

**WATER QUALITY PROTECTION  
ORDINANCE**

**of the**

**WHITE MOUNTAIN APACHE TRIBE  
OF THE FORT APACHE INDIAN RESERVATION**

# WATER QUALITY PROTECTION ORDINANCE

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**CHAPTER THREE  
WATER QUALITY PROTECTION**

**PREAMBLE**

Tú, water, is one of the gifts of the Creator that is essential to the survival of the White Mountain Apache People. Water is inseparable from our land and culture. Our homeland has always been blessed with a great number of springs, streams, and meadows to sustain a diverse and vibrant community of plants, wildlife, and people. We have always sought to protect our precious natural resources and special places. We recognize that we must assert full authority over all the lands and waters of our Reservation to protect them from abuse. The standards for water quality in this Tribal Ordinance will guide the protection of our waters for present and future generations.

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*It's good we have that water. We need it to live. It's good we have that spring too.  
We need it to live right.*

-- Apache Elder Nick Thompson speaking on the significance of a spring in Cibecue, tú nchaa hal<sup>xi</sup>i<sup>1</sup>

Dzit liqai si áń Ndee bi Tú diyini

*Water is sacred. Water for the Apache people comes from the White Mountain.*

Ramon Riley, on behalf of the Apache Culture Advisory Group

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Quoted in Western Apache Language and Culture, by Keith H. Basso, Tucson: University of Arizona Press, 1990.

## SECTION 3.1

## INTRODUCTION, AUTHORITY AND APPLICABILITY

A. **PURPOSES.** Pursuant to the inherent and aboriginal sovereign authority of the White Mountain Apache Tribe, and as authorized by and recognized in Section 518 of the Clean Water Act, 33 U.S.C. § 1377, (February 4, 1987), the Tribal Council of the White Mountain Apache Tribe, a federally-recognized Indian tribe, hereby enacts this Water Quality Ordinance ("Ordinance") for all waters within exterior boundaries of the Fort Apache Indian Reservation ("Reservation").

The purposes of this Ordinance and the standards contained herein are as follows:

- (1) To promote the health of tribal waters and the people, plants, and wildlife that depend on them through holistic management and sustainable use;
- (2) To designate the existing and attainable uses for which the surface water of the White Mountain Apache Tribe shall be protected;
- (3) To prescribe water quality standards to sustain the designated uses;  
and
- (4) To assure that degradation of existing water quality does not occur.

The standards contained herein are intended and shall be construed to be consistent with the Clean Water Act, which declares its objective to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The Tribe shares that objective for its waters, and further adds the objective of restoring and maintaining the *cultural* and *spiritual* integrity of its waters.

The Clean Water Act also states that "it is the national goal that, wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water. Irrigation, primary contact, domestic water supply (including municipal and industrial), groundwater recharge, plant gathering, fish culture, and respect for culturally or religiously significant areas are other beneficial uses of the Tribal waters intended to be protected by this Ordinance. Any contamination that may result from such uses shall not lower the quality of the water below what is needed for life, including human recreation and protection and propagation of fish and wildlife that depend on Tribal waters.

B. **APPLICABILITY.** Except as specifically provided herein, this Ordinance applies to all waters within the exterior boundaries of the Reservation, including water situated wholly or partly within, or bordering upon the Reservation, including but not limited to all waters reserved by the White Mountain Apache Tribe since time immemorial. Waters which are not in immediate hydrologic connection with other surface or subsurface

waters, such as some stock tanks, constructed wetlands, treatment lagoons are excluded from this Ordinance. Artificially created conveyance systems such as irrigation ditches are also excluded. However, the standards do apply to the receiving bodies of water impacted by the effluent from such sources. The specified criteria apply to substances attributable to point source discharges, nonpoint sources, or instream activities. The criteria shall not apply to natural phenomena not brought about by human activity.

**C. GENERAL STANDARDS.** The general standards in Section 3.5 of this ordinance shall be maintained at all times and apply to all perennial, ephemeral, and intermittent streams, and to all ponds, lakes, standing waters, sub-surface waters, wetlands, and springs. The most stringent numerical criteria applicable to any perennial stream shall be maintained any time the flow equals or exceeds the lowest four-day mean flow in a three-year period (define as 4Q3). Human Health Criteria shall be implemented through the harmonic mean flow. When ephemeral and intermittent streams have a low flow value of zero, all discharges shall meet standards for the designated uses. The criteria assigned to a water body are the ones required to sustain all designated uses of the waterbody. When a Tribal water has more than a single existing attainable or designated use, the applicable numeric standards shall be the most stringent of those established for such a waterbody. The Tribal Council of the White Mountain Apache Tribe shall approve and issue surface water designations for Tribal waters and shall determine the suitability of bodies of water for primary contact purposes. The numeric and narrative criteria contained in this Ordinance will be part of the permitting and management process for all dischargers who are subject to regulation by the White Mountain Apache Tribe and/or the Federal Government. The standards shall be used in existing permitting and management processes, or new processes that may be created, in order to determine when a designated use is threatened. If standards are exceeded, and if it is determined that such exceedance would impair a designated use, then the permitting or management processes will be expected to require treatment technologies for regulated point sources and to implement such best management practices as are applicable for regulated non-point sources.

**D. ANTI-DEGRADATION POLICY.** The anti-degradation policy for Tribal waters is set forth in Section 3.2 of this Ordinance.

**E. IMPLEMENTATION PLAN.** The plan for implementing the anti-degradation policy and other aspects of this Ordinance is set forth in Section 3.3 of this Ordinance.

**F. ENVIRONMENTAL PLANNING OFFICE.** The Tribe's Environmental Planning Office (EPO), or other designated Tribal Environmental Office or department shall work in cooperation with other Tribal entities, the U.S. Environmental Protection Agency ("EPA") and other appropriate agencies to implement this Ordinance. The responsibilities of the EPO are detailed in the Implementation Plan of Section 3.3 in this Ordinance.

**G. ADOPTION AND REVISIONS.** The Tribal Council has exclusive authority to adopt and modify this Ordinance. The Tribal Council also may revise the standards from

time to time if deemed necessary through use attainability analysis or as the need arises or as a result of updated scientific information.

**H. PUBLIC HEARINGS.** Pursuant to Section 303(c) of the Clean Water Act, 33 U.S.C. § 1313(c), the White Mountain Apache Tribe shall hold public hearings at least once each three-year period for the purpose of reviewing and, as appropriate, modifying and adopting water quality standards. Revisions shall incorporate relevant scientific and engineering advances with respect to water quality and waste water treatment. The Tribe shall hold public hearings before modifying or amending this Ordinance or incorporating, by reference, any regulations into this Ordinance. Errors resulting from inadequate or erroneous data, human or clerical oversight will be subject to correction by the Tribal Council. The discovery of such errors does not render the remaining and unaffected standards invalid. Public hearings will be held in accordance with White Mountain Apache Tribal law, as well as 40 C.F.R. Part 130 (EPA's Water Quality Management Regulation), and 40 C.F.R. Part 25 (EPA's Public Participation Regulation).

**I. USE ATTAINABILITY ANALYSIS.** In the event that monitoring of water quality identifies waters where attainable water quality is less than existing water quality standards, or the Tribal Council wishes to remove a designated use, provided that the designated use is not an actual existing use, the standards may be modified to reflect attainability. Such modifications shall be carried out in accordance with use attainability analysis procedures set forth in 40 C.F.R. § 131.10 or other appropriate methods. To remove a designated use, the use attainability analysis must demonstrate that attaining the designated use is not feasible for any of the following reasons:

- (1) Naturally occurring pollutant concentrations prevent the attainment of the use;
- (2) Natural, ephemeral, intermittent or low-flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of a sufficient volume of effluent discharges without violating water conservation or other applicable requirements to enable uses to be met;
- (3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place;
- (4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in attainment of the use;
- (5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses;

(6) Controls more stringent than those required by Sections 301(b) and 306 of the Clean Water Act, 33 U.S.C. §§ 1311(b) & 1316 would result in substantial and economic and social impact.

**J. SEPARABILITY.** If any provision of this Ordinance or the application of any provision of this Ordinance should be held to be invalid, the application of such provision to other persons or circumstances and the remainder of this Ordinance shall not be affected thereby.

**K. SCHEDULES.** It shall be the policy of the White Mountain Apache Tribe to allow on a case-by-case basis the inclusion of a compliance schedule in a National Pollutant Discharge Elimination System ("NPDES") permit issued to an existing facility. Such a 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 achieve stream standards. Compliance schedules may be included in NPDES permits at the time of permit reissuance or modification and shall require compliance at the earliest practicable time, not to exceed three years. Compliance schedules also shall specify milestone dates so as to measure progress towards final project completion.

**L. VARIANCES.** The Tribal Council may allow variances from this Ordinance and the standards herein on a case-by-case basis. A variance may be allowed in certain cases where the appropriateness of specific criteria is questionable. The variance provides a period of time during which issues concerning the appropriateness of the criteria may be resolved. A variance shall be valid for no more than three years. Variances are not renewable but may be reissued again upon adequate justification. A variance shall be granted only after appropriate public participation. Variances will be allowed for anticipated non-attainment of water quality standards due to one or more of the reasons listed in 40 C.F.R. § 131.10(g). Variances shall be for specific pollutants, time-limited, and shall not forego the current designated use. Where a designated use for a waterbody is not now attainable but can be expected to make reasonable progress towards water quality, variances are to be issued rather than removing the designated use for that waterbody.

**M. SHORT TERM EXCEEDANCES.** The Tribal Environmental Planning Office or other authorized Tribal Office or department with consent from the Tribal Council, may authorize short-term activities that may cause temporary violations of the water quality standards if the White Mountain Apache Tribe determines that such activities are necessary to accommodate legitimate uses or emergencies or to protect public health and welfare. A short term exceedance will only be allowed for activities that are not likely to cause permanent or long-term impairment of beneficial uses; such as, but not limited to, riparian restoration activities, bank stabilization, mosquito abatement, algae and weed control, tracers used in hydrological studies or activities which result in overall enhancement or maintenance of beneficial uses. Such authorization shall not be granted for activities which could result in the adverse impact on any species designated as sensitive by the Tribe. The Environmental Planning Office shall specify the degree of variance, the time limit and restoration procedures

where applicable. Nothing herein shall be intended to supersede existing White Mountain Apache Tribe and federal permitting processes or requirements.

**N. DISPUTE RESOLUTION MECHANISM.** Should a dispute due to differing water quality standards arise between the White Mountain Apache Tribe and the State of Arizona, the Tribe shall follow the Dispute Resolution Mechanism set forth in 40 C.F.R. § 131.7. Should a dispute due to differing water quality standards arise between the Tribe and a neighboring Indian Tribe, the Tribe shall seek to resolve the dispute through inter-tribal discussions, mediation, or non-binding arbitration.

## **SECTION 3.2 ANTI-DEGRADATION POLICY**

The anti-degradation policy of the White Mountain Apache Tribe is as follows:

**A.** Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected;

**B.** Where existing water quality is better than necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the Tribal Council finds, after full satisfaction of intergovernmental coordination and public participation provisions of this Ordinance, that:

(1) allowing lower water quality is necessary to accommodate important economic or social development in an area where the waters are located,

(2) water quality adequate to protect existing uses is fully protected,

(3) the highest statutory and regulatory requirements for all new and existing point sources are achieved, and

(4) all cost effective and reasonable best management practices for non-point source control are implemented.

**C.** In those cases where potential water quality impairments associated with thermal discharge is involved, the anti-degradation policy and implementing methods shall be consistent with Section 316 of the Act, 33 U.S.C. § 1326.

### **D. UNIQUE WATER DESIGNATIONS**

#### **(1) HIGH QUALITY WATERS**

a. Where water quality exceeds the levels necessary to support



basic uses such as propagation of fish, and wildlife and recreation in and on the water, the Tribal Council may designate those waters as **high quality waters**.

b. Water quality and stream ecosystem health in high quality waters shall be maintained to protect:

- culturally or religiously significant areas
- archaeological and historical sites
- natural flow regimes
- natural flood retention capacity
- instream habitats for fish and other aquatic life
- water-dependent wildlife, including plants and wildlife designated as sensitive by the Tribe
- native riparian vegetation, including plants traditionally gathered for cultural and medicinal purposes

## **(2) SENSITIVE WATERS**

(a) The Tribal Council may designate a water body as a **sensitive water** and such waters shall be maintained to protect water quality and stream ecosystem health in the same manner as high quality water. In many cases, these waters have been substantially degraded from their historical condition. This state of degradation may prevent many of the uses, including recreation and support of the full assemblage of native aquatic life, that were once provided by these streams. It may not be known to what extent those uses may be restored in the future. Nevertheless, it is the Tribe's policy that these waters should be protected to encourage natural restoration to occur, and to engage in active restoration measures on a priority basis.

