 that enters the main stem from Revuelto creek.

A. Designated Uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.
B. Criteria:
(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
(2) TDS 6,500 mg/L or less at flows above 25 cfs.

[20.6.4.301 NMAC - Rp 20 NMAC 6.1.2301, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.302 CANADIAN RIVER BASIN - Ute reservoir.

A. Designated Uses: livestock watering, wildlife habitat, public water supply, industrial water supply, primary contact and warmwater aquatic life.
B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.302 NMAC - Rp 20 NMAC 6.1.2302, 10-12-00; A, 05-23-05; A, 12-01-10]

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 and Ute creeks and their perennial tributaries.

A. Designated Uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.
B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
[20.6.4.303 NMAC - Rp 20 NMAC 6.1.2303, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.304 CANADIAN RIVER BASIN - Conchas reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, public water supply, primary contact and warmwater aquatic life.
B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.304 NMAC - Rp 20 NMAC 6.1.2304, 10-12-00; A, 05-23-05; A, 12-01-10]

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 (except Lake Maloya and Lake Alice) and Uña de Gato creeks.

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

B. Criteria:

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

(2) TDS 3,500 mg/L or less at flows above 10 cfs.

[20.6.4.305 NMAC - Rp 20 NMAC 6.1.2305, 10-12-00; A, 05-23-05; A, 12-01-10]

[NOTE: This segment was divided effective 12-01-10. The standards for Lake Maloya and Lake Alice are under 20.6.4.311 and 20.6.4.312 NMAC.]

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 aquatic life, livestock watering, wildlife habitat and primary contact; and public water supply on Cimarroncito creek.

B. Criteria:

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

(2) TDS 3,500 mg/L or less at flows above 10 cfs.

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

20.6.4.307 CANADIAN RIVER BASIN - Perennial reaches of the Mora river from the USGS gaging station near Shoemaker upstream to the state highway 434 bridge in Mora, all perennial reaches of tributaries to the Mora river downstream from the USGS gaging station at La Cueva in San Miguel and Mora counties except lakes identified in 20.6.4.313 NMAC, perennial reaches of Ocate creek 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 aquatic life, warmwater aquatic life, primary contact, irrigation, livestock watering and wildlife habitat.

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

[20.6.4.307 NMAC - Rp 20 NMAC 6.1.2305.3, 10-12-00; A, 05-23-05; A, 12-01-10; A, 07-10-12]

20.6.4.308 CANADIAN RIVER BASIN - Charette lakes.

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

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

[20.6.4.308 NMAC - Rp 20 NMAC 6.1.2305.5, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.309 CANADIAN RIVER BASIN - The Mora river and perennial reaches of its tributaries upstream from the state highway 434 bridge in Mora except lakes identified in 20.6.4.313 NMAC, all perennial reaches of tributaries to the Mora river upstream from the USGS gaging station at La Cueva, perennial reaches of Coyote creek and its tributaries, the Cimarron river and its perennial tributaries above state highway 21 in Cimarron except Eagle Nest lake, all perennial reaches of tributaries to the Cimarron river north and northwest of highway 64 except north and south Shuree ponds, perennial reaches of Rayado creek 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 aquatic life, livestock watering, wildlife habitat, and primary contact; and public water supply on the Cimarron river upstream from Cimarron and on perennial reaches of Rayado creek and its tributaries.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 500 μ S/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.309 NMAC - Rp 20 NMAC 6.1.2306, 10-12-00; A, 7-19-01; A, 05-23-05; A, 12-01-10; A, 07-10-12]

[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 standards for Shuree ponds are in 20.6.4.314 NMAC and the standards for Eagle Nest lake are in 20.6.4.315 NMAC, effective 07-10-12]

20.6.4.310 CANADIAN RIVER BASIN - Perennial reaches of Corrupma creek.

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

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: temperature 25°C (77°F) or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

(2) TDS 1,200 mg/L or less, sulfate 600 mg/L or less, chloride 40 mg/L or less.

[20.6.4.310 NMAC - N, 05-23-05; A, 12-01-10]

20.6.4.311 Lake Alice.

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

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

[20.6.4.311 NMAC - N, 12-01-10]

20.6.4.312 Lake Maloya.

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

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

[20.6.4.312 NMAC - N, 12-01-10]

20.6.4.313 CANADIAN RIVER BASIN - Encantada lake, Maestas lake, Middle Fork lake of Rio de la Casa, North Fork lake of Rio de la Casa and Pacheco lake.

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

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

[20.6.4.313 NMAC - N, 07-10-12]

20.6.4.314 CANADIAN RIVER BASIN - Shuree ponds (north and south).

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

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: specific conductance 500 μ S/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.314 NMAC - N, 07-10-12]

20.6.4.315 CANADIAN RIVER BASIN - Eagle Nest lake.

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

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses except that the following segment-specific criteria apply: specific conductance 500 μ S/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less. [20.6.4.315 NMAC - N, 07-10-12]

20.6.4.316 CANADIAN RIVER BASIN - Clayton lake.

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

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less. [20.6.4.316 NMAC - N, 07-10-12]

20.6.4.317 CANADIAN RIVER BASIN - Springer lake.

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

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses. [20.6.4.317 NMAC - N, 07-10-12]

20.6.4.318 - 20.6.4.400: [RESERVED]

20.6.4.401 SAN JUAN RIVER BASIN - The main stem of the San Juan river from the Navajo Nation boundary at the Hogback upstream to its confluence with the Animas river. Some waters in this segment are under the joint jurisdiction of the state and the Navajo Nation.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 32.2°C (90°F) or less. [20.6.4.401 NMAC - Rp 20 NMAC 6.1.2401, 10-12-00; A, 05-23-05; A, 12-01-10]

[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.]

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, marginal warmwater aquatic life, marginal coldwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 32.2°C (90°F) or less. [20.6.4.402 NMAC - Rp 20 NMAC 6.1.2402, 10-12-00; A, 05-23-05; A, 12-01-10]

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

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses. [20.6.4.403 NMAC - Rp 20 NMAC 6.1.2403, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.404 SAN JUAN RIVER BASIN - The Animas river from Estes Arroyo upstream to the New Mexico-Colorado line.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: phosphorus (unfiltered sample) 0.1 mg/L or less. [20.6.4.404 NMAC - Rp 20 NMAC 6.1.2404, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.405 SAN JUAN RIVER BASIN - The main stem of the San Juan river from Canyon Largo upstream to the Navajo dam.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 $\mu\text{S}/\text{cm}$ or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less. [20.6.4.405 NMAC - Rp 20 NMAC 6.1.2405, 10-12-00; A, 05-23-05; A, 12-01-10]

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

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

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

[20.6.4.406 NMAC - Rp 20 NMAC 6.1.2406, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.407 SAN JUAN RIVER BASIN - Perennial reaches of the Navajo river from the Jicarilla Apache reservation boundary to the Colorado border and perennial reaches of Los Pinos river in New Mexico.

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

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

[20.6.4.407 NMAC - Rp 20 NMAC 6.1.2407, 10-12-00; A, 05-23-05; A, 12-01-10]

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

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

[20.6.4.408 NMAC - N, 05-23-05; A, 12-01-10]

20.6.4.409 SAN JUAN RIVER BASIN - Lake Farmington.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.409 NMAC - N, 12-01-10]

20.6.4.410 SAN JUAN RIVER BASIN - Jackson lake.

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

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

[20.6.4.410 NMAC - N, 07-10-12]

20.6.4.411 - 20.6.4.450: [RESERVED]

20.6.4.451 LITTLE COLORADO RIVER BASIN - The Rio Nutria upstream of the Zuni pueblo boundary, Tampico draw, Agua Remora, Tampico springs.

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

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

[20.6.4.451 NMAC - N, 12-01-10]

20.6.4.452 LITTLE COLORADO RIVER BASIN - Ramah lake.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.452 NMAC - N, 12-01-10]

20.6.4.453 LITTLE COLORADO RIVER BASIN - Quemado lake.

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

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

[20.6.4.453 NMAC - N, 07-10-12]

20.6.4.454 - 20.6.4.500: [RESERVED]

20.6.4.501 GILA RIVER BASIN - The main stem of the Gila river from the New Mexico-Arizona line upstream to Redrock canyon and perennial reaches of streams in Hidalgo county.

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

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

[20.6.4.501 NMAC - Rp 20 NMAC 6.1.2501, 10-12-00; A, 05-23-05; A, 12-01-10]

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

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: 28°C (82.4°F) or less.

[20.6.4.502 NMAC - Rp 20 NMAC 6.1.2502, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.503 GILA RIVER BASIN - All perennial tributaries to the Gila river above and including Mogollon creek.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less for the main stem of the Gila river above Gila hot springs and 400 µS/cm or less for other reaches; 32.2°C (90°F) or less in the east fork of the Gila river and Sapillo creek below Lake Roberts; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.503 NMAC - Rp 20 NMAC 6.1.2503, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.504 GILA RIVER BASIN - Wall lake, Lake Roberts and Snow lake.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: specific conductance 300 µS/cm or less.

[20.6.4.504 NMAC - Rp 20 NMAC 6.1.2504, 10-12-00; A, 05-23-05; A, 12-01-10]

[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.]

20.6.4.505 GILA RIVER BASIN - Bill Evans lake.

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

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

[20.6.4.505 NMAC - N, 07-10-12]

20.6.4.506 - 20.6.4.600: [RESERVED]

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, marginal warmwater and marginal coldwater aquatic life, livestock watering, wildlife habitat and primary contact.

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

[20.6.4.601 NMAC - Rp 20 NMAC 6.1.2601, 10-12-00; A, 05-23-05; A, 12-01-10]

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

[20.6.4.602 NMAC - Rp 20 NMAC 6.1.2602, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.603 SAN FRANCISCO RIVER BASIN - All perennial reaches of tributaries to the San Francisco river above the confluence of Whitewater creek and including Whitewater creek.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 µS/cm or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less; and temperature 25°C (77°F) or less in Tularosa creek.

[20.6.4.603 NMAC - Rp 20 NMAC 6.1.2603, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.604 - 20.6.4.700: [RESERVED]

20.6.4.701 DRY CIMARRON RIVER - Perennial portions of the Dry Cimarron river above Oak creek and perennial reaches of Oak creek.

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

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: temperature 25°C (77°F) or less, the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

(2) TDS 1,200 mg/L or less, sulfate 600 mg/L or less and chloride 40 mg/L or less.

[20.6.4.701 NMAC - Rp 20 NMAC 6.1.2701, 10-12-00; A, 05-23-05 A, 12-01-10]

[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.]

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: coolwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

(2) TDS 1,200 mg/L or less, sulfate 600 mg/L or less and chloride 40 mg/L or less.

[20.6.4.702 NMAC - N, 05-23-05; A, 12-01-10; A, 07-10-12]

20.6.4.703 - 20.6.4.800: [RESERVED]

20.6.4.801 CLOSED BASINS - Rio Tularosa east of the old U.S. highway 70 bridge crossing east of Tularosa and all perennial tributaries to the Tularosa basin except Three Rivers and excluding waters on the Mescalero tribal lands.

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

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

[20.6.4.801 NMAC - Rp 20 NMAC 6.1.2801, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.802 CLOSED BASINS - Perennial reaches of Three Rivers.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 500 μ S/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.802 NMAC - Rp 20 NMAC 6.1.2802, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.803 CLOSED BASINS - Perennial reaches of the Mimbres river downstream of the confluence with Willow Springs canyon and all perennial reaches of tributaries thereto.

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

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

[20.6.4.803 NMAC - Rp 20 NMAC 6.1.2803, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.804 CLOSED BASINS - Perennial reaches of the Mimbres river upstream of the confluence with Willow Springs canyon and all perennial tributaries thereto.

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

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

[20.6.4.804 NMAC - Rp 20 NMAC 6.1.2804, 10-12-00; A, 05-23-05; A, 12-01-10]

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 water supply, livestock watering, wildlife habitat, marginal coldwater aquatic life and primary contact.

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

[20.6.4.805 NMAC - Rp 20 NMAC 6.1.2805, 10-12-00; A, 05-23-05; A, 12-01-10]

20.6.4.806 CLOSED BASINS - Bear canyon reservoir.

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

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: specific conductance 300 μ S/cm or less.

[20.6.4.806 NMAC - N, 05-23-05; A, 12-01-10]

20.6.4.807 - 20.6.4.899: [RESERVED]

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

A. Fish Culture and Water Supply: Fish culture, public water supply and industrial water supply 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.

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. Those criteria listed under domestic water supply in Subsection J of this section apply to this use.

C. Irrigation and Irrigation Storage: the following numeric criteria and those criteria listed under irrigation in Subsection J of this section 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. |

D. Primary Contact: the monthly geometric mean of E. coli bacteria of 126 cfu/100 mL and single sample of 410 cfu/100 mL and pH within the range of 6.6 to 9.0 apply to this use.

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.

F. Livestock Watering: the criteria listed in Subsection J of this section for livestock watering apply to this use.

G. Wildlife Habitat: Wildlife habitat 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; can bioaccumulate; or might impair the community of animals in a watershed or the ecological integrity of surface waters of the state. The numeric criteria listed in Subsection J for wildlife habitat apply to this use.

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

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

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

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

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

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

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

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

I. Hardness-dependent acute and chronic aquatic life criteria for metals are calculated using the following equations. The criteria are expressed as a function of dissolved hardness (as mg CaCO₃/L). With the exception of aluminum, the equations are valid only for dissolved hardness concentrations of 0-400 mg/L. For dissolved hardness concentrations above 400 mg/L, the criteria for 400 mg/L apply. For aluminum the equations are valid only for dissolved hardness concentrations of 0-220 mg/L. For dissolved hardness concentrations above 220 mg/L, the aluminum criteria for 220 mg/L apply.

