

BLACKFEET TRIBE
SURFACE WATER QUALITY STANDARDS
AND
ANTIDEGRADATION POLICY

APPROVED BY COUNCIL _____
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SURFACE WATER QUALITY STANDARDS OF THE BLACKFEET TRIBE

Part I DECLARATION OF TRIBAL POLICY AND AUTHORITY

1.0 Policy

The Blackfeet Tribe believes that the quality of water resources within the boundaries of the Blackfeet Reservation are of utmost value to the Tribe and all peoples that live within the Reservation and must be protected under the jurisdiction of the Tribe. Water quality influences all aspects of Tribal health and welfare, including its use for domestic and cultural purposes, the protection of aquatic life and wildlife, the protection of recreation in and on the water, and its use for the economic well being of the Tribe.

The Blackfeet Tribe declares that it shall be its policy to develop, maintain, and periodically revise water quality standards on all surface waters within the Blackfeet Reservation boundaries and to do this under Tribal authority (Aquatic Lands Protection Ordinance 90A) and the authority of the Clean Water Act, 1972 and subsequent amendments. In accordance with this declaration, the following standards are adopted to preserve, protect and maintain the chemical, physical, and biological integrity of the surface waters, including wetlands, of the Blackfeet Reservation.

Further, in implementing these water quality standards, the Tribe declares that:

- 1) All practicable methods to control and prevent pollution of waters on the Reservation shall be required.
- 2) The Tribe will seek to maintain the highest quality of Tribal waters.
- 3) Pollutants that enter ground waters and have a direct hydrologic connection to surface waters are considered to be from point sources for purposes of implementing these standards.
- 4) Without adequate water quality the economic security and political integrity of the Tribe is at risk.

Public involvement in water quality: It is the policy of the Blackfeet Tribe to involve the Tribal public in the development and revision of Tribal Water Quality Standards to facilitate the public understanding and participation. In this process, a separate companion document to the Tribal Water Quality Standards has been prepared and is available to the public. This document (A Citizens Guide to Blackfeet Surface Water Quality Standards) provides a general overview of what standards are and how they are applied, but are not formally a part of the standards requiring EPA approval. The Guide includes specific discussions of:

- 1) What the Blackfeet Water Quality Standards are;
- 2) How water quality standards are arrived at;

- 3) How standards are used to protect the quality of surface waters under the jurisdiction of the Blackfeet Tribe; and
- 4) How EPA and the public is involved in the process.

The Guide is available free from the Tribal Environmental Office and other locations where Tribal Water Quality Standards are available for review.

2.0 Authority

The water quality standards rules are adopted by the Tribal Council upon recommendation of the Natural Resource Department, under authority of the Constitution and Bylaws for the Blackfeet Tribe of the Blackfeet Reservation (Article VI), the Aquatic Lands Protection Ordinance 90A, and Land and Water Conservation Ordinance 62. After consideration of these authorities and in consultation with the Environmental Protection Agency (EPA), the following rules are promulgated.

These standards shall be effective under the Clean Water Act 30 days after adoption and immediately after approval by EPA. Prior to approval by EPA, and after adoption by the Tribe, these standards shall be applicable to Tribal waters insofar as Tribal authority allows.

3.0 Severability

If any word, phrase, clause, sentence, paragraph, section, or other part of these rules is held invalid by any court of competent jurisdiction, such judgment shall affect only that portion held invalid and all other provisions shall be in force.

4.0 Other Law

These rules in no manner supersede or negate the necessity of any person to obtain permits or conduct such environmental studies as may be required by Federal or Tribal authorities for any conduct or activity affecting or potentially affecting Reservation waters and the designated uses of these waters.

Any applicable rule-making procedures required by Tribal law will be followed with respect to the classification and adoption of standards for all surface water bodies and wetlands of the Blackfeet Reservation including antidegradation policy decisions regarding Reservation waters.

5.0 Provision for Review and Revision of Standards

Standards will be reviewed and revised as necessary from time to time, but not less often than every three years from the time of final EPA approval of these standards.

Revisions will be in accordance with Tribal Ordinance 90A, any conditions stated in these standards, and the Clean Water Act. Proposed revisions will be solicited from the community through public hearings and other means of communication and public notices and hearings before Council will be completed before changes are made in the standards and these changes submitted to EPA for approval.

New or revised parts of the water quality standards will become effective after EPA approval. Until such time, the previously approved EPA standards will be in force.

Part II TRIBAL WATER QUALITY STANDARDS

1.0 Introduction

The practical purpose of tribal water quality standards is to provide the legal basis for maintaining and restoring the quality of waters within the Blackfeet Reservation boundaries. By maintaining those waters that are of high quality and restoring those waters that have been degraded from their natural condition the economic, recreational, spiritual and social values of the Tribe and all of the people within the Reservation will be enhanced.

Water quality standards reflect the goals, or designated uses, the Tribe sets for each water body within the Reservation boundaries. These goals describe the beneficial uses and the desired water quality conditions that presently exist or are to be achieved for each of the Tribe's water bodies.

Designation of these uses for a particular waterbody does not mean that this waterbody has fully achieved the goal use at the present time. It does mean that, through Tribal and federal regulation and through voluntary nonpoint source efforts, the Tribe will strive to fully achieve the designated beneficial uses. The designated use uses provide a legal basis to accomplish this goal.

Water quality standards consist of four basic parts, plus the descriptions of how each of these parts will be implemented. These parts are:

- a) A description of the kinds or classes of beneficial uses the Tribe will use and their assignment to particular waterbodies as designated uses.
- b) Specific numeric standards for specific pollutants that will protect the designated uses.
- c) The descriptive or narrative standards that apply to all waterbodies; these apply to all pollutants, whether or not they have numeric standards, and may apply to sources of degradation not normally thought of as pollutants.
- d) An antidegradation policy that applies to all waterbodies and seeks to protect or limit any negative changes in water quality.

2.0 Definition of Terms

The specific meaning of terms used in the Blackfeet Water Quality Standards are important to understanding the standards and for legally determining what is intended by statements in the Standards. The following terms are used in the Blackfeet Water Quality Standards and have the meanings given below for each term defined. Other terms, not defined below, have the normal dictionary meaning of the words.

1. ***“Acute standard”*** means the water quality standard that is intended to protect a beneficial use over a short exposure period. This period is usually measured as an instantaneous or one hour average.
2. ***“Beneficial use”*** means any use set out in Part II, Section 3 as a use class or category of Tribal waters. These uses presently include categories and subcategories of Domestic water supplies, Fish and aquatic life, Recreation, Wildlife, Agriculture, Industrial and Navigation, and Cultural uses. Additional uses or subcategories of uses may be added in the future. Definitions under each of these categories are contained in Part II, Section 3 of these standards.
3. ***“Best Management Practices” (“BMP’s”)*** means schedules of activities, operational practices, maintenance procedures, and other management practices adopted by rule or incorporated by the Tribe or agency as a condition of a permit or contract to prevent or reduce the pollution of Reservation waters. *Best Management Practices* may also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage that enter or have the potential to enter surface waters or ground waters of the Tribes.
4. ***“BEO”*** means the Blackfeet Environmental Office.
5. ***“Chronic standard”*** means the water quality standard that is intended to protect a beneficial use over a prolonged exposure period. This period is usually based on a 30 day average, but may be shorter (7 day) or longer (lifetime exposure).
6. ***“Classes of beneficial uses”*** are those uses the Tribe considers to be benefit to the Tribe and must be protected under Tribal water quality standards when applied to a particular Tribal waterbody. These uses include classes and sub-classes of aquatic life, municipal water, cultural, recreation, wildlife, industrial and agricultural uses and are defined in Part II, Section 3 of these standards.
7. ***“Contaminated sediments”*** means sediments containing any of the specifically regulated priority or non-priority pollutants included in the Tribal Numeric Chart for surface waters and any other pollutants found in sediments that are determined to be deleterious to existing and designated uses.
8. ***“Conventional water treatment”*** means, in order of application, the processes of coagulation, sedimentation, filtration and disinfection. It may also include taste and odor control and lime softening.
9. ***“Criteria”*** means EPA-recommended water quality numeric values which the Agency has judged are necessary to protect beneficial uses. Criteria that are adopted by the Tribes become Tribal Numeric Standards. Criteria may also mean, determined by their context, concentrations of pollutants that will be used by the

Tribe to guide decision regarding water or sediment quality where there is presently insufficient scientific data to support a standard.

10. **“Cultural uses”** means any use the Tribe or its members make of a Tribal waterbody which the Tribe, at its sole discretion, considers to be a use related to the culture of the Blackfeet people and which the Tribe seeks to protect.
11. **“Deleterious substances”** means any physical, chemical or biological materials in concentrations or amounts that do or could impair the designated or existing uses of Reservation surface waters.
12. **“Designated use”** means those beneficial uses of Reservation waters which are specified, or designated, for particular waterbodies or segments of waters, whether or not they are being attained. In addition, it is the intent of these regulations that all “existing uses”, as defined herein, be designated as they become known.
13. **“Discharge”** means any addition of pollutants or combination of pollutants to Reservation waters from any point source. Discharge also means any pollutant-contaminated waters entering any surface waters of the Tribe as the result of a direct hydrologic connection from ground waters that have been degraded by any surface sources. A discharge from pollutant sources through direct hydrological connection may occur at multiple locations and do not require the existence of a discrete pipe or other typical point source conveyances.
14. **“EPA”** means the U.S. Environmental Protection Agency.
15. **“Ephemeral stream”** means a stream or part of a stream which flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow or ice. The channel bottom is normally always above the local water table, except under extreme conditions.
16. **“Existing use”** means a use actually attained in the water body or a use that the existing water quality would have allowed the water body to attain, on or after November 28, 1975. This definition applies whether or not the existing use is a designated use and included in Tribal water quality standards.
17. **“Geometric mean”** means the value obtained by taking the Nth root of the product of the measured values where zero values for measured values are taken to be the detection limit.
18. **“High quality waters”** are considered to be any water where existing water quality is significantly better than numeric standards. Refer to section 14.4.2 for a more complete definition of high quality waters.

19. ***“Intermittent stream”*** means a stream or reach of a stream that does not normally contain flowing surface water during the entire year. The stream or stream section is below the local water table for at least some part of the year, and obtains its flow from either or both surface runoff and ground water discharge during parts of the year. Intermittent streams may have some pooled waters that are separated by dry or non-flowing segments during parts of the year when the stream as a whole is not flowing. Intermittent streams may also have sub-surface flow during the entire year, which may allow for the existence of aquatic life during periods where there is no surface flow.
20. ***“Naturally occurring water quality”*** means the quality of a waterbody which has had little or no human influence. The quality of this water is not based upon one fixed concentration of parameters, but is described by the range, mean, mode, and other appropriate descriptors of seasonal and annual water quality in Reservation waters. Where there is no sufficient data available to determine what the naturally occurring water quality of Tribal water is, the Tribe may infer the naturally occurring quality from similar waters that have sufficient data to describe a naturally occurring condition.
21. ***“Natural limitations”*** means qualities of the naturally occurring water quality or physical habitats in Tribal waters which limit the full expression of a beneficial use or may be less than the normal water quality standards for the classification of that waterbody. Natural limitations are not the result of man-related activities affecting physical habitats or water quality.
22. ***“Outstanding National Resource Waters (ONRW)”*** means waters that because of their exceptional water quality and/or their ecological, recreational, or cultural significance are an outstanding National resource.
23. ***“Outstanding Tribal Resource Waters (OTRW)”*** is the term used by the Tribe for Reservation waters having the same attributes as ONRWs. This designation, under the Antidegradation provisions, may be applied by the Tribe to any surface water of the Tribe on approval by Council.
24. ***“Perennial water”*** means waters that normally flow throughout the year or contain standing water throughout most of its length during the entire year. Perennial streams normally intersect and are partially fed by ground water, but may be losing or gaining streams at particular locations. Under extreme climactic conditions a normally perennial stream may be intermittent. Although normally intermittent streams may have isolated perennial pools, they are differentiated from perennial streams by the relatively low proportion of the stream that is perennially pooled.
25. ***“Person”*** means an individual, association, partnership, corporation, commercial or professional establishment, institution, firm, government or agency, or any agent or employee thereof.