(b) In permitting any activity that could impact in sensitive water bodies, the Tribe shall require the most stringent statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for non-point source control.

## **(3) OUTSTANDING TRIBAL RESOURCE WATERS**

(a) The Tribal Council may designate a water body as an **Outstanding Tribal Resource Water** due to cultural value, the presence of archeological or historic sites, ecological or biological features, scenic beauty, or other exceptional qualities of importance to the Tribe.

(b) No degradation of Outstanding Tribal Resource Waters shall be permitted (i.e. their high quality shall be maintained and protected).

### **SECTION 3.3**

### **IMPLEMENTATION**

**A. IMPLEMENTATION PROCEDURES.** Implementation procedures are as follows:

(1) The Environmental Planning Office shall implement and enforce this Ordinance, including but not limited to the water quality standards and anti-degradation policy, by establishing and maintaining controls on the discharge of pollutants to surface waters. The White Mountain Apache Tribe may adopt additional regulations and ordinances for enforcement of the Water Quality Standards. Unless and until the White Mountain Apache Tribe asserts primary responsibility for NPDES permitting, the EPA shall work together with the Tribe to develop, issue and enforce permits for dischargers within the Reservation in accordance with standards set forth in this Ordinance.

(2) To the extent required to ensure compliance with this Ordinance, the Environmental Planning Office and other Tribal offices and departments, including, but not limited to the Watershed Planning Program, Utility Authority, Wildlife and Outdoor Recreation Division, and outside agencies as requested by the Tribe shall:

(a) Monitor water quality (chemical, physical, and biological) to assess the effectiveness of pollution controls and to determine whether water quality standards are being attained;

(b) Obtain and assess information pertinent to the actual environmental effect of any effluent discharge, using data that accurately represents the quality and quantity of the effluent and receiving water, with due consideration of all factors that bear on the actual or attainable use of a receiving water;

(c) Advise any prospective discharger in writing, as needed, of requirements for obtaining a permit to discharge, including any additional permit requirements that the White Mountain Apache Tribe may enact;

(d) Maintain and review the adequacy of existing data bases and obtain additional data when required;

(e) Assess the probable impact of effluent discharges on receiving waters with regard to designated uses, anti-degradation policy, and numeric and narrative standards;

(f) Require the degree of wastewater treatment that is practicable,

cost-effective and commensurate with protecting and maintaining designated uses and the existing water quality of the receiving water, with consideration of the long-term Tribal objectives for the economy and environment;

(g) Follow EPA-approved procedures to develop water quality-based effluent limitations and comment on technology-based effluent limitations, as appropriate, for inclusion in any Tribal or federal permit issued to a discharger;

(h) Require that effluent limitations developed by the White Mountain Apache Tribe be included in any such permit as a condition for Tribal certification pursuant to Section 401 of the Clean Water Act, 33 U.S.C. § 1341, provided that a reasonable time, not to exceed three years, for compliance shall be duly considered in determining whether certification shall be granted, and provided further that effluent discharge limitations more stringent than those contained in existing NPDES permits shall not be imposed without providing an applicant an opportunity to demonstrate that existing permit limitations are adequate to protect existing and designated uses of receiving waters;

(i) Institute and coordinate water pollution control activities with other Tribal entities, including other departments, enterprises, livestock associations, and communities as appropriate;

(j) Coordinate water pollution control activities with the San Carlos Apache Tribe, State of Arizona, and federal agencies, as appropriate and in consultation with the Tribal Council;

(k) Develop and pursue inspection and enforcement programs to ensure that:

i. dischargers comply with requirements of this Ordinance,

ii. satisfy the requirements of any regulations the White Mountain Apache Tribe enact subsequent to the adoption of this Ordinance, and

iii. enforce federal permits with assistance from the Environmental Protection Agency;

(l) Assist the Tribal Utility Authority in providing continuing technical training for wastewater treatment facility operators through training and certification programs;

(m) Encourage in conjunction with other Tribal entities and outside agencies, the development and implementation of best *management practices*

to control nonpoint sources of pollutants to achieve compliance with this Ordinance;

(n) Ensure that the provisions for public participation required by Tribal law and applicable provisions of the Clean Water Act are followed;

(o) Subject to the approval of the Tribal Council, designate streams as perennial, intermittent, or ephemeral in accordance with this Ordinance and with appropriate hydrologic technical support; and

(p) Provide technical support as is required to accomplish the objectives of this Ordinance, including recommendations to the Tribal Council of any permitting or management regulations which would be consistent with the purposes of this Ordinance.

**B. PUBLIC NOTIFICATION.**

(1) Any proposed amendments of these standards must be carried out according to Tribal laws regarding public review of Tribal ordinances.

(2) Amendments of these standards shall also comply with applicable requirements of the federal Clean Water Act.

**SECTION 3.4 ENFORCEMENT & PENALTIES**

**A. JURISDICTION.** Except as otherwise provided by this Code, the White Mountain Apache Tribe, through its Tribal Council, Tribal Court, and such other tribal entities as are designated by Tribal law, shall have absolute, original, and exclusive jurisdiction to regulate and adjudicate all matters pertaining to water quality within the boundaries of the Fort Apache Indian Reservation. The Tribal Court may exercise absolute original and exclusive jurisdiction over all individuals, whether members of the White Mountain Apache Tribe, non-member Indians or non-Indians, who violate any provision described herein. This Section shall not profit federal prosecution, whether civil or criminal.

**B. NOTICE.** Signs shall be posted conspicuously at the northern and southern points of entry onto the Reservation along Arizona State Route 260 and the northern and eastern points of entry onto the Reservation along Arizona State Route 260, putting the public on notice of Tribal jurisdiction over Tribal lands. The notice shall be in a form similar to the following, to the effect that:

(1) Visitors consent to Tribal jurisdiction; and

(2) Persons who violate any Tribal law are trespassers and shall be subject to Tribal and Federal prosecution.

**C. PROCEDURE.** Except as otherwise provided in this Code, or as the interests

of justice may require, the White Mountain Apache Formal Rules of Civil Procedure shall govern all questions of procedure arising as a result of the enforcement of this Code.

**D. FEDERAL PROSECUTION.**

(1) Nothing in this Code shall be deemed to preclude federal prosecution of Nonmembers who trespass on the Reservation. Federal prosecution may be pursued in addition to, or in lieu of, other enforcement procedures provided by this Code.

(2) Any use of Reservation waters contrary to the terms of this Code constitutes theft of Tribal assets. Accordingly, nothing in this Code shall be deemed to preclude federal prosecution under 18 U.S.C. § 1163 for theft of Tribal property. Federal prosecution may be pursued in addition to or in lieu of other enforcement procedures provided by this Code.

**E. WARRANTS, SUBPOENAS, AND SERVICE OF PROCESS.**

Any Authorized Officer may, in addition to exercising any of the powers granted by this Code:

(1) Execute search warrants issued by the Tribal Court in matters arising under this Code;

(2) Serve subpoenas or other legal documents issued in matters arising under this Code;

(3) Issue citations for violations of this Code.

**F. IDENTIFICATION OF SUSPECTED VIOLATORS.**

(1) Any Authorized Officer who has reasonable grounds to believe that a person has violated this Code, either in or out of the Officer's presence, shall identify himself or herself to such person and promptly determine whether the person is a Member or Nonmember. If the individual is a Nonmember, the Officer shall determine whether the person is Indian or non-Indian. In making such determination, the officer may demand identification and ask such questions as the office reasonably believes are necessary to make the determination.

(2) Any person, who an Authorized Officer reasonably believes to have violated this Code, may:

(a) Be issued a citation pursuant to Section xxx; or

(b) Be issued a complaint regarding the individual to appear in Tribal Court.

(3) If the suspected violator refuses to identify himself or herself the

Officer shall enter a fictitious name, such John Doe, on the citation. After learning the defendant's true name, the Tribe shall amend the citation or complaint to reflect the defendant's true name.

#### **G. CIVIL CITATIONS**

(1) Any Authorized Officer can issue civil citations imposing fines of up to \$500 for violations of this Code. The citation form shall state that the fine can be appealed by submitting a notice of objection to the Tribal Court and that the objecting party will be required to appear at a hearing before a Tribal judge to address the matter.

(2) The citation shall be prepared in duplicate and be signed by the person cited. One copy will be given to the person cited, the other copy will be filed with the Tribal Attorney.

(3) The citation shall inform the person cited of the violation charged, the location, date, and time of the alleged violation, and the location, date and time of the Initial Appearance, which shall be scheduled not more than 14 days from the date of the issuance of the citation. The citation shall also inform the person cited that failure to appear at the Initial Appearance will result in the entry of a default judgment against him or her and forfeiture of bond money and/or property.

#### **H. COMPLAINTS**

(1) In lieu of issuing a citation, any Authorized Officer can issue a Complaint against any individual suspected of violating this Code. The issuance of a Complaint initiates a civil action against a suspected violator.

(2) The Complaint shall be prepared in duplicate and shall be signed by the person cited. One copy will be given to the person cited, the other copy will be filed with the Tribal Legal Department.

(3) The Complaint shall inform the person cited of the violation charged, the location, date, and time of the alleged violation, and the location of the Initial Appearance. The complaint shall notify the cited person that notice of their Initial Appearance date will be mailed to them within 30 days of the actual day and that their failure to appear at the Initial Appearance will result in the entry of a default judgment against him or her and forfeiture of bond, money or property.

#### **I. INITIAL APPEARANCE**

(1) A person served with a Complaint shall appear at the time and place stated in the Complaint, or prior to that time if so authorized by the Court, and shall, upon the directions contained in the Complaint, admit or deny the allegations stated therein. The defendant may also file a written response to the complaint, provided that the written response is received by the Court prior to the *scheduled Initial*

## Appearance.

(2) If the defendant admits liability for the cited violation(s), the Court may immediately impose a penalty or set a separate hearing to establish a penalty. If the defendant denies liability, the proceedings used to adjudicate liability shall be in accordance with the White Mountain Apache Tribe Formal Rules of Civil Procedure. Upon a showing of substantial need and in the interests of justice, the Court may order that the proceedings be held in accordance with the White Mountain Apache Tribe Informal Rules of Civil Procedures.

## **J. TRESPASSING, EXPULSION OF NONMEMBERS**

(1) Any Nonmember who violates this Code shall be deemed a trespasser. It shall be unlawful for any Nonmember to trespass on the White Mountain Apache Reservation.

(2) Any Authorized Officer may expel Nonmember who violate this Code, in addition to or in lieu of any other enforcement procedure provided for by this Code.

(3) Any Nonmember who violates this Code shall also be subject to formal exclusion pursuant to Chapter 5, White Mountain Apache Government code, WMAT Law & Order Code.

## **K. CONTEMPT.**

All defendants to actions brought under this Code, whether Member or Nonmember, shall be subject to the civil contempt power of the White Mountain Apache Tribal Court, and may be sanctioned by any means provided for in the White Mountain Apache Tribal Code for civil contempt.

## **L. LIQUIDATED DAMAGES PROVISIONS**

(1) The Department shall prepare and, at least once per year, shall review and, revise, as necessary a schedule of Liquidated Damages calculated to closely approximate the cost of providing equitable restitution to the Tribe for the damage which would be caused by each violation of each regulation of this Code. In calculating these Liquidated Damages the Department may consider, in addition to any other factors reasonably deemed relevant:

(a) The cost to the Tribe of producing and/or protecting the resource;

(b) The cost of replacing or restoring the resource;

(c) The costs of enforcement including the general overall costs and costs particularized to individual violations where appropriate;

- (d) Damages for trespass.

#### **M. LIQUIDATED DAMAGES PRESUMPTION**

(1) Since in most instances the exact amount of damages caused to the Tribe by a particular violation of this Code will be difficult or impossible to determine, it shall be presumed by the court adjudicating a complaint for violation of this Code that the amount fixed by the schedule of Liquidated Damages represents the damages owed to the Tribe as restitution if the defendant is found to be liable. This presumption may be rebutted by showing of clear and convincing evidence that the amount indicated by the schedule of Liquidated Damages is so excessive as to be punitive, or so inadequate in a particular case as to result in a gross deprivation of adequate restitution. In any case in which the presumption is successfully rebutted, the parties may introduce evidence to prove the actual damages as in any other civil case.

(2) All persons shall be deemed to have consented to the Liquidated Damages provisions of this Code by their presence and by their impact to Reservation water quality.

#### **N. PUNITIVE DAMAGES**

(1) Nothing in this Code shall be deemed to preclude the Tribe, through its counsel, from praying for and being awarded punitive damages in any civil action filed for a violation of this Code wherein it is alleged that the violator has committed the acts constituting the violation with wanton, wilful or malicious disregard for the interests of the Tribe.

(2) The Court, in assessing punitive damages, shall determine their amount in the same manner in which it would determine punitive damages in any other civil action. Punitive damages shall not exceed ten times the amount of the civil penalty.