(1) **Acute aquatic life criteria for metals.** The equation to calculate acute criteria in µg/L is $\exp(m_A[\ln(\text{hardness})] + b_A)(CF)$. Except for aluminum, the criteria are based on analysis of dissolved metal. For aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department. The equation parameters are as follows:

Metal	m_A	b_A	Conversion factor (CF)
Aluminum (Al)	1.3695	1.8308	
Cadmium (Cd)	0.8968	-3.5699	$1.136672 - [(\ln \text{hardness})(0.041838)]$
Chromium (Cr) III	0.8190	3.7256	0.316
Copper (Cu)	0.9422	-1.700	0.960
Lead (Pb)	1.273	-1.460	$1.46203 - [(\ln \text{hardness})(0.145712)]$
Manganese (Mn)	0.3331	6.4676	
Nickel (Ni)	0.8460	2.255	0.998
Silver (Ag)	1.72	-6.59	0.85
Zinc (Zn)	0.9094	0.9095	0.978

(2) **Chronic aquatic life criteria for metals.** The equation to calculate chronic criteria in µg/L is $\exp(m_C[\ln(\text{hardness})] + b_C)(CF)$. Except for aluminum, the criteria are based on analysis of dissolved metal. For aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department. The equation parameters are as follows:

Metal	m_C	b_C	Conversion factor (CF)
Aluminum (Al)	1.3695	0.9161	
Cadmium (Cd)	0.7647	-4.2180	$1.101672 - [(\ln \text{hardness})(0.041838)]$
Chromium (Cr) III	0.8190	0.6848	0.860
Copper (Cu)	0.8545	-1.702	0.960
Lead (Pb)	1.273	-4.705	$1.46203 - [(\ln \text{hardness})(0.145712)]$
Manganese (Mn)	0.3331	5.8743	
Nickel (Ni)	0.8460	0.0584	0.997
Zinc (Zn)	0.9094	0.6235	0.986

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

Hardness as CaCO ₃ , dissolved (mg/L)		Al	Cd	Cr III	Cu	Pb	Mn	Ni	Ag	Zn
	25	Acute	512	0.51	180	4	14	1,881	140	0.3
	Chronic	205	0.17	24	3	1	1,040	16		34

Hardness as CaCO ₃ , dissolved (mg/L)		Al	Cd	Cr III	Cu	Pb	Mn	Ni	Ag	Zn
		30	Acute	658	0.59	210	4	17	1,999	170
	Chronic	263	0.19	28	3	1	1,105	19		41
40	Acute	975	0.76	270	6	24	2,200	220	0.7	70
	Chronic	391	0.23	35	4	1	1,216	24		53
50	Acute	1,324	0.91	320	7	30	2,370	260	1.0	85
	Chronic	530	0.28	42	5	1	1,309	29		65
60	Acute	1,699	1.07	370	8	37	2,519	300	1.3	101
	Chronic	681	0.31	49	6	1	1,391	34		76
70	Acute	2,099	1.22	430	10	44	2,651	350	1.7	116
	Chronic	841	0.35	55	7	2	1,465	38		88
80	Acute	2,520	1.37	470	11	51	2,772	390	2.2	131
	Chronic	1,010	0.39	62	7	2	1,531	43		99
90	Acute	2,961	1.51	520	12	58	2,883	430	2.7	145
	Chronic	1,186	0.42	68	8	2	1,593	48		110
100	Acute	3,421	1.65	570	13	65	2,986	470	3.2	160
	Chronic	1,370	0.45	74	9	3	1,650	52		121
200	Acute	8,838	2.98	1,010	26	140	3,761	840	11	301
	Chronic	3,541	0.75	130	16	5	2,078	90		228
220	Acute	10,071								
	Chronic	4,035								
300	Acute	10,071	4.21	1,400	38	210	4,305	1190	21	435
	Chronic	4,035	1.00	180	23	8	2,379	130		329
400 and above	Acute	10,071	5.38	1,770	50	280	4,738	1510	35	564
	Chronic	4,035	1.22	230	29	11	2,618	170		428

J. Use-Specific Numeric criteria.

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

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

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

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

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

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

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

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

(h) The criteria for polychlorinated biphenyls (PCBs) applies to the sum of all congeners, to the sum of all homologs or to the sum of all aroclors.

(2) **Table of Numeric Criteria:** The following table sets forth the numeric criteria applicable to existing, designated and attainable uses. Additional criteria that are not compatible with this table are found in Subsections A through I, K and L of this section.

Pollutant	CAS Number	DWS	Irr	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Aluminum, dissolved	7429-90-5		5,000						
Aluminum, total recoverable	7429-90-5					a	a		
Antimony, dissolved	7440-36-0	6						640	P
Arsenic, dissolved	7440-38-2	10	100	200		340	150	9.0	C,P
Asbestos	1332-21-4	7,000,000 fibers/L							
Barium, dissolved	7440-39-3	2,000							
Beryllium, dissolved	7440-41-7	4							
Boron, dissolved	7440-42-8		750	5,000					
Cadmium, dissolved	7440-43-9	5	10	50		a	a		
Chlorine residual	7782-50-5				11	19	11		
Chromium III, dissolved	16065-83-1					a	a		
Chromium VI, dissolved	18540-29-9					16	11		
Chromium, dissolved	7440-47-3	100	100	1,000					
Cobalt, dissolved	7440-48-4		50	1,000					
Copper, dissolved	7440-50-8	1300	200	500		a	a		
Cyanide, total recoverable	57-12-5	200			5.2	22.0	5.2	140	
Lead, dissolved	7439-92-1	15	5,000	100		a	a		
Manganese, dissolved	7439-96-5					a	a		
Mercury	7439-97-6	2		10	0.77				
Mercury, dissolved	7439-97-6					1.4	0.77		
Methylmercury	22967-92-6							0.3 mg/kg in fish tissue	P
Molybdenum, dissolved	7439-98-7		1,000						
Molybdenum, total recoverable	7439-98-7					7,920	1,895		
Nickel, dissolved	7440-02-0	700				a	a	4,600	P
Nitrate as N		10 mg/L							
Nitrite + Nitrate				132 mg/L					
Selenium, dissolved	7782-49-2	50	b	50				4,200	P
Selenium, total recoverable	7782-49-2				5.0	20.0	5.0		
Silver, dissolved	7440-22-4					a			
Thallium, dissolved	7440-28-0	2						0.47	P
Uranium, dissolved	7440-61-1	30							
Vanadium, dissolved	7440-62-2		100	100					
Zinc, dissolved	7440-66-6	10,500	2,000	25,000		a	a	26,000	P
Adjusted gross alpha		15 pCi/L		15 pCi/L					
Radium 226 + Radium 228		5 pCi/L		30.0 pCi/L					
Strontium 90		8 pCi/L							

Pollutant	CAS Number	DWS	Irr	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Tritium		20,000 pCi/L		20,000 pCi/L					
Acenaphthene	83-32-9	2,100					990		
Acrolein	107-02-8	18					9		
Acrylonitrile	107-13-1	0.65					2.5		C
Aldrin	309-00-2	0.021				3.0		0.00050	C,P
Anthracene	120-12-7	10,500						40,000	
Benzene	71-43-2	5						510	C
Benzidine	92-87-5	0.0015						0.0020	C
Benzoanthracene	56-55-3	0.048						0.18	C
Benzoapyrene	50-32-8	0.2						0.18	C,P
Benzo(b)fluoranthene	205-99-2	0.048						0.18	C
Benzo(k)fluoranthene	207-08-9	0.048						0.18	C
alpha-BHC	319-84-6	0.056						0.049	C
beta-BHC	319-85-7	0.091						0.17	C
Gamma-BHC (Lindane)	58-89-9	0.20				0.95		1.8	
Bis(2-chloroethyl) ether	111-44-4	0.30						5.3	C
Bis(2-chloroisopropyl) ether	108-60-1	1,400						65,000	
Bis(2-ethylhexyl) phthalate	117817	6						22	C
Bromoform	75-25-2	44						1,400	C
Butylbenzyl phthalate	85-68-7	7,000						1,900	
Carbon tetrachloride	56-23-5	5						16	C
Chlordane	57-74-9	2				2.4	0.0043	0.0081	C,P
Chlorobenzene	108-90-7	100						1,600	
Chlorodibromomethane	124-48-1	4.2						130	C
Chloroform	67-66-3	57						4,700	C
2-Chloronaphthalene	91-58-7	2,800						1,600	
2-Chlorophenol	95-57-8	175						150	
Chrysene	218-01-9	0.048						0.18	C
Diazinon	333-41-5					0.17	0.17		
4,4'-DDT and derivatives		1.0			0.001	1.1	0.001	0.0022	C,P
Dibenzo(a,h)anthracene	53-70-3	0.048						0.18	C
Dibutyl phthalate	84-74-2	3,500						4,500	
1,2-Dichlorobenzene	95-50-1	600						1,300	
1,3-Dichlorobenzene	541-73-1	469						960	
1,4-Dichlorobenzene	106-46-7	75						190	
3,3'-Dichlorobenzidine	91-94-1	0.78						0.28	C
Dichlorobromomethane	75-27-4	5.6						170	C
1,2-Dichloroethane	107-06-2	5						370	C
1,1-Dichloroethylene	75-35-4	7						7,100	C
2,4-Dichlorophenol	120-83-2	105						290	
1,2-Dichloropropane	78-87-5	5.0						150	C
1,3-Dichloropropene	542-75-6	3.5						210	C
Dieldrin	60-57-1	0.022				0.24	0.056	0.00054	C,P
Diethyl phthalate	84-66-2	28,000						44,000	
Dimethyl phthalate	131-11-3	350,000						1,100,000	
2,4-Dimethylphenol	105-67-9	700						850	
2,4-Dinitrophenol	51-28-5	70						5,300	

Pollutant	CAS Number	DWS	Irr	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
2,4-Dinitrotoluene	121-14-2	1.1						34	C
Dioxin		3.0E-05						5.1E-08	C,P
1,2-Diphenylhydrazine	122-66-7	0.44						2.0	C
alpha-Endosulfan	959-98-8	62				0.22	0.056	89	
beta-Endosulfan	33213-65-9	62				0.22	0.056	89	
Endosulfan sulfate	1031-07-8	62						89	
Endrin	72-20-8	2				0.086	0.036	0.060	
Endrin aldehyde	7421-93-4	10.5						0.30	
Ethylbenzene	100-41-4	700						2,100	
Fluoranthene	206-44-0	1,400						140	
Fluorene	86-73-7	1,400						5,300	
Heptachlor	76-44-8	0.40				0.52	0.0038	0.00079	C
Heptachlor epoxide	1024-57-3	0.20				0.52	0.0038	0.00039	C
Hexachlorobenzene	118-74-1	1						0.0029	C,P
Hexachlorobutadiene	87-68-3	4.5						180	C
Hexachlorocyclopentadiene	77-47-4	50						1,100	
Hexachloroethane	67-72-1	25						33	C
Ideno(1,2,3-cd)pyrene	193-39-5	0.048						0.18	C
Isophorone	78-59-1	368						9,600	C
Methyl bromide	74-83-9	49						1,500	
2-Methyl-4,6-dinitrophenol	534-52-1	14						280	
Methylene chloride	75-09-2	5						5,900	C
Nitrobenzene	98-95-3	18						690	
N-Nitrosodimethylamine	62-75-9	0.0069						30	C
N-Nitrosodi-n-propylamine	621-64-7	0.050						5.1	C
N-Nitrosodiphenylamine	86-30-6	71						60	C
Nonylphenol	84852-15-3					28	6.6		
Polychlorinated Byphenyls (PCBs)	1336-36-3	0.50			0.014	2	0.014	0.00064	C,P
Pentachlorophenol	87-86-5	1.0				19	15	30	C
Phenol	108-95-2	10,500						860,000	
Pyrene	129-00-0	1,050						4,000	
1,1,2,2-Tetrachloroethane	79-34-5	1.8						40	C
Tetrachloroethylene	127-18-4	5						33	C,P
Toluene	108-88-3	1,000						15,000	
Toxaphene	8001-35-2	3				0.73	0.0002	0.0028	C
1,2-Trans-dichloroethylene	156-60-5	100						10,000	
1,2,4-Trichlorobenzene	120-82-1	70						70	
1,1,1-Trichloroethane	71-55-6	200							
1,1,2-Trichloroethane	79-00-5	5						160	C
Trichloroethylene	79-01-6	5						300	C
2,4,6-Trichlorophenol	88-06-2	32						24	C
Vinyl chloride	75-01-4	2						24	C

K. Acute aquatic life criteria for total ammonia are dependent on pH and the presence or absence of salmonids. The criteria in mg/L as N based on analysis of unfiltered samples are as follows:

pH	Where Salmonids Present	Where Salmonids Absent
6.5 and below	32.6	48.8
6.6	31.3	46.8
6.7	29.8	44.6
6.8	28.1	42.0
6.9	26.2	39.1
7.0	24.1	36.1
7.1	22.0	32.8
7.2	19.7	29.5
7.3	17.5	26.2
7.4	15.4	23.0
7.5	13.3	19.9
7.6	11.4	17.0
7.7	9.65	14.4
7.8	8.11	12.1
7.9	6.77	10.1
8.0	5.62	8.40
8.1	4.64	6.95
8.2	3.83	5.72
8.3	3.15	4.71
8.4	2.59	3.88
8.5	2.14	3.20
8.6	1.77	2.65
8.7	1.47	2.20
8.8	1.23	1.84
8.9	1.04	1.56
9.0 and above	0.885	1.32

L. Chronic aquatic life criteria for total ammonia are dependent on pH, temperature and whether fish in early life stages are present or absent. The criteria are based on analysis of unfiltered samples and are calculated according to the equations in Paragraphs (1) and (2) of this subsection. For temperatures below 0°C, the criteria for 0°C apply; for temperatures above 30°C, the criteria for 30°C apply. For pH values below 6.5, the criteria for 6.5 apply; for pH values above 9.0, the criteria for 9.0 apply.

(1) Chronic aquatic life criteria for total ammonia when fish early life stages are present.