26. ***“Pesticide”*** means any insecticide, herbicide, rodenticide, fungicide or any substance or mixture of substances intended for preventing, destroying, repelling, altering life processes, or controlling insects, rodents, nematodes, fungi, algae, weeds and other undesirable forms of terrestrial or aquatic plant and animal life.
27. ***“Point Source”*** means any discernable, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, dam gate or spillway, well, discrete fissure, container, rolling stock, or vessel or other floating craft from which water-born pollutants are or may be discharged. Point Source may also include waters originating at discrete locations on the surface that subsequently enter ground waters and reenter Tribal surface waters, as described under the definition of “discharge”.
28. ***“Pollutant”*** means any material that enters or has the potential to enter surface waters of the Tribes and impairs or has the potential to impair any designated or existing use of Tribal waters or that results in the exceedence of any numeric standard or narrative standard. Pollutants include, but are not limited to, dredged soil, dirt, slurry, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, or any industrial, municipal, or agricultural wastes discharged into or that in any way enter waters of the Tribes.
29. ***“Pollution”*** means any man-made or man-induced alteration that results in or has the potential to result in the degradation of the chemical, physical, biological, or radiological integrity, or to impair any of the designated or existing uses of any Tribal water.
30. ***“Sediment”*** means solid or semi-solid material which is carried by or may settle from suspension in Tribal water. This includes inorganic and organic particles originating from weathering, chemical precipitation, biological processes, scouring or any activity of man. Sediment may be in the water column or on the bottom of Tribal water. Sediment is generally defined as particles smaller than 1.0 cm, but may be defined as larger, in accordance with best available science.
31. ***“Settleable solids”*** means inorganic or organic particles that are being transported or have been transported by water from the site or sites of origin and are settled or are capable of being settled from suspension in Tribal waters.
32. ***“Standards”*** means all designated uses, all numeric standards, all narrative standards, all policies and procedures related to antidegradation and all written implementation procedures for any of the above.
33. ***“Surface waters”*** means any waters on the surface of the Reservation, including but not limited to streams (permanent, intermittent, and ephemeral), lakes, ponds, reservoirs and wetlands. Constructed treatment facilities that are not within any of the Tribal surface waters, have been approved by the Tribe, and are used solely

for treating, transporting or impounding pollutants are not considered a surface water of the Tribe.

34. ***“Toxic substances”*** means EPA’s most recent published list of priority pollutants in EPA Region CWA 304 (a) Criteria Chart and any concentrations or combinations of materials which are toxic or harmful to human, animal, plant or aquatic life. Toxic substances may also, depending upon context, be used to describe any chemical, biological or physical substance that causes injury or death to any form of aquatic life or any for of life that utilizes Tribal water, including wildlife and humans.
35. ***“Tribal Numeric Chart Levels”*** means the levels and concentrations considered by the Tribe to be numeric water quality standards for priority, non-priority pollutants and any other constituents on these charts and the conditions of their application. Tribal Charts generally adopt the latest EPA updates to the CWA 304 (a) Criteria Chart for priority toxic and other pollutants but may be more stringent, at the discretion of the Tribe. Values and conditions for Tribal numeric charts are given in Appendix Tables A-1 through A-7.

Tribal standards for human health are based on the latest (2002) carcinogen risk levels (at a risk factor of one in a million) to protect human health.
36. ***“True color”*** means the color of water from which turbidity has been removed.
37. ***“Turbidity”*** means a condition in water or wastewater caused by the presence of suspended matter resulting in the scattering and absorption of light rays. Turbidity is expressed as nephelometric turbidity units (NTU).
38. ***“Undesirable aquatic life”*** means any form of aquatic life (plant, invertebrate, vertebrate) that is introduced or not native to the water and is considered undesirable by the Tribe. In addition, the abundance or quantity or relative abundance of any species may be considered as “undesirable” if it significantly interferes with the attainment or maintenance of a designated use.
39. ***“Use Attainability Analysis”*** (UAA) means an assessment of the ability of a waterbody to attain a particular beneficial use. It is based on the physical, chemical, biological, and economic factors that affect the attainment of an existing or designated use. A use attainability analysis consists of a water body survey and assessment, a wasteload allocation, and, if appropriate, an economic analysis. UAAs may be used to determine whether a use could be attained were it not for natural or anthropogenic conditions that are not reparable within 20 years and must conform to EPA’s latest guidance on use attainability analysis.
40. ***“Waterbody”*** or ***“tribal waterbody”*** or ***“tribal water”*** means any surface water, or part of surface water under jurisdiction of the Tribe. Entire streams, lakes, ponds, wetlands, etc. or portions of these waters (segments of a stream) may be defined as a waterbody for purposes of designating uses or applying water quality standards. Unless draining into to a surface water, or specifically designated,

irrigation ditches are not considered to be a water of the Tribe for water quality purposes. Also, see “Surface water” and “Water of the Tribe”.

41. **“Waste”** means any material, gas, liquid or solid, that is a product or by product of any human activity and that is disposed of or that enters waters of the Tribe and impairs or has the potential to impair any Tribal standard.
42. **“Water of the Tribe”** means any surface water within the exterior boundaries of the Blackfeet Reservation. This includes, but is not limited to, rivers, streams, creeks, lakes, ponds, reservoirs, wetlands, springs, irrigation return flows to surface waters, and all other waters that are in a natural drainage. Treatment works approved by the Tribe and are not included in any of the above surface waters, and which are used solely for treating transporting or impounding pollutants, are not considered a surface water of the Tribe. Tribal waters include waters that are perennial, intermittent, and ephemeral.

3.0 Classes of Beneficial Uses for the Blackfeet Tribe

3.1 Introduction

The Tribe has identified the following list as beneficial uses of Tribal waters. “Beneficial uses” are not the same as “designated uses” but are the classes or types of uses that the Tribe recognizes. These uses are known to exist or may exist in the future on one or more waters of the Tribe. Once a beneficial use is applied to a specific waterbody, the beneficial use is considered a designated use for that waterbody.

All beneficial uses are not appropriate for all waters of the Tribe. Because of this, each category of beneficial uses is evaluated to determine whether it should apply to a specific Tribal waterbody. For example, in assessing what designated uses should be applied to the upper Milk River segment, the Tribe would evaluate the entire list of Tribal beneficial uses to determine whether or not that use ever existed on the river or was to be a goal use the Tribe desires the river to meet.

The following Tribal beneficial uses include all of those uses required by the Clean Water Act and has, in addition, the class of “Cultural Uses”. If, in the future, other beneficial uses are determined which require protection under Tribal water quality standards, they may be added. In addition, refinements (or sub-classes) of the beneficial uses may added or deleted, in compliance with the Clean Water Act, if the Tribe finds this useful in further protecting water quality and the uses it supports.

Table 3.9-1 compares the Blackfeet Tribe beneficial use classes with those of the State of Montana.

3.2 Domestic Water Supply Uses

- 3.2.1 Class 1, High Quality Domestic Water:** Waters that are naturally of high quality and are intended to be suitable for drinking, culinary, and food processing after only simple disinfection.

3.2.2 Class 2: Domestic Water Supply: These waters are naturally of somewhat lower quality than Class 1 waters, and are intended to be suitable for drinking, culinary, and food processing after conventional drinking water treatment.

3.3 Fish and Aquatic Life Uses

The Fish and Aquatic Life use has been divided into seven sub-classes to reflect actual or potential populations to be protected in Blackfoot Tribal waters. These are:

Salmonid, All Life Stages
Salmonid, Partial Life Stages
Salmonid, Sensitive Species
Non-salmonid, All Life Stages
Non-salmonid, Partial Life Stages
Non-salmonid, Sensitive Species
Non-fish Aquatic Life

The Tribe recognizes that, theoretically, only a single aquatic life classification would be necessary, since in all cases the most sensitive species in a waterbody is supposed to be protected by the standards. In practice, this does not always occur because lumping of species and life stages into broad groups like salmonid and non-salmonid may not account for particular sensitivities of some species or life stages. In addition, some waters may be overprotected by applying standards designed to protect species or life stages that do not exist in those waters.

The Fish and Aquatic Life classifications described below recognize that salmonid species (trout, char, salmon, and whitefish) are a very significant part of the ecology of Tribal waters and are often the most sensitive species to be protected in a waterbody. It also recognizes that there may be particular species or life stages (ie. Bull trout, embryonic stages) that have specific water quality requirements that go beyond the needs of other salmonids or life stages (ie. temperature and sediment, enhanced sensitivity to metals as embryos). In addition, the classification recognizes that some species or life stages may be present in a waterbody at some times of the year and not at other times.

The Tribe anticipates that the majority of Tribal waters will have the more inclusive subclasses of **Salmonid or Non-Salmonid, All Life Stages**. The purpose of the other sub-classes is to highlight the kinds of aquatic life populations that exist or could exist as a Tribal goal and prevent over or under-protection of these populations now and in the future.

Federally listed threatened or endangered species or Tribal species of special concern may be the basis for a classification of **Salmonid or Non-salmonid, Sensitive Species**. Further, the classification recognizes that salmonids may occur in reduced numbers or sizes in waters where *natural* conditions of water quality or habitat significantly limit reproduction or growth. These waters may be classified as protected for **Partial Life Stages**. Also, waters that have natural limitations of flow, physical habitat, and/or water quality may be able to support **Aquatic Life, No Fish** with standards that protect this use but may not fully protect fish life.

In applying these classifications, Tribal waters may have more than one aquatic life classification assigned (designated) to them in order to protect the aquatic life uses of that water. For example, a water may be designated as **Salmonid, all life stages** and **Salmonid, sensitive species** in order to protect both cutthroat trout and bull trout populations, as well as all other aquatic life. Where there is a conflict between a classification and standards that fully protect a sensitive species and one that may not be ideal for another species in the same waterbody, the standard for the sensitive species will apply.

Tribal waters may also have different aquatic life designated uses at different times of the year. For example, some waters may support adult trout during the cooler months and have a designation of **Salmonid, partial life stage** during this time, but also have a designation of **Non-salmonid, all life stages** which applies year round. In each case the standards that are most protective will apply during the appropriate time period. As the information becomes known, specific time periods will be assigned to the more sensitive designated use.

The following Fish and Aquatic Life classifications specifically include *all aquatic life* in addition to fish life. The phrase, “other fish species and aquatic life normally associated with this waterbody in a natural or unimpaired state”, used in the aquatic life classifications is to be interpreted to mean:

- O all fish species, native or intentionally stocked, or if not intentionally stocked, considered by the Tribe to be desirable;
- O all aquatic or semi-aquatic vertebrates, such as frogs, turtles, snakes, etc;
- O all aquatic or semi-aquatic invertebrates, except those species that are not native and are considered undesirable by the Tribe;
- O all aquatic or semi-aquatic plants except those species that are not native and are considered undesirable by the Tribe; and
- O “normally associated” is to mean species that would be expected to occur in a waterbody with similar characteristics, location, and altitude in its natural or relatively unimpaired state.

3.3.1 Salmonid, all life stages: Waters that do support or have a Tribal goal to be suitable for all life stages of salmonids, including growth and propagation. In addition, these waters are to be suitable for the full life stages for all other fish and aquatic life that are or normally would be associated with this waterbody in a natural or unimpaired state.

3.3.2 Salmonid, partial life stages: Waters that do support or have a Tribal goal to be suitable for the growth and survival of adult salmonids. These waters limit the full reproductive potential of salmonids by a *natural* lack of sufficient spawning or nursery habitat or by *natural* water quality or other habitat conditions which prevent the full use of

the water for all life stages. Waters that serve only as migratory routes for salmonid species can be in this category and are to be protected for the salmonid life stage that is present during the migratory period.

In addition, these waters are to be suitable for the full life stages for all other fish and aquatic life that are or normally would be associated with this waterbody in a natural or unimpaired state.

3.3.3 Salmonid, sensitive species: Waters that do support or have a Tribal goal to support species that require specific environmental conditions at any life stages that may not be met by standards for the more general categories of salmonids. These waters contain populations (or historically contained populations) of federally listed threatened or endangered species or species of special Tribal concern. In cases where there are known requirements for more stringent standards for any of these species, the more stringent standards shall apply. In cases where there are no known more stringent water quality requirement to protect these populations, standards for the general category of salmonids shall apply, but more stringent standards shall be added as they become known.

3.3.4 Non-Salmonid, all life stages: Waters that do support or have a Tribal goal to be suitable for all life stages of non-salmonid fish, including growth and propagation. These waters normally do not contain salmonid fish. In addition, these waters are to be suitable for all life stages of aquatic life that are or normally would be associated with a waterbody in its natural or unimpaired state.