#### **O. COSTS**

(1) In addition to civil penalties and liquidated and punitive damages, the Court may award payment of costs associated with damage to Tribal resources not otherwise provided for in this Code, including, but not limited to, rehabilitation, reforestation, loss of future revenue and loss of productivity.

(2) The Court may also charge the violator with payment of all reasonable costs associated with the enforcement of these regulations, beginning with detection and including all processes through prosecution and collection of the settlement, such as field examination and survey, damage appraisal, investigation assistance and reports, witness expenses, demand letters, court costs and attorney's fees.



## **P. DISPOSITION OF FEES, FORFEITURES, PENALTIES**

(1) All fines, costs, monies penalties or damages collected for violation(s) of this Code shall be deposited in the Tribal General Fund and shall be available for expenditure in connection with the conservation and protection of water resources within the exterior bounds of the Fort Apache Indian Reservation.

(2) Each Tribal judge or clerk of the Court shall, within twenty days after a judgment has been rendered under the provisions of this Code, remit tot he Tribal Treasurer all fines, forfeitures, damages or penalties collected.

## **SECTION 3.5 NARRATIVE WATER QUALITY STANDARDS**

Tribal waters shall be free of contaminants in such quantity and 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. In addition, the following narrative standards apply to all Tribal Waters, unless stricter standards are imposed.

**A. BOTTOM DEPOSITS.** The bottoms of all Tribal waters shall be free from water contaminants from other than natural causes that will settle and cause deleterious effects to the aquatic biota, including fish, or significantly alter the physical or chemical properties of the bottom.

**B. FLOATING SOLIDS, OIL, AND GREASE.** All waters shall be free from visible oils, scum, foam, grease and other floating materials and suspended substances of a persistent nature resulting from other than natural causes.

**C. COLOR.** Materials producing true color resulting from other than natural causes shall not create an aesthetically undesirable condition; nor shall color impair the attainable uses of the water or harm aquatic life.

**D. ODOR AND TASTE.** Water contaminants from other than natural causes shall be limited to concentrations that will not impart unpalatable flavor to fish, result in offensive odor or taste arising from the water, or otherwise interfere with the existing and attainable uses of the water, nor shall taste and odor-producing substances of other than natural origin interfere with the production of a potable water supply by modern treatment methods.

**E. NUISANCE CONDITIONS.** Nutrients or other substances stimulating algal growth from other than natural causes shall not be present in concentrations that will produce objectionable algal densities, nuisance aquatic vegetation, result in a dominance of nuisance species instream, or otherwise cause nuisance conditions. When stricter requirements are not established elsewhere in this Ordinance, the minimum dissolved oxygen shall be maintained at or above 2 mg/liter in order to prevent nuisance conditions from other than natural causes. The phosphorus and nitrogen concentrations shall not be increased to levels that result in

man-induced eutrophication problems. The Tribal Council may establish nutrient limitations for lakes, reservoirs, and streams and shall incorporate such limitations into appropriate water quality management plans.

**F. PATHOGENS.** Tribal water shall be virtually free from pathogens which include bacteria, viruses or parasites. In particular, waters used for irrigation of table crops shall be virtually free of Salmonella and Shigella species.

**G. TURBIDITY.** Turbidity attributable to other than natural causes shall not reduce light transmission to the point that the aquatic biota is inhibited or that will cause an unaesthetic and substantial visible contrast with the natural appearance of the water. Specifically, turbidity shall not exceed 5 NTU over background when background turbidity is 50 NTU or less. When background turbidity is more than 50 NTU, there shall not be more than a 10% increase in turbidity. Background turbidity may be estimated by measuring levels upstream of the human-caused impacts or during zero runoff periods (greater than five (5) days after most recent event).

**H. MIXING ZONES.** In any perennial waters receiving a waste discharge, a continuous zone shall be maintained where the water is of adequate quality to allow the migration of aquatic life with no significant affect on their population. The cross-sectional area of mixing zones shall generally be less than 1/3 of the cross-sectional area at or above 4Q3 conditions of the receiving stream. In intermittent or ephemeral streams, discharges shall meet all applicable numeric and narrative criteria at the point of discharge with no allowance for mixing zones. There shall be no acute toxicity in mixing zones and no chronic toxicity at the edge of the mixing zone. Numeric acute criteria shall be attained at the point of discharge. Mixing zones shall not overlap sites of primary contact. Requirements for mixing zones shall be expressed in terms of specific concentration limits for specific parameters and shall be consistent with those established in the water quality management plans and implementation plans developed by the White Mountain Apache Tribe.

**I. RADIOACTIVE MATERIALS.** The radioactivity of Tribal water shall not exceed the maximum natural background concentrations in Tribal waters.

**J. TEMPERATURE.** The introduction of heat by other than natural causes shall not increase temperature outside mixing zones by more than 2.0° C (5° F), based upon the monthly average of the maximum daily temperatures measured at mid-depth or three feet (whichever is less) outside the mixing zone. In lakes, the temperature of the water column or epilimnion (if thermal stratification exists) shall not be raised more than 1.7° C (3° F) above that which existed before the addition of heat of artificial origin, based upon the average of temperatures taken from the surface to the bottom, or the surface to the bottom of the epilimnion (if stratified). Normal daily and seasonal variations of temperature that were present before the addition of heat from other than natural sources shall be maintained. In no case shall heat of artificial origin be permitted when the maximum temperature specified for the reach would thereby be exceeded. High water temperatures caused by unusually high ambient air temperature are not violations of these standards. In cases where dissolved oxygen levels are within 0.5 mg/l of the limit, no increases in temperature will be allowed.

**K. SALINITY/MINERAL QUALITY (total dissolved solids, chlorides, and sulfates).** Existing mineral concentrations shall not be altered by municipal, industrial, or instream activities, or other waste discharges that would interfere with established designated uses. No increase exceeding 1/5 of naturally-occurring levels shall be permitted.

**L. pH.** The pH of a stream or a lake shall not fluctuate in excess of 1.0 pH unit over a period of 24 hours for other than natural causes and shall be within a range of 6.5-9.0.

**M. DISSOLVED OXYGEN.** If a surface water body is capable of supporting aquatic life, dissolved oxygen concentration shall be maintained at a minimum of 5.0 mg/l.

**N. DISSOLVED GASES.** Surface water shall be free of nitrogen and other dissolved gases at levels above 110% saturation when this supersaturation is attributable to municipal, industrial, or other discharges.

**O. TOTAL RESIDUAL CHLORINE.** Total chlorine residual, after the allowances for a mixing zone as defined herein, shall not exceed 0.1 mg/l.

**P. TOXIC SUBSTANCES.**

(1) Toxic substances, including, but not limited to, pesticides, herbicides, heavy metals, and organic chemicals, shall not be present in Tribal waters above those levels identified in 40 C.F.R. § 131.36 (incorporated herein by reference except as given in Q. below) as toxic to human, animal, plant, or aquatic life, or to interfere with the normal propagation, growth, and survival of the aquatic biota, including fish. There shall be no acute toxicity. At the edge of mixing zones there shall be no chronic toxicity.

(2) When appropriate, bio-monitoring evaluations following current EPA test methods may be used to determine compliance with the narrative criteria. These protocols can be found in EPA's Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001: February 1989, or the most current revision thereof. Other references are Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms: EPA/600/4-90/027F, August 1993, or the most current revision thereof; Post Third Round NPDES Permit Implementation Strategy, adopted October 1, 1992, or the most current revision thereof; and Technical Support Document for Water Quality-based Toxics Control, EPA/505/2-90-001, March 1991 or the most current revision thereof. Should the White Mountain Apache Tribe need to derive numeric criteria, without actually conducting toxicity tests, it shall use the AQUIRE (Aquatic Toxicity Information Retrieval) database and EPA's guidance, Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and their Uses, to calculate any criteria. In the event that sufficient data is not available to derive numeric criteria following the above guidance, the White Mountain Apache Tribe may use the results of toxicological studies to calculate criteria based on the following

methods:

(a) Concentrations of non-persistent toxic materials that do not exceed concentrations which are chronically toxic (as determined from appropriate chronic toxicity data or- calculated as 10% of LC<sub>50</sub> values) to representative, sensitive, aquatic organisms;

(b) Concentrations of persistent toxic materials that do not bio-accumulate and do not exceed concentrations which are chronically toxic (as determined from appropriate chronic toxicity date or calculated as 5% of LC<sub>50</sub> values) to representative, sensitive aquatic organisms; and

(c) Concentrations of toxic materials that bio-accumulate and do not exceed concentrations which are chronically toxic (as determined from appropriate chronic toxicity data or calculated as 1% of LC<sub>50</sub> values) to representative, sensitive, aquatic organisms.

Toxic substances in Tribal waters known to be persistent, bio-accumulative, carcinogenic, and/or synergistic with other waste stream components may be addressed on a case-by-case basis. If ambient water concentrations of a toxic substance are found to be in excess of levels protective of aquatic and human health, per criteria given in 40 CFR 131.36, the edible portion or whole body of aquatic species of concern shall be analyzed to determine if concentrations exceed EPA or Federal Food and Drug Administration action levels. Should concentrations be exceeded, the Tribal Environmental Planning Office or designee will contact U.S. EPA Region 9 and, if necessary, issue a fish consumption advisory for the affected area.

#### **Q. MERCURY AND ARSENIC.**

(1) The standard for concentrations of mercury in Tribal waters will be assessed and based on fish tissue analysis and consumption levels in accordance with current and accepted protocol of the U. S. Environmental Protection Agency and U.S. Fish and Wildlife Service. The fish consumption standard for wildlife is based on U.S. Fish and Wildlife Service criteria and is 0.1 mg/kg (dry weight) of whole fish samples composited from a minimum of four (4) fish of the same species gathered from the same sampling location. The fish consumption standard protective of human health is based on the Federal Food and Drug Administration (FDA) criteria of 1.0 mg/kg (dry weight) of the edible portion of fish samples composited from a minimum of four (4) fish of the same species gathered from the same sampling location. Should results from two separate sampling events show mercury concentrations greater than the FDA criteria, the Tribal Environmental Planning Office or designee will contact U.S. EPA Region 9 and, if necessary, issue a fish consumption advisory for the affected area.

(2) The standard for concentrations of arsenic (inorganic) in Tribal waters

shall not exceed 5.0 ug/l.

### **SECTION 3.6      DESIGNATED USES AND SPECIFIC CRITERIA**

The Tribe adopts the following water quality standards for the following designated uses for specific Tribal water bodies:

**A. WARMWATER HABITAT.** The following standards are applicable to the protection of warmwater habitat in all streams and perennial lakes, ponds and some tanks of the Reservation.

- (1) Temperature shall not exceed 32.2 °C (90 °F).
- (2) Temperature shall not be raised by more than 2.0°C due to human-caused impacts.
- (3) Dissolved oxygen shall not be less than 5.0 mg/L.
- (4) pH shall be within the range of 6.5-9.0 with a maximum change of 0.5 due to human-caused activities.
- (5) Total ammonia standards shall be calculated as a function of pH and temperature, in accordance with the Table for Warmwater Habitat in Appendix A.
- (6) Selenium concentrations shall be no more than 2.0 µg/l.
- (7) Toxic substances shall not be present in amounts exceeding the levels set forth in Section IV, subsection P, of this Ordinance.

**B. MARGINAL COLDWATER HABITAT.** All standards set forth in Subsection A of this section apply to the protection of marginal coldwater habitat, with the following exceptions:

- (1) The temperature shall not exceed 25° C (71.6°F).
- (2) Temperature shall not be raised by more than 2.0°C due to human-caused impacts.
- (3) Dissolved oxygen shall not be less than 6.0 mg/L.
- (4) Total ammonia standards shall be calculated as a function of pH and temperature, in accordance with the Table for Coldwater habitat in Appendix A.

**C. COLDWATER HABITAT, INCLUDING COLDWATER FISH REARING:** All standards set forth in Subsection A of this section apply to the protection of coldwater habitat, including coldwater fish rearing, with the following exceptions:

- (1) The temperature shall not be raised by more than 1.0°C due to human-caused impacts.
- (2) Temperature shall not exceed 23°C.
- (3) Dissolved oxygen shall not be less than 6.0 mg/L.
- (4) Total phosphorus (as P) shall be less than 0.1 mg/L.
- (5) Total organic carbon shall be less than 7.0 mg/L.
- (6) Total ammonia standards shall be calculated as a function of pH and temperature, in accordance with the Table for Coldwater habitat in Appendix A.

**D. HIGH-QUALITY COLDWATER HABITAT, INCLUDING COLD WATER FISH HATCHERY.** All standards set forth in Subsection A of this section apply to the protection of high-quality coldwater habitat and fish hatchery use, with the following exceptions.