(a) The equation to calculate chronic criteria in mg/L as N is:

$$((0.0577/(1 + 10^{7.688-pH})) + (2.487/(1 + 10^{pH-7.688}))) \times \text{MIN}(2.85, 1.45 \times 10^{0.028 \times (25-T)})$$

(b) Selected values of calculated chronic criteria in mg/L as N:

pH	Temperature (°C)										
	0 and below	14	15	16	18	20	22	24	26	28	30 and above
6.5 and below	6.67	6.67	6.46	6.06	5.33	4.68	4.12	3.62	3.18	2.80	2.46
6.6	6.57	6.57	6.36	5.97	5.25	4.61	4.05	3.56	3.13	2.75	2.42
6.7	6.44	6.44	6.25	5.86	5.15	4.52	3.98	3.50	3.07	2.70	2.37
6.8	6.29	6.29	6.10	5.72	5.03	4.42	3.89	3.42	3.00	2.64	2.32
6.9	6.12	6.12	5.93	5.56	4.89	4.30	3.78	3.32	2.92	2.57	2.25
7.0	5.91	5.91	5.73	5.37	4.72	4.15	3.65	3.21	2.82	2.48	2.18
7.1	5.67	5.67	5.49	5.15	4.53	3.98	3.50	3.08	2.70	2.38	2.09
7.2	5.39	5.39	5.22	4.90	4.31	3.78	3.33	2.92	2.57	2.26	1.99

pH	Temperature (°C)										
	0 and below	14	15	16	18	20	22	24	26	28	30 and above
7.3	5.08	5.08	4.92	4.61	4.06	3.57	3.13	2.76	2.42	2.13	1.87
7.4	4.73	4.73	4.59	4.30	3.78	3.32	2.92	2.57	2.26	1.98	1.74
7.5	4.36	4.36	4.23	3.97	3.49	3.06	2.69	2.37	2.08	1.83	1.61
7.6	3.98	3.98	3.85	3.61	3.18	2.79	2.45	2.16	1.90	1.67	1.47
7.7	3.58	3.58	3.47	3.25	2.86	2.51	2.21	1.94	1.71	1.50	1.32
7.8	3.18	3.18	3.09	2.89	2.54	2.23	1.96	1.73	1.52	1.33	1.17
7.9	2.80	2.80	2.71	2.54	2.24	1.96	1.73	1.52	1.33	1.17	1.03
8.0	2.43	2.43	2.36	2.21	1.94	1.71	1.50	1.32	1.16	1.02	0.897
8.1	2.10	2.10	2.03	1.91	1.68	1.47	1.29	1.14	1.00	0.879	0.773
8.2	1.79	1.79	1.74	1.63	1.43	1.26	1.11	0.973	0.855	0.752	0.661
8.3	1.52	1.52	1.48	1.39	1.22	1.07	0.941	0.827	0.727	0.639	0.562
8.4	1.29	1.29	1.25	1.17	1.03	0.906	0.796	0.700	0.615	0.541	0.475
8.5	1.09	1.09	1.06	0.990	0.870	0.765	0.672	0.591	0.520	0.457	0.401
8.6	0.920	0.920	0.892	0.836	0.735	0.646	0.568	0.499	0.439	0.386	0.339
8.7	0.778	0.778	0.754	0.707	0.622	0.547	0.480	0.422	0.371	0.326	0.287
8.8	0.661	0.661	0.641	0.601	0.528	0.464	0.408	0.359	0.315	0.277	0.244
8.9	0.565	0.565	0.548	0.513	0.451	0.397	0.349	0.306	0.269	0.237	0.208
9.0 and above	0.486	0.486	0.471	0.442	0.389	0.342	0.300	0.264	0.232	0.204	0.179

(2) **Chronic aquatic life criteria for total ammonia when fish early life stages are absent.**

(a) The equation to calculate chronic criteria in mg/L as N is:

$$((0.0577/(1 + 10^{7.688-pH})) + (2.487/(1 + 10^{pH-7.688}))) \times 1.45 \times 10^{0.028 \times (25-MAX(T,7))}$$

(b) Selected values of calculated chronic criteria in mg/L as N:

pH	Temperature (°C)									
	0 and below	7	8	9	10	11	12	13	14	15 and above
6.5 and below	10.8	10.8	10.1	9.51	8.92	8.36	7.84	7.35	6.89	6.46
6.6	10.7	10.7	9.99	9.37	8.79	8.24	7.72	7.24	6.79	6.36
6.7	10.5	10.5	9.81	9.20	8.62	8.08	7.58	7.11	6.66	6.25
6.8	10.2	10.2	9.58	8.98	8.42	7.90	7.40	6.94	6.51	6.10
6.9	9.93	9.93	9.31	8.73	8.19	7.68	7.20	6.75	6.33	5.93
7.0	9.60	9.60	9.00	8.43	7.91	7.41	6.95	6.52	6.11	5.73
7.1	9.20	9.20	8.63	8.09	7.58	7.11	6.67	6.25	5.86	5.49
7.2	8.75	8.75	8.20	7.69	7.21	6.76	6.34	5.94	5.57	5.22
7.3	8.24	8.24	7.73	7.25	6.79	6.37	5.97	5.60	5.25	4.92
7.4	7.69	7.69	7.21	6.76	6.33	5.94	5.57	5.22	4.89	4.59
7.5	7.09	7.09	6.64	6.23	5.84	5.48	5.13	4.81	4.51	4.23
7.6	6.46	6.46	6.05	5.67	5.32	4.99	4.68	4.38	4.11	3.85
7.7	5.81	5.81	5.45	5.11	4.79	4.49	4.21	3.95	3.70	3.47
7.8	5.17	5.17	4.84	4.54	4.26	3.99	3.74	3.51	3.29	3.09
7.9	4.54	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89	2.71
8.0	3.95	3.95	3.70	3.47	3.26	3.05	2.86	2.68	2.52	2.36
8.1	3.41	3.41	3.19	2.99	2.81	2.63	2.47	2.31	2.17	2.03
8.2	2.91	2.91	2.73	2.56	2.40	2.25	2.11	1.98	1.85	1.74
8.3	2.47	2.47	2.32	2.18	2.04	1.91	1.79	1.68	1.58	1.48
8.4	2.09	2.09	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25

pH	Temperature (°C)									
	0 and below	7	8	9	10	11	12	13	14	15 and above
8.5	1.77	1.77	1.66	1.55	1.46	1.37	1.28	1.20	1.13	1.06
8.6	1.49	1.49	1.40	1.31	1.23	1.15	1.08	1.01	0.951	0.892
8.7	1.26	1.26	1.18	1.11	1.04	0.976	0.915	0.858	0.805	0.754
8.8	1.07	1.07	1.01	0.944	0.855	0.829	0.778	0.729	0.684	0.641
8.9	0.917	0.917	0.860	0.806	0.756	0.709	0.664	0.623	0.584	0.548
9.0 and above	0.790	0.790	0.740	0.694	0.651	0.610	0.572	0.536	0.503	0.471

At 15° C and above, the criterion for fish early life stages absent is the same as the criterion for fish early life stages present (refer to table in Paragraph (1) of this subsection).

[20.6.4.900 NMAC - Rp 20 NMAC 6.1.3100, 10-12-00; A, 10-11-02; A, 05-23-05; A, 07-17-05; A, 12-01-10]

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

- A. American public health association. 1992. *Standard methods for the examination of water and wastewater, 18th Edition*. Washington, D.C. 1048 p.
 - B. American public health association. 1995. *Standard methods for the examination of water and wastewater, 19th Edition*. Washington, D.C. 1090 p.
 - C. American public health association. 1998. *Standard methods for the examination of water and wastewater, 20th Edition*. Washington, D.C. 1112 p.
 - D. 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.
 - E. United States geological survey. 1987. *Methods for the determination of organic substances in water and fluvial sediments, techniques of water-resource investigations of the U.S. geological survey*. Washington, D.C. 80 p.
 - F. United States environmental protection agency. 1974. *Methods for chemical analysis of water and wastes*. National environmental research center, Cincinnati, Ohio. (EPA-625-/6-74-003). 298 p.
 - G. New Mexico water quality control commission. 2003. *(208) state of New Mexico water quality management plan*. Santa Fe, New Mexico. 85 p.
 - H. Colorado river basin salinity control forum. 2002. *2002 Review, water quality standards for salinity, Colorado river system*. Phoenix, Arizona. 176 p.
 - I. United States environmental protection agency. 2002. *Methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms*. Office of research and development, Washington, D.C. (5th Ed., EPA 821-R-02-012). 293 p. <http://www.epa.gov/ostWET/disk2/atx.pdf>
 - J. United States environmental protection agency. 2002. *Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms*. Environmental monitoring systems laboratory, Cincinnati, Ohio. ([4th Ed., EPA 821-R-02-01). 335 p.
 - K. Ambient-induced mixing, in United States environmental protection agency. 1991. *Technical support document for water quality-based toxics control*. Office of water, Washington, D.C. (EPA/505/2-90-001). 2 p.
 - L. United States environmental protection agency. 1983. *Technical support manual: waterbody surveys and assessments for conducting use attainability analyses*. Office of water, regulations and standards, Washington, D.C. 251 p. <http://www.epa.gov/OST/library/wqstandards/uaavol123.pdf>
 - M. United States environmental protection agency. 1984. *Technical support manual: waterbody surveys and assessments for conducting use attainability analyses, volume III: lake systems*. Office of water, regulations and standards, Washington, D.C. 208 p. <http://www.epa.gov/OST/library/wqstandards/uaavol123.pdf>
- [20.6.4.901 NMAC - Rp 20 NMAC 6.1.4000, 10-12-00; A, 05-23-05; A, 12-01-10]

HISTORY of 20.6.4 NMAC:
Pre-NMAC History:

Material in the part was derived from that previously filed with the commission of public records - state records center and archives:

WQC 67-1, Water Quality Standards, filed 7-17-67, effective 8-18-67
WQC 67-1, Amendment Nos. 1-6, filed 3-21-68, effective 4-22-68
WQC 67-1, Amendment No. 7, filed 2-27-69, effective 3-30-69
WQC 67-1, Amendment No. 8, filed 7-14-69, effective 8-15-69
WQC 70-1, Water Quality Standards for Intrastate Waters and Tributaries to Interstate Streams, filed July 17, 1970;
WQC 67-1, Amendment Nos. 9 and 10, filed 2-12-71, effective 3-15-71
WQC 67-1, Amendment No. 11, filed 3-4-71, effective 4-5-71
WQC 73-1, New Mexico Water Quality Standards, filed 9-17-73, effective 10-23-73
WQC 73-1, Amendment Nos. 1 and 2, filed 10-3-75, effective 11-4-75
WQC 73-1, Amendment No. 3, filed 1-19-76, effective 2-14-76
WQC 77-2, Amended Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 2-24-77, effective 3-11-77
WQC 77-2, Amendment No. 1, filed 3-23-78, effective 4-24-78
WQC 77-2, Amendment No. 2, filed 6-12-79, effective 7-13-79
WQCC 80-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 8-28-80, effective 9-28-80
WQCC 81-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 5-5-81, effective 6-4-81
WQCC 81-1, Amendment No. 1, filed 5-19-82, effective 6-18-82
WQCC 81-1, Amendment No. 2, filed 6-24-82, effective 7-26-82
WQCC 85-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 1-16-85, effective 2-15-85
WQCC 85-1, Amendment No. 1, filed 8-28-87, effective 9-28-87
WQCC 88-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 3-24-88, effective 4-25-88
WQCC 91-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 5-29-91, effective 6-29-91
WQCC 91-1, Amendment No. 1, filed 10-11-91, effective 11-12-91

History of the Repealed Material:

WQC 67-1, Water Quality Standards, - Superseded, 10-23-73
WQC 73-1, New Mexico Water Quality Standards, - Superseded, 3-11-77
WQC 77-2, Amended Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 9-28-80
WQCC 80-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 6-4-81
WQCC 81-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 2-15-85
WQCC 85-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 4-25-88
WQCC 88-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 6-29-91
WQCC 91-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 1-23-95
20 NMAC 6.1, Standards for Interstate and Intrastate Streams, - Repealed, 2-23-00
20 NMAC 6.1, Standards for Interstate and Intrastate Surface Waters, - Repealed, 10-12-00

State of New Mexico Continuing Planning Process

(Appendix A)



Antidegradation Policy Implementation Procedure

Adopted by the New Mexico Water Quality Control Commission
November 30, 2010

Gray indicates amended text

Table of Contents

I. INTRODUCTION.....	3
II. SCOPE	3
III. TIER DEFINITIONS	3
A. Tier 1	4
B. Tier 2	4
C. Tier 3.....	5
IV. IMPLEMENTATION.....	6
A. Tier 1	7
B. Tier 2	7
1. Determination of Necessity	7
a) Publicly Owned and Private Domestic Treatment Work Discharges	8
b) Industrial Discharges	9
c) General Permits	10
2. Conducting Tier 2 Review.....	14
a) Information Gathering.....	14
b) Preliminary Decision-Making.....	14
c) Public Comment and Intergovernmental Coordination	15
d) Final Decision	15
3. Permitted Activities That Result in Restoration or Maintenance of the Chemical, Physical or Biological Integrity of Tier 2 Waters.....	16
C. Tier 3.....	16
1. General Requirements	17
2. Temporary and Short-Term Degradation	17
a) Commission Approval of Temporary and Short Term Degradation.....	17
b) Emergency Procedures - Temporary and Short Term Degradation.....	18
3. Permitted Activities That Result in Restoration or Maintenance of the Chemical, Physical or Biological Integrity of ONRWs.....	19
4. Other Provisions for Tier 3 Waters.....	19
5. Implementing Agencies	20
V. APPEALS	20
APPENDIX – 1 Tier 2 Review of a Public Facility	21
Table 1-1. Antidegradation Data Worksheet.....	22
Table 1-2. Antidegradation Data Worksheet.....	23
Table 1-3. Substantial Impacts Analysis – Part I	24
Table 1-4. Substantial Impacts Analysis – Part II	25
Table 1-5. Substantial Impacts Analysis – Part II	26
Table 1-6. Substantial Impacts Analysis – Part II	27
Table 1-7. Substantial Impacts Analysis – Part III	29
Table 1-8. Widespread Impacts Analysis – Public Facility.....	30
APPENDIX – 2 Tier 2 Review of a Private Facility	31
Table 2-1. Data Worksheet for Financial Factors	32
Table 2-2. Substantial Impacts Analysis - Financial Tests Used to Measure the Financial Health of a Private Entity	33
Table 2-3. Widespread Impacts Analysis – Private entity/facility	34
APPENDIX – 3 Assimilative Capacity Calculation Guideline	35

ANTIDegradation Policy Implementation Procedures

I. INTRODUCTION

The Antidegradation Implementation Procedures (Procedures) establish the process for implementing the Antidegradation Policy (Policy) in the *Standards for Interstate and Intrastate Surface Waters* (New Mexico Water Quality Standards), 20.6.4.8 NMAC. The Procedures should be construed in conjunction with other planning tools approved by the Water Quality Control Commission (Commission), including the Clean Water Act (CWA) Section 303(d)/305(b) Integrated Report, and the Statewide Water Quality Management Plan.