3.3.5 Non-Salmonid, partial life stages: Waters that do support or have a Tribal goal to be suitable for the growth and marginal propagation of some or all of the existing or expected non-salmonid fish species. These waters limit the full reproductive potential of non-salmonid fish by a *natural* lack of sufficient spawning or nursery habitat or by *natural* water quality or other habitat conditions which prevent the full use of the water for all life stages. Waters that serve only as migratory routes for non-salmonid species can be in this category and are to be protected for the life stage that is present during the migratory period. In addition, these waters are to be suitable for all other aquatic life that are or normally would be associated with a waterbody in its natural or unimpaired state.

Waters that may be considered in this category are intermittent waters, very low flow streams, or waters with excessively high natural temperatures or water chemistry conditions.

3.3.6 Non-Salmonid, sensitive species: Waters that do support or have a Tribal goal to support species that require specific environmental conditions at any life stages that may not be met by standards for the more general categories of non-salmonids. These waters contain

populations (or historically contained populations) of federally listed threatened or endangered species or of species of special Tribal concern. In cases where there are known requirements for more stringent standards for any of these species, the more stringent standards shall apply. In cases where there are no known more stringent water quality requirement to protect these populations, standards for the general category of non-salmonids shall apply, but more stringent standards shall be added as they become known.

- 3.3.7 Aquatic life, no fish:** Waters that do not contain fish species because of natural limitations of habitat and/or water quantity or quality, but do contain other aquatic life. These waters could be, but are not necessarily, small headwaters, intermittent streams or other water types which limit fish survival. For a water to be classified with this designation, it must be shown that fish have never existed in the water or that habitat or natural water quality would prohibit fish from existing in the water.

3.4 Recreation Uses

Recreational uses include any human uses of Tribal waters that may be considered recreational in character. The Tribe uses two categories of use, generally based on the likelihood of health effects from pathogens entering the body while recreating in or on the water. It is anticipated that most or all waters of the Tribe will be designated for one or both of these classes.

- 3.4.1 Class 1 – Full Contact Recreation:** Waters that are or have the Tribal goal of being, suitable for bathing, swimming, wading and recreation where the likelihood of pathogens entering the body from any orifice or break in the skin is high.
- 3.4.2 Class 2 – Limited Contact Recreation:** Waters that are, or have the Tribal goal of being, suitable for boating, fishing, and incidental contact recreation where the likelihood of pathogens entering the body from any orifice or break in the skin is low.

3.5 Wildlife Uses

Waters that are, or have the Tribal goal of being, suitable for reproductive, cover, and/or feeding habitat (depending on the species) of non-domesticated species of birds, mammals, reptiles, and amphibians.

It is the Tribal goal that all waters be designated for wildlife uses.

These waters shall be free from constituents in amounts that are harmful to the survival, growth or reproduction of wildlife species, or constituents that bioaccumulate in aquatic food organisms to the extent that they are harmful to growth or reproduction of these species or their prey, including human populations.

3.6 Agricultural Uses

Waters that are, or have the Tribal goal of being, suitable as an irrigation source for agricultural activities and domestic livestock use. Designation of a waterbody for an agricultural use does not imply or convey any water quantity right.

3.6.1 Irrigation use: These waters shall be free from constituents in amounts that are harmful to the growth of crops, or contain constituents that bioaccumulate to the extent that they are harmful the survival, growth or reproduction of domestic animals or people eating those crops.

3.6.2 Livestock use: These waters shall be free from constituents in amounts that are harmful to the growth of domestic animals, or contain constituents that bioaccumulate to the extent that they are harmful the survival, growth or reproduction of domestic animals or may be harmful to domestic animals or people eating those crops.

3.7 Navigation and Industrial Uses

The quality of all waters are intended to be generally suitable for navigation and raw water for industrial uses. The Tribe will assume that the quality of water protected by other uses will protect these uses unless it can be shown otherwise.

3.8 Cultural Uses

The cultural use classification is intended to include any uses the Blackfeet Tribe, through its Cultural Committee and Tribal Council considers to be a valid cultural activity of the Tribe. The classification does not require specifying the exact nature of the cultural activity nor the exact location of the activity on the waterbody. A conclusion by Council that a waterbody has, or is intended to have, cultural uses is sufficient to classify a water as such, and is not subject to challenge. In general, all waters of the Tribe are considered to have cultural significance; however, the Tribe has determined that two sub-categories of cultural uses are appropriate.

3.8.1 High Quality Cultural Waters: These are waters that have a naturally high quality, as determined by the Cultural Committee, have had little degradation from activities of man, and have been determined to merit the designation of High Quality Cultural use. These waters are, or are intended to be, suitable for any cultural activities performed on or in the water and for cultural uses of the water when removed from the waterbody. Cultural waters with the “high quality” designation may not have any new or increased discharges from point sources and are to be maintained at their present condition of water quality to the extent of Tribal authority.

3.8.2 Cultural Waters: These are waters that have a satisfactory quality, as protected by other designated uses, and are, or are intended to be, suitable for any cultural activities performed on or in the water and for cultural uses of the water when removed from the waterbody.

3.9 Relationship to State of Montana Use Classes

Because the Blackfeet Reservation is surrounded by waters of the State of Montana, and in order to facilitate comparison of the Blackfeet Tribe use classes with the State of Montana beneficial use categories, Table 3.9-1 provides a direct comparison between the two systems. The major difference between the State and the Tribal beneficial use classes are:

- 1) The Tribe focuses on specific uses that may be assigned to specific waterbodies; whereas the State groups specific uses into classes.
- 2) The Tribal Standards include two classes of aquatic life not contained in the Montana standards. These classes are the ***Sensitive species***, for both ***Salmonid and Non-salmonid***.
- 3) The Tribe has only two classes of Municipal Water Supply (vs three for the State).
- 4) The Tribe has an additional class of ***Cultural***, which is not a beneficial use under Montana standards.

TABLE 3.9-1**Comparison of Aquatic Life Beneficial Use Classes -
Blackfeet Tribe vs. State of Montana Standards**

<u>BLACKFEET USE CLASSES</u>	<u>MONTANA CLASSES</u>							
	A- closed	A1	B1	B2	B3	C1	C2	C3
Salmonid, all life stage	X	X	X			X		
Salmonid, partial life stage				X			X	
Salmonid, *sensitive species								
Non-Salmonid, all life stages					X			X
Non-Salmonid, partial life stage							X	
Non-Salmonid, *sensitive species								
Aquatic Life, No fish **	X	X	X	X	X	X	X	X
Full Body recreation	X	X	X	X	X	X	X	X
Limited Contact Rec.	X	X	X	X	X	X	X	X
Domestic Water High Quality	X							
Domestic Water		X	X	X	X			X
Wildlife	X	X	X	X	X	X	X	X
Agriculture		X	X	X	X	X	X	X
Cultural***								

* Montana has no specific class for sensitive species; all species, sensitive or not, are supposed to be protected under all Montana classifications.

** Montana does have a specific class for waters expected to support aquatic life but no fish, F-1. See ARM 17.30.657.

*** Montana has no classification of “cultural uses” for water quality standards.

4.0 Designated Uses for Waters of the Tribe

4.1 Introduction

Once the Tribe establishes categories of Tribal Beneficial Uses, the BEO evaluates each individual Tribal waterbody to determine which of the uses are appropriate and should be assigned to this particular waterbody. Assigning a beneficial use to a particular waterbody makes the use a *designated use* for that water. The decision process of what designated uses should apply to a particular waterbody is made based on requirements of the Clean Water Act (CWA) and on Tribal goals for that waterbody.

4.1.1 Clean Water Act Requirements: The CWA requires that any use that actually exists now or existed at any time on or after November 25th, 1975 must be protected for that use. These uses are collectively called “*existing uses*” in the CWA. The CWA also requires that all waters be designated for protection of aquatic life, wildlife, and recreation in and on the water, unless it can be shown that the waterbody is not capable of supporting these uses. For example, if a waterbody presently supports a trout population, it must be designated for one of the Tribe’s Aquatic Life, Salmonid classifications. However, if a stream does not support trout now, (possibly because temperatures are too high) but the waterbody did support trout in 1987, (when riparian vegetation kept the stream cooler), then it must be designated for a Salmonid classification as an “existing use” and the Tribe must apply standards that would protect and restore that use.

4.1.2 Tribal Goals. The Tribe has the authority and may designate waters for some uses even though the Clean Water Act does not require the Tribe to do this and the use does not exist now. For example: A waterbody below a dam is almost dewatered every year since it was built in 1936. Although it supported trout before the dam was built, there is too little water in the stream to support trout now. The Tribe wishes to restore this stream and chooses to designate this stream for Salmonid, All Life Stages.

This is a legitimate use of Tribal authority under the CWA, and the Tribe will set standards to protect this use, even though at present the stream does not support the use.

4.2 Waters Included

All waters of the Tribe are assigned one or more designated uses if the uses are known or can be assumed. “Water of the Tribe” means any surface water within the exterior boundaries of the Blackfeet Reservation. This includes, but is not limited to, rivers, streams, creeks, lakes, ponds, reservoirs, wetlands, springs, and all other waters that are in a natural drainage and are not specifically made for treatment of waste. Tribal waters

include waters that are perennial, intermittent, and ephemeral. Ephemeral streams typically may not have any known uses, but feed into intermittent and perennial streams.

4.3 Designated Uses of Tribal Surface Waters

The designated uses assigned to specific Tribal running and standing waters are shown on Tables 4.3-1 to 4.3-5. These tables are organized by the major drainages of Saint Mary River, Milk River, Cut Bank Creek, Two Medicine River, and Birch Creek.

- 4.3.1 Rivers, streams, creeks and all running waters.** Any Tribal running waters not included on Tables 4.3-1 to 4.3-5 are designated for *Aquatic Life -no Fish, Immersion Recreation, Wildlife*, and *cultural* use until such time that information is available to warrant a change in the designated uses.
- 4.3.2 Reservoirs, lakes, ponds, springs and other non-flowing waters.** Any Tribal non-running waters which are not included on Tables 4.3-1 to 4.3-5 are designated for *Aquatic Life, Non-salmonid all life stages, Full body Recreation, Wildlife* and *Cultural* uses until such time as information is available to warrant a change in the designated uses.
- 4.3.3 Wetlands.** The Blackfeet Reservation contains many wetlands, most of which have not been named and have little to no data regarding their water quality and existing uses. Although the Tribe is working on a classification system to delineate different groupings of wetlands for water quality standards purposes, this is not yet complete.

All wetlands are considered to be waters of the Tribe, regardless of size, and are designated for *Aquatic Life - no Fish, Full Body Recreation, Wildlife* and *Cultural uses* until such time as information is available to warrant other uses.

TABLES 4.3-1 to 4.3-5
DESIGNATED USES OF BLACKFEET TRIBAL WATERS

See Appendix B

5.0 Narrative Standards to Protect Uses

5.1 Introduction

Both narrative and numeric standards are designed to protect the beneficial uses designated for Tribal waters. Narrative standards are intended to protect waters from pollutants and combinations of pollutants where there are no numeric standards or where numeric standards are not protecting the designated uses. In addition, both narrative and numeric standards may be used as a basis to:

- a) establish maximum or minimum allowable levels or concentrations of pollutants and pollution in Tribal waters which will protect each of the beneficial uses of the Tribe, and;
- b) establish a basis for limiting the introduction of pollutants and/or pollution that could negatively affect existing or designated uses of Tribal surface waters.
- c) establish TMDLs that will protect existing and designated uses of Tribal waters.

5.2 Policy

Narrative standards apply generally to all uses and may supercede the numeric standards when there is a conflict. The Tribe will use best professional judgment and/or weight of evidence approach in implementing narrative standards. Where Tribal interpretation of the narrative water quality standard is more stringent than the applicable numeric standard for a pollutant (Criteria Chart or other numeric standards specific to a designated use) the narrative standard will always take precedence.

For example, the numeric copper standard (allowable water concentration) for the *Salmonid, all life stages* use is set based upon evidence that this concentration will protect trout. If the best available scientific evidence is convincing to the Tribe that this concentration in a particular stream actually damages trout populations, then the narrative standard of “no toxic materials in toxic amounts” overrides the numeric copper standard. In this case the calculation and use of a numeric standard which is lower than the Criteria Chart value may be used as a standard.

5.3 Narrative Standards

The narrative standards given below are set by the Tribe to protect the beneficial uses defined in Section 3.0. These standards apply to all tribal waterbodies, both classified and unclassified, at all places and all times. They are often referred to as the “free from” standards.