- (1) Dissolved oxygen shall not be less than 8.0 mg/l for a one-day period and not less than 9.5 mg/L for a seven-day mean.
- (2) Temperature shall not exceed 20°C (68°F).
- (3) Weekly average temperatures shall not exceed 17 °C.
- (4) Temperature shall not be raised by more than 1.0°C due to human-caused impacts.
- (5) pH shall be within the range of 6.6 to 8.8.
- (6) Total phosphorus (as P) shall be less than 0.1 mg/L.
- (7) Total organic carbon shall be less than 7.0 mg/L.
- (8) Turbidity shall be less than 10 NTU, except in certain reaches where natural background conditions prevent attainment of lower turbidity.
- (9) Total ammonia standards shall be calculated as a function of pH and temperature, in accordance with the Table for Coldwater habitat in Appendix A.

**E. IRRIGATION.** The following numeric standards are applicable in order to protect irrigation water use and shall not be exceeded:

(1)	Dissolved aluminum	5.0 mg/L
	Dissolved boron	0.75 mg/L
	Dissolved cadmium	0.01 mg/L
	Dissolved chromium*	0.10 mg/L
	Dissolved cobalt	0.05 mg/L
	Dissolved copper	0.20 mg/L
	Dissolved lead	5.0 mg/L
	Dissolved molybdenum	0.01 mg/L
	Dissolved selenium	0.13 mg/L
	Dissolved vanadium	0.1 mg/L
	Dissolved zinc	2.0 mg/L

\*The standards for chromium shall be applied to an analysis which measures both the trivalent and hexavalent.

**F. DOMESTIC/INDUSTRIAL WATER SUPPLY.** The following standards are applicable in order to protect domestic, municipal and industrial (including hydropower generation) water supply uses:

(1) The following numeric standards shall not be exceeded:

Dissolved barium	1.0 mg/L
Dissolved cadmium	0.01 mg/L
Dissolved chromium*	0.05 mg/L
Dissolved cyanide	0.2 mg/l
Dissolved lead	0.05 mg/L
Total nitrate	10.0 mg/L
Dissolved selenium	0.05 mg/L
Dissolved silver	0.05 mg/L
Dissolved cyanide	0.2 mg/L
Dissolved uranium	5.0 mg/L
Radium-226 + radium-228	30.0 pCi/L
Tritium	20,000 pCi/L
Gross alpha	15 pCi/L

\*The standards for chromium shall be applied to an analysis which measures

both the trivalent and hexavalentions.

**G. GROUNDWATER RECHARGE.** The above standards for domestic water supply are also applicable in order to protect areas designated for groundwater recharge.

**H. UNTREATED DRINKING WATER.** The above standards for domestic water supply are also applicable in order to protect untreated drinking water use. Waters designated for such use will be signed and may be seasonally restricted. In addition, the following standards apply:

(1) *E.coli* shall not exceed a geometric mean maximum of 3 colonies/100ml and a single sample maximum of 4 colonies/100ml.

(2) Turbidity shall not exceed 10 NTU.

(3) The open water shall be free of algae in concentrations causing a nuisance condition or causing gastrointestinal or skin disorders.

**I. LIVESTOCK AND WILDLIFE.** The following standards are applicable to all perennial, intermittent and ephemeral streams, lakes, wetlands, and other standing tribal waters in order to protect livestock and wildlife uses:

Dissolved aluminum	5.0 mg/L
Dissolved boron	5.0 mg/L
Dissolved cadmium	0.05 mg/L
Dissolved chromium*	1.0 mg/L
Dissolved cobalt	1.0 mg/L
Dissolved copper	0.5 mg/L
Dissolved lead	0.1 mg/L
Total selenium	0.002 mg/L
Dissolved vanadium	0.1 mg/L
Dissolved zinc	25.0 mg/L
Radium-226 + radium-228	30.0 pCi/L

\*The standards for chromium shall be applied to an analysis which measures both the trivalent and hexavalent ions.

**J. PRIMARY CONTACT.** The following standards are applicable in order to protect primary contact uses. They are applicable to periods when primary contact would reasonably be anticipated:



(1) Fecal Coliform.

(a) May 1 through September 30. The monthly geometric mean maximum for *E. coli* shall be a maximum of 47 colonies/100ml and the single sample maximum shall be 88 colonies/100ml, in accordance with a illness rate of 4 per 1,000 exposures. If single samples are found to exceed the limit, then compliance with this standard shall be determined based on a minimum of five samples taken over maximum of thirty days.

(b) October 1 through April 30. Fecal coliform standards for Secondary Contact Recreational Use apply.

(2) In any single sample, pH shall be within the range of 6.5-9.0.

(3) Turbidity shall not exceed 25 NTU.

(4) The open water shall be free of algae in concentrations causing a nuisance condition or causing gastrointestinal or skin disorders.

**K. SECONDARY CONTACT RECREATIONAL USE.** The following standards are applicable in order to protect secondary contact (recreation) uses:

(1) In any single sample, pH shall be within the range of 6.5-9.0

(2) Turbidity shall be less than 50 NTU in river systems and 25 NTU in lakes.

(3) The amount of fecal coliform bacteria expressed in colony forming units per 100 ml of water (cfu/100ml) shall not exceed:

30-day geometric mean, 5 sample minimum	1000
10% of samples of a 30-day period	2000
Single sample maximum	4000

**L. CEREMONIAL PRIMARY CONTACT:** The standards for primary contact waters set forth in subparagraph J shall apply to protect ceremonial uses.

**M. GATHERING OF MEDICINAL OR OTHERWISE CULTURALLY SIGNIFICANT PLANTS:** The standards for Secondary Contact Recreation shall be applied to protect this use. In addition, native riparian and wetland plants shall not be removed without Tribal review and authorization, unless they are being gathered by individual tribal members for private use.

**N. CULTURAL SIGNIFICANCE.** Actions that disrespect waters of religious significance are prohibited. Potential violations of this standard will be reviewed by the Cultural Advisory Committee. Any actions that may affect these waters must be reviewed and approved under the Tribal Plan and Project Review Process.

**O. FLOOD CONTROL.** This standard is designated for all Tribal wetlands that serve to retain or absorb flood waters. Any actions that may affect the long-term capacity of these areas to retain flood waters must be reviewed and approved under the Tribal Plan and Project Review Process. The water quality, physical, biological and hydrologic characteristics of wetlands shall be maintained. Wetlands shall not be used in lieu of storm water treatment.

### **SECTION 3.7 WATER QUALITY SAMPLING AND ANALYSIS**

**A. METHODOLOGY.** All methods of sample collection, preservation, and analysis used in determining water quality and maintenance of these standards shall be in accordance with procedures prescribed by the latest edition of EPA's "Guidelines Establishing Test Procedures for the Analysis of Pollutants" (40 C.F.R. Part 136) and by approved Tribal quality assurance plans.

**B. BACTERIOLOGICAL SURVEYS.** In conducting such surveys, the monthly geometric mean shall be used in assessing attainment of standards when a minimum of five samples is collected in a thirty day period. No single sample shall exceed the upper limit for bacterial concentration, as set forth in Section V, when less than five samples are collected in a thirty day period.

**C. SAMPLING PROCEDURES.** The following sampling procedures shall be used:

(1) Stream monitoring stations below waste discharges shall be located outside the mixing zone.

(2) Sampling in lakes, including artificial lakes, shall be located where the attainment of a water quality standard is to be assessed. Water quality measurements shall be taken at intervals in the water column at a sampling station. For toxic substances and nutrients, the entire water column shall be monitored. For dissolved oxygen in stratified lakes, measurements shall be made in the epilimnion after analysis of stratification. In non-stratified lakes, measurement will be made at intervals throughout the entire water column.

(3) General assessments of Tribal Water Quality Standards and protection of designated uses may be conducted by sampling below the confluence of connecting river and stream tributaries.

**SECTION 3.8      DEFINITIONS**

A.      The following terms shall have the following definitions when used in this Ordinance:

(1)      **"ACUTE TOXICITY"**: Toxicity that exerts short-term lethal impacts on representative organisms with a duration of exposure generally less than or equal to 48 hours. Acute toxicity shall be determined in accordance with procedures specified in EPA/600/4-90/27, "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms." Other methods may be used as appropriate to determine acute effects other than lethality such as, but not limited to, behavioral changes and immobilization.

(2)      **"ALGAE"**: Simple rootless plants that grow in sunlit waters in relative proportion to the amounts of nutrients available, and which can affect adversely water quality by lowering the dissolved oxygen in the water.

(3)      **"ANTI-DEGRADATION"**: The policy set forth in Section II of this Ordinance whereby existing uses, the level of water quality necessary to protect those uses, and general aquatic and riparian ecosystem health is maintained and protected.

(4)      **"AQUATIC BIOTA"**: Animal and plant life in the water.

(5)      **"ATTAINABLE USE"**: Use of surface water meeting water quality and all other characteristics necessary to support and maintain the use, as specified in Section VI of this Ordinance, or which would support and maintain the use after the implementation of standards set forth in this Ordinance.

(6)      **"AQUATIC LIFE CRITERIA"**: Pollutant concentrations, levels, or narrative statements, representing a quality of water that is protective of aquatic life.

(7)      **"BEST MANAGEMENT PRACTICES"**: Practices undertaken to control, restrict, and diminish non point sources of pollution which are determined to be the most effective and practical means of preventing or reducing pollution of water bodies from non point sources.

(8)      **"BIO-ACCUMULATION"**: The process of a chemical accumulating in a biological food chain by being passed from one organism to another as the contaminated organism is preyed upon by another organism.

(9)      **"BIO-CONCENTRATION"**: Uptake and retention of a substance by an aquatic organism from the surrounding water only, through gill membranes or other external body surfaces.

(10) **"CAS NUMBER"**: Chemical abstract service number; each chemical has a specific identification number.

(11) **"CARCINOGENIC"**: Cancer causing.

(12) **"CEREMONIAL USE"**: Any ceremonial use of the water in which primary contact with the water may occur but the probability of ingesting untreated water is low, including, but not limited to, sweat baths, baptisms and Sunrise ceremonies.

(13) **"cfs"**: Cubic feet per second

(14) **"CHRONIC TOXICITY"**: Toxicity which exerts sub-lethal effects, such as impairment of growth or reproduction, or which becomes lethal after long term exposure, generally measured in a 7-day test on representative organisms. Chronic toxicity shall be determined in accordance with procedures specified in EPA/600/4-89/001, "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms."

(15) **"COLDWATER HABITAT"**: A stream reach, lake, or impoundment where the water temperature and other characteristics are suitable for the support of coldwater fish such as trout.

(16) **"COLOR"**: Color as used herein means true color as well as apparent color. True color is the color of the water from which turbidity has been removed. Apparent color includes not only the color due to substances in solution (true color), but also that color due to suspended matter.

(17) **"CUMULATIVE"**: Increasing by successive additions.

(18) **"DESIGNATED USES"**: Those uses set forth in Section V and Appendix B of this Ordinance.

(19) **"DISSOLVED OXYGEN (DO)"**: The amount of oxygen dissolved in water or the amount of oxygen available for biochemical activity in water, commonly expressed as a concentration in milligrams per liter (mg/l).

(20) **"DOMESTIC WATER SUPPLY"**: Water that only requires disinfection in order to be usable for drinking or cooking.

(21) **"DRINKING WATER"**: Water that does not require any treatment in order to be usable for drinking or cooking.

(22) **"e"**: a transcendental constant equal to 2.7182818 which is used as the base of natural logarithms.

(23) **"EFFLUENT"**: Discharge into surface waters from other than natural sources.

(24) **"EPHEMERAL STREAM"**: A reach of a stream that flows temporarily in direct response to precipitation or snowmelt, the channel bed of which is above the water table (examples are washes and arroyos).

(25) **"EPILIMNION"**: The layer of water that overlies the thermocline of a lake and that is subject to the action of wind.

(26) **"EUTROPHICATION"**: A natural aging process during which a lake, estuary, or bay evolves into a bog, marsh or wetland and eventually disappears. During the later stages of eutrophication the waterbody is choked by abundant plant life as the result of increased amounts of nutritive compounds such as nitrogen and phosphorus. Human activities, particularly nutrient loading from human or animal wastes, can accelerate the process.

(27) **"EXISTING USES"**: Those uses actually attained in a surface water body whether or not they are referred to in this Ordinance.

(28) **"FECAL COLIFORM BACTERIA"**: The portion of the coliform group which is present in the gut or the feces of warmblooded animals. Fecal coliform bacteria generally include organisms that are capable of producing gas from lactose broth in a suitable culture medium within 24 hours at  $44.5 \pm 0.2^{\circ}\text{C}$ .

(29) **"FISH HATCHERY"**: Production of fish from eggs.

(30) **"FISH REARING"**: Raising of fish (trout) from fingerlings.

(31) **"FISHERY"**: A balanced, diverse community of fishes controlled by the water quality, quantity, and habitat of a waterbody.

(32) **"FLOOD CONTROL"**: The natural absorption and retention of flood waters by the land adjacent to a stream.

(33) **"FLOW"**: Natural discharge of a stream, spring or artesian well, and may include artificial discharge of effluent.