II. SCOPE

A. Permitted Discharges

These Procedures apply to every proposal for a new or increased permitted discharge of a pollutant to a "surface water of the State."¹ Permitted discharges are those discharges regulated under the authority of the CWA and discharges regulated pursuant to 20.6.2 NMAC that have potential to impact surface water quality. The Procedures also apply to the reissuance and renewal of existing CWA permits in certain circumstances as determined by the New Mexico Environment Department (NMED or Department), including a single discharge causing degradation over time, a single source contributing to cumulative degradation, and a single source with a history of permit noncompliance.

B. Nonpoint Sources

These procedures do not apply to nonpoint sources.

C. Other Activities

The Procedures do not apply to other water quality-related actions, including revision of Commission documents (e.g., New Mexico Water Quality Standards, Continuing Planning Process, Statewide Water Quality Management Plan, and New Mexico Nonpoint Source Management Program); the Commission's establishment of Total Maximum Daily Loads (TMDLs); or the conduct of studies, including use attainability analyses, by any party, including NMED. These types of water quality-related actions already are subject to extensive requirements for review and public participation, as well as various limitations on degradation imposed by state and federal law.

III. TIER DEFINITIONS

The Policy establishes three categories of waters. These categories herein are called "tiers". The tier designation requires different levels of review and allows different levels of degradation. Tier 1 and 2 designations are made on a parameter-by-parameter basis. As a result, a water may be Tier 1 for one parameter and Tier 2 for a different one. Tier 3 designation is made based on the special nature of the water.

Figure 1 illustrates the tier designation process.

¹ The term "surface water of the state" is defined in the New Mexico Water Quality Standards, 20.6.4.7 NMAC.

A. Tier 1

Tier 1 applies to waters that do not meet or meet but are not better than the water quality standards for existing or designated uses.² Tier 1 waters that require Tier 1 review will be identified by assessing water quality information pursuant to established protocols. Waters identified as “impaired” for any existing or designated use according to the current *State of New Mexico Procedures for Assessing Standards Attainment for the Integrated §303(d) / §305(b) Water Quality Monitoring and Assessment Report: Assessment Protocol*³ automatically will be Tier 1 for the parameter of concern. Waters not identified as impaired on New Mexico’s Integrated CWA 303(d) / 305(b) List will be evaluated on a case-by-case basis. The Department will conduct the evaluation using the available water quality information and the same protocols used to develop the Integrated 303(d) / 305(b) report.

The Policy defines the level of protection for Tier 1 waters: “Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.” 20.6.4.8.A.1 NMAC. Existing uses are uses “actually attained in a surface water on or after November 28, 1975, whether or not they are actually included in the water quality standards.” See 40 CFR 131.3(e); 20.6.4.6.Q NMAC. Tier 1 defines the minimum level of protection afforded to all waters regardless of tier designation.

B. Tier 2

Tier 2 applies to waters whose quality is better than necessary to protect the CWA Section 101(a)(2) goals. Tier 2 applies to all classified waters (e.g., identified in the New Mexico Water Quality Standards, Sections 101 through 899) that are not designated as Tier 1 on a parameter-by-parameter basis or as Tier 3. Tier 2 may apply to unclassified waters on a parameter-by-parameter basis depending on the available water quality information. Like Tier 1 waters, Tier 2 waters will be identified by assessing water quality information pursuant to established protocols.

The Policy defines the level of protection for Tier 2 waters:

Where the quality of a surface water of the state exceeds levels necessary to support the propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected unless the commission finds,⁴ after full satisfaction of the intergovernmental coordination and public participation provisions of the state’s continuing planning process, that allowing lower water quality is necessary to accommodate important economic and social development in the area in which the water is located. In allowing such degradation or lower water quality, the state shall assure water quality adequate to protect existing uses fully. Further, the state shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable BMPs for nonpoint source control. Additionally, the state shall encourage the use of watershed planning as a further means to protect surface waters of the state.

² The terms “existing use” and “designated use” are defined in the *Code of Federal Regulations* (40 CFR 131.3) and the New Mexico Water Quality Standards (20.6.4.7 NMAC). The terms are not interchangeable and are subject to different levels of protection depending on the specific use. See, e.g., 40 CFR 131.10.

³ The protocol is based in part upon USEPA’s 2002 *Integrated Water Quality Monitoring and Assessment Report Guidance*; 2001 Memorandum from Robert H. Wayland, Office of Wetlands, Oceans, and Watersheds. Washington D.C.

⁴ Pursuant to the New Mexico Water Quality Act, Section 74-6-4.F, the Commission delegated responsibility for implementing the antidegradation policy to the Department. See 20.6.4.8.B NMAC.

20.6.4.8.A.2 NMAC.

In Tier 2 waters, limited degradation may be allowed after consideration of several factors, including:

- 1) the discharge's potential to affect existing or designated uses or to interfere with CWA Section 101(a)(2) goals (water quality which provides for the "protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water");⁵
- 2) the need to accommodate important economic and social development in the area in which the water is located; and
- 3) the availability of discharge alternatives, including no discharge, reuse, land disposal, pollution prevention or reduction, and pollutant trading with point and non-point sources.

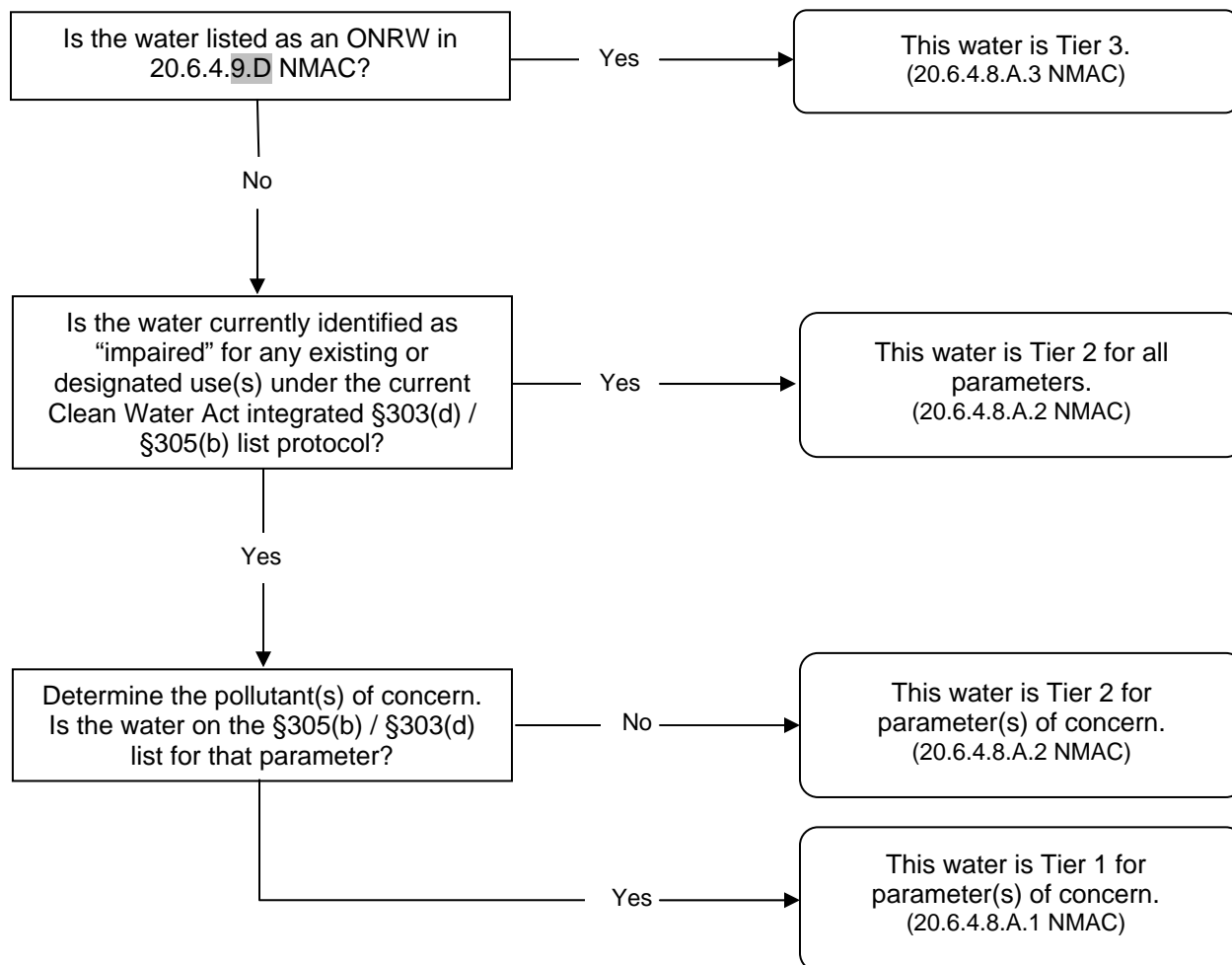
Even if the decision is made to allow degradation in Tier 2 waters, water quality must be maintained to ensure the protection of existing uses. Water quality also must be maintained to ensure the protection of designated uses unless the designated uses are modified through a use attainability analysis, 40 CFR 131.10(j) and 20.6.4.15 NMAC, or adequately protected by segment-specific water quality standards. Finally, water quality must be maintained to ensure the protection of the CWA Section 101(a)(2) uses. The applicant for the new or increased discharge (or an existing discharge in certain circumstances as described on page 6) bears the burden of demonstrating the social and economic need for degrading water quality.

C. Tier 3

Tier 3 applies to waters that are designated by the Commission as "outstanding national resource waters" (ONRWs). The Commission designates Tier 3 waters after public notice and comment pursuant to procedures established in the New Mexico Water Quality Standards. See 20.6.4.9 NMAC.

⁵ Commonly referred to as the "fishable/swimmable goals".

Figure 1. Tier Determination Flowchart
 (Flowchart summarizes preceding narrative description, refer to narrative for complete detail)



IV. IMPLEMENTATION

A. Tier 1

The Department employs the CWA Section 401 certification process to ensure that water quality that does not meet or that meets but is not better than the water quality standards for existing uses in Tier 1 waters is not degraded by a new or increased discharge or the renewal of a permit for an existing discharge. See *Continuing Planning Process - Process for the Development of Effluent Limitations*. Section 401 certification ensures that NPDES and Dredge-or-Fill permits are consistent with state law, protect the water quality standards, and implement the water quality management plan, including TMDLs. Section 401 certification also ensures that NPDES permits comply with the federal requirement that a new or increased discharge will not cause or contribute to a violation of water quality standards, unless such discharge is authorized by a TMDL waste load allocation or similar mechanism prior to TMDL establishment. See 40 CFR 122.4(i).⁶

There are a number of opportunities for public participation in the review of new and increased discharges into Tier 1 waters. The Commission adopts TMDLs for Tier 1 waters not meeting water quality objectives. This process includes public notice and comment. The USEPA and Army Corps follow detailed procedures requiring public notice and comment when issuing NPDES and Dredge-or-Fill permits. Finally, the Department's Section 401 certification can be appealed and a full hearing held before the Commission.

Permitted Activities That Result in Restoration or Maintenance of the Chemical, Physical or Biological Integrity of Tier 1 Waters: This antidegradation policy authorizes permitted activities that may result in degradation in Tier 1 waters when such activities will result in restoration or maintenance of the chemical, physical or biological integrity of the water in accordance with the requirements in 20.6.4.8.A(4)(b) NMAC.

In certifying a permit for such a project, the Department may require in-stream monitoring by the discharger of projects that result in degradation to ensure that water quality is of sufficient quality to protect existing uses and that water quality is restored upon completion of the activity. Monitoring requirements shall include benchmarks to assess progress made toward water quality restoration. If monitoring indicates that existing uses are not protected, permit conditions shall be revised or augmented to ensure protection of existing uses and/or enforcement action may be taken by the Department.

Temporary degradation due to piscicide application may be approved in accordance with 20.6.4.16 NMAC.

B. Tier 2

1. Determination of Necessity

Tier 2 screening is triggered when a new or increased discharge or the renewal of a permit for an existing discharge is proposed for a receiving water with existing water quality better than necessary to support the propagation of fish, shellfish, and wildlife, or recreation in and on the water. The initial focus is the magnitude of the effect on water quality. If the magnitude of the effect on water quality exceeds a specified level, Tier 2 review will be conducted. Below that specified level, Tier 2 review will not be conducted. By establishing a *de minimis* level above which Tier 2 review will be conducted, limited state

⁶ There is no comparable federal requirement for Dredge-or-Fill Permits, but the Department uses Section 401 certification to ensure that a new or increased discharge complies with TMDL waste load allocations.

resources are directed to new or increased discharges and the renewal of permits for existing discharges with the likelihood of causing significant degradation of water quality. Establishing *de minimis* action levels also helps reduce overall costs for the Department, the general public and dischargers.

In rare instances the WQCC may consider either establishing or revising a TMDL – Waste Load Allocation (WLA) in a Tier 2 water. This situation might arise where a previously established TMDL for a former Tier 1 water has been successful in restoring water quality and there is a subsequent application to revise the TMDL-WLA to allow an increase in the discharge of pollutants. In this situation two processes come into consideration, the public and commission review of the TMDL and the Department's review of the TMDL under the antidegradation policy. When this situation occurs, the two processes may for efficiency be held simultaneously or sequentially depending on the specific circumstances of the case.