All Reservation surface waters must be:

- a) *free from* pollution or pollutants (either alone or in combination with other pollutants and/ or pollution) that are or may become *injurious to public health, safety, welfare*, or will cause or contribute to the violation of

surface water quality standards (including existing and designated uses, numeric and narrative standards, and antidegradation provisions).

- b) ***Free from*** substances attributable to municipal, industrial, or other discharges or agricultural practices that may cause or contribute to the formation of decaying or otherwise ***objectionable sludge deposits*** or emulsions beneath the surface of the water or upon adjoining shorelines.
- c) ***Free from floating debris, oil, scum,*** and other floating materials attributable to municipal, industrial or other discharges or agricultural practices in amounts ***sufficient to be unsightly or deleterious***. Floating oil is not to be present as a visible oil film or globules of grease (or in concentrations at or above 10 milligrams per liter).
- d) ***Free from*** material attributable to municipal, industrial, or other discharges or agricultural practices producing ***color, odor or other conditions*** in such a degree as to ***create a nuisance*** or render ***any undesirable taste*** to fish flesh, ***or in any other way, make food fish inedible*** or ***harm wildlife*** ingesting aquatic food organisms.
- e) ***Free from*** substances attributable to municipal, industrial or other discharges or agricultural practices in ***concentrations or combinations which are toxic or harmful*** to human, animal, plant or aquatic life except for pesticides applied in accordance with Tribal and Federal pesticide law and regulation.
- f) ***Free from*** substances attributable to municipal, industrial or other discharges or agricultural practices in ***concentrations or combinations*** which produce or encourage ***undesirable*** populations or conditions of ***aquatic life***.
- g) In addition, No pollutants or pollution may be discharged that, either alone or in combination with other pollutants or pollution, will result in total dissolved gas pressure exceeding 110 percent of saturation relative to the water surface.

6.0 Numeric Standards to Protect Uses

6.1 Introduction

Numeric standards are the concentrations of pollutants in the water that are considered to be protective of a beneficial use when they are not exceeded (or, in some cases, when they are a minimum value as for oxygen). These numeric values are based upon the best scientific data available and usually follow EPA recommended values, however, they may be more stringent than EPA recommendations if the Tribe deems this is necessary to protect the designated uses of waters. Numeric standards consist of allowable concentrations of pollutants (usually, micrograms or milligrams per liter of water) for short term exposure (acute) and long term exposure (chronic) and an averaging period over which they are measured. Acute standards for aquatic life are to be protective for

the short term and are usually based on one-hour exposures. Chronic standards for aquatic life are usually based on one-week or 30-day exposures, but may be based on life cycle exposures. Human health exposures are generally based on estimated lifetime exposures.

All human health standards utilize the updated human health risk levels for priority pollutants and other pollutants “published” in the most recent EPA documents. (“Published” and “documents” may include those values given at the official EPA internet site.)

6.2 Policy

The following shall be Tribal policy with regards to numeric water quality standards:

- O In the case of human health standards, the Tribe has a choice of using one-in-a-million (1/1,000,000) or one-in-one hundred thousand (1/100,000) risk factor for cancer producing chemicals. The Tribe has chosen the more protective one-in-a-million risk factor. (It is noted that in some cases the State of Montana has chosen less than one in a million risk factors.)

6.3 Priority Pollutants

Appendix A, Table A-1, Blackfeet Numeric Water Quality Standards Chart for Priority Pollutants, gives the Tribal numeric acute and chronic standards for priority pollutants. These pollutants are defined by section 304(a) of the Clean Water Act and include metals, pesticides, and organic chemicals. Acute and chronic criteria are not available for all pollutants. Where they are available, these values are currently based upon the most recent EPA 304(a) criteria recommendations. It is important to take into account the footnotes to the numeric standards when applying these standards. Where there is no numeric standard for a pollutant, the narrative standards will apply.

The toxicity to aquatic life of several of the metals concentrations varies by the hardness of the water. Generally metals in softer water (lower hardness) are more toxic than metals in harder water. Where hardness is a factor, the concentrations for standards in the Tables are based upon a hardness of 100. Standards for other hardnesses can be calculated based on formulas in the Footnotes. Metal standards are based upon the total recoverable form of the metals, except for aluminum, which is based on the dissolved form. The chronic standard for silver (Ag) is not based upon EPA criteria. Until EPA derives a new criteria, the Tribe will use 0.12 ug/l as the Tribal standard, which was the last EPA criterion for silver.

6.4 Non-Priority Pollutants

Appendix A, Table A-2, *Numeric Water Quality Standards Chart for Non-Priority Pollutants*, gives numeric acute and chronic standards for non-priority pollutants. These include a variety of pollutants, including bacteria, oxygen, chlorine, ammonia, and pH. A number of these pollutants do not have both acute and chronic standards, and some do not have any numeric standard at the present time. Where there is no numeric standard for a pollutant, the narrative standards will apply.

6.5 Human Health Pollutants

Appendix A, Table A-3, *Numeric Surface Water Maximum Contaminant Level (MCL) Standards Adopted to Protect the Water Supply Designated Use*, include chemicals that affect the drinking water use and are based upon the Safe Drinking Water Act. These are to be applied to both classes of Tribal Drinking Water Supply uses.

7.0 Biological Standards

7.1 Policy

It is the goal of the Tribal Council that all surface waters of the Reservation shall be free from substances in concentrations or combinations which will adversely impact the structure or function of indigenous or intentionally introduced aquatic and wildlife communities. In particular:

- potentially deleterious substances that bioconcentrate in aquatic life more than 50 times their concentration in water will be kept at the lowest level possible, and in no case higher than numeric standards to protect aquatic life.
- no person may cause the introduction of substances to surface waters that may negatively affect the structure and function of biological communities, whether via point source or non-point source.
- the Tribe intends to fully protect federally listed or proposed threatened or endangered species or species of special Tribal interest.
- pesticides must be applied following label directions and other stipulations identified by the Tribe.

7.2 Standards

At this time the Tribe does not have specific, numeric biological standards or criteria, however, it is the intent of the Tribes to develop such criteria or standards as resources allow. In the interim, narrative standards apply.

8.0 Radiological Standards

8.1 Policy

No person may cause radioactive materials to be present in surface waters in excess of natural quantities.

8.2 Standards

Specific numeric standards for radiological substances are contained in the numeric standards chart for purposes of determining potential impairment.

9.0 Clean Sediment Policy, Criteria, and Standards

Clean sediments are particles of 1.0 cm or smaller that does not contain toxic materials in toxic amounts and are contained in the water column or deposited on the bottom of Tribal waters.

9.1 Policy

The Tribe recognizes that, although running waters normally carry sediments, sediment loads substantially above natural levels or of a finer material than natural, can be detrimental to the designated uses of those waters and particularly aquatic life uses. Excessive sediments can smother organisms, destroy spawning areas, and fill pools and ponds. It is Tribal policy that all waters be free from the deposition of sediments in amounts that impair any of the designated uses of Tribal waters. A conclusion by the Tribe that clean sediment deposition is harming a designated use is considered an exceedence of standards.

9.2 Criteria and Standards

Presently the Tribe does not have numeric standards for sediment deposition, however, the following criteria will be used in assessing whether designated uses are impaired and narrative standards are exceeded until numeric standards or other implementation procedures are developed. Criteria of impairment:

- a) salmonid spawning areas contain fine sediments (.25 cm or less) in amounts greater than 15% by dry weight, unless it can be shown that this is a natural long term condition.
- b) 20% or more of representative pool depths are filled by sediments, unless it can be shown that this is the result of a natural long term condition.

10.0 Contaminated Sediment Policy, Criteria, and Standards

Contaminated sediments are particles of one centimeter or smaller that contains toxic materials in toxic amounts and is in the water column or deposited on the bottom of Tribal waters.

10.1 Policy

It is Tribal policy that all waters be free from the deposition of contaminated sediments in amounts that impair any of the designated uses of Tribal waters. A conclusion by the Tribe that contaminated sediment deposition is harming a designated use is considered an exceedence of standards.

10.2 Criteria and Standards

Presently the Tribe does not have numeric standards for contaminated sediment in the water column or on the substrate, however, the following criteria will be used in assessing whether designated uses are impaired until numeric standards or other implementation procedures are developed. Criteria of impairment:

- a) using the latest EPA methodology, which takes into account the concentration and availability of polar and non-polar pollutants, it is likely that pollutant levels in the sediments will harm aquatic life, directly or will

result in bioconcentration in any aquatic life tissue that may harm other aquatic life or humans utilizing the aquatic life resources.

- b) bioassays of sediments indicate a mortality or growth affect which is 20% or higher than controls.

11.0 Nutrients Policy, Criteria, and Standards

Nutrients are primarily forms of nitrogen and phosphorus that allow and encourage the growth of vegetation in aquatic systems. The vegetation may be phytoplankton (free floating) or macrophytes (larger forms attached to the bottom).

11.1 Policy

Excessive nutrients in Tribal waters may impair designated uses by reducing oxygen in the water column, by encouraging undesirable species and amounts of plant life, and by degrading the aesthetic qualities of water. It is Tribal policy to seek control of excessive amounts of nutrients, regardless of the source.

11.2 Criteria and Standards

The Tribe will develop criteria or standards, based upon EPA recommendations, as this information becomes available. The conclusion by the Tribe that excessive nutrient loading or concentration is harming a designated use constitutes a violation of standards.

12.0 Site Specific Standards

The Tribe recognizes that, although the numeric table standards will be protective of uses in the great majority of cases, there may be instances of specific water chemistry or sensitivity of a particular species that make pollutants more or less toxic or harmful to a designated use. Site specific standards are a means of avoiding gross over or under-protection of designated uses, and may be lower or higher in concentrations than the usual numeric standards to protect that use.

Site specific standards apply to a specific waterbody and must meet downstream water quality standards. Although different from the numeric standards specified in the numeric standards tables, site specific standards are required to fully protect all designated uses of the waterbody to which they are applied. As with all changes in standards, site specific standards will be submitted to EPA for approval along with the scientific rationale and evidence for the proposed new standards.

12.1 Policy

Site specific standards must be scientifically shown to fully protect all uses of a waterbody, and procedures to determine this protection must follow the latest EPA recommend or allowed procedures. Any person wishing to propose site specific standards must provide convincing scientific proof to the Tribe, at the expense of the proponent. The studies must be coordinated with the Tribe and EPA and must be approved by EPA before they are effective.

12.2 Criteria and Standards

Site specific standards will be determined on a case-by-case basis. At present, there are no site specific standards for any Tribal water.

13.0 Wetlands Standards

The Tribe recognizes that the natural water quality of wetlands may differ from that of associated streams, even when there is a direct hydrologic connection. In addition, there are many wetlands that do not have any direct connection to other surface waters of the Tribe. The Tribe also recognizes that parameters such as temperature, pH, and dissolved oxygen may be naturally different in wetlands from other kinds of healthy waterbodies. For these reasons, and because there are a great many wetlands on the Reservation for which there is no water quality data, the following will apply to all wetlands until numeric standards are developed.

13.1 Policy

The existing water quality of all unimpaired wetlands will be maintained; wetland form, functions and values will be protected. When a wetland is known to be impaired, based upon existing field data, these wetlands will be restored and enhanced as funding becomes available. Specifically, the Tribe intends to fully protect federally listed or proposed threatened or endangered species or species of special Tribal interest that may use wetlands of the Tribe. Existing wetlands may not be used as a treatment system to treat pollutants.

When any person shall undertake activities which have the potential to degrade a wetland, that person shall be responsible for collecting and analyzing water quality data to ensure no degradation of the wetland. The study design, parameters and frequencies of sampling shall be approved by the BEO prior to any activity potentially affecting a wetland.

13.2 Criteria and Standards

There are presently no standards that are specific to wetlands of the Tribe. Until specific standards are developed, the following guidelines (which are considered to be standards for all wetlands) will apply:

- *wetlands that are physically associated with a stream or lake.* The standards of the associated waterbody will apply unless it can be scientifically shown that other standards reflect the natural condition and protect the designated uses.
- *wetlands that are isolated from other waterbodies.* The usual numeric standards to protect any designated uses will apply unless it can be scientifically shown that other standards reflect the natural condition and/or protect the designated uses.