(34) **"GATHERING OF MEDICINAL OR OTHERWISE CULTURALLY SIGNIFICANT PLANTS"**: Collecting of plants by individual tribal members for private use (in the home or as a cottage industry). Specific plants may be recognized as significant by the Tribal Cultural Advisory Committee.

(35) **"GEOMETRIC MEAN"**: A mean calculated by converting all

values to logarithms; averaging the logarithms; and determining the antilogarithm of that average.

(36) **"GROUNDWATER"**: Subsurface water that occurs beneath the water table (level of water in a well) in soils and geological formations that are fully saturated.

(37) **"GROUNDWATER RECHARGE"**: The replenishment of aquifers by seepage of surface runoff through sediments and rock formations.

(38) **"HARMONIC MEAN FLOW"**: Is the number of daily flow measurements divided by the sum of the reciprocals of the flow.

(39) **"HIGH QUALITY COLDWATER HABITAT"**: A stream reach, lake, or impoundment where the water temperature and other characteristics are suitable for the support and reproduction of native coldwater fish such as Apache Trout.

(40) **"HUMAN HEALTH CRITERIA"**: Criteria guidance published under section 304 (a) of the Clean Water Act and periodically updated based on the latest scientific information on the effect a pollutant concentration has on human health from consumption of fish and/or ingestion of water.

(41) **"INDIGENOUS"**: Produced, growing, or living naturally in a particular region or environment according to current or historical records, including oral histories, compiled by tribal, federal, or state agencies or published scientific literature.

(42) **"INDUSTRIAL"**: Human activities for the production of goods or services.

(43) **"INTERMITTENT LAKE"**: A type of wetland which may contain standing water for extended periods, but not throughout the year.

(44) **"INTERMITTENT STREAM"**: A stream or reach of a stream that flows only at certain times of the year when receiving flow from springs, melting snow, or localized precipitation.

(45) **"IRRIGATION USE"**: The use of water, after diversion, to promote the growth of crops.

(46) **"LIVESTOCK AND WILDLIFE USE"**: The use of water, by ingestion, by domestic livestock and other vertebrate animals.

(47) **"MARGINAL COLDWATER HABITAT"**: A stream reach, lake, or impoundment where water temperature and other characteristics are suitable for support of coldwater fish (such as trout), but where temperature and other characteristics may not always be suitable for propagation of coldwater fish.

(48) **"LC-50"**: The concentration of a substance that is lethal to 50% of the test organisms within a defined time period.

(49) **"MILLIGRAMS PER LITER (mg/l)"**: Unit of concentration expressed in terms of the number of milligrams is contained in a volume of one liter; one milligram per liter is equivalent to one part per million (ppm) at unit density.

(50) **"MIXING ZONE"**: A three-dimensional zone in which discharged effluent mixes with the receiving water and within which there is an accepted degradation of water quality.

(51) **"NARRATIVE STANDARDS"**: A standard or criterion expressed in words rather than numerically.

(52) **"NATURAL BACKGROUND"**: Levels of pollutants present in ambient water that are from natural, as opposed to human-induced, sources.

(53) **"NON-POINT SOURCE"**: Pollution that is not from a discernible, single source (e.g. sediment runoff from land).

(54) **"NTU"**: Nephelometric Turbidity Units; a measure of turbidity in water; see Turbidity.

(55) **"NUISANCE CONDITION"**: A condition involving uncontrolled growth of aquatic plants, usually caused by excessive nutrients in water.

(56) **"NUTRIENT"**: A chemical element or inorganic compound taken in by green plants and used in organic synthesis (e.g. phosphorous and nitrogen).

(57) **"PATHOGENS"**: Microorganisms (bacteria, viruses, or parasites) that can cause disease in humans, animals, and plants, and can be found in sewage, in runoff from farms or rural areas populated with domestic and/or wild animals, and in water used for swimming. Fish and shellfish contaminated by pathogens can cause serious illnesses.

(58) **"PERENNIAL STREAM"**: A stream or reach of a stream that flows continuously throughout the year, the upper surface of which is generally lower than the water table of the region adjoining the stream.

- (59) **"PERSISTENT"**: Existing continuously or for a longer time than usual.
- (60) **"pH"**: The negative logarithm of the effective hydrogen-ion concentration in gram equivalents per liter.
- (61) **"PICOCURIE (pCi)"**: That quantity of radioactive material producing 2.22 nuclear transformations per minute.
- (62) **"POINT SOURCE"**: A discernible, confined and discrete pollutant source but not including return flows from irrigated agriculture.
- (63) **"POLLUTANT"**: (See water contaminant).
- (64) **"PRIMARY CONTACT"**: Any recreational or other water use in which there is prolonged and intimate contact with the waterbody, such as swimming and wading, involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard. Primary contact also means any use of waterbodies for traditional or ceremonial purposes in which there is intimate contact with the waterbody that may pose a significant health risk. This contact may include but is not limited to ingestion or immersion.
- (65) **"SECONDARY CONTACT RECREATIONAL USE"**: Any recreational use of the water in which contact with the water need not occur and in which the probability of ingesting water is minimal, such as wading and boating.
- (66) **"SEGMENT"**: A surface water body that has common hydrologic characteristics or flow regulation regimes, possesses common natural physical, chemical, and biological characteristics, and exhibits common reactions to external stresses such as the discharge of pollutants.
- (67) **"SENSITIVE SPECIES"**: A plant, animal, or other living organism designated as sensitive by the Tribe or for which special management practices or plans have been developed by the Tribe.
- (68) **"SUB-SURFACE WATER"**: Water that stands or flows above ground level.
- (69) **"RELIGIOUS SIGNIFICANCE"**: Water bodies that are exceptionally significant as features in the spiritual landscape of tribal members and require special protections as a result of that status.
- (70) **"TDS"**: Total dissolved solids.



(71) **"TECHNOLOGY-BASED CONTROLS"**: The application of technology-based effluent limitations as required under Section 301(b) of the Clean Water Act.

(72) **"THERMAL STRATIFICATION"**: Temperature-caused horizontal layers of different densities produced in a lake.

(73) **"TOXIC SUBSTANCES"**: Those pollutants or combinations of pollutants, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including but not limited to malfunctions in reproduction), or physical deformations in such organisms or their offspring.

(74) **"TOXICITY"**: The degree of danger posed by a substance to animal or plant life; see "Acute Toxicity" and "Chronic Toxicity."

(75) **"TURBIDITY"**: The degree to which water is cloudy or muddy in physical appearance due to suspended silt or organic mater.

(76) **"USE ATTAINABILITY ANALYSIS"**: A structured scientific assessment of the factors affecting attainment of a use for a body of water, which may include physical, chemical, biological and economic factors as referred to in 40 C.F.R. Section 131.10(g).

(77) **"WARMWATER HABITAT"**: A stream reach, lake, or impoundment where the water temperature and other characteristics are suitable for the support of warmwater fish such as, but not limited to, indigenous fishes including Desert-Mountain Sucker, Sonoran Sucker, Speckled Dace, as well as non-natives such as Largemouth Bass, Smallmouth Bass, Channel Catfish, and Flathead Catfish.

(78) **"WATERS" - "WATERS OF THE WHITE MOUNTAIN APACHE TRIBE"**: means all lakes, rivers, ponds, streams, springs, sub-surface waters, seeps, wetlands, canals, irrigation and drainage ditches, and all other surface and ground waters which arise on, border, transverse or underlie the Fort Apache Reservation or are otherwise within the jurisdiction of the White Mountain Apache Tribe and which contain water at some point in the year and are connected to other waters via surface or below ground flows.

(79) **"WATER CONTAMINANT"**: Any substance that alters the physical, chemical, or biological qualities of water.

(80) **"WATER QUALITY-BASED CONTROLS"**: Effluent limitations, as provided under Section 301(b)(1)(C) of the Clean Water Act, that are developed

and imposed on point-source dischargers in order to protect and maintain applicable water quality standards.

**(81) "WETLAND":** Any area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, such as swamps, marshes, bogs, and similar areas. This includes wetlands created, restored or enhanced as part of a mitigation procedure. This does not include constructed wetlands intentionally constructed from non-wetland sites outside waters of the Fort Apache Indian Reservation.

**(82) "ZONE OF PASSAGE":** The portion of the receiving water outside the mixing zone where water quality is the same as that of the receiving water.

# APPENDIX A

## Total Ammonia (mg/l as N), Warmwater Habitat:

### 1. Acute Standards

pH

	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0.00	29.00	26.00	23.00	19.00	14.00	10.00	6.60	3.70	2.10	1.20	0.70
1.00	28.00	26.00	23.00	19.00	14.00	9.90	6.50	3.70	2.10	1.20	0.70
2.00	28.00	26.00	22.00	18.00	14.00	9.70	6.40	3.60	2.10	1.20	0.69
3.00	28.00	25.00	22.00	18.00	14.00	9.60	6.30	3.60	2.00	1.20	0.69
4.00	27.00	25.00	22.00	15.00	14.00	9.50	6.20	3.50	2.00	1.20	0.69
5.00	27.00	25.00	22.00	15.00	13.00	9.40	6.10	3.50	2.00	1.20	0.68
6.00	27.00	24.00	21.00	18.00	13.00	9.30	6.10	3.50	2.00	1.10	0.68
7.00	26.00	24.00	21.00	17.00	13.00	9.20	6.00	3.40	2.00	1.10	0.68
8.00	26.00	24.00	21.00	17.00	13.00	9.10	6.00	3.40	1.90	1.10	0.68
9.00	26.00	24.00	21.00	17.00	13.00	9.00	5.90	3.40	1.90	1.10	0.68
10.00	25.00	23.00	21.00	17.00	13.00	8.90	5.90	3.30	1.90	1.10	0.68
11.00	25.00	23.00	20.00	17.00	13.00	8.90	5.80	3.30	1.90	1.10	0.68
12.00	25.00	23.00	20.00	17.00	13.00	8.80	5.80	3.30	1.90	1.10	0.69
13.00	25.00	23.00	20.00	16.00	12.00	8.70	5.70	3.30	1.90	1.10	0.69
14.00	25.00	23.00	20.00	16.00	12.00	8.70	5.70	3.30	1.90	1.10	0.70
15.00	24.00	23.00	20.00	16.00	12.00	8.60	5.70	3.30	1.90	1.10	0.70
16.00	24.00	22.00	20.00	16.00	12.00	8.60	5.70	3.30	1.90	1.10	0.71
17.00	24.00	22.00	20.00	16.00	12.00	8.50	5.60	3.20	1.90	1.10	0.72
18.00	24.00	22.00	19.00	16.00	12.00	8.50	5.60	3.20	1.90	1.20	0.73
19.00	24.00	22.00	19.00	16.00	12.00	8.50	5.60	3.20	1.90	1.20	0.74
20.00	24.00	22.00	19.00	16.00	12.00	8.50	5.60	3.20	1.90	1.20	0.75
21.00	24.00	22.00	19.00	16.00	12.00	8.40	5.60	3.20	1.90	1.20	0.77
22.00	24.00	22.00	19.00	16.00	12.00	8.40	5.60	3.30	1.90	1.20	0.78
23.00	24.00	22.00	19.00	16.00	12.00	8.40	5.60	3.30	1.90	1.20	0.80
24.00	24.00	22.00	19.00	16.00	12.00	8.40	5.60	3.30	2.00	1.20	0.81
25.00	24.00	22.00	19.00	16.00	12.00	8.40	5.60	3.30	2.00	1.20	0.83
26.00	22.00	20.00	18.00	15.00	11.00	7.90	5.20	3.10	1.90	1.20	0.80
27.00	20.00	19.00	17.00	14.00	10.00	7.30	4.90	2.90	1.80	1.10	0.76
28.00	19.00	18.00	15.00	13.00	9.70	6.90	4.60	2.70	1.70	1.10	0.73
29.00	18.00	16.00	14.00	12.00	9.10	6.40	4.30	2.60	1.60	1.00	0.70
30.00	17.00	15.00	13.00	11.00	8.50	6.00	4.10	2.40	1.50	0.97	0.68

Total Ammonia (mg/l as N), Warmwater Habitat:

