Utah Administrative Code

The Utah Administrative Code is the body of all effective administrative rules as compiled and organized by the Division of Administrative Rules (see Subsection 63G-3-102(5); see also Sections 63G-3-701 and 702).

NOTE: For a list of rules that have been made effective since August 1, 2019, please see the codification segue page.

NOTE TO RULEFILING AGENCIES: Use the RTF version for submitting rule changes.

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R317. Environmental Quality, Water Quality.

Rule R317-2. Standards of Quality

for Waters of the State.

As in effect on August 1, 2019

Table of Contents

R317-2-1A. Statement of Intent.

Whereas the pollution of the waters of this state constitute a menace to public health and welfare, creates public nuisances, is harmful to wildlife, fish and aquatic life, and impairs domestic, agricultural, industrial, recreational and other legitimate beneficial uses of water, and whereas such pollution is contrary to the best interests of the state and its policy for the conservation of the water resources of the state, it is hereby declared to be the public policy of this state to conserve the waters of the state and to protect, maintain and improve the quality thereof for public water supplies, for the propagation of wildlife, fish and aquatic life, and for domestic, agricultural, industrial, recreational and other legitimate beneficial uses; to provide that no waste be discharged into any waters of the state without first being given the degree of treatment necessary to protect the legitimate beneficial uses of such waters; to provide for the prevention, abatement and control of new or existing water pollution; to place first in priority those control measures directed toward elimination of pollution which creates hazards to the public health; to insure due consideration of financial problems imposed on water polluters through pursuit of these objectives; and to cooperate with other agencies of the state, agencies of other states and the federal government in carrying out these objectives.

R317-2-1B. Authority.

These standards are promulgated pursuant to Sections 19-5-104 and 19-5-110.

R317-2-1C. Triennial Review.

The water quality standards shall be reviewed and updated, if necessary, at least once every three years. The Director will seek input through a cooperative process from stakeholders representing state and federal agencies, various interest groups, and the public to develop a preliminary draft of changes. Proposed changes will be presented to the Water Quality Board for information. Informal public meetings may be held to present preliminary proposed changes to the public for comments and suggestions. Final proposed changes will be presented to the Water Quality Board for approval and authorization to initiate formal

rulemaking. Public hearings will be held to solicit formal comments from the public. The Director will incorporate appropriate changes and return to the Water Quality Board to petition for formal adoption of the proposed changes following the requirements of the Utah Rulemaking Act, Title 63G, Chapter 3.

R317-2-2. Scope.

These standards shall apply to all waters of the state and shall be assigned to specific waters through the classification procedures prescribed by Sections 19-5-104(5) and 19-5-110 and R317-2-6.

R317-2-3. Antidegradation Policy.

3.1 Maintenance of Water Quality

Waters whose existing quality is better than the established standards for the designated uses will be maintained at high quality unless it is determined by the Director, after appropriate intergovernmental coordination and public participation in concert with the Utah continuing planning process, allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. However, existing instream water uses shall be maintained and protected. No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses.

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

3.2 Category 1 Waters

Waters which have been determined by the Board to be of exceptional recreational or ecological significance or have been determined to be a State or National resource requiring protection, shall be maintained at existing high quality through designation, by the Board after public hearing, as Category 1 Waters. New point source discharges of wastewater, treated or otherwise, are prohibited in such segments after the effective date of designation. Protection of such segments from pathogens in diffuse, underground sources is covered in R317-5 and R317-7 and the rules for Individual Wastewater Disposal Systems (R317-501 through R317-515). Other diffuse sources (nonpoint sources) of wastes shall be controlled to the extent feasible through implementation of best management practices or regulatory programs.

Discharges may be allowed where pollution will be temporary and limited after consideration of the factors in R317-2-3.5.b.4., and where best management practices will be employed to minimize pollution effects.

Waters of the state designated as Category 1 Waters are listed in R317-2-12.1.

3.3 Category 2 Waters

Category 2 Waters are designated surface water segments which are treated as Category 1 Waters except that a point source discharge may be permitted provided that the discharge does not degrade existing water quality. Discharges may be allowed where pollution will be temporary and limited after consideration of the factors in R317-2-.3.5.b.4., and where best management practices will be employed to minimize pollution effects. Waters of the state designated as Category 2 Waters are listed in R317-2-12.2.

3.4 Category 3 Waters

For all other waters of the state, point source discharges are allowed and degradation may occur, pursuant to the conditions and review procedures outlined in Section 3.5.

3.5 Antidegradation Review (ADR)

An antidegradation review will determine whether the proposed activity complies with the applicable antidegradation requirements for receiving waters that may be affected.