14.0 Antidegradation

14.1 Introduction

In addition to the water quality standards described in previous Parts, the CWA requires that water quality standards of States and Tribes include an Antidegradation Policy and that procedures are developed to implement this policy. The three overall purposes of the Antidegradation policy and implementation are to:

- a) ensure a minimum level of water quality, (below which no Tribal waters will go);
- b) provide a basis and process that helps maintain the existing quality of waterbodies which are better than the narrative or numeric standards; and
- c) provide a mechanism for protecting very high value waters (Outstanding Tribal Resource Waters).

These three purposes generally describe the three Tiers of waters that are protected under the Antidegradation provisions. It is also specifically noted that, in the Antidegradation context, the term “existing use” has a particular meaning as it is used below. Any use that actually existed, on or after November 28th, 1975, is an “existing use”. This means that if a use can be shown to have occurred during this time period, but the waterbody is not designated for this use, then that use must be protected with appropriate water quality standards.

14.2 Levels of Antidegradation Protection (Tiers) of Blackfoot Surface Waters

In order to accomplish the goals of Antidegradation, the Tribe has established three levels or tiers of waterbody protection under the antidegradation policy, in accordance with EPA regulations. These are:

14.2.1 Tier 1, Use Protected Waters

Waters protected: All Tribal waters must meet Tier1 water quality requirements.

Basis for protection: Existing uses of Tribal waters and the concentrations of pollutants or levels of pollution necessary to fully protect existing uses shall be maintained and protected for Tier 1 waters.

14.2.2 Tier 2, High Quality Waters

Waters protected: All Tribal waters that have a quality better than numeric or narrative standards and meet the definition of high quality waters are protected.

Basis for protection: Only Tribal waters considered to be “High Quality” are protected under Tier 2. The Tribe recognizes that in order to accommodate legitimate tribal uses and economic development, waters considered under Tier 2 may be degraded to the protection level of narrative and numeric standards, but only after a clear need and examination of alternatives that would result in less degradation has been demonstrated.

Where the quality of a waterbody is better than the levels (concentrations) necessary to support the propagation and growth of fish and other aquatic life,

wildlife, and recreation in and on the water, that quality shall be maintained and protected, unless the **BEO recommends and the Council finds:**

- O after compliance with the intergovernmental coordination and public participation provisions of any Tribal administrative procedures and continuing planning process,
- O that allowing lower water quality is *necessary* to reasonably accomplish the goals of the proposed development or activity, and, after an thorough analysis and consideration of all reasonable *alternatives*, and the proposed activity/development will,
 - a) accommodate important tribal economic or social development, and
 - b) the development will be in the area in which the high quality water is located.
- O In allowing any degradation or lower water quality the BEO and the Council shall assure:
 - a) that water quality is adequate to protect existing uses fully,
 - b) that the highest requirements for all **new** and **existing** point sources are in place or legally agreed to, and
 - c) the Tribe has required all cost-effective and reasonable best management practices for point source and nonpoint source pollution control.

14.2.3 Tier 3 waters. Outstanding Tribal Resource Waters (OTRW).

Waters protected: Only waters specifically designated by the Tribe as an OTRW are Tier 3 waters. The Tribe may designate many or no waters as OTRWs, at their discretion, after consideration of information and petitions of nomination of waters as Outstanding Tribal Resource Waters. Outstanding Tribal Resource Waters (OTRW) has the same meaning as the CWA term Outstanding National Waters (ONRW). The Tribe has determined that the following waters, by category or as individual waterbodies, are Tier 3 waters:

- (1) All waters located within tribally designated primitive or wilderness areas.
- (2) No individual waters have been designated.

Basis for protection: Where Tribal waters constitute an outstanding Tribal resource, such as waters of exceptional quality, or waters of ecological, recreational, or cultural significance, water quality shall be maintained and protected at its existing quality (with certain temporary exceptions, as described below).

14.3 Applicability & Limitations of Antidegradation

- a) The requirements of Antidegradation provisions apply to any human activity degrading or potentially degrading a waterbody or segment of a waterbody.
- b) If the BEO or Council determines, based on important economic or social development, that degradation may be allowed, in no event may degradation of Reservation waters interfere with or become harmful, detrimental or injurious to public health or welfare, recreation, safety, cultural or spiritual values, fish and wildlife uses, livestock uses, or other existing uses.
- c) In allowing degradation to lower water quality, the Department shall assure water quality adequate to protect existing uses fully and shall assure that the most stringent enforceable requirements will be applied to all new and existing point sources and that all cost-effective and reasonable best management practices for nonpoint source control will be achieved.
- d) Degradation of Outstanding Tribal Resource Waters (OTRW) is prohibited.
- e) No new or expanded discharges are allowed in ONRW waters, whether or not they would degrade existing water quality. Short term exceptions to this policy may be made by the Department if the activity will result in the cleanup of an existing pollution source or for an essential, but short term, activity such as bridge or road construction or repair. In this event, all practicable methods are used to minimize any water quality or habitat effects on the affected waters and to minimize the length of time that the exception will apply.
- f) “High quality waters”, within the meaning of Antidegradation, will be determined on a parameter by parameter basis.

14.4 Antidegradation Implementation

Implementation procedures for Antidegradation provisions are continuing to be developed. The following procedures are in effect at this time and will be added to and updated in subsequent revisions. Until Antidegradation implementation procedures are completed, the Tribal staff will work with EPA Region VIII staff to identify and apply appropriate antidegradation implementation procedures that are in addition to those specified in this section.

14.4.1 Tier 1, Use Protected Waters

- a) **Waters included:** All surface waters of the Tribe are “use protected” under Tier 1
- b) **Determination that all existing uses are protected.**
 - i. During the standards setting and revising process, the BEO will educate the public and other Tribal offices as to the meaning of

“existing uses” under the Antidegradation context. The public will be encouraged to provide information on uses known for specific waterbodies through public meetings and/or written notices by the BEO and Council. The BEO and Council will actively seek and consider any public or private information brought to their attention regarding uses that existed on or after November 25th, 1975 for any surface water of the Tribe.

- ii. Each instance of a potential “existing use” that is not a designated use which is brought to the Tribe’s attention will be confirmed or rejected by the BEO after examination of the source of information and seeking any additional confirmation of the use.
- iii. Factors the Tribe will use in determining whether a non-designated use is an “existing use” include, but are not limited to:
 - O Whether there is any confirmatory evidence from other people;
 - O Whether there are written records documenting the use; and
 - O Whether other departments or agencies agree the use existed.
- iv. Existing uses, if not designated, will be designated when they become known and are considered valid by the BEO. When bonafide existing uses are determined by the BEO, but have not yet been designated by the Tribe, they will be accorded the same protection by numeric, narrative, and antidegradation standards as if they had been designated.

14.4.2 Tier 2, High Quality Waters

Identification of “High Quality” waters: The following shall govern how high quality waters are identified.

- O all Tribal waters shall be considered high quality waters unless there is evidence that the natural water quality for the pollutant of concern exceeds standards as outlined in this document. The following implementation procedures will be used to ensure identification and protection of Tier 2 waters:

High Quality waters are considered to be any water where existing water quality shows that at least five of the parameters listed in the Appendix Tables are significantly better than numeric standards. Oxygen, pH, and temperature must be included in the five parameters.

- a) Full written implementation procedures have not been developed by the Tribe at this time. However, in the interim, the following procedures will guide implementation of the protection of Tier 2 waters:
 - i. Assessment of water quality that is better than standards will be evaluated on a seasonal basis, rather than considering all data for a year.
 - ii. Assessment of better than standards for acute or chronic standards will be based upon a minimum of 3 samples per season.
 - iii. “Significantly better” will be interpreted to mean that the mean of seasonal data for each parameter considered will be at least 10% better than numeric standards.

14.4.3 Tier 3, Outstanding Tribal Resource Waters

Nomination of OTRWs

Surface waters of the Tribes that are of exceptional quality and/or are of exceptional recreational, ecological, or cultural significance may be designated by the Tribes as Outstanding Tribal Resource Waters (OTRW). OTRWs have the same meaning as ONRWs under the Clean Water Act.

Any person or Tribal Office wishing to nominate an OTRW for the Tribes’ consideration shall follow the petition requirements. The Petition form may be requested from the Department.

The Tribal Council, after consideration of the petition and recommendations of the BEO may designate any Tribal water as an OTRW. It is not necessary that water be considered Tier 2 water in order to be considered as an OTRW.

14.5 Antidegradation Review Process

All new and existing surface water discharge permits shall undergo an Antidegradation review of water quality by the Department at the time of permit issuance or renewal.

At the present time it is only when a permit for a new or increased discharge is sought that the provisions for protecting Tier 2 waters come into play. Because the Tribe has very few discharge permits, this is likely to have few applications presently, but in the future there may be more. In addition, if high quality waters are identified that flow from Montana into the Reservation, identification of these waters as Tier 2 waters may affect any discharge permits upstream of the Tribe.

No written Tribal implementation procedures have been developed at this time. These implementation procedures may be developed and implemented by administrative

procedures before being incorporated into the Blackfeet Water Quality Standards document.

15.0 Policy and Procedures for Tribal Implementation of Water Quality Standards

15.1 Introduction

The following policies and procedures outline how the Tribe will implement the water quality standards described in preceding sections. Several of these policies or procedures are still under development by the Tribe and may be added to or modified on or before the next Triennial Review of the Blackfeet Water Quality Standards. There also are some aspects of implementation procedures described within the water quality sections. These apply as implementation procedures and are considered a part of the current Blackfeet Water Quality Standards. As implementation procedure become further developed they will be included in the sections below. Because of this, a number of categories of implementation only have a heading as a place marker for the procedure which will be developed.

15.2 Mixing Zone Policy

15.2.1 Policy

It is Tribal policy to allow the potential for, but not to automatically grant, a mixing zone below or adjacent to discharges which have a valid NPDES permit. A more detailed mixing zone policy and implementation procedures will be developed by the first Triennial Review and is expected to follow EPA region VIII Policy Statement: Mixing Zone and Dilutions Policies and Procedures as well as other accepted EPA guidance documents.

Applicants for a mixing zone must show evidence that:

- a) the smallest mixing area possible is being requested.
- b) all standards, chronic and acute, will be met at the edge of the mixing zone, including temperature, pH, ammonia, and all other parameters included on the Tribal Numeric Criteria Charts.
- c) human health standards for drinking water must be met within 1 mile of any intake for domestic use.

15.2.2 Implementation

All mixing zones must meet the following criteria, or be considered in violation of Tribal standards.

- a) there shall be no acute toxicity within the mixing zone. Acute toxicity shall be determined by any valid sample exceeding acute standards for any parameter. The exceedence of chronic samples shall be judged by a minimum of 3 samples / 30 day period and permit conditions shall specify a minimum of this number of samples. If less than 3 samples are available and these samples indicate a violation of standards, the Tribe, at its discretion, may conclude that standards have been violated.
- b) the mixing zone shall not interfere with upstream or downstream migration of fish; interference will be judged by fish not crossing the mixing zone, fish being attracted to the mixing zone and estimated to remain for periods of 24 hours or more, or any observed negative affects on behavior or health of fish in the mixing zone.

In addition, the following apply:

- c) dischargers with a valid mixing zone in their permit must periodically monitor at the edge of the mixing zone for any parameters that are, in the judgment of the Tribe, likely to exceed standards. Monitoring shall be at the expense of the discharger and in compliance with a sampling plan and protocol approved by the Tribe in the discharge permit. This must include:
 - i. Periodic monitoring for chronic standard exceedences at the edge of the mixing zone, and
 - ii. Monitoring for acute standard exceedences at the “end of the pipe”.
 - iii. Endo-of-pipe sampling to determine compliance may be used in conjunction with sampling of the mixing zone, and must take into account any changes in toxicity of discharged substances within the mixing zone and downstream due to changes in pH, temperature, hardness, or any other factor affecting toxicity in the waterbody.
- d) dischargers without a valid mixing zone allowance in their permit must meet standards at the end of the pipe. The determination must take into account any changes in toxicity of discharged substances within the mixing zone and downstream due to changes in pH, temperature, hardness, or any other factor affecting toxicity in the waterbody.

15.3 Implementation of Designated Uses

Future addition.

15.4 Implementation of Narrative Standards

Implementation of narrative standards will be developed as part of the mixing zone policy. Procedures will address various mechanisms used to implement water quality-based controls (chemical-specific, and biological standards components), as well as how these mechanisms will be integrated to protect designated uses. Implementation is expected to follow EPA guidance documents and 40 CFR 131.11 (a) (2).

Future addition.

15.5 Implementation of Numeric Standards

Implementation procedures are not complete at this time; however the following applies in addition to any implementation procedures discussed under Section 6.0.