2. Chronic Standard

pH

	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0.00	2.50	2.50	2.50	2.50	2.50	2.30	1.50	0.84	0.48	0.28	0.16
1.00	2.50	2.50	2.50	2.50	2.50	2.30	1.50	0.83	0.47	0.27	0.16
2.00	2.40	2.40	2.40	2.40	2.40	2.20	1.50	0.82	0.47	0.27	0.16
3.00	2.40	2.40	2.40	2.40	2.40	2.20	1.40	0.81	0.46	0.27	0.16
4.00	2.40	2.40	2.40	2.40	2.40	2.20	1.40	0.80	0.46	0.27	0.16
5.00	2.30	2.30	2.30	2.30	2.30	2.10	1.40	0.80	0.45	0.26	0.16
6.00	2.30	2.30	2.30	2.30	2.30	2.10	1.40	0.79	0.45	0.26	0.16
7.00	2.30	2.30	2.30	2.30	2.30	2.10	1.40	0.78	0.45	0.26	0.16
8.00	2.30	2.30	2.30	2.30	2.30	2.10	1.40	0.77	0.44	0.26	0.15
9.00	2.20	2.20	2.20	2.20	2.20	2.10	1.30	0.77	0.44	0.26	0.16
10.00	2.20	2.20	2.20	2.20	2.20	2.00	1.30	0.76	0.44	0.26	0.16
11.00	2.20	2.20	2.20	2.20	2.20	2.00	1.30	0.76	0.44	0.26	0.16
12.00	2.20	2.20	2.20	2.20	2.20	2.00	1.30	0.75	0.44	0.26	0.16
13.00	2.20	2.20	2.20	2.20	2.20	2.00	1.30	0.75	0.43	0.26	0.16
14.00	2.10	2.10	2.10	2.10	2.20	2.00	1.30	0.75	0.43	0.26	0.16
15.00	2.10	2.10	2.10	2.10	2.10	2.00	1.30	0.74	0.43	0.26	0.16
16.00	2.10	2.10	2.10	2.10	2.10	2.00	1.30	0.74	0.43	0.26	0.16
17.00	2.10	2.10	2.10	2.10	2.10	1.90	1.30	0.74	0.43	0.26	0.16
18.00	2.10	2.10	2.10	2.10	2.10	1.90	1.30	0.74	0.43	0.26	0.17
19.00	2.10	2.10	2.10	2.10	2.10	1.90	1.30	0.74	0.44	0.26	0.17
20.00	2.10	2.10	2.10	2.10	2.10	1.90	1.30	0.74	0.44	0.27	0.17
21.00	1.90	1.90	1.90	1.90	1.90	1.80	1.20	0.69	0.41	0.25	0.16
22.00	1.80	1.80	1.80	1.80	1.80	1.70	1.10	0.65	0.38	0.24	0.15
23.00	1.70	1.70	1.70	1.70	1.70	1.60	1.00	0.60	0.36	0.22	0.15
24.00	1.60	1.60	1.60	1.60	1.60	1.50	0.97	0.57	0.34	0.21	0.14
25.00	1.40	1.40	1.50	1.50	1.50	1.40	0.91	0.53	0.32	0.20	0.13
26.00	1.30	1.30	1.40	1.40	1.40	1.30	0.85	0.50	0.30	0.19	0.13
27.00	1.30	1.30	1.30	1.30	1.30	1.20	0.79	0.47	0.28	0.18	0.12
28.00	1.20	1.20	1.20	1.20	1.20	1.10	0.74	0.44	0.27	0.17	0.12
29.00	1.10	1.10	1.10	1.10	1.10	1.00	0.70	0.41	0.25	0.16	0.11
30.00	1.00	1.00	1.00	1.00	1.00	0.97	0.65	0.39	0.24	0.16	0.11

Total Ammonia (mg/l as N), Coldwater Habitat:

1. Acute Standards

pH

	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0.00	29.00	26.00	23.00	19.00	14.00	10.00	6.60	3.70	2.10	1.20	0.70
1.00	28.00	26.00	23.00	19.00	14.00	9.90	6.50	3.70	2.10	1.20	0.70
2.00	28.00	26.00	22.00	15.00	14.00	9.70	6.40	3.60	2.10	1.20	0.69
3.00	28.00	25.00	22.00	18.00	14.00	9.60	6.30	3.60	2.00	1.20	0.69
4.00	27.00	25.00	22.00	18.00	14.00	9.50	6.20	3.50	2.00	1.20	0.69
5.00	27.00	25.00	22.00	18.00	13.00	9.40	6.10	3.50	2.00	1.20	0.68
6.00	27.00	24.00	21.00	15.00	13.00	9.30	6.10	3.50	2.00	1.10	0.68
7.00	26.00	24.00	21.00	17.00	13.00	9.20	6.00	3.40	2.00	1.10	0.68
8.00	26.00	24.00	21.00	17.00	13.00	9.10	6.00	3.40	1.90	1.10	0.68
9.00	26.00	24.00	21.00	17.00	13.00	9.00	5.90	3.40	1.90	1.10	0.69
10.00	25.00	23.00	21.00	17.00	13.00	9.90	5.90	3.30	1.90	1.10	0.68
11.00	25.00	23.00	20.00	17.00	13.00	9.90	5.80	3.30	1.90	1.10	0.68
12.00	25.00	23.00	20.00	17.00	13.00	9.80	5.80	3.30	1.90	1.10	0.69
13.00	25.00	23.00	20.00	16.00	12.00	9.70	5.70	3.30	1.90	1.10	0.69
14.00	25.00	23.00	20.00	16.00	12.00	8.7	5.70	3.30	1.90	1.10	0.70
15.00	24.00	23.00	20.00	16.00	12.00	9.60	5.70	3.30	1.90	1.10	0.70
16.00	24.00	22.00	20.00	16.00	12.00	9.60	5.70	3.30	1.90	1.10	0.71
17.00	24.00	22.00	20.00	16.00	12.00	9.50	5.60	3.20	1.90	1.10	0.72
18.00	24.00	22.00	19.00	16.00	12.00	8.50	5.60	3.20	1.90	1.20	0.73
19.00	24.00	22.00	19.00	16.00	12.00	8.50	5.60	3.20	1.90	1.20	0.74
20.00	24.00	22.00	19.00	16.00	12.00	8.50	5.60	3.20	1.90	1.20	0.75
21.00	22.00	20.00	18.00	15.00	11.00	7.90	5.20	3.00	1.80	1.10	0.71
22.00	21.00	19.00	17.00	14.00	10.00	7.30	4.90	2.80	1.70	1.00	0.68
23.00	19.00	18.00	15.00	13.00	9.70	6.80	4.50	2.70	1.60	0.98	0.65
24.00	18.00	16.00	14.00	12.00	9.00	6.40	4.20	2.50	1.50	0.93	0.62
25.00	17.00	15.00	13.00	11.00	9.40	6.00	4.00	2.30	1.40	0.88	0.59
26.00	16.00	14.00	13.00	10.00	7.90	5.60	3.70	2.20	1.30	0.84	0.56
27.00	14.00	13.00	12.00	9.60	7.30	5.20	3.50	2.10	1.20	0.79	0.54
28.00	13.00	12.00	11.00	9.00	6.90	4.90	3.30	1.90	1.20	0.76	0.52
29.00	13.00	12.00	10.00	8.40	6.40	4.60	3.10	1.80	1.10	0.72	0.50
30.00	12.00	11.00	10.00	7.80	6.00	4.30	2.90	1.70	1.10	0.69	0.48

Total Ammonia (mg/l as N), Coldwater Habitat:

2. Chronic Standard

pH

	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0.00	2.50	2.50	2.50	2.50	2.50	2.30	1.50	0.84	0.48	0.28	0.16
1.00	2.50	2.50	2.50	2.50	2.50	2.30	1.50	0.83	0.47	0.27	0.16
2.00	2.40	2.40	2.40	2.40	2.40	2.20	1.50	0.82	0.47	0.27	0.16
3.00	2.40	2.40	2.40	2.40	2.40	2.20	1.40	0.81	0.46	0.27	0.16
4.00	2.40	2.40	2.40	2.40	2.40	2.20	1.40	0.80	0.46	0.27	0.16
5.00	2.30	2.30	2.30	2.30	2.30	2.10	1.40	0.80	0.45	0.26	0.16
6.00	2.30	2.30	2.30	2.30	2.30	2.10	1.40	0.79	0.45	0.26	0.16
7.00	2.30	2.30	2.30	2.30	2.30	2.10	1.40	0.78	0.45	0.26	0.16
8.00	2.30	2.30	2.30	2.30	2.30	2.10	1.40	0.77	0.44	0.26	0.15
9.00	2.20	2.20	2.20	2.20	2.20	2.10	1.30	0.77	0.44	0.26	0.16
10.00	2.20	2.20	2.20	2.20	2.20	2.00	1.30	0.76	0.44	0.26	0.16
11.00	2.20	2.20	2.20	2.20	2.20	2.00	1.30	0.76	0.44	0.26	0.16
12.00	2.20	2.20	2.20	2.20	2.20	2.00	1.30	0.75	0.44	0.26	0.16
13.00	2.20	2.20	2.20	2.20	2.20	2.00	1.30	0.75	0.43	0.26	0.16
14.00	2.10	2.10	2.10	2.10	2.20	2.00	1.30	0.75	0.43	0.26	0.16
15.00	2.10	2.10	2.10	2.10	2.10	2.00	1.30	0.74	0.43	0.26	0.16
16.00	2.00	2.00	2.00	2.00	2.00	1.80	1.20	0.69	0.40	0.24	0.15
17.00	1.80	1.80	1.80	1.80	1.80	1.70	1.10	0.64	0.38	0.23	0.14
18.00	1.70	1.70	1.70	1.70	1.70	1.60	1.00	0.60	0.35	0.21	0.14
19.00	1.60	1.60	1.60	1.60	1.60	1.50	0.97	0.56	0.33	0.20	0.13
20.00	1.50	1.50	1.50	1.50	1.50	1.40	0.90	0.52	0.31	0.19	0.12
21.00	1.40	1.40	1.40	1.40	1.40	1.30	0.84	0.49	0.29	0.18	0.12
22.00	1.30	1.30	1.30	1.30	1.30	1.20	0.79	0.46	0.27	0.17	0.11
23.00	1.20	1.20	1.20	1.20	1.20	1.10	0.73	0.43	0.26	0.16	0.10
24.00	1.10	1.10	1.10	1.10	1.10	1.00	0.69	0.40	0.24	0.15	0.10
25.00	1.00	1.00	1.00	1.00	1.00	0.96	0.64	0.38	0.23	0.14	0.10
26.00	0.95	0.95	0.96	0.96	0.97	0.90	0.60	0.35	0.21	0.13	0.09
27.00	0.89	0.89	0.89	0.90	0.91	0.84	0.56	0.33	0.22	0.13	0.09
28.00	0.83	0.83	0.83	0.84	0.85	0.79	0.53	0.31	0.19	0.12	0.08
29.00	0.77	0.78	0.78	0.78	0.79	0.73	0.49	0.29	0.18	0.12	0.08
30.00	0.72	0.72	0.73	0.73	0.74	0.69	0.46	0.28	0.17	0	

APPENDIX B

WMAT Water Quality Standards

Designated Use

Waterbody

Type

Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
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<b>WHITE RIVER WATERSHED</b>																	
White River	Perennial Stream	X				X	X	X		X	X		X	X	X		
Amos Wash	Intermittent Stream	X							X		X				X		
Priebe Creek	Intermittent Stream	X							X		X				X		
Navajo Bill Tank	Tank	X							X		X				X		
Priebe Creek Tank	Tank	X							X		X				X		
Pit Hole Tank	Tank	X							X		X				X		
East Fork White River below Rock Creek confl.	Perennial Stream		X			X	X	X		X		X	X	X			
Seven Mile Canyon	Intermittent Stream	X									X				X		
Seven Mile Tank	Tank	X									X				X		
Firebox Creek above R30 Crossing	Perennial Stream				X	X					X		X	X			
Firebox Creek below R30 Crossing	Intermittent Stream		X								X				X		
East Fork White River below R52 Road, above Rock Cr.	Perennial Stream			X		X		X		X		X	X	X			X
Williams Canyon	Intermittent Stream			X							X				X		
East Fork White River, above R52 Road	Perennial Stream				X	X		X		X		X	X	X		X	
East Fork White River, in Wilderness Area	Perennial Stream				X	X			X		X	X	X				X
Rock Creek	Perennial Stream			X		X				X			X	X			
Deep Creek	Perennial Stream				X	X				X			X	X			
Elk Canyon	Perennial Stream				X	X				X			X	X			
North Fork White River, below Alch. Spring	Perennial Stream		X			X	X	X		X	X		X	X	X		

APPENDIX B

WMAT Water Quality Standards

Designated Use

Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
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Waterbody Type