The Department will evaluate whether the magnitude of the effect on water quality exceeds a specific level on a parameter-by-parameter basis. The evaluation will be conducted using numeric criteria only, because of the impracticability of applying the process to narrative criteria. It should be noted that the decision to use numeric criteria does not expose Tier 2 waters to substantial degradation of water quality because these waters are protected by overlapping designated and existing uses and their associated criteria, as well as by the NPDES and Dredge-or-Fill permits and Section 401 certification that must be written to protect the narrative criteria.

Figure 2 illustrates the process for determining whether a new or increased discharge is subject to Tier 2 review. The following text explains the figure in more detail.

a) Publicly Owned and Private Domestic Treatment Work Discharges

For purpose of Tier 2 review, the following new or increased discharges and the renewal of permits for existing discharges by publicly owned treatment works (POTWs) and privately owned domestic treatment works (PODTWs) are considered *de minimis* and are not subject to Tier 2 review provided that the assimilative capacity is more than 10% of the criterion for the parameter of concern and:

1) the POTW or PODTW has a design capacity of 0.1 million gallons per day or less and is eligible to omit Part B of the NPDES permit application form (OMB Number 2040-0086, Approved 1/14/99);⁷

2) the design capacity of the POTW or PODTW or the pollutant load (measured on a parameter-by-parameter basis) will increase 10 percent or less in a five-year period, and the exemption is not used for two consecutive permits;

3) the design capacity of the POTW or PODTW will increase by 10 to 25 percent in a five-year period, the POTW or PODTW demonstrates to the Department's satisfaction that it is implementing a water conservation or wastewater reuse or diversion program designed to reduce the discharge pollutant load by at least 10 percent in that five-year period, and the exemption is not used for two consecutive permits;

4) the design capacity of the POTW or PODTW is 10 percent or less of the critical low flow of the receiving stream (as defined in the water quality standards);

5) the POTW or PODTW demonstrates to the Department's satisfaction that its pollutant load (measured on a parameter-by-parameter basis) will be offset by enforceable reductions by

⁷ During the development of the revised NPDES permit application form, USEPA studied the potential for minor POTWs and PODTWs to cause violations of water quality standards. USEPA found that these facilities posed an extremely low probability of causing a violation of water quality standards because of their low volume and effluent quality (even without considering the ameliorative effect of dilution). 64 Fed. Reg. 42433 (August 4, 1999).

other point or nonpoint sources within the same waterbody segment as the new or increased discharge;
or

6) the new or increased discharge or the renewal of a permit for an existing discharge was reviewed in an Environmental Assessment (EA) or Environmental Impact Statement (EIS) that considered water quality impacts and the social and economic development in the area in which the water is located and that was conducted in accordance with federal regulations, and in the case of an EA, the responsible federal agency made a Finding of No Significant Impact (FONSI).

Notwithstanding these *de minimis* activities, the Department shall conduct Tier 2 review for any new or increased discharge or the renewal of a permit for an existing discharge by a POTW or PODTW when the discharge, taken together with all other activities allowed after the baseline water quality is established⁸, would cause a reduction in the available assimilative capacity of 10 percent or more for the parameter of concern.

For purpose of this section, available assimilative capacity is defined as the difference between the baseline water quality and the water quality criterion for the parameter of concern. (See Appendix C to this document for guidelines for calculating assimilative capacity).

Figure 2 illustrates the process for determining whether a new or increased discharge or the renewal of a permit for an existing discharge by a POTW or PODTW is subject to Tier 2 review. Figure 2 is presented for illustration only and may not address all possible circumstances. In the event of omission, ambiguity or conflict, the written provisions of these procedures will control.

b) Industrial Discharges

For purpose of Tier 2 review, the following new or increased discharges and the renewal of permits for existing discharges by industrial activities are considered *de minimis* and are not subject to Tier 2 review provided that the assimilative capacity is more than 10% of the criterion for the parameter of concern and:

1) the discharger demonstrates to the Department's satisfaction that the new or increased discharge will consume 10 percent or less of the available assimilative capacity for the pollutant of concern;

2) the discharger demonstrates to the Department's satisfaction that its pollutant load (measured on a parameter-by-parameter basis) will be offset by enforceable reductions by other point or nonpoint sources within the same waterbody segment as the new discharge; or

3) the new or increased discharge or the renewal of a permit for an existing discharge was reviewed in an EA or EIS that considered water quality impacts and the social and economic development in the area in which the water is located and that was conducted in accordance with federal regulations, and in the case of an EA, the responsible federal agency made a FONSI.

Notwithstanding these *de minimis* activities, the Department shall conduct Tier 2 review for any new or increased discharge or the renewal of a permit for an existing discharge by an industrial activity when the discharge, taken together with all other activities allowed after the baseline water quality is established, would cause a reduction in the available assimilative capacity of 10 percent or more for the parameter of concern.

⁸ When evaluating the "baseline" condition, the Department will consider any previous antidegradation reviews for the same body of water to prevent cumulative impacts.

For purpose of this section, available assimilative capacity is defined as the difference between the baseline water quality and the water quality criterion for the parameter of concern. (See Appendix C to this document for guidelines for calculating assimilative capacity).

c) General Permits

New or increased discharges and the renewal of permits for existing discharges covered by NPDES General permits and Dredge-or-Fill Nationwide and Regional permits present special considerations regarding Tier 2 review because of their approach of authorizing categories of discharges over a broad geographic range. Three categories of NPDES General permits (No Discharge, Storm Water, and Aquifer Remediation) and several categories of Nationwide (Dredge-or-Fill) permits have been issued in New Mexico.

EPA has not issued any national guidance regarding Tier 2 review for general permits. Accordingly, the Commission adopts the following approach for general permits in New Mexico. Further, the Department reserves the right to require that any new or increased discharge or the renewal of a permit for an existing discharge (1) be subject to Tier 2 review if warranted by the facts and circumstances, or (2) be required to obtain an individual NPDES or Dredge-or-Fill permit (and thereby subject to Tier 2 review).⁹

1) No Discharge General Permits

Existing and former "No Discharge General Permits" include NPDES General Permits for Oil and Gas Facilities in the Onshore Subcategory of the Oil and Gas Extraction Point Source Category (Onshore O&G)¹⁰ and Concentrated Animal Feeding Operations (CAFOs).

The Onshore O&G NPDES General Permit prohibited all discharges of pollutants to waters of the United States. 56 Fed. Reg. 7698 (February 25, 1991). Because discharges covered by this general permit were prohibited, water quality would not be degraded. In addition, Onshore O&G activities generally are considered to have social and economic importance to New Mexico.

The CAFO General Permit prohibits all discharges unless caused by (1) a storm event greater than the 25-year 24-hour storm for the CAFO location; (2) chronic rainfall greater than the 25-year 24-hour storm for the CAFO location; or (3) a catastrophic event, such as a tornado, provided that the CAFO is properly designed and operated. 58 Fed. Reg. 7611 (February 8, 1993). Because discharges covered by this general permit are prohibited except in exceptional circumstances beyond the control of the CAFOs, the degradation of water quality, beyond temporary or short-term impacts, is unlikely. In addition, CAFOs - primarily dairies and cattle feedlots - generally are considered to have social and economic importance to New Mexico.

2) Storm Water General Permits

⁹ Federal regulations for NPDES General Permits (40 CFR 122.28) and Dredge-and-Fill Nationwide and Regional Permits (33 CFR 325.7) require a discharger to obtain an individual NPDES or Dredge-and-Fill permit if, *inter alia*, circumstances have changed since the original authorization or the discharge is deemed to be "significant".

¹⁰ The oil & gas permit expired on February 25, 1996. As of August 2004, EPA has no plan to reissue the permit. It is included in this discussion as an example of the types of general permits that have occurred in NM and therefore may occur in the future.

Storm Water General Permits include the NPDES General Permits for Storm Water Discharges from Construction Activities, 68 Fed. Reg. 39087 (July 1, 2003), and the NPDES General Permit for Storm Water from Industrial Activities, 65 Fed. Reg. 64746 (October 30, 2000). Storm water discharges are transient in nature, particularly in the desert climate of New Mexico. Storm water discharges from construction activities are even more transient because they occur only during the construction itself. Further, storm water dischargers seeking coverage under these general permits are required to identify pollutants on a parameter-by-parameter basis and to design and implement controls to prevent or reduce their discharge. As a result, storm water discharges that comply with general permits are not likely to cause significant degradation of water quality. In addition, industrial and construction activities generally are considered to have social and economic importance to New Mexico.

3) Aquifer Remediation General Permits

The Aquifer Remediation General Permit was the NPDES General Permit for Discharges Resulting from Implementing Corrective Action Plans for Cleanup of Petroleum UST Systems. 62 Fed. Reg. 61116 (November 14, 1997). These discharges resulted from projects implemented to remediate groundwater contaminated with petroleum products from leaking underground storage tanks. The general permit imposed stringent effluent limitations on these discharges, even though they are considered to be relatively clean. Accordingly, these kinds of discharges are not expected to cause degradation to water quality. Moreover, because 90 percent of New Mexico's population relies on groundwater for drinking water (2000 CWA § 305(b) Report, page 87), these discharges are considered to have social and economic importance to New Mexico.

4) Dredge or Fill General Permits

The Dredge-or-Fill General Permit authorizes the discharge of fill material within the ordinary high water mark of waters of the United States. The Army Corps under CWA Section 404 regulates these discharges. The Department, pursuant to its CWA Section 401 certification of this general or "Nationwide" permit, requires dischargers to obtain specific authorization before commencing the discharge. As a result, dischargers are subject to Section 401 certification review. Based on this review, the Department may grant the authorization, grant the authorization with conditions, or deny the authorization. To implement the Policy, the Department will use the authorization process to evaluate whether a discharge will cause significant degradation of water quality. A discharge will be deemed to cause significant degradation of water quality if the load of pollutants is quantifiable¹¹ and (1) the new or increased discharge or the renewal of a permit for an existing discharge will consume 10 percent or more of the total assimilative capacity for the pollutant of concern, or (2) the new or increased discharge or the renewal of a permit for an existing discharge, taken together with all other activities allowed after the baseline water quality is established, would cause a reduction in the available assimilative capacity of 10 percent or more for the parameter of concern.

¹¹ Pollutant loads from Dredge or Fill permits are often difficult or impossible to quantify in the same manner as practiced in NPDES permits. Dredge or Fill permits are often temporary construction measures in or near a watercourse that may result in disturbance or deposition of sediments in the water. The primary tool for limiting the discharge of pollutants (e.g., sediment and contaminated sediment) from these activities is through permit requirements mandating the installation and operation of best management practices (BMPs) that prevent pollutant transport to a watercourse and thereby degradation. The SWQB reviews dredge or fill projects pursuant to conditions of the State's CWA Section 401 certification of the Nationwide permits. The SWQB has long employed a strategy of requiring the implementation of BMPs, necessary to protect state water quality standards that are designed to prevent to maximum extent possible the discharge of pollutants instead of allowing a particular quantity of pollutant to be discharge.

For purpose of this section, available assimilative capacity is defined as the difference between the baseline water quality and the water quality criterion for the parameter of concern.

If the Department determines that a discharge will cause significant degradation, the Department will either impose conditions to avoid significant degradation or require Tier 2 review.

5) Future General Permits

General permits are an important tool in addressing categories of discharges where large numbers of facilities are engaged in similar activities such as those described above. Review of future proposed general permits will be on a case-by-case basis. The Department will consider the nature of the permit requirements and determine a course of action.

As practical guidance:

i) No Discharge general permits such as the no discharge CAFO and Oil & Gas cited above may be considered *de minimis* impacts and may not be required to proceed through full Tier 2 antidegradation review. The Department may at its discretion initiate a review if it deems the case-by-case circumstances warrant such action;

ii) Storm Water general permits for industrial activities such as those cited above may be considered *de minimis* and may not be required to proceed through full Tier 2 antidegradation review. The Department may at its discretion initiate a review if it deems the case-by-case circumstances warrant such action;

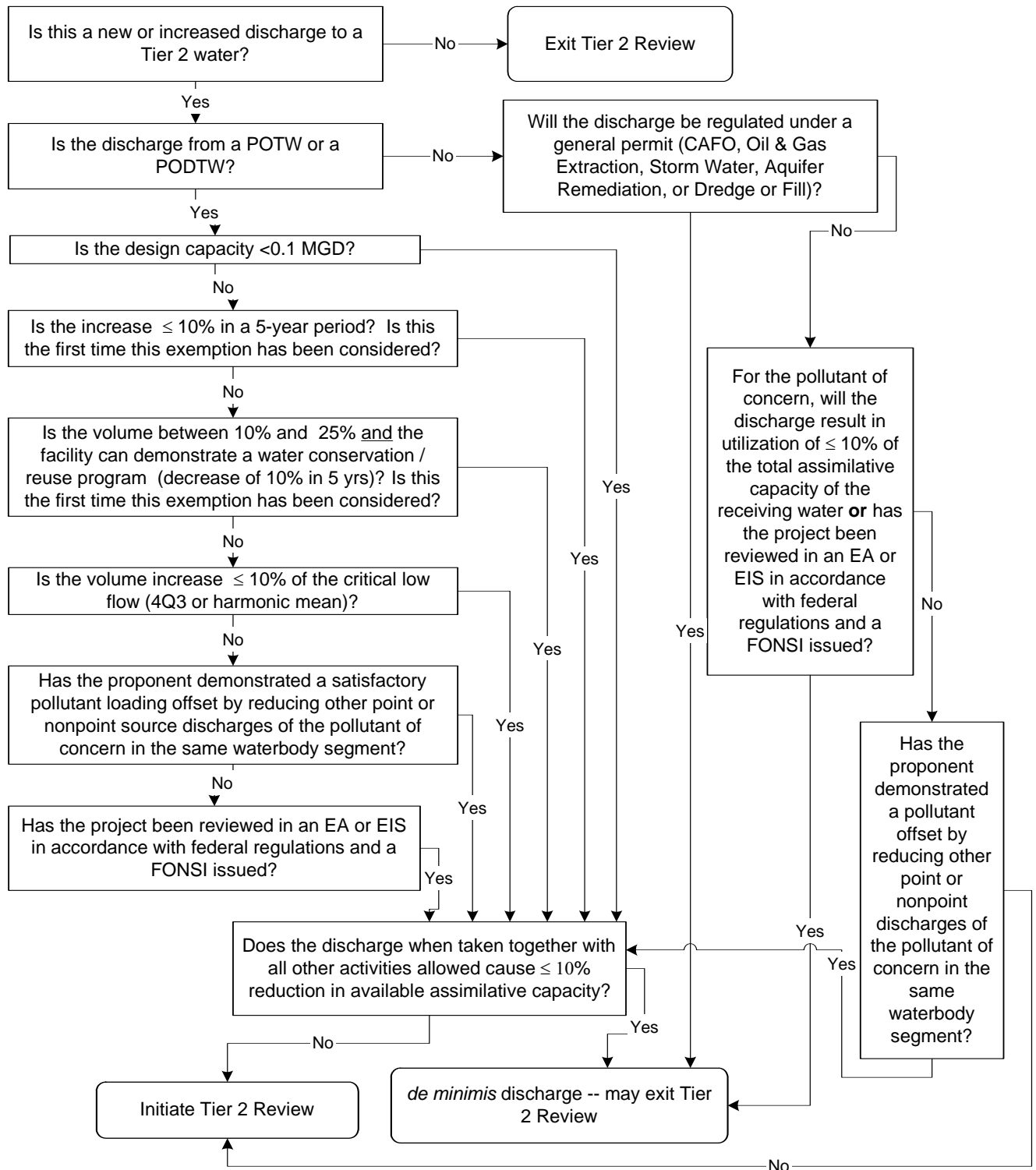
iii) Storm Water general permits for municipal or urban runoff may be proposed to comply with CWA Section 402(p). Urban runoff from municipalities has existed historically but has not been regulated under the NPDES program. Consideration should be given that these discharges may be from existing systems and as such are existing discharges. New permit requirements such as implementation of best management practices will reduce existing loads of pollutants entering the storm sewer system and therefore the receiving water. Therefore these permit actions should be considered as reducing any degradation that may result from these discharges and therefore not require Tier 2 antidegradation review;