Neither chronic nor acute concentration levels for any parameter may be exceeded more than once in any consecutive 3-year period, unless specifically stated otherwise.

15.6 Application of Acute and Chronic Standards **Allowable Frequency of Exceedences Averaging Periods**

See discussion under Section 6.0.

15.7 Calculation of Hardness

Calculation of hardness for purposes of metals toxicity shall be based on the following:

Acute standards – instantaneous hardness value taken at the same time as the metal sample.

Chronic standards – averages of monthly hardness values. If no hardness data is available, the Tribe will make an appropriate default hardness determination on a case-by-case basis.

15.8 Calculation of pH

Future addition.

15.9 Calculation of Flow

Future addition.

15.10 Implementation of Wetlands Standards

Future addition. Also see Section 13.0.

15.11 Implementation of Clean Sediments Criteria

Future addition. Also see Section 9.0

15.12 Implementation of Contaminated Sediments Criteria

Future addition. Also see Section 10.0

15.13 Implementation of Biological Criteria

Future addition. Also see section 7.0.

15.14 Implementation of Nutrients Criteria

Future addition. Also see Section 11.0.

15.15 Variances from Water Quality Standards

Future addition.

15.16 Compliance Schedules

The Tribe will decide whether to allow compliance schedules to dischargers needing additional time to be able to meet discharge limitations. The Tribe will decide whether to allow compliance schedules on a case-by-case basis.

Part III 401 CERTIFICATION

1.0 Introduction

2.0 Purpose

3.0 Definitions

4.0 Authority to Act

5.0 Application

6.0 Public Notice and Public Hearings

APPENDIX A TABLES

- A-1 Numeric Water Quality Standards of Priority Pollutants for Protection of Aquatic Life and Human Health
- A-1a Table of Aquatic Life Hardness Correction Factors for Metals
- A-2 Non-Priority Pollutants - Numeric Standards for Aquatic Life and Human Health
- A-3 Maximum Contaminant Levels Adopted to Protect the Blackfoot Water Supply Designated Use
- A-4 Acute Ammonia Standards for Aquatic Life
- A-5 Chronic Ammonia Standards for Aquatic Life, Early Life Stages of Fish Present
- A-6 Oxygen Standards for Aquatic Life Designated Uses
- A-7 Chronic Ammonia Standards for Aquatic Life, Early Life Stages (ELS) of Fish Absent

APPENDIX A, Table A-1

Numeric Water Quality Standards of Priority Pollutants for Protection of Aquatic Life and Human Health

<i>Uses Protected**</i>	<i>All Aquatic Life Classes</i>	<i>Human Health Consumption</i>			
Priority Pollutant	ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)	Notes AL = Aquatic Life standards HH = Human Health standards
1. Antimony			5.6	640	
2. Arsenic	340	150	0.018	0.14	AL standards based on total As.
3. Beryllium					(c)
4. Cadmium	2.0 (a)	0.25 (a)			AL standards. @ hardness of 100**. (c).
5a. Chromium III	570 (a)	74 (a)			AL standards. @ hardness of 100**. (c)
5b. Chromium VI	16	11			(c)
6. Copper	13 (a)	9.0 (a)	1,300		Standards based on Water effect ratio for AL may be considered if high dissolved organic carbon present in waterbody.
7. Lead	65 (a)	2.5 (a)			AL standards. @ hardness of 100**. (c)
8. Mercury 8a. Methyl Mercury	1.4 O	0.77	0.05	0.051	Chronic AL standard based on total mercury. HH standards may be under-protective due to food chain concentrations. Fish tissue concentrations of 0.3 mg/Kg will be used when implementation procedures available.
9. Nickel	470 (a)	52 (a)	610	4,600	AL standards. @ hardness of 100**
10. Selenium		5	170	4,200	The acute AL standard for selenium = $1/[(f1/186)+(f2/13)]$ where: f1 and f2 are the fractions of total Se as selenite and selenate.
11. Silver	3.2 (a)	0.12			AL standards. @ hardness of 100**. If field values averaged, use half of AL Table standard.

	ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)	Notes AL = Aquatic Life standards HH = Human Health standards
12. Thallium			0.24	0.47	
13. Zinc	120(a)	120 (a)	7,400	26,000	AL standards @ hardness of 100**
14. Cyanide	22	5.2	140	140	As mg free Cyanide/L for aquatic life.
15. Asbestos			7 million fibers/L		
16. 2,3,7,8-TCDD Dioxin			5.0 E -9 *	5.1 E-9 *	
17. Acrolein			190	290	
18. Acrylonitrile			0.051*	0.25 *	
19. Benzene			2.2 *	51*	
20. Bromoform			4.3*	140*	
21. Carbon Tetrachloride			0.23*	1.6*	
22. Chlorobenzene			130	1,600	
23. Chlorodibromomethane			0.40*	13*	
24. Chloroethane					(c)
25. 2-Chloroethylvinyl Ether					(c)
26. Chloroform			5.7*	470*	
27. Dichlorobromomethane			0.55*	17*	
28. 1,1-Dichloroethane					(c)
29. 1,2-Dichloroethane			0.38*	37*	
30. 1,1-Dichloroethylene			330*	7,100*	
31. 1,2-Dichloropropane			0.50*	15*	
32. 1,3-Dichloropropene			0.34	21	
33. Ethylbenzene			530	2,100	
34. Methyl Bromide			47	1,500	
35. Methyl Chloride					(c)
36. Methylene Chloride			4.6*	590*	
37. 1,1,2,2-Tetrachloroethane			0.17*	4*	
38. Tetrachloroethylene			0.69*	3.3*	
39. Toluene			1,300	15,000	
40. 1,2 –Trans-Dichloroethylene			140	10,000	
41. 1,1,1-Trichloroethane					(c)
42. 1,1,2-Trichloroethane			0.59*	16*	

	ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)	Notes AL = Aquatic Life standards HH = Human Health standards
43. Trichloroethylene			2.5*	30*	
44. Vinyl Chloride			0.025*	2.4*	
45. 2-Chlorophenol			81	150	
46. 2,4-Dichlorophenol			77	290	
47. 2,4-Dimethylphenol			380	850	
48. 2-Methyl-4,6-Dinitrophenol			13	280	
49. 2,4-Dinitrophenol			69	5,300	
50. 2-Nitrophenol					(c)
51. 4-Nitrophenol					(c)
52. 3-Methyl-4-Chlorophenol					(c)
53. Pentachlorophenol	19(b)	15(b)	0.27*	3.0*	AL standard @ pH= 7.8. See footnote (b) below.
54. Phenol			21,000	1,700,000	
55. 2,4,6-Trichlorophenol			1.4*	2.4*	
56. Acenaphthene			670	990	
57. Acenaphthylene					(c)
58. Anthracene			8,300	40,000	
59. Benzidine			0.000086*	0.00020*	
60. Benzo(a)Anthracene			0.0038*	0.018*	
61. Benzo(a)Pyrene			0.0038*	0.018*	
62. Benzo(b)Fluoranthene			0.0038*	0.018*	
63. Benzo(g,h,i)Perylene					(c)
64. Benzo(k)Fluoranthene			0.0038*	0.018*	
65. Bis(2-Chloroethoxy)Methane					(c)
66. Bis(2-Chloroethyl)Ether			0.030*	.53*	
67. Bis(2-Chloroisopropyl)Ether			1,400	65,000	
68. Bis(2-Ethylhexyl)Phthalate			1.2*	2.2*	
69. 4-Bromophenyl Phenyl Ether					(c)
70. Butylbenzyl Phthalate			1,500	1,900	
71. 2-Chloronaphthalene			1,000	1,600	
72. 4-Chlorophenyl Phenyl Ether					(c)
73. Chrysene			0.0038*	0.018*	

	ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)	Notes AL = Aquatic Life standards HH = Human Health standards
74. Dibenzoa,hAnthracene			0.0038*	0.018*	
75. 1,2-Dichlorobenzene			420	1,300	
76. 1,3-Dichlorobenzene			320	960	
77. 1,4-Dichlorobenzene			63	190	
78. 3,3-Dichlorobenzidine			0.021*	0.028*	
79. Diethyl Phthalate			17,000	44,000	
80. Dimethyl Phthalate			270,000	1,100,000	
81. Di-n-Butyl Phthalate			2,000	4,500	
82. 2,4-Dinitrotoluene			0.11*	3.4*	
83. 2,6-Dinitrotoluene					(c)
84. Di-n-Octyl Phthalate					(c)
85. 1,2-Diphenylhydrazine			0.036*	0.20*	
86. Fluoranthene			130	140	
87. Fluorene			1,100	5,300	
88. Hexachlorobenzene			0.00028*	0.00029*	
89. Hexachlorobutadiene			0.44*	18*	
90. Hexachlorocyclopentadiene			40	1,100*	
91. Hexachloroethane			1.4*	3.3*	
92. Ideno 1,2,3-cdPyrene			0.0038*	0.018*	
93. Isophorone			35*	960*	
94. Naphthalene					(c)
95. Nitrobenzene			17	690	
96. N-Nitrosodimethylamine			0.00069*	3.0*	
97. N-Nitrosodi-n-Propylamine			0.005*	0.51*	
98. N-Nitrosodiphenylamine			3.3*	6.0*	
99. Phenanthrene			5.6	640	
100. Pyrene			830	4,000	
101. 1,2,4-Trichlorobenzene			35	70	
102. Aldrin	3.0		0.000049*	0.000050*	If field values averaged, use half of AL Table standard.
103. alpha-BHC			0.0026*	0.0049 *	

	ACUTE (CMC) (ug/L)	CHRONIC (CCC) (ug/L)	Water + organism (ug/L)	Organism only (ug/L)	Notes AL = Aquatic Life standards HH = Human Health standards
104. beta-BHC			0.0091*	0.017*	
105. gamma-BHC (Lindane)	0.95		0.98*	1.8*	
106. delta-BHC					(c)
107. Chlordane	2.4	0.0043	0.00080	0.00081	If field values averaged, use half of AL Table standard.
108. 4,4-DDT	1.1	0.001	0.00022*	0.00022*	If field values averaged, use half of AL Table standard.
109. 4,4-DDE			0.00022*	0.00022*	
110. 4,4-DDD			0.00031*	0.00031*	
111. Dieldrin	0.24	0.056 ↓	0.000052*	0.000054*	
112. alpha-Endosulfan	0.22	0.056	62	89	If field values averaged, use half of AL Table standard. Use sum of alpha & beta endosulfan.
113. beta-Endosulfan	0.22	0.056	62	89	If field values averaged, use half of AL Table standard. Use sum of alpha & beta endosulfan.
114. Endosulfan Sulfate			62	89	
115. Endrin	0.086	0.036	0.059	0.060	Acute AL standard does not consider food chain intake; standard may be reduced in permits to protect upper trophic level organisms.
116. Endrin Aldehyde			0.29	0.30	
117. Heptachlor	0.52	0.0038	0.000079*	0.000079*	If field values averaged, use half of AL Table standard.
118. Heptachlor Epoxide	0.52	0.0038	0.000039*	0.000039*	If field values averaged, use half of AL Table standard.
119. Polychlorinated Biphenyls PCBs		0.014	0.000064*	0.000064*	Includes all arochlors. HH standard is for total PCBs.
120. Toxaphene	0.73	0.0002	0.00028*	0.00028*	

Footnotes for Priority Pollutants Numeric Standards

* This pollutant is a carcinogen. All carcinogen human health standards are based on a 10⁻⁶ risk level.

(a). Standards are a function of total hardness of waterbody. Assessment of waterbodies meeting acute standards are based on waterbody hardness at the time of sampling. Assessment of chronic standards are based on the average hardness for any 30 day period. Table below shows hardness correction factors. Listed standards in criteria chart are at a hardness of 100** mg/L.

** Use the lower boundary limit of 25 mg/l and the upper limit of 400 mg/l for calculations of aquatic life hardness - adjusted standards for metals based on total recoverable analyses.

(b). Aquatic Life standards for pentachlorophenol are a function of pH, calculated as follows: Acute standard =exp [1.005 (pH) - 4.869] WQS; Chronic standard =exp [1.005 (pH) - 5.134]. Values displayed in table correspond to a pH of 7.8.

(c). No EPA Human Health criteria. Permit actions should use Tribal narrative criteria for toxics.