Waterbody	Type	Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
Diamond Creek	Perennial Stream			X		X	X	X		X	X		X	X	X				
Coon Creek	Perennial Stream			X		X				X		X		X	X				
Christmas Tree Lake	Lake				X	X		X		X		X		X	X	X			
Sun Creek	Perennial Stream				X	X				X		X		X	X				
Moon Creek	Perennial Stream				X	X				X		X		X	X				
North Fork	Perennial Stream			X		X				X		X		X	X				
Little Diamond	Perennial Stream			X		X				X		X		X	X				
Maverick Cienega	Wetland							X		X				X	X	X			
Coyote Creek	Perennial Stream			X		X				X		X		X	X				
Woolsey Lake	Wetland							X		X				X	X	X			
Blue Lake	Lake	X				X		X		X	X		X	X	X	X			
Bull Cienega Creek	Perennial Stream		X			X				X		X		X	X				
Bull Spring Cienega	Wetland		X					X		X				X	X	X			
Gomez Creek	Perennial Stream		X			X				X		X		X	X				
McNary Mill Ponds	Lake/Wetland		X			X		X		X		X		X	X	X			
Gooseberry Creek	Perennial Stream		X			X				X		X		X	X				
San Juan Lake	Intermittent Lake	X								X		X			X				
Trout Creek	Perennial Stream			X		X				X		X		X	X				
Hawley Lake	Lake			X		X		X		X	X		X	X	X	X			
Earl Park Lake	Lake			X		X		X		X	X		X	X	X	X			
Earl Creek	Perennial Stream			X		X				X		X		X	X				



APPENDIX B

WMAT Water Quality Standards

Designated Use

Waterbody	Type	Designated Use																	
		Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
Porcupine Creek	Perennial Stream			X		X				X		X		X	X				
Sand Creek	Perennial Stream			X		X				X		X		X	X				
Cyclone Lake	Lake			X		X		X		X	X		X	X	X	X			
Sand Take	Perennial Stream			X		X				X		X		X	X				
No Name Tank	Tank		X							X		X			X				
Williams Creek	Perennial Stream			X		X				X		X		X	X				
All Subsurface/groundwaters, springs and seeps within the White River Watershed						X	X	X	X	X	X		X	X	X				
<b>BLACK RIVER WATERSHED:</b>																			
Black River	Perennial Stream		X			X		X		X	X			X	X				
Georges Basin Creek	Intermittent Stream	X								X		X			X				
Georges Basin Tank	Lake	X				X		X		X		X		X	X	X			
Nash Creek	Intermittent	X								X		X			X				
Nash Creek Reservoir	Lake	X				X		X		X		X		X	X	X			
Lone Pine Tank	Tank	X								X		X			X				
Turkey Creek	Intermittent Stream	X				X				X		X			X				
Lower Pasture Tank	Tank	X								X		X			X				
Chino Tank	Tank	X								X		X			X				
7-Mile Tank	Tank	X								X		X			X				
Upper Corn Creek Tank	Tank	X								X		X			X				

APPENDIX B

WMAT Water Quality Standards

Designated Use

Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
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Waterbody

Type

Turkey Creek North of Y-70	Perennial Stream	X			X			X	X		X	X					
West Turkey Creek	Intermittent Stream	X						X	X			X					
Weaning Pen Tank	Tank	X						X	X			X					
East Bonito Prairie Tank	Tank	X						X	X			X					
North Bonito Prairie Tank	Tank	X						X	X			X					
Corn Tank	Tank	X						X	X			X					
Bog Creek	Perennial Stream		X		X			X	X		X	X					
McNary Ditch	Ditch	X						X	X			X					
Shash Bitu (Big Bear Lake)	Lake		X		X	X		X	X		X	X	X	X			
Little Bog Creek	Perennial Stream		X		X			X	X		X	X					
Shash Bizhaazhe (Little Bear Lake)	Lake		X		X	X		X	X		X	X	X	X			
Bog Tank	Tank		X					X	X			X					
Soldier Creek	Perennial Stream		X		X			X	X		X	X					
Bar H Creek	Perennial Stream		X		X			X	X		X	X					
Horseshoe Lake	Lake		X		X	X		X	X		X	X	X	X			
Horseshoe Ditch	Ditch	X						X	X			X					
No Name Creek	Perennial Stream		X		X			X	X		X	X					
Paradise Creek below Wohlenberg	Perennial Stream		X		X	X		X	X		X	X	X				
Natural Lake	Lake		X		X	X		X	X		X	X	X	X			
Wohlenberg Draw	Perennial Stream		X		X			X	X		X	X					
Snow Stake	Perennial Stream		X		X			X	X		X	X					

APPENDIX B

WMAT Water Quality Standards

Designated Use

Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
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Waterbody

Type

Paradise Creek, above Wohlenberg	Perennial Stream			X	X			X		X		X	X		X		
Bear Cienega Creek	Perennial Stream		X		X			X		X		X	X				
Sheep Cienega	Wetland					X		X			X	X	X				
A-1 Lake	Lake		X		X	X		X	X		X	X	X	X			
Ord Creek	Perennial Stream			X	X			X		X		X	X		X		
Smith Cienega	Wetland			X		X		X				X	X	X	X		
Bull Cienega	Wetland			X		X		X				X	X	X	X		
Smith Creek	Perennial Stream			X	X			X		X		X	X		X		
Becker Creek	Perennial Stream		X		X			X		X		X	X				
Snake Creek	Perennial Stream		X		X			X		X		X	X				
Sunrise Lake	Lake		X		X			X		X		X	X				
Big Bonito	Perennial Stream		X		X			X		X		X	X		X		
Tonto Creek, below Y47 Crossing	Perennial Stream		X		X			X		X		X	X		X		
Tonto Creek above Y47 Crossing	Perennial Stream	X			X			X		X		X	X				
Perry Creek	Intermittent Stream	X						X		X			X				
Cienega Creek	Perennial Stream		X		X			X		X		X	X				
Bull Creek	Perennial Stream	X			X			X		X		X	X				
Odart Mountain	Perennial Stream		X		X			X		X		X	X				
Odart Cienega	Wetland					X		X				X	X	X			
Tonto Lake	Lake	X			X	X		X	X			X	X	X			
Willow Cienega	Wetland					X		X				X	X	X			

APPENDIX B

WMAT Water Quality Standards

Designated Use

Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
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Waterbody

Type

Sheep Cienega	Wetland					X		X				X	X	X			
Little Bonito Creek, below Y55 Crossing	Perennial Stream	X			X			X		X		X	X				
Marshall Butte Creek	Perennial Stream		X		X			X		X		X	X				
Crooked Creek	Perennial Stream		X		X			X		X		X	X		X		
Lofer Cienega Creek	Perennial Stream		X		X			X		X		X	X			X	
Boggy Creek	Perennial Stream		X		X			X		X		X	X		X		
Little Bonito Creek, above Y55 Crossing	Perennial Stream		X		X			X		X		X	X		X		
Flash Creek	Perennial Stream		X		X			X		X		X	X		X		
Long Canyon	Perennial Stream		X		X			X		X		X	X				
Squaw Creek	Perennial stream		X		X			X		X		X	X		X		
Butterfly	Perennial Stream		X		X			X		X		X	X				
Butterfly Cienega	Wetland					X		X				X	X	X			
Bonito Rock Cienega	Wetland					X		X				X	X	X			
Hurricane Lake	Lake		X		X	X		X	X			X	X	X	X		
Hurricane Creek	Perennial Stream			X	X			X		X		X	X		X		
Hughey Creek	Perennial Stream		X		X			X		X		X	X		X		
Bonito Cienega	Wetland			X		X		X				X	X	X	X		
Willow Creek	Intermittent Stream	X						X		X			X				
Willow Tank	Tank	X						X		X			X				
Burnt Corral Creek	Intermittent Stream		X					X		X			X				
Oak Tank	Tank	X						X		X			X				

APPENDIX B

WMAT Water Quality Standards

Designated Use

Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
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Waterbody

Type

Paddy Creek	Perennial Stream		X			X			X		X		X	X				
Pacheta Creek	Perennial Stream			X		X			X		X		X	X				
Milk Creek	Perennial Stream		X			X			X		X		X	X				
Pair o' Dice Cienega	Wetland						X		X				X	X	X			
Ess Creek	Perennial Stream		X			X			X		X		X	X				
Bluff Cienega Creek	Perennial Stream		X			X			X		X		X	X				
Pacheta Lake	Lake			X		X		X	X				X	X	X			
Upper Pacheta Cienega	Wetland			X			X		X				X	X	X			
Drift Fence Lake	Lake			X		X		X	X				X	X	X			
Reservation Creek	Perennial Stream			X		X			X		X		X	X				
Bear Cienega	Wetland						X		X				X	X	X			
Deep Cienega	Wetland			X			X		X				X	X	X			
Reservation Lake	Lake			X		X		X	X				X	X	X			
Navajo Pit Tank	Tank	X							X		X			X				
West Fork Black River	Perennial Stream				X	X			X		X		X	X		X		
Hall Cienega	Wetland				X		X		X				X	X	X	X		
Purcell Cienega	Wetland				X		X		X				X	X	X	X		
Thompson Creek	Perennial Stream				X	X			X		X		X	X		X		
All Surface/groundwaters, springs and seeps within the Black River Watershed						X	X	X	X	X	X	X	X	X				

APPENDIX B

WMAT Water Quality Standards

Designated Use

Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
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Waterbody

Type

<b>CARRIZO WATERSHED</b>																	
Carrizo Creek below Corduroy	Perennial Stream	X				X	X	X		X	X		X	X			X
Carrizo Creek above Corduroy	Perennial Stream		X			X	X	X		X	X		X	X			X
Cedar Creek	Perennial Stream	X				X	X	X		X	X		X	X			X
Big Canyon (E. Cedar Creek)	Perennial Stream		X			X				X	X		X	X			X
Middle Cedar Creek	Perennial Stream		X			X				X	X		X	X			X
West Cedar Creek	Intermittent Stream	X								X	X		X				X
Corduroy Creek	Perennial Stream		X			X	X	X		X	X		X	X			
Hop Canyon	Perennial Stream		X			X				X	X		X				
Hop Spring	Spring									X	X		X		X		
Cottonwood Canyon	Intermittent Stream	X				X				X	X		X				
Forestdale Creek	Intermittent Stream		X			X				X			X				
Bootleg Lake	Lake	X				X		X		X	X		X		X		
Cooley Lake	Lake		X			X		X		X	X		X		X		
Turkey Canyon	Intermittent Stream	X								X	X		X				
Blue Spring	Spring		X			X		X	X		X		X				
Mud Creek	Intermittent Stream	X								X	X		X				
Skunk Canyon	Intermittent Stream	X								X	X		X				
Limestone Canyon	Perennial Stream		X			X				X	X		X				
Jump Off Canyon	Perennial Stream		X			X				X	X		X				
Deer Springs Canyon	Perennial Stream		X			X				X	X		X				

APPENDIX B

WMAT Water Quality Standards

Designated Use

Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
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Waterbody

Type

Foot Canyon	Perennial Stream		X			X			X		X	X	X				
Twin Lake	Intermittent lake	X					X	X			X		X	X			
West Blue lake	Intermittent Lake	X					X	X		X	X		X	X			
Wild Horse Lake	Intermittent Lake	X						X			X						
<i>All Subsurface/groundwaters, springs and seeps within the Carrizo Watershed</i>																	
<b>CIBECUE WATERSHED</b>																	
Cibecue Creek in Box Canyon to Salt river	Perennial Stream	X				X		X	X		X	X	X		X		
Cibecue Creek, Box Canyon up to Confluence with Salt Creek	Perennial Stream	X				X			X		X	X				X	
Fox Canyon	Intermittent Stream	X						X		X			X				
Cibecue Canyon	Intermittent Stream	X						X		X			X				
Spring Creek	Intermittent Stream	X				X		X		X			X			X	
Cement Trough Canyon	Intermittent Stream	X						X		X			X				
Indian Canyon	Intermittent Stream	X						X		X			X				
Salt Creek	Intermittent Stream	X				X		X		X			X			X	
Cibecue Creek, from confluence w/Salt Cr. to Big Springs	Perennial Stream			X		X		X	X		X	X	X			X	
Cibecue Creek, above Big Springs	Perennial Stream		X			X	X	X		X		X	X			X	
Ivins Canyon	Intermittent Stream	X						X		X			X				
Penner Canyon	Intermittent Stream	X						X		X			X				

APPENDIX B

WMAT Water Quality Standards

Designated Use

Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
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Waterbody

Type

Wagon Wheel Lake	Intermittent Lake	X				X	X	X			X						
Louse Lake	Intermittent Lake	X				X	X	X			X						
Donkey Lake	Intermittent Lake	X				X	X	X			X						
Nyce Lake	Intermittent Lake	X				X	X	X			X						
Pumpkin Lake	Lake		X	X		X	X	X	X	X	X	X	X				X
Chuckbox Lake	Intermittent Lake	X				X	X	X		X		X					
All Subsurface/groundwaters, springs and seeps within the Cbecue Watershed				X	X	X	X	X	X		X	X	X				
<b>SALT RIVER &amp; SALT DRAW WATERSHED</b>																	
Salt River	River	X			X	X		X	X		X	X	X				
Medicine Creek	Intermittent Stream	X						X		X		X					
Rock Springs Creek	Perennial Stream	X			X			X		X		X	X		X		
Soldier Creek	Intermittent Stream	X						X		X		X					
Salt Draw	Perennial Stream	X			X			X		X		X	X			X	
Lower Canyon Butte Tank	Tank	X						X		X		X					
Canyon Butte Tank	Tank	X						X		X		X					
West Tin House Tank	Tank	X						X		X		X					
Coyote Tank	Tank	X						X		X		X					
Dixon Tank	Tank	X						X		X		X					
Snake Tank	Tank	X						X		X		X					