iv) Environmental remediation permits such as the Aquifer Remediation general permit cited above may be considered *de minimis* impacts and in the public interest for social and economic benefit and may not be required to proceed through full Tier 2 antidegradation review. The Department may at its discretion initiate a review if it deems the case-by-case circumstances warrant such action;

v) Dredge or Fill Permits General Permits (or Nationwide Permits) should continue to be reviewed in the same manner as existing Dredge or Fill permits. The Department may at its discretion initiate a review if it deems the case-by-case circumstances warrant such action;

vi) The Department should consider other types of general permits on a case-by-case basis with the same principles as considered in the above examples. The Department shall advise the Commission of *de minimis* determinations in respect to general permit certifications at the first WQCC meeting after the permit certification is completed.

Figure 2. Tier 2 Review - Eligibility Flowchart
 (Flow chart summarizes preceding narrative description, refer to narrative for complete detail)



2. Conducting Tier 2 Review

The steps for reviewing whether a new or increased discharge or the renewal of a permit for an existing discharge to a Tier 2 water may cause significant degradation are: 1) information gathering, 2) preliminary decision-making, 3) public-intergovernmental participation, and 4) final decision-making.

a) Information Gathering

Within 30 days of receipt of the complete permit application, the Department shall notify the applicant regarding the standard of review for the new or increased discharge or the renewal of a permit for an existing discharge and its obligation to submit the information described below, as well as any other information that the Department may require to conduct the review. Within 30 days of receipt of the Department's notification, the applicant shall submit the required information. Within 30 days of receipt of the applicant's response, the Department shall notify the applicant whether the response is adequate and whether additional information is required. Upon the applicant's satisfaction of the Department's requests for information, the Department shall determine that the application is complete and initiate the antidegradation review. The applicant's failure to submit the requested information may result in certification denial or delay in permit issuance.

The Department shall request at least the following information:

- 1) An analysis of important social or economic activities and development in the area in which the water is located that may be *beneficially* impacted by the new or increased discharge or the renewal of a permit for an existing discharge;
- 2) An analysis of important social or economic activities and development in the area in which the water is located that may be *adversely* impacted by the new or increased discharge or the renewal of a permit for an existing discharge;
- 3) An analysis of the following factors, quantified to the greatest extent possible;
 - i) employment;
 - ii) production of goods and services;
 - iii) tax base;
 - iv) housing;
 - v) effect on existing or expected environmental and public health problems;
 - vi) any other relevant information; and
- 4) An analysis of alternative disposal options (including no discharge to a surface water) or discharge reduction options, including any option that would minimize degradation.

The Department also may require, in its discretion, that the applicant complete the Antidegradation Data Worksheets in Appendix 1 or Appendix 2.

b) Preliminary Decision-Making

Within 60 days of the Department's determination that the information submitted pursuant to the above paragraph is complete, the Department shall make a preliminary decision to deny or authorize the degradation. The Department shall prepare a written statement of basis for the preliminary decision containing the following information (as applicable):

- 1) Applicant's name, facility, and location;
- 2) Description of the discharge, including the nature and concentration of pollutants;
- 3) Description of receiving water, existing and designated uses, and applicable criteria;
- 4) Identification of the permit and the facility's permitting and enforcement history;
- 5) Description of treatment or best management practices to be employed and a brief description of alternative disposal options evaluated by the applicant.
- 6) Estimation of the amount of requested degradation and impact on receiving water and existing and designated uses;
- 7) Analysis of economic or social importance and whether and what magnitude of degradation is necessary to accommodate it;
- 8) Description and brief discussion of conditions to be imposed upon discharge; and
- 9) Description of the procedures for reaching a final decision including:
 - i) The comment period and address where comments may be sent;
 - ii) Procedure for obtaining a public hearing;
 - iii) Other procedures for public participation in the final decision;
 - iv) Departmental contact for additional information.

c) Public Comment and Intergovernmental Coordination

The Department will publish notice and provide an opportunity to comment on the preliminary decision and statement of basis. The public comment period shall be no less than 30 days. During the public comment period, any interested person may submit written comments and request a public hearing. A request for a public hearing must be in writing and must state the nature of the issues to be raised. If the Department determines that the request for public hearing raises issues of significant public interest within the scope of the antidegradation policy, the Department will hold a public hearing. The public hearing will be held in a location near the water affected by the discharge.

With respect to the public notice, the Department shall:

- 1) Publish legal notice in a newspaper of general circulation in the affected area;
- 2) Post the legal notice on the Department website;
- 3) Mail the legal notice to all persons who have submitted a written request to the Commission for advance notice of preliminary decisions and provided the Commission with a mailing address; and
- 4) The legal notice shall describe where a copy of the preliminary decision and statement of basis may be obtained.

d) Final Decision

Within 60 days after the later of the close of the public comment period or the public hearing, the Department shall issue a final decision and a written statement of basis. The statement of basis shall:

- 1) Review the relevant facts, including the applicant, facility, water, uses, and criteria;
- 2) Identify changes from the preliminary decision and statement of basis;
- 3) Identify and summarize the basis for any conditions to be imposed on the discharge, including citations to applicable statutory and regulatory provisions;
- 4) Respond to comments on the preliminary decision and statement of basis, including comments during the public comment period and public hearing, if any; and
- 5) Describe the process for filing an appeal with the Commission.

The Department shall send the final decision to the applicant and to each person who submitted written comments or requested notice of the final decision. The final decision shall be effective immediately.

3. Permitted Activities That Result in Restoration or Maintenance of the Chemical, Physical or Biological Integrity of Tier 2 Waters

This antidegradation policy authorizes permitted activities that may result in degradation in Tier 2 waters when such activities will result in restoration or maintenance of the chemical, physical or biological integrity of the water in accordance with the requirements in 20.6.4.8.A(4)(b) NMAC.

In certifying a permit for such a project, the Department may require in-stream monitoring by the discharger of projects that result in degradation to ensure that water quality is of sufficient quality to protect existing uses and that water quality is restored upon completion of the activity. Monitoring requirements shall include benchmarks to assess progress made toward water quality restoration. If monitoring indicates that existing uses are not protected, permit conditions shall be revised or augmented to ensure protection of existing uses and/or enforcement action may be taken by the Department.

Temporary degradation due to piscicide application may be approved in accordance with 20.6.4.16 NMAC.

C. Tier 3

The Antidegradation Policy in 20.6.4.8.A NMAC prohibits degradation in waters designated by the Commission as ONRWs. This provision shall be implemented in accordance with EPA's Water Quality Standards Handbook, Section 4.7, which states:

Outstanding National Resource Waters (ONRWs) are provided the highest level of protection under the antidegradation policy. The policy provides for protection of water quality in high-quality waters that constitute an ONRW by prohibiting the lowering of water quality. ONRWs are often regarded as highest quality waters of the United States: That is clearly the thrust of 131.12(a)(3). However, ONRW designation also offers special protection for waters of "exceptional ecological significance." These are water bodies that are important, unique, or sensitive ecologically, but whose water quality, as measured by the traditional parameters such as dissolved oxygen or pH, may not be particularly high or whose characteristics cannot be adequately described by these parameters (such as

wetlands).

The regulation requires water quality to be maintained and protected in ONRWs. EPA interprets this provision to mean no new or increased discharges to ONRWs and no new or increased discharge to tributaries to ONRWs that would result in lower water quality in the ONRWs. The only exception to this prohibition, as discussed in the preamble to the Water Quality Standards Regulation (48 F.R. 51402) permits States to allow some limited activities that result in temporary and short-term changes in the water quality of ONRW. Such activities must not permanently degrade water quality or result in water quality lower than that necessary to protect the existing uses in the ONRW. It is difficult to give an exact definition of "temporary" and "short-term" because of the variety of activities that might be considered. However, in rather broad terms, EPA's view of temporary is weeks and months, not years. The intent of EPA's provision clearly is to limit water quality degradation to the shortest possible time. If a construction activity is involved, for example, temporary is defined as the length of time necessary to construct the facility and make it operational. During any period of time when, after opportunity for public participation in the decision, the State allows temporary degradation, all practical means of minimizing such degradation shall be implemented.

The state's Antidegradation Policy for Tier 3 waters shall be implemented as follows:

1. General Requirements

The Antidegradation Policy in 20.6.4.8.A(3) NMAC prohibits degradation in waters designated by the Commission as ONRWs except as provided in 20.6.4.8.A(3) and 20.6.4.8.A(4) NMAC. In accordance with EPA guidance, this policy is interpreted to prohibit new or increased discharges to ONRWs and tributaries to ONRWs that would result in lower water quality in the ONRW. The only exceptions for permitted discharges to this prohibition are described below in Paragraph 2, Temporary and Short-Term Degradation, and Paragraph 3, Permitted Activities That Result in Restoration or Maintenance of the Chemical, Physical or Biological Integrity of Surface Waters.

2. Temporary and Short-Term Degradation

The Commission may authorize temporary and short-term degradation in an ONRW pursuant to 20.6.4.8.A(3) NMAC when the Commission has determined that the activity causing degradation is necessary to accommodate public health or safety activities.

a) Commission Approval of Temporary and Short Term Degradation

Any person seeking Commission approval of temporary and short-term degradation of water quality in an ONRW to accommodate public health or safety activities shall file a written request concurrently with the Commission and the Surface Water Quality Bureau of the Department. The request shall contain, at a minimum, the following information:

- 1) The requester's name and address;
- 2) A description of the project that may result in temporary and short-term degradation to an ONRW including a map showing the location of the project and the water(s) potentially affected;
- 3) A description of the degradation that may occur, including the type and magnitude of contaminants;

4) The period of time (not to exceed six months) for which the approval is requested;

5) A description of all actions to be taken to comply with the requirements of subparagraphs (i) through (iv) of 20.6.4.8.(A)(3)(a) NMAC;

6) An affidavit of publication of notice of a minimum 30-day review and comment period in a newspaper of general circulation in the affected county. The public notice shall state that comments shall be submitted to the Surface Water Quality Bureau of the Department within the 30-day comment period; and

An entity seeking Commission approval of temporary and short-term degradation of water quality in an ONRW to accommodate public health or safety activities may submit an approved National Environmental Policy Act analysis in fulfillment of this requirement, providing the document includes all of the information specified paragraphs 1) through 6) above.

Upon receipt of the request, the Surface Water Quality Bureau of the Department shall post notice of the request on its website. Within 30 days of receipt of the request, the Department shall review the request and file a recommendation with the Commission to approve, approve with conditions or deny the request. The recommendation shall be sent to the requester. In making a written recommendation to the Commission, the Department shall consider the following in addition to the regulatory criteria in 20.6.4.8.A(3)(a) NMAC:

1) Temporary and short-term is interpreted to mean weeks or months, and shall not exceed six months.

2) For intermittent activities, the cumulative effect of the discharge shall be considered in determining the length of time that temporary and short-term degradation is occurring. The cumulative impact of degradation from any one approved activity shall not exceed six months. An example of an intermittent activity is a construction project that will create turbidity in an ONRW periodically throughout the construction period.

3) Temporary and short-term degradation associated with construction activities shall be approved only for the length of time necessary to construct the facility and make it operational, and where BMPs are employed to minimize pollution effects.

4) For projects that depend on reestablishing vegetation to permanently control sediment discharges, disturbed areas that are not otherwise physically protected from erosion must be reseeded or planted with native vegetation. Stabilization measures including vegetation are required at the earliest practicable date, but no later than the end of first full growing season following construction. Additional BMPs may be required prior to reestablishing vegetation.

Upon receipt of the Department's recommendation, the Commission shall include the request for authorization as soon as practicable at a regularly scheduled meeting. If the Commission approves the activity, the Department shall oversee implementation of the activity.

b) Emergency Procedures - Temporary and Short Term Degradation

Where an emergency response action that may result in temporary and short-term degradation to an ONRW is necessary to mitigate an immediate threat to public health or safety, the emergency response action may proceed prior to providing notification required by 20.6.4.8.A(3)(a) NMAC in accordance with the following:

1) Only actions that mitigate an immediate threat to public health or safety may be undertaken pursuant to this provision. Non-emergency portions of the action shall comply with the requirements of 20.6.4.8.A(3)(a) NMAC.