Table A-1a Aquatic Life Hardness Correction Factors for Metals

	Acute = exp {ma [ln (hardness)] + ba}		Chronic = exp {mc [ln (hardness)] + bc}	
	ma	ba	mc	bc
Cadmium	1.0166	-3.924	0.7409	-4.719
Copper	0.9422	-1.700	0.8545	-1.702
Chromium (III)	0.8190	3.7256	0.8190	0.6848
Lead	1.273	-1.460	1.273	-4.705
Nickel	0.8460	2.255	0.8460	0.0584
Silver	1.72	-6.59	-----	-----
Zinc	0.8473	0.884	0.8473	0.884

APPENDIX A, Table A-2
**Non-Priority Pollutants - Numeric Standards for Aquatic
Life and Human Health**

Pollutant	<u>Aquatic Life</u>		<u>Human consumption</u>		Notes
	ACUTE Standards (ug/L)	CHRONIC Standards (ug/L)	Water + organism (ug/L)	Organism only (ug/L)	
1. Alkalinity		20,000			
2. Aluminum pH 6.5-9.0	750*	87*			Measured as total recoverable metal.
3. Ammonia					See Ammonia Tables.
4. Aesthetic Qualities					See Narrative Standards.
5. Bacteria					See Recreation Use classification.
6. Barium			1,000		
7. Boron					See Narrative Standards.
8. Chloride	860,000	230,000			
9. Chlorine	19	11			
10. Chlorophenoxy Herbicide 2,4,5,-TP			10		
11. Chlorophenoxy Herbicide 2,4-D			100		
12. Chlorpyrifos	0.083	0.041			
13. Color					See Narrative Standards.
14. Demeton		0.1			
15. Ether, Bis (Chloromethyl)			0.00010	0.00029	
16. Gases, Total Dissolved					See Narrative Standards.
17. Guthion		0.01			
18. Hardness					See Narrative Standards.
19. Hexachlorocyclo-hexane-Technical			0.0123	0.0414	
20. Iron		1,000	300		
21. Malathion		0.1			
Pollutant	ACUTE Standards	CHRONIC Standards	Water + organism	Organism only (ug/L)	Notes

	(ug/L)	(ug/L)	(ug/L)		
22. Manganese			50	100	
23. Methoxychlor		0.03	100		
24. Mirex		0.001			
25. Nitrates			10,000		
26. Nitrosamines			0.0008	1.24	
27. Dinitrophenols			69	5,300	
28. Nitrosodibutylamine			0.0064	0.587	
29. Nitrosodiethylamine			0.0008	1.24	
30. Nitrosopyrrolidine			0.016	91.9	@ cancer risk 10 ⁻⁶
31. Oil and Grease					See Narrative Standards.
32. Oxygen, Dissolved					See Oxygen Table.
33. Parathion	0.065	0.013			
34. Pentachlorobenzene			1.4	1.5	
35. pH	6.5-9.0	6.5-9.0	5.0-9.0		
36. Phosphorus Total					See Section 10.0
37. Nutrients (P and N species)					See Section 10.0
38. Solids Dissolved (TDS) and Salinity			250,000		See Narrative Standards.
39. Solid Suspended (TSS) &/or Turbidity					Not to exceed 120% of natural, except by permit.
40. Sulfide-Hydrogen Sulfide		2			
41. Tainting Substances					See Narrative Standards.
42. Temperature					See Narrative standards & Aquatic Life Classes.
43. Tetrachlorobenzene, 1,2,4,5-			0.97	1.1	
44. Tributyltin TBT	0.46	0.072			
45. Trichlorophenol, 2,4,5-			1,800	3,600	
46. Clean Sediment					See Section 8.0
47. Contaminated Sediment					See Section 9.0

* The tribe may consider whether Water-Effect Ratios are appropriate at pH values greater than 7.0 and moderate-to-high hardness. EPA supporting data indicates that aluminum is substantially less toxic at higher pH and hardness, but these effects are not well quantified at this time.

Appendix A, Table A-3
Maximum Contaminant Levels (MCLs)
Adopted to Protect The Blackfoot Water Supply Designated Use
(And Potential Health Effects of Exceeding the MCLs)

Chemical Name	MCL (1)	Potential Health Effects targets from Ingestion of Water (2)
Priority Pollutants (µg/l)		
Chlorobenzene	100	Liver, kidneys
1,2,4-Trichlorobenzene	70	Adrenal glands
1,1,1-Trichloroethane	200	Liver, nervous system, circulatory system
1,2-Dichlorobenzene	600	Liver, kidneys, circulatory system
1,4-Dichlorobenzene	75	Anemia, liver, kidneys, spleen, blood
1,2-trans-Dichloroethylene	100	Liver
Ethylbenzene	700	Liver, kidneys
Hexachlorocyclopentadiene	50	Kidneys, stomach
Toluene	1000	Nervous system, kidneys, liver
Antimony	6	Blood cholesterol, blood sugar
Beryllium	4	Intestinal lesions
Cadmium	5	Kidneys
Chromium (total)	100	
Cyanide	200	Thyroid
Lead (3)	TT	Physical/mental development (children), kidney, high blood pressure (adults)
Nickel	100	Heart, liver (4)
Selenium	50	hair, fingernail, numbness, circulatory system
Non-Priority Pollutants (µg/l)		
Alachlor	2	Eye, liver, kidneys, spleen, anemia, cancer
Atrazine	3	Cardiovascular system, reproductive system
Carbofuran	40	Blood, nervous system, reproductive system
2,4-D	70	Kidneys, liver, adrenal glands
Dalapon	200	Kidneys
Di(2-ethylhexyl)adipate	400	Reproductive system
Dibromochloropropane	0.2	Reproductive system, cancer
Dichloroethylene (cis-1,2-)	70	Liver
Dinoseb	7	Reproductive system
Diquat	20	Cataracts
Endothall	100	Stomach, intestines
Ethylene dibromide (EDB)	0.05	Liver, stomach, reproductive system, kidneys, cancer
Glyphosate	700	Kidneys, reproductive system
Methoxychlor	40	Reproductive system
Oxamyl (Vydate)	200	Nervous system
Picloram	500	Liver
Simazine	4	Blood
Styrene	100	Liver, kidneys, circulatory system
Xylenes	10,000	Nervous system
Fluoride	4,000	Bone, teeth
Nitrite	1,000	Methemoglobinemia
Radiological contaminants (in pCi/l, except where noted)		
Alpha emitters	15	Cancer
Beta/photon emitters	4 mrem/y	Cancer
Combined Radium 226 & 228	5	Cancer

Appendix A, Table A-3 (continued)

- (1) Current published Clean Water Act § 304(a) human health criteria based on Maximum Contaminant Levels (MCLs) of the Safe Drinking Water Act. Carcinogen criteria are based on a 10^{-6} incremental risk assuming a daily consumption of 2 liters of water.
- (2) Potential health effects are based on consumption of water containing pollutant concentrations that exceed the MCL, in most cases, over many years.
- (3) For lead, the MCL requires a Treatment Technology (TT); however, the action level is 0.015 mg/L.

Appendix A, Table A-4

Acute Ammonia Standards for Aquatic Life
(pH-dependent)*
mg N/L, Total

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

* The toxicity of ammonia (measured as total mg of N per liter) is a function of the **pH and Temperature** of the water. For chronic toxicity, both pH and temperature affect the standards. For acute toxicity, only pH affects the standard. Toxicity (and the standard) also varies by whether Salmonid species (trout, salmon) are present or absent and by whether the early life stages of fish are present or absent. All of the ammonia tables take these variables into account in setting the maximum environmental values of NH₃ allowable for chronic and acute exposures to aquatic life.

APPENDIX A, Table A-5

NH3 Chronic Standards for Waters with Early Life Stages of Fish Present

Temperature, C

	0	14	16	18	20	22	24	26	28	30
pH										
6.5	6.67	6.67	6.06	5.33	4.68	4.12	3.62	3.18	2.80	2.46
6.6	6.57	6.57	5.97	5.25	4.61	4.05	3.56	3.13	2.75	2.42
6.7	6.44	6.44	5.86	5.15	4.52	3.98	3.50	3.07	2.70	2.37
6.8	6.29	6.29	5.72	5.03	4.42	3.89	3.42	3.00	2.64	2.32
6.9	6.12	6.12	5.56	4.89	4.30	3.78	3.32	2.92	2.57	2.25
7.0	5.91	5.91	5.37	4.72	4.15	3.65	3.21	2.82	2.48	2.16
7.1	5.67	5.67	5.15	4.53	3.98	3.50	3.08	2.70	2.38	2.09
7.2	5.39	5.39	4.90	4.31	3.78	3.33	2.92	2.57	2.26	1.99
7.3	5.08	5.08	4.61	4.06	3.57	3.13	2.76	2.42	2.13	1.87
7.4	4.73	4.73	4.30	3.78	3.32	2.92	2.57	2.26	1.98	1.74
7.5	4.36	4.36	3.97	3.49	3.06	2.69	2.37	2.08	1.83	1.61
7.6	3.98	3.98	3.61	3.18	2.79	2.45	2.16	1.90	1.67	1.47
7.7	3.58	3.58	3.25	2.86	2.51	2.21	1.94	1.71	1.50	1.32
7.8	3.18	3.18	2.89	2.54	2.23	1.96	1.73	1.52	1.33	1.17
7.9	2.80	2.80	2.54	2.24	1.96	1.73	1.52	1.33	1.17	1.03
8.0	2.43	2.43	2.21	1.94	1.71	1.50	1.32	1.16	1.02	0.897
8.1	2.10	2.10	1.91	1.68	1.47	1.29	1.14	1.00	0.879	0.773
8.2	1.79	1.79	1.63	1.43	1.26	1.11	0.973	0.855	0.752	0.661
8.3	1.52	1.52	1.39	1.22	1.07	0.941	0.827	0.727	0.639	0.562
8.4	1.29	1.29	1.17	1.03	0.906	0.796	0.700	0.615	0.541	0.475
8.5	1.09	1.09	0.990	0.870	0.765	0.672	0.591	0.520	0.457	0.401
8.6	0.920	0.920	0.836	0.735	0.646	0.568	0.499	0.439	0.386	0.339
8.7	0.778	0.778	0.707	0.622	0.547	0.480	0.422	0.371	0.326	0.287
8.8	0.661	0.661	0.601	0.528	0.464	0.408	0.359	0.315	0.277	0.244
8.9	0.565	0.565	0.513	0.451	0.397	0.349	0.306	0.269	0.237	0.208
9.0	0.486	0.486	0.442	0.389	0.342	0.300	0.264	0.232	0.204	0.179

* All standards are expressed as total ammonia as mg N/L

Appendix A, Table A-6

Oxygen Standards for Aquatic Life Designated Uses**

The following oxygen standards shall apply to Tribal waters. These standards are to protect life stages of fish species at some or all life stages and other forms of aquatic life that are associated with the water classification. At present, there are no numeric oxygen standards specific to sensitive species classifications; however, these may be added in the future.

Averaging period for standard	Salmonid All Life Stages	Salmonid All Life & Partial Life Stages	Salmonid Sensitive Species	Non-Salmonid All Life Stages	Non-Salmonid Partial Life Stages	Non- Salmonid Sensitive Species	Non-Fish Aquatic Life
Most sensitive life stage protected	Early Life Stages (ELS) (1,2)	Other Life Stages (OLS) (3)	All Life Stages (ELS + OLS) (1,2)	All Life Stages (ELS + OLS) (1,2)	Other Life Stages (OLS) (3)	All Life Stages (ELS + OLS) (1,2)	All Stages
30 Day Mean	N/A*	6.5	95% saturation (5)	N/A	5.5	95% saturation (5)	N/A*
7 Day Mean	9.5 (6.5)	N/A	95% saturation (5)	6.0	N/A	95% saturation (5)	No less than 80% of saturation, based on natural water temperatures
7 Day Mean Minimum	N/A	5	95% saturation (5)	N/A	4.0	95% saturation (5)	
1 Day Minimum (4)	8.0 (5.0)	4	95% saturation (5)	5.0	3.0	95% saturation (5)	No less than 60% of saturation, based on natural water temperatures

* N/A (Not Applicable)

- (1). These are water column concentrations to achieve the required inter-gravel dissolved oxygen concentrations shown in parentheses. For species that have early life stages exposed directly to the water column, the figures in parentheses apply.
- (2.) "Early Life Stages" includes all embryonic and larval stages and all juvenile forms to 30-days following hatching. The spawning-to-hatching period is operationally defined as including when the first known spawning occurs (or is likely to occur) until 95% of each fish species' eggs

deposited in a waterbody segment have hatched. The 95% hatching rate shall be estimated by studies or set as the result of studies and experience.