APPENDIX B

WMAT Water Quality Standards

Designated Use

Warmwater Habitat	Marginal Coldwater Habitat	Coldwater Habitat	High Quality Coldwater Habitat	Irrigation	Dom./Ind. Water Supply	Groundwater Recharge	Untreated Drinking Water	Livestock & Wildlife	Primary Contact	Secondary Contact	Ceremonial Primary Contact	Gathering of Plants	Cultural Significance	Flood Control	High Quality Water	Sensitive Water	Outstanding Water
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Waterbody

Type

Kelly Draw Tank	Tank	X						X	X			X					
1 Mile Tank	Tank	X						X	X			X					
Mud Tank	Tank	X						X	X			X					
All subsurface/groundwaters, springs and seeps - Salt River & Salt Draw Watershed																	
<b>CANYON CREEK WATERSHED</b>																	
Canyon Creek S. of Chediski Farms	Perennial Stream	X			X	X		X	X		X	X	X			X	
Willow Creek (Lower Canyon Cr.)	Perennial Stream	X			X			X		X		X	X		X		
Oak Creek	Intermittent Stream	X			X			X		X		X				X	
Sloan Creek	Intermittent Stream	X						X		X		X					
Ellison Creek	Intermittent Stream	X						X		X		X					
Gentry Creek	Intermittent Stream	X			X			X		X		X					
Bear Creek	Intermittent Stream	X						X		X		X					
Rock Creek	Intermittent Stream	X						X		X		X					
Canyon Creek, N. of Chediski Farms	Perennial Stream		X		X			X	X		X	X	X			X	
Willow Creek (Upper Canyon Cr.)	Intermittent Stream	X						X		X		X					
Cow Creek	Intermittent Stream	X						X		X		X					
Bull Flat Canyon	Intermittent Stream	X						X		X		X					
All subsurface/groundwaters, springs and seeps within the Canyon creek Watershed																	

## **Chronology of White Mountain Apache Tribe, Water Quality Standards Development**

revised September 2, 1999

- Sept. 1993 Tribe applies to U.S.EPA, Region 9 for Treatment-as-a-State under Clean Water Act (CWA) Sec. 106, as authorized by CWA Sec. 518.
- Nov. 1993 U.S. EPA Region 9 notifies surrounding jurisdictions (San Carlos Apache Tribe, State of Arizona, etc.) of Tribe's application and requests comment.
- May 1994 Tribe receives CWA Sec. 106 program authorization from U.S. EPA, including grant money to begin water pollution control efforts.
- Aug. 1995 Tribe applies to U.S. EPA Region 9 for Tribal program authorization under CWA Sec. 303, water quality standards.
- Feb. 1997 Tribe receives approval from U.S. EPA Region 9 under CWA Sec. 303. Included in this approval is the authority to administer CWA Sec. 401, water quality certification.
- Sept. 1997 Tribal Environmental Planning Office (EPO) issues first Tribal water quality certification.
- Dec. 1997 WMA Tribal Council approves draft Tribal Water Quality Protection Ordinance (with Tribal water quality standards) for submittal to U.S. EPA.
- Jan.-March 1998 Period of revisions and informal consultation with U.S. EPA Region 9 and U.S. Fish and Wildlife Service technical staff.
- Feb. 1998 Presentation to WMA Tribal Council on Ordinance, standards and revisions in preparation for public hearings.
- March 10th Public hearing in Tribal community of Cibecue.  
March 12th Public hearing in Tribal community of Whiteriver.
- April 9, 1998 Certified letters mailed to surrounding jurisdictions informing of Tribe's intentions to adopt its own water quality standards and inviting jurisdictions to May 29, 1998 public hearing in Whiteriver. Articles placed in Ft. Apache Scout and White Mountain Independent newspapers providing notification of intent to adopt standards and directions for providing input.
- May 29, 1998 Public hearing on Tribal water quality standards adoption, Whiteriver, AZ.

- Oct. 1998 WMA Tribal Council approves Tribal Water Quality Protection Ordinance for 10-day posting period (Ordinance never adopted after posting period).
- Dec. 1998 - Ordinance amended to include Enforcement and Penalties section and  
March 1999 revisions/additions made to Appendix B designated use table.
- March 25, 1999 Certified letters mailed to surrounding jurisdictions again informing of Tribe's intentions to adopt its own water quality standards and inviting jurisdictions to May 14, 1999 public hearing in Whiteriver. Articles placed in Ft. Apache Scout, White Mountain Independent and Arizona Republic newspapers providing notification of intent to adopt standards and directions for providing input.
- May 14, 1999 Public hearing on Tribal water quality standards adoption, Whiteriver, AZ.
- May 27, 1999 Ordinance and standards approved by Tribal Plan and Project Review Panel with condition that additional cultural language be added to preamble.
- July 15, 1999 Ordinance and standards presented to WMA Tribal Council for approval. Approved for posting by Resolution No. 07-99-170.
- Sept. 1, 1999 Final adoption of Tribal Water Quality Protection Ordinance by WMA Tribal Council by Resolution No. 09-99-214.

## WHITE MOUNTAIN APACHE TRIBE

### Water Quality Protection Ordinance and Water Quality Standards -- Public Participation and Review Record -- (and notes on agency consultation)

#### Public participation and review by WMAT for tribal/general public and surrounding jurisdictions

- Tribal Council Resolution No. 09-99-214 of September 1, 1999, enacting Tribal Water Quality Ordinance including Tribal water quality standards.
- Tribal Council Resolution No. 07-99-170, approving Ordinance for posting for minimum 10-day public comment period.
- Public Hearing held May 14, 1999 in Whiteriver, Arizona to inform public and solicit input on Ordinance and standards.
- Certified letters with copy of Ordinance of March 25, 1999 to surrounding jurisdictions, providing notification of May 14, 1999 public hearing and inviting review and written comments (Jane Hull, Governor of Arizona, Raymond Stanley, Chairman of San Carlos Apache Tribe, Cruz Salas, Gila County Supervisor, Lawrence Vicario, Navajo County Supervisor, Clarence Bigelow, Apache County Supervisor, Eleanor Towns, U.S. Forest Service Regional Forester).
- Public Notice of March 26, 1999 in statewide newspaper, *Arizona Republic*, notifying of Tribe's intent to adopt standards, advertising public hearing in Whiteriver on May 14, 1999, and inviting review and comment.
- Article of March 26, 1999 in local newspaper, *Apache Scout*, describing purpose of Ordinance and standards, advertising public hearing in Whiteriver on May 14, 1999, and inviting review and comment.
- Public Notice of March 19, 1999 in regional newspaper, *White Mountain Independent*, notifying of Tribe's intent to adopt standards, advertising public hearing in Whiteriver on May 14, 1999, and inviting written comments.
- Radio announcement notes and notes from public meetings of March 10, 1998, Cibecue, Arizona, and March 12, 1998, Whiteriver, Arizona, prior to first public hearing of May 29, 1998.

### Consultation with Environmental Protection Agency

- Letter of February 2, 2000 from WMAT to Phil Woods, primary EPA Region 9 Water Division technical contact, informally transmitting resolutions and final Ordinance and requesting review and informal consultation with US Fish and Wildlife Service, Arizona Fisheries Resource Office.
- Certified letter of March 25, 1999 with copy of Ordinance to EPA Region 9 Water Division providing notice of May 14, 1999 public hearing.
- Letter of March 15, 1999 from Alexis Strauss, EPA Region 9, Acting Director, Water Division, to FWS AZFRO initiating informal review of Tribal water quality standards as required for EPA.
- Faxed memo of March 30, 1998 from WMAT to Phil Woods, EPA Region 9, concerning proposed mercury and arsenic standards, followed by concurrence with standards language over telephone same day.
- Faxed comments of March 3, 1998 from Phil Woods, EPA Region 9 Water Division, providing technical comments on December 15, 1997 draft Ordinance.
- Telephone conversation of February 19, 1998 with Phil Woods discussing public review record and draft designated uses.
- Letter of January 20, 1998 from WMAT to Terry Oda, EPA Region 9 with direct copy to Phil Woods, forwarding draft Tribal Water Quality Protection Ordinance (with Tribal water quality standards) for review and information.
- Telephone conversation of December 15, 1997 with Phil Woods discussing fish tissue sampling, designated uses, numeric criteria, etc.
- Faxed comments of October 30, 1997 from Phil Woods providing technical comments on draft Ordinance.
- Telephone conversation of September 5, 1997 with Phil Woods discussing draft designated uses, California toxics rule, State of Arizona water quality standards, etc.

#### Consultation with Fish and Wildlife Service

- Letter of July 6, 1999 from WMAT updating on status of adoption process
- Letter of March 15, 1999 from Alexis Strauss, EPA Region 9, Acting Director, Water Division, to FWS AZFRO initiating informal review of Tribal water quality standards as required for EPA.
- Faxed memo of April 2, 1998 from WMAT to Mary Jo Stegman, FWS liaison to WMAT, concerning proposed mercury and arsenic standards.
- Letter of January 20, 1998 from WMAT to FWS AZFRO forwarding draft Tribal Water Quality Protection Ordinance (with Tribal water quality standards) for review and information.

#### Consultation with Bureau of Indian Affairs

- Letter of April 7, 1999 with copy of Ordinance to BIA Superintendent's Office, Whiteriver, Arizona, providing notification of May 14, 1999 public hearing and inviting review and comment.

#### Consultation with Indian Health Service

- Letter of April 7, 1999 with copy of Ordinance to IHS, District Engineer's Office, Pinetop, Arizona, providing notification of May 14, 1999 public hearing and inviting review and comment.

# A Cultural Connection

*Tribe represents the United States in International Festival*



Members of the entourage from the Fort Apache Reservation pose in front of with their host and a group from Finland. The group was at Taiwan for 14 days entertaining their host with the Apache culture.

Photo courtesy of Cline Griggs.

Ten members of the White Mountain Apache Tribe went to Taiwan to represent the United States in a gathering of different cultures at the 1999 Ping Ting International Folklore, Music and Dance Festival.

This event is held every three years and different nationalities from all over the world are invited.

Ramon Riley, who assembled the group, had sent a video tape of the Theodore Roosevelt School's crown dance group to the organizers to see if they were interested. He was notified they (organizers) were indeed interested.

"We ran into some problems and it wasn't working out," said Riley.

"They keep up after me to go," he said, "but we had to come up with \$3,000 in a couple of days."

Ramon quickly completed a grant for \$2,000 and faxed it to the Arizona Commission of the Arts. He received word via phone that his grant had been approved. He was still short a \$1,000. He then approached a group that he had helped in the past, hoping they would help him in return. As it turned out, they (Apache Coalition) returned the favor by giving him the \$1,000.

Then he had to come up with people who

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## Comments sought on water quality ordinance

By Brenda P. Begay  
Environmental Planning

The White Mountain Apache Tribe is well on its way to developing an overall water quality protection ordinance, which will serve to protect the priceless water resources of the reservation into the future.

Important element of the ordinance are pollution limits and designated uses for all streams, rivers, lakes and cienegas. These are called water quality standards, and when approved by the U.S. Environmental Protection Agency, they will give the Tribe the same legal status as the State of Arizona for protecting its waters from on-and off-reservation polluters.

When these standards are finalized, the Tribe will become the first Arizona tribe to have developed this program. The Tribe has been asserting its rights over management and control of its water quantity for decades. Developing its own water quality standards will provide the strongest assertion possible of the Tribe's right and ability to manage its water resources based on quality.

Your comments on the draft Tribal Water Quality Protection Ordinance and water quality standards are needed. A public comment period begins with the publishing of this notice in the Fort Apache Scout. Comments will be accepted until the end of the

work day Friday, May 14. A public hearing will be held in the Tribal Council Chambers in Whiteriver at 10:00 a.m. on May 14, 1999.

Copies of the draft Tribal water quality ordinance and water quality standards can be picked up during normal business hours at the Tribal Environment Planning Office in the Tribal Executive Building in Whiteriver. Written or oral comments must be provided directly to the Environmental Planning Office by the time shown above.

To obtain a copy of that draft by mail, call Brenda Pusher-Begay at 338-4346, ext. 328, or Keith Jones at ext. 223.

## Whiteriver CellularOne celebrates with Fun Day

Cellular One held a fun day on March 12 at the Aday Memorial Hall. The purpose of this day was to invite the community over to find out more on how Cellular One operates and to celebrate the Whiteriver Cellular six month anniversary.

In the morning, a demo day was scheduled as managers, directors and the tribal council were invited. This was set up for the individuals to express their concerns and to find out more on what could be done to improve the total operation.

"This service was needed a long time ago. We have sev-

See FUN DAY, page 5