2) The discharger shall make best efforts to comply with the requirements of 20.6.4.8(A)(3)(a)(i) through (iv) NMAC.

3) The discharger shall notify the department of the emergency response action in writing within seven days of initiation of the action.

4) Within 30 days of initiation of the emergency response action, the discharger shall provide a summary of the action taken, including all actions taken to comply with the requirements of 20.6.4.8.(A)(3)(a)(i) through (iv) NMAC.

3. Permitted Activities That Result in Restoration or Maintenance of the Chemical, Physical or Biological Integrity of ONRWs

Where a permitted activity will result in restoration or maintenance of the chemical, physical or biological integrity of an ONRW, NMED may allow degradation within the ONRW after a case-by case basis review in accordance with 20.6.4.8.A(4)(a) NMAC.

In approving such a project, the Department may require in-stream monitoring by the discharger of projects that result in degradation to ensure that water quality is of sufficient quality to protect existing uses and that water quality is restored upon completion of the activity. Monitoring requirements shall include benchmarks to assess progress made toward water quality restoration. If monitoring indicates that existing uses are not protected, permit conditions shall be revised or augmented to ensure protection of existing uses and/or enforcement action may be taken by the Department.

Temporary degradation due to piscicide application may be approved in accordance with 20.6.4.16 NMAC.

4. Other Provisions for Tier 3 Waters

a) The permittee may be required in permit conditions to monitor its discharge to ensure that no pollutant load is added to the ONRW in order that water quality degradation does not occur and the essential character or special use that makes the water an ONRW is not altered.

b) For permitted discharges that originate outside of and upgradient of the ONRW designated area (including private inholdings within federal or state lands), discharges will be evaluated during CWA permit issuance to ensure that the discharge will not result in lower water quality in the downstream ONRW and that any temporary discharge complies with requirements of Paragraphs 2 and 3 above (Temporary and Short-Term Degradation; Permitted Activities That Result in Restoration or Maintenance of the Chemical, Physical or Biological Integrity of Surface Waters).

c) For any CWA Section 402 or 404 regulated discharge or activity within an ONRW, the permittee must obtain an activity-specific state certification that water quality standards will be met prior to discharge pursuant to Title 40, Part 121 of the Code of Federal Regulations.

d) Permitted discharges to impaired waters listed on the state's most recent 303(d) List and located within an ONRW must be fully controlled to meet permit conditions or TMDL waste load allocations that mitigate the contribution by the discharge to the impairment. NMED shall have primary responsibility to determine the source(s) of an impairment.

e) Pursuant to 20.6.2.3109.H(2) NMAC, no ground water discharge permit shall be issued if the discharge will cause a violation of the Antidegradation Policy in 20.6.4.8.A NMAC.

f) The Department shall provide notice of activities approved by the commission pursuant to 20.6.4.8.A(3)(a) NMAC and of activities conducted pursuant to 20.6.4.8.A(4) NMAC by posting a brief description, location, and timeframe for such activities on a dedicated Department website.

5. Implementing Agencies

Permitting and certification of CWA permits is the responsibility of NMED pursuant to the New Mexico Water Quality Act Section 74-6-5.E. Discharge permits issued pursuant to the Water Quality Act (WQA), shall be issued by NMED except in situations where the Commission has delegated WQA permitting authority to the Oil Conservation Division of the Energy, Minerals and Natural Resources Department pursuant to the Delegation of Responsibilities dated July 21, 1989.

V. APPEALS

Persons adversely affected by any final decision of the Department may appeal to the Commission in accordance with the New Mexico Water Quality Act.

APPENDIX – 1 Tier 2 Review of a Public Facility

Appendix 1 includes additional information that may be required by the Department to evaluate socio-economic factors of a public facility during a Tier 2 review. This evaluation is based on two types of impacts, referred to as “substantial” and “widespread”. The Substantial Impacts analysis is found in Tables 1-3 – 1-7. The Widespread Impacts¹² analysis is found in Table 1-8.

SUBSTANTIAL IMPACTS - SUMMARY

Purpose of Substantial Impacts analysis: Determine whether a public facility can afford pollution controls in order to avoid any degradation of water quality.

The first step in a Substantial Impacts analysis is to provide data on the socio-economic factors listed in the worksheets in Tables 1-1 and 1-2. This data is then used to determine two indicators called the “Municipal Affordability Screener” (Table 1-3) and the “Secondary Affordability Test” (Tables 1-4 – 1-6). The results of these indicators are then compared in the “Assessment of Substantial Impacts Matrix” (Table 1-7) as a way to determine overall affordability to the community.

Widespread Impacts - Summary

Purpose of Widespread Impacts Analysis: evaluates the social costs of pollution control requirements by: 1) defining the affected community; 2) evaluating the community’s current characteristics; and 3) evaluating how community characteristics would change if discharger must avoid degradation to water quality.

If the conclusion from the Substantial Impacts analysis is “Questionable Affordability” or “Community cannot afford the pollution control”, then a Widespread Impacts analysis may be completed to further resolve the affordability issue. This analysis is primarily a qualitative evaluation based on community socioeconomic factors that are expanded to a larger scale than the Substantial Impacts analysis.

¹² Widespread Impact Analysis forms derived from EPA’s Water Quality Standards Academy Participant Manual Update-4, 2000 [EPA 823-B-00-005].

Table 1-1. Antidegradation Data Worksheet

SOCIO-ECONOMIC INDICATORS	DATA
CITY'S DEMOGRAPHICS	
Population _____(year)	
Current Population _____(year)	
Type of household moving away from _____(city)	
Number of households	
Median Household Income (U.S. Census, Census Designated Place)	
Median Household Income (Local Planning Board Estimates, City)	
Median Household Income (U.S. Census, State)	
Median Household Income (U.S. Census, County)	
Major Type of Employment	
Regional Economic Conditions	
% of Total Wastewater Flow from Residential & Municipal Sources	
Unemployment Rate (City)	
Unemployment Rate (County)	
Unemployment Rate (State)	
CITY'S FINANCIAL HISTORY	
Property Tax Revenues _____(year)	
Sales Tax & Miscellaneous Revenues _____(year)	
Total Government Revenues _____(year)	
Property Tax Revenues (FY_____)	
Sales Tax & Miscellaneous Revenues (FY_____)	

APPENDIX -- 1

Total Government Revenues (FY _____)	
Current Market Value of Taxable Property (FY _____)	
Property Tax Delinquency Rate	
Bond Rating - insured sewer	
Bond Rating - non insured sewer	
Overall Net Debt (FY _____)	

Table 1-2. Antidegradation Data Worksheet

SOCIO-ECONOMIC INDICATOR	DATA
Cost of Treatment Options (pollution controls) that will Avoid Degradation of Water Quality	
Capital Improvements	
OPTION 1. (year) _____ dollars	
OPTION 2. (year) _____ dollars	
Annual Operating Costs	
OPTION 1. (year) _____ dollars	
OPTION 2. (year) _____ dollars	
FINANCING FOR WASTEWATER TREATMENT OPTIONS	
OPTION 1. Source of Financing	
Repayment Term, Vehicle	
Bond Rate	
Total Annual Cost of Existing Plant	
OPTION 2. Source of Financing	
Repayment Term, Vehicle	

Bond Rate	
Total Annual Cost of Existing Plant	

Table 1-3. Substantial Impacts Analysis – Part I

PART I. CALCULATING THE MUNICIPAL AFFORDABILITY SCREENER	
This screener is used to evaluate expected impacts to households. It indicates whether community households can afford to pay the total annualized pollution control costs to avoid water quality degradation.	
A. Calculate Average Annualized Cost Per Household	
1. Calculate the Total Annual Cost of the Project	
Interest Rate for Financing (<i>i</i>) =	_____ (expressed as a fraction)
Time Period for Financing (<i>n</i>) =	_____ (years)
Annualization Factor: $\frac{i}{(i + 1)^n - 1} (+ i) =$	_____ (1)
Total Capital Cost of Project to be Financed =	_____ (2)
Annual Operating Costs of Project =	_____ (3)
Annualized Capital Cost [(1) x (2)] =	_____ (4)
Total Annual Cost of Project [(3) + (4)] =	_____ (5)
2. Calculate the Total Annual Cost to Households	
Total Annual Cost of Project (5) x Percentage of Total Wastewater Flow Attributable to Residential and Municipal Wastewater Flows =	_____ (6)
Total Annual Cost of Existing Plant (\$) x Percentage of Total Wastewater Flow Attributable to Residential and Municipal Wastewater Flows =	_____ (7)
Total Annual Cost to Households [(6) + (7)] =	_____ (8)
3. Calculate the Average Annualized Cost Per Household	
$\frac{\text{Total Annual Cost to Households (8)}}{\text{Number of Households}} =$	_____ (9)
B. Calculate Screener Value:	
$\frac{\text{Average Annualized Cost Per Household (9)}}{\text{Median Household Income}} (x 100) =$	_____ % municipal affordability screen (10)

APPENDIX -- 1

What type of impact does the Municipal Affordability Screener Indicate in table below?			_____ impact
Little Impact < 1.0 %	Mid-Range Impact 1.0% - 2.0%	Large Impact > 2.0%	
Explanation of Impacts: <u>Little Impact</u> – high affordability; households can afford to pay pollution control costs <u>Mid-Range Impact</u> – uncertain affordability <u>Large Impact</u> – low affordability; pollution control costs may cause economic hardship on households			
Is there a need to proceed to the Secondary Affordability Test? (yes, if large impact or mid-range impact)			_____ (yes/no)

Table 1-4. Substantial Impacts Analysis – Part II

PART II. APPLYING THE SECONDARY AFFORDABILITY TEST																				
A. EVALUATING THE DEBT INDICATORS																				
Bond Rating: This is a Measure of the Credit Worthiness of a Community																				
What is Bond Rating of (name of municipality) _____ ?																				
What is the resulting score? (assign score from table below)																				
<table border="1"> <tr> <td>Source of Bond Rating</td> <td>Weak</td> <td>Mid-Range</td> <td>Strong</td> </tr> <tr> <td>S&P</td> <td>below BBB</td> <td>BBB</td> <td>above BBB</td> </tr> <tr> <td>Moody's</td> <td>below Baa</td> <td>Baa</td> <td>above Baa</td> </tr> <tr> <td>Score</td> <td>1</td> <td>2</td> <td>3</td> </tr> </table>	Source of Bond Rating	Weak	Mid-Range	Strong	S&P	below BBB	BBB	above BBB	Moody's	below Baa	Baa	above Baa	Score	1	2	3	_____ score points (11)			
Source of Bond Rating	Weak	Mid-Range	Strong																	
S&P	below BBB	BBB	above BBB																	
Moody's	below Baa	Baa	above Baa																	
Score	1	2	3																	
Overall Net Debt to Market Value of Taxable Property: This measures Debt Burden on Residents within the Community																				
(municipality) _____ Overall Net Debt =																				
_____ (12)																				

APPENDIX -- 1

(municipality) _____ Market Value of Taxable Property =	_____ (13)												
$\frac{\text{Overall Net Debt (12)}}{\text{Market Value of Taxable Property (13)}} \times 100 =$	_____ % (13a)												
What is the resulting score? (assign score from table below)													
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 15%;"></td> <td style="width: 25%;">Weak</td> <td style="width: 25%;">Mid-Range</td> <td style="width: 35%;">Strong</td> </tr> <tr> <td>Compare % from 13a</td> <td>>5%</td> <td>2% - 5%</td> <td><2%</td> </tr> <tr> <td>Score</td> <td>1</td> <td>2</td> <td>3</td> </tr> </table>		Weak	Mid-Range	Strong	Compare % from 13a	>5%	2% - 5%	<2%	Score	1	2	3	_____ score points (14)
	Weak	Mid-Range	Strong										
Compare % from 13a	>5%	2% - 5%	<2%										
Score	1	2	3										
<p>Explanation of Ratings:</p> <p><u>Weak</u> = negative effect on indicator from increased costs for pollution controls</p> <p><u>Mid-Range</u> = uncertain effect on indicator</p> <p><u>Strong</u> = indicator can withstand increased costs for pollution controls</p>													

Table 1-5. Substantial Impacts Analysis – Part II

PART II. APPLYING THE SECONDARY AFFORDABILITY TEST (continued)													
B. EVALUATING THE SOCIOECONOMIC INDICATORS													
<p>Unemployment Rate: This measures the General Economic Health of the Community</p>													
What is (municipality) _____ Unemployment Rate?	_____												
Is this above, below, or equal to the State's rate?	_____												
What is the resulting Score? (assign score from table below)													
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 15%;"></td> <td style="width: 25%;">Weak</td> <td style="width: 25%;">Mid-Range</td> <td style="width: 35%;">Strong</td> </tr> <tr> <td>Compare unemployment rate</td> <td>Above State Average</td> <td>State Average</td> <td>Below State Average</td> </tr> <tr> <td>Score</td> <td>1</td> <td>2</td> <td>3</td> </tr> </table>		Weak	Mid-Range	Strong	Compare unemployment rate	Above State Average	State Average	Below State Average	Score	1	2	3	_____ score points (15)
	Weak	Mid-Range	Strong										
Compare unemployment rate	Above State Average	State Average	Below State Average										
Score	1	2	3										

APPENDIX -- 1

Median Household Income: This Measure Provides an Overall Indication of Community Earning Capacity				
What is (municipality) _____ Median Household Income?				_____
Is this above, below, or equal to the State's rate?				_____
What is the resulting Score? (assign score from table below)				
	Weak	Mid-Range	Strong	
Compare median income	Below State Average	State Average	Above State Average	
Score	1	2	3	_____ score points (16)