- (3.) "Other life stages" include all stages following "early life stages".
- (4). All minima should be considered as instantaneous concentrations to be achieved at all times.
- (5). When specific information necessary to set dissolved oxygen standards different from the general categories of Salmonid and Non-Salmonid are lacking, the following guide shall be used:

Oxygen values shall be no less than 95% of natural water temperature saturation for all averaging periods and life stages. Where the US Fish and Wildlife Service (USFWS) has recommended values for Endangered or Threatened Species, the Tribe will use these values as minimum protection and, at Tribal discretion, may also impose more protective standards without USFWS recommendation when scientific evidence indicates these are necessary to fully protect sensitive species.

- ** These standards generally apply to all waters of the Tribe. However, oxygen standards for lakes and reservoirs may recognize differences in natural or attainable levels in the hypolimnion as opposed to the epilimnion. Standards for these different lake strata may be set as site specific standards as information becomes known of appropriate values that protect the designated uses and are natural or attainable.

Appendix, Table A-7

Chronic Ammonia Standards for Aquatic Life, Early Life Stages (ELS) of Fish Absent

(Standards as mg N/L, Total)

Temperature C

	0-7	8	9	10	11	12	13	14	15*
pH									
6.5	10.8	10.1	9.51	8.92	8.36	7.84	7.35	6.89	6.46
6.6	10.7	9.99	9.37	8.79	8.24	7.72	7.24	6.79	6.36
6.7	10.5	9.81	9.20	8.62	8.08	7.58	7.11	6.66	6.25
6.8	10.2	9.58	8.98	8.42	7.90	7.40	6.94	6.51	6.10
6.9	9.93	9.31	8.73	8.19	7.68	7.20	6.75	6.33	5.93
7.0	9.60	9.00	8.43	7.91	7.41	6.95	6.52	6.11	5.73
7.1	9.20	8.63	8.09	7.58	7.11	6.67	6.25	5.86	5.49
7.2	8.75	8.29	7.69	7.21	6.76	6.34	5.94	5.57	5.22
7.3	8.24	7.73	7.25	6.79	6.37	5.97	5.60	5.25	4.92
7.4	7.69	7.21	6.76	6.33	5.94	5.57	5.22	4.89	4.59
7.5	7.09	6.64	6.23	5.84	5.48	5.13	4.81	4.51	4.23
7.6	6.46	6.05	5.67	5.32	4.99	4.68	4.38	4.11	3.85
7.7	5.81	5.45	5.11	4.79	4.49	4.21	3.95	3.70	3.47
7.8	5.17	4.84	4.54	4.26	3.99	3.74	3.51	3.29	3.09
7.9	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89	2.71
8.0	3.95	3.70	3.47	3.26	3.05	2.88	2.68	2.52	2.36
8.1	3.41	3.19	2.99	2.81	2.63	2.47	2.31	2.17	2.03
8.2	2.91	2.73	2.56	2.40	2.25	2.11	1.98	1.85	1.74
8.3	2.47	2.32	2.18	2.04	1.91	1.79	1.68	1.58	1.48
8.4	2.09	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25
8.5	1.77	1.66	1.55	1.46	1.37	1.28	1.20	1.13	1.06
8.6	1.49	1.40	1.31	1.23	1.15	1.08	1.01	0.951	0.892
8.7	1.26	1.18	1.11	1.04	0.976	0.915	0.858	0.805	0.754
8.8	1.07	1.01	0.944	0.885	0.829	0.778	0.729	0.684	0.641
8.9	0.917	0.860	0.806	0.756	0.709	0.664	0.623	0.584	0.548
9.0	0.790	0.740	0.694	0.651	0.610	0.572	0.536	0.503	0.471

* At 15°C and above, the criterion for fish ELS absent is the same as the criterion for fish, ELS present.

APPENDIX B TABLES

Designated Use Tables 4.3-1 to 4.3-5

4.3-1 Two Medicine Drainage

4.3-2 St. Mary Drainage

4.3-3 Birch Creek Drainage

4.3-4 Cut Bank Drainage

4.3-5 Milk River Drainage

<p>Table 4.3-1,</p> <p><u>TWO MEDICINE DRAINAGE</u></p> <p><u>Two Medicine / Birch Creek Confluence to Marias River</u></p> <p><u>Two Medicine / Birch Creek Confluence to Badger Creek</u></p> <p><u>Two Medicine/Badger Creek Confluence to Two Medicine Diversion</u></p> <p><u>Two Medicine Diversion to South Fork Two Medicine</u></p> <p><u>South Fork Two Medicine River</u></p> <p><u>Two Medicine River to Two Medicine Dam</u></p> <p><u>Deep Creek</u></p> <p><u>Badger Creek</u></p> <p><u>Little Badger Creek</u></p> <p><u>White Tail Creek</u></p> <p><u>Midvale Creek</u></p> <p><u>Railroad Creek</u></p> <p><u>Two Medicine Tributaries above Two Medicine Diversion</u></p> <p><u>Badger Creek Tributaries</u></p> <p><u>Evans Creek</u></p> <p><u>Lower Two Medicine Lake</u></p> <p><u>Dog Gun Lake</u></p> <p><u>Cooper Lake</u></p> <p><u>Magee Lake</u></p> <p><u>Mittens Lake</u></p> <p><u>Twin Lakes</u></p>																					
Drinking water Class 1																					
Drinking water Class 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Aquatic life Salmonid All life stages				X	X	X	X	X	X	X	X	X	X	X		X	X				
Aquatic life Salmonid Partial life stages																		X	X	X	X
Aquatic life Salmonid Sensitive species											X*										
Aquatic life Non- Salmonid Full life stages	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Aquatic life Non- Salmonid Partial life stages																					
Aquatic life Non- Salmonid Sensitive species																					
Recreation Class 1 Full body contact	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Recreation Class 2 Incidental contact																					
Wildlife growth and Propagation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Agriculture	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Navigation and Industrial Uses	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cultural	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

*Midvale Creek The sensitive species is West Slope Cutthroat Trout

Table 4.3-2

**SAINT MARY
DRAINAGE**

	<u>St. Mary River</u>	<u>Otatso Creek</u>	<u>Swiftcurrent Creek</u>	<u>Kennedy Creek</u>	<u>Boulder Creek</u>	<u>Divide Creek</u>	<u>Lee Creek</u>	<u>Wild Creek</u>	<u>Roberts Creek</u>	<u>Willow Creek</u>	<u>Small Tributaries</u>	<u>Lower St. Mary</u>	<u>Duck Lake</u>	<u>Spider Lake</u>	<u>Pike Lake</u>	<u>Flat Top Lake</u>	<u>Sherburne Lake</u>
Drinking water Class 1																	
Drinking water Class 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Aquatic life Salmonid All life stages	X	X	X	X	X	X	X	X				X				X	X
Aquatic life Salmonid Partial life stages										X	X		X	X			
Aquatic life Salmonid Sensitive species	X*	X*	X*	X*	X*	X*	X*	X**	X			X*		X*			
Aquatic life Non- Salmonid Full life stages	X	X	X	X	X	X	X			X		X	X	X	X	X	X
Aquatic life Non- Salmonid Partial life stages																	
Aquatic life Non- Salmonid Sensitive species																	
Recreation Class 1 Full body contact	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Recreation Class 2 Incidental contact																	
Wildlife growth and Propagation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Agriculture	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Navigation and Industrial Uses	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cultural	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* Sensitive Species

** Sensitive Species

Bull Trout

West Slope Cutthroat Trout and Bull Trout occur in this stream

Table 4.3-3, <u>BIRCH CREEK DRAINAGE</u>	<u>Mouth Birch Creek/Two Medicine to Blacktail Creek</u>	<u>Birch Creek- Black Tail to Birch Creek Canal</u>	<u>Birch Creek-Canal to Swift Dam</u>	<u>North Fork Birch Creek Above Swift Dam to Border</u>	<u>Haywood/Eagle Creek</u>	<u>Blacktail Creek</u>	<u>Other Tributaries</u>	<u>Four Horn Lake</u>	<u>Swift Reservoir</u>	<u>Alkali Lake***</u>
Drinking Water Class 1										
Drinking Water Class 2	X	X	X	X	X	X	X	X	X	X
Aquatic life Salmonid All life stages		X	X	X	X	X	X		X	
Aquatic life Salmonid Partial life stages								X		
Aquatic life Salmonid Sensitive species									X*	
Aquatic life Non-Salmonid Full life stages	X	X	X	X	X	X	X	X	X	
Aquatic life Non-Salmonid Partial life stages										X
Aquatic life Non-Salmonid Sensitive species										
Recreation Class 1 Full body contact	X	X	X	X	X	X	X	X	X	X
Recreation Class 2 Incidental contact										
Wildlife growth and propagation	X	X	X	X	X	X	X	X	X	X**
Agriculture	X	X	X	X	X	X	X	X	X	X
Navigation and Industrial Uses	X	X	X	X	X	X	X	X	X	X
Cultural	X	X	X	X	X	X	X	X	X	X

* Sensitive Species

** Sensitive Species

*** Alkali Lake

The sensitive species is West Slope Cutthroat Trout

Piping Plover

May be hypersaline, more information needed.

Table 4.3-4,

CUT BANK DRAINAGE

	<u>Cut Bank Creek/Marias River to Old Maid Coulee</u>	<u>Old Maid Coulee to Boarding School</u>	<u>Boarding School to Confluence of N. & S. Forks of Cut Bank Creek</u>	<u>N. & S. Cut Bank Creek to Glacier Park</u>	<u>Tributaries above Starr School</u>	<u>Flatiron Head Waters to Flatiron Diversion</u>	<u>Greasewood Head Waters to N. & S. Forks of Greasewood</u>	<u>Willow Creek Mouth to Confluence with Depot Creek</u>	<u>Willow Creek Head Waters to Depot Creek Confluence</u>	<u>Depot Creek</u>	<u>Tributaries of Cut Bank Creek above Grease Wood Confluence</u>	<u>Mission Lake</u>	<u>Buffalo Lake*</u>	<u>Sharp Lake*</u>	<u>Kipp Lake</u>	<u>Hidden Lake</u>	<u>Guardipee Lake*</u>	<u>Hope Lake</u>	<u>No Chief/Whisky John Lake</u>
Drinking Water Class 1																			
Drinking Water Class 2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Aquatic life Salmonid All life stages	X	X	X	X	X	X			X										
Aquatic life Salmonid Partial life stages												X			X	X		X	X
Aquatic life Salmonid Sensitive species																			
Aquatic life Non-Salmonid Full life Stages	X	X	X	X	X	X	X	X	X	X	X	X			X	X		X	X
Aquatic life Non-Salmonid Partial life stages													X				X		
Aquatic life Non-Salmonid Sensitive species																			
Recreational Class 1 Full body contact	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Recreational Class 2 Incidental contact																			
Wildlife growth and propagation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Agriculture	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Navigation and industrial uses	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cultural	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* Guardipee Lake

Hypersaline. Sharp Lake and Buffalo Lake may be hypersaline, more information needed.

**Table 4.3-5,
MILK RIVER
DRAINAGE**

	<u>Milk River International Border to Confluence with Middle Fork</u>	<u>Middle Fork Milk River</u>	<u>North Fork Milk River</u>	<u>Dry Fork Milk River</u>	<u>Livermore Creek</u>	<u>South Fork of Milk River to Livermore Confluence</u>	<u>Toad Creek</u>	<u>Fox Creek</u>	<u>Arnoux Creek</u>	<u>S. Fork Above Confluence with Arnoux Creek</u>	<u>Sand Rock Coulee</u>	<u>Other Ponds</u>	<u>Goose Lake</u>	<u>Horse Lake</u>	<u>Croff Lake*</u>	<u>Spider Lake</u>
Class I Drinking Water																
Class II Drinking Water	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Aquatic life Salmonid All life stages		X	X		X	X	X	X	X	X						
Aquatic life Salmonid Partial life stages													X			X
Aquatic life Salmonid Sensitive species																X**
Aquatic life Non-Salmonid Full life stages	X	X	X		X	X								X	X	X
Aquatic life Non-Salmonid Partial life stages				X								X				
Aquatic life Non-Salmonid Sensitive species																
Recreation Class I Full body contact	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Recreation Class II Incidental contact																
Wildlife growth and propagation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Agriculture	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Navigation and Industrial Uses	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X
Cultural	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* Croff Lake

** Sensitive Species

Hypersaline

Bull Trout