Table 1-6. Substantial Impacts Analysis – Part II

PART II. APPLYING THE SECONDARY AFFORDABILITY TEST (continued)				
C. EVALUATING THE FINANCIAL MANAGEMENT INDICATORS				
Property Tax Revenue to Full Market Value of Taxable Property: This Measures Funding Capacity Available to Support Debt Based on Community's Wealth				
What is (municipality) _____ Property Tax Revenue?				_____ (17)
What is the Full Market Value of Taxable Property?				_____ (18)
$\frac{\text{Property Tax Revenue (17)}}{\text{Full Market Value of Taxable Property (18)}} \times 100 =$				_____ % (18a)
What is the resulting Score? (assign score from table below)				
	Weak	Mid-Range	Strong	
Compare % from 18a	<2%	2% - 4%	>4%	
Score	1	2	3	_____ score points (19)
Property Tax Collection Rate: This Measures How Well the Local Government is Administrated				

APPENDIX -- 1

What is the Property Tax Collection Rate of (municipality) _____	_____%_												
What is the resulting Score? (assign score from table below)													
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20%;"></td> <td style="width: 25%;">Weak</td> <td style="width: 25%;">Mid-Range</td> <td style="width: 30%;">Strong</td> </tr> <tr> <td>Compare tax collection rate</td> <td><94%</td> <td>94% - 98%</td> <td>>98%</td> </tr> <tr> <td>Score</td> <td>1</td> <td>2</td> <td>3</td> </tr> </table>		Weak	Mid-Range	Strong	Compare tax collection rate	<94%	94% - 98%	>98%	Score	1	2	3	_____ score points (20)
	Weak	Mid-Range	Strong										
Compare tax collection rate	<94%	94% - 98%	>98%										
Score	1	2	3										
D. CALCULATE THE CUMULATIVE SECONDARY AFFORDABILITY TEST SCORE: This is the average score of all the indicators calculated above.													
$\frac{(11) + (14) + (15) + (16) + (19) + (20)}{6} =$	_____ cumulative score (21)												
In what impact range does the cumulative secondary score fall?													
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20%;"></td> <td style="width: 25%;">Weak</td> <td style="width: 25%;">Mid-Range</td> <td style="width: 30%;">Strong</td> </tr> <tr> <td>Compare cumulative score from 21</td> <td>< 1.5</td> <td>1.5 – 2.5</td> <td>> 2.5</td> </tr> </table>		Weak	Mid-Range	Strong	Compare cumulative score from 21	< 1.5	1.5 – 2.5	> 2.5	_____ impact range				
	Weak	Mid-Range	Strong										
Compare cumulative score from 21	< 1.5	1.5 – 2.5	> 2.5										

Table 1-7. Substantial Impacts Analysis – Part III

Part III. Assessment of Substantial Impacts Matrix																
THE MUNICIPAL AFFORDABILITY SCREENER (10) =	_____ %															
THE CUMULATIVE SECONDARY AFFORDABILITY TEST SCORE (21) =	_____ score points															
Where does (municipality) _____ appear in the Substantial Impacts Matrix below?																
Substantial Impacts Matrix																
Secondary Assessment Score	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="3" style="padding: 5px;">Municipal Affordability Screener</th> </tr> <tr> <th style="width: 33%; padding: 5px;"><1.0%</th> <th style="width: 33%; padding: 5px;">1.0% - 2.0%</th> <th style="width: 33%; padding: 5px;">>2.0%</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">< 1.5</td> <td style="padding: 5px;">?</td> <td style="padding: 5px;">X</td> </tr> <tr> <td style="padding: 5px;">1.5 – 2.5</td> <td style="padding: 5px;">√</td> <td style="padding: 5px;">?</td> </tr> <tr> <td style="padding: 5px;">> 2.5</td> <td style="padding: 5px;">√</td> <td style="padding: 5px;">?</td> </tr> </tbody> </table>	Municipal Affordability Screener			<1.0%	1.0% - 2.0%	>2.0%	< 1.5	?	X	1.5 – 2.5	√	?	> 2.5	√	?
Municipal Affordability Screener																
<1.0%	1.0% - 2.0%	>2.0%														
< 1.5	?	X														
1.5 – 2.5	√	?														
> 2.5	√	?														
<p>? = Questionable affordability √ = Community can afford the pollution control X = Community cannot afford the pollution control</p>																
Based on the Substantial Impacts Matrix above, what is the affordability status (afford, not afford, or questionable) of the (municipality) _____? In other words, can the project proponent afford to upgrade the facility in order to avoid water quality degradation?	_____ Matrix Result															
If the conclusion from the Substantial Impacts analysis is either “Cannot Afford” or “Questionable Affordability”, then proceed to the Widespread Impacts analysis for further evaluation.	Complete Widespread Impacts Analysis? _____(yes/no)															

Table 1-8. Widespread Impacts Analysis – Public Facility

<p>1. <u>Define the Affected Community</u> Evaluate the Discharger's Contribution to the Community:</p> <ul style="list-style-type: none"> ○ Contribution to economic base (e.g., property taxes and employment) ○ Provides product or service upon which other businesses or the community depend
<p>2. <u>Evaluate Community's Current Characteristics</u></p> <p>Evaluate how community's current socioeconomic health may change if proposed project must avoid degradation to water quality by considering the following factors:</p> <ul style="list-style-type: none"> ○ Median household income ○ Unemployment rate ○ Rate of industrial development ○ Developing and declining industries ○ Percent of households below poverty line ○ Ability of community to carry more debt ○ Local and regional factors <p>Other applicable information on the local and regional economy that should also be reviewed includes:</p> <ul style="list-style-type: none"> ○ Annual rate of population change ○ Current financial surplus as a percentage of total expenditures ○ Percentage of property taxes actually collected ○ Property tax revenues as a percentage of the market value of real property ○ Overall debt outstanding as a percentage of market value of real property ○ Overall debt per capita ○ Percentage of outstanding debt due within 5 years
<p>3. <u>Evaluate How Community Characteristics Would Change if Discharger Must Avoid Degradation to Water Quality</u></p> <p>Evaluate the projected adverse socioeconomic impacts of adding pollution controls to the project to meet antidegradation requirements by considering the following:</p> <ul style="list-style-type: none"> ○ Property Values ○ Employment Rate ○ Commercial Development Opportunities ○ Tax Revenues ○ Expenditure on Social Services ○ State level impacts such as loss of revenues and increased expenditures

APPENDIX – 2 Tier 2 Review of a Private Facility

Appendix 2 includes additional information that may be required by the Department to evaluate socio-economic factors of a private facility during a Tier 2 review. This evaluation is based on two types of impacts, referred to as “substantial” and “widespread”. The Substantial Impacts analysis is found in Table 2-2. The Widespread Impacts analysis is found in Table 2-3.

SUBSTANTIAL IMPACTS - SUMMARY

Purpose of Substantial Impacts analysis: Determine whether a private facility can afford pollution controls in order to avoid any degradation of water quality.

The first step in a Substantial Impacts analysis is to provide data on the socio-economic factors listed in the worksheet in Table 1. This data is then used to calculate four financial tests that in turn indicate the financial health of a private entity (Table 2).

WIDESPREAD IMPACTS - SUMMARY

Purpose of Widespread Impacts analysis: Evaluates the social costs of pollution control requirements by: 1) defining the affected community; 2) evaluating the community’s current characteristics; and 3) evaluating how community characteristics would change if discharger must avoid degradation to water quality.

If the Substantial Impacts analysis (i.e., the four financial tests) indicates that the private entity’s financial health is questionable, then a Widespread Impacts analysis may be completed to further resolve the affordability issue. This analysis is primarily a qualitative evaluation based on community socioeconomic factors that are expanded to a larger scale than the Substantial Impacts analysis.

Table 2-1. Data Worksheet for Financial Factors

Financial Factor	Data
Current Assets	
Current Liabilities	
Cash flow per given year	
Total debt of the entity	
Amount firm has borrowed (debt)	
Amount of stockholders' capital (equity)	
Pre-tax earnings	
Annualized pollution control cost	

Table 2-2. Substantial Impacts Analysis - Financial Tests Used to Measure the Financial Health of a Private Entity

<p>1. Liquidity Test - Indicates how easily an entity can pay its short-term bills.</p> <p>Current Ratio = Current Assets / Current Liabilities</p> <p>NOTE: A ratio greater than 2 indicates affordability</p>
<p>2. Solvency Test - Indicates how easily an entity can pay its fixed and long-term bills.</p> <p>Beaver's Ratio = Cash flow per given year / Total debt of the entity</p> <p>NOTE: > 0.20 Indicates private entity is solvent < 0.15 Indicates private entity may go bankrupt</p>
<p>3. Leverage Test - Indicates how much money the entity can borrow.</p> <p>Debt-to-Equity Ratio = Amount firm has borrowed (debt) / Amount of Stockholders' capital (equity)</p> <p>NOTE: The larger the Debt-to-Equity Ratio, the less likely that the entity will be able to borrow funds</p>
<p>4. Earnings Test - Indicates how much the entity's profitability will change with the additional pollution control needed to avoid degradation of water quality.</p> <p>Earnings = Pre-tax – Annualized Pollution Control Cost</p> <p>NOTE: Compare earnings result with entity's revenues to measure post-compliance profit rate</p>
<p>Guidelines to evaluate financial tests:</p> <ul style="list-style-type: none"> ○ Results of all four tests above should be considered jointly ○ Ratios and tests should be compared over several years ○ Financial ratios should also be compared against those of "healthy" entities ○ The role the entity plays in a parent firm's operations should also be considered

Table 2-3. Widespread Impacts Analysis – Private entity/facility

1. Define the Affected Community

Evaluate the Discharger's Contribution to the Community:

- Contribution to economic base (e.g., property taxes and employment)
- Provides product or service upon which other businesses or the community depend

2. Evaluate Community's Current Characteristics

Evaluate how community's current socioeconomic health would change if proposed project must avoid degradation to water quality by considering the following factors:

- Median household income
- Unemployment rate
- Rate of industrial development
- Developing and declining industries
- Percent of households below poverty line
- Ability of community to carry more debt
- Local and regional factors

Other applicable information on the local and regional economy that should also be reviewed includes:

- Annual rate of population change
- Current financial surplus as a percentage of total expenditures
- Percentage of property taxes actually collected
- Property tax revenues as a percentage of the market value of real property
- Overall debt outstanding as a percentage of market value of real property
- Overall debt per capita
- Percentage of outstanding debt due within 5 years

3. Evaluate How Community Characteristics Would Change if Discharger Must Avoid Degradation to Water Quality

Evaluate the projected adverse socioeconomic impacts of adding the pollution control to the project to meet antidegradation requirements by considering the following:

- Property Values
- Employment Rate
- Commercial Development Opportunities
- Tax Revenues
- Expenditure on Social Services
- State level impacts such as loss of revenues and increased expenditures

APPENDIX – 3 Assimilative Capacity Calculation Guideline

The intent of this guideline is to provide a screening tool that will allow an estimate of the magnitude of the impact of a discharge on receiving water (i.e., *de minimis* or not).

This guideline and accompanying spreadsheets are intended to serve as a guideline for calculation of assimilative capacity for purposes of the Antidegradation Implementation Procedure. This procedure is intended only for use in these guidelines. Where the Procedure calls for calculation of assimilative capacity, the value is used as a screening tool to determine if a proposed discharge will have *de minimis* effects or not. Since this is a screening tool, that is not being used for more rigorous determinations such as calculating enforceable NPDES permit effluent limits or TMDL waste load allocations, the method has been kept as simple as possible and is viewed as an estimate. Users of this guideline may find it necessary in the course of events to slightly modify the process in order to accommodate unique problems with data sets or circumstances that might occur.

The spreadsheets illustrate the calculations to estimate assimilative capacity. The first set of calculations addresses pollutants other than Biochemical Oxygen Demand (BOD). The second set of calculations addresses BOD. The second set of calculations is necessary because BOD is the parameter regulated in discharge permits to prevent undue depletion of Dissolved Oxygen (DO) in receiving waters.

The following data gathering guidelines should be used to compile the information required for the two sets of calculations. However, because of variations in data availability, as well as other relevant case-specific factors, the guidelines may be adjusted to ensure the compilation of appropriate information. In circumstances indicating the need to adjust the guidelines, the reviewer should consult with the Department, as well as other NMED water quality assessment protocols and Quality Assurance Plans.

Data Gathering Guidelines.

- 1) Obtain ambient water quality data for the pollutant of concern in the receiving water upstream but as close to the discharge as possible. Optimally, use the water quality station and data used by NMED SWQB in the most recent evaluation of the stream segment for purposes of the biennial Clean Water Act Section 303(d) evaluation.
 - a) Possible sources of data include:
 - i) NMED SWQB water quality database
 - ii) USEPA STORET
 - iii) USGS water quality monitoring stations
 - b) Use all valid data points regardless of the stream flow or time of year when collected
 - c) Valid data is data that has met quality assurance / quality control protocols established by the SWQB
- 2) Obtain data about the discharge.

Appendix - 3

- a) Possible sources of data include:
 - i) NPDES Permit Applications
 - (1) Supplemental sampling requested by the permitting authority to support the permitting process may be used.
 - ii) USEPA STORET
 - iii) USEPA Permit Compliance System (PCS)
 - iv) Other valid data that has met quality assurance / quality control protocols established by the SWQB
- 3) Summarize the data by calculating the arithmetic mean for all parameters except bacteria. Use geometric mean to summarize bacteria data. This value will be used as the upstream concentration in the calculation below.
 - a) If the data value is reported as less than a number, that usually means the test result was below the lab's minimum quantification level.
 - i) If all data points are "less than"; treat them all as zeros.
 - ii) If some of the data are "less than" and some are quantified values, use the actual quantified values and one half of the "less than" value to calculate the geometric mean.
 - (1) For example in a data set that has the following 4 values: 1.2, <0.5, <0.6 and 1.4, input the following numbers into the calculation 1.2, 0.25, 0.3 and 1.4. The result in this example would be 0.6
- 4) Obtain critical low flow data for the stream above the discharge.
 - a) Critical low flow for purpose of the calculation is the minimum average four consecutive day flow which occurs with a frequency of once in three years (4Q3)
 - i) In most cases it will only be necessary to find the 4Q3. However if the only concern is estimating the assimilative capacity necessary to meet a human health criterion then the harmonic mean¹³ flow may be substituted.

¹³ Refer to Water Quality Standards for Interstate and Intrastate Surface Waters, 20.6.4.10.B.