An antidegradation review (ADR) may consist of two parts or levels. A Level I review is conducted to insure that existing uses will be maintained and protected.

Both Level I and Level II reviews will be conducted on a parameter-by-parameter basis. A decision to move to a Level II review for one parameter does not require a Level II review for other parameters. Discussion of parameters of concern is those expected to be affected by the proposed activity.

Antidegradation reviews shall include opportunities for public participation, as described in Section 3.5e.

a. Activities Subject to Antidegradation Review (ADR)

1. For all State waters, antidegradation reviews will be conducted for proposed federally regulated activities, such as those under Clean Water Act Sections 401 (FERC and other Federal actions), 402 (UPDES permits), and 404 (Army Corps of Engineers permits). The Director may conduct an ADR on any projects with the potential for major impact on the quality of waters of the state. The review will determine whether the proposed activity complies with the applicable antidegradation requirements for the particular receiving waters that may be affected.

2. For Category 1 Waters and Category 2 Waters, reviews shall be consistent with the requirement established in Sections 3.2 and 3.3, respectively.

3. For Category 3 Waters, reviews shall be consistent with the requirements established in this section

b. An Anti-degradation Level II review is not required where any of the following conditions apply:

1. Water quality will not be lowered by the proposed activity or for existing permitted facilities, water quality will not be further lowered by the proposed activity, examples include situations where:

(a) the proposed concentration-based effluent limit is less than or equal to the ambient concentration in the receiving water during critical conditions; or

(b) a UPDES permit is being renewed and the proposed effluent concentration and loading limits are equal to or less than the concentration and loading limits in the previous permit; or

(c) a UPDES permit is being renewed and new effluent limits are to be added to the permit, but the new effluent limits are based on maintaining or improving upon effluent concentrations and loads that have been observed, including variability; or

2. Assimilative capacity (based upon concentration) is not available or has previously been allocated, as indicated by water quality monitoring or modeling information. This includes situations where:

(a) the water body is included on the current 303(d) list for the parameter of concern; or

(b) existing water quality for the parameter of concern does not satisfy applicable numeric or narrative water quality criteria; or

(c) discharge limits are established in an approved TMDL that is consistent with the current water quality standards for the receiving water (i.e., where TMDLs are established, and changes in effluent limits that are consistent with the existing load allocation would not trigger an antidegradation review).

Under conditions (a) or (b) the effluent limit in an UPDES permit may be equal to the water quality numeric criterion for the parameter of concern.

3. Water quality impacts will be temporary and related only to sediment or turbidity and fish spawning will not be impaired,

4. The water quality effects of the proposed activity are expected to be temporary and limited. As general guidance, CWA Section 402 general discharge permits, CWA Section 404 general permits, or activities of short duration, will be deemed to have a temporary and limited effect on water quality where there is a reasonable factual basis to support such a conclusion. Factors to be considered in determining whether water quality effects will be temporary and limited may include the following:

(a) Length of time during which water quality will be lowered.

(b) Percent change in ambient concentrations of pollutants of concern

(c) Pollutants affected

(d) Likelihood for long-term water quality benefits to the segment (e.g., dredging of contaminated sediments)

(e) Potential for any residual long-term influences on existing uses.

(f) Impairment of the fish spawning, survival and development of aquatic fauna excluding fish removal efforts.

c. Anti-degradation Review Process

For all activities requiring a Level II review, the Division will notify affected agencies and the public with regards to the requested proposed activity and discussions with stakeholders may be held. In the case of Section 402 discharge permits, if it is determined that a discharge will be allowed, the Director will develop any needed UPDES permits for public notice following the normal permit issuance process.

The ADR will cover the following requirements or determinations:

1. Will all Statutory and regulatory requirements be met?

The Director will review to determine that there will be achieved all statutory and regulatory requirements for all new and existing point sources and all required cost-effective and reasonable best management practices for nonpoint source control in the area of the discharge. If point sources exist in the area that have not achieved all statutory and regulatory requirements, the Director will consider whether schedules of compliance or other plans have been established when evaluating whether compliance has been assured. Generally, the "area of the discharge" will be determined based on the parameters of concern associated with the proposed activity and the portion of the receiving water that would be affected.

2. Are there any reasonable less-degrading alternatives?

There will be an evaluation of whether there are any reasonable non-degrading or less degrading alternatives for the proposed activity. This question will be addressed by the Division based on information provided by the project proponent. Control alternatives for a proposed activity will be evaluated in an effort to avoid or minimize degradation of the receiving water. Alternatives to be considered, evaluated, and implemented to the extent feasible, could include pollutant trading, water conservation, water recycling and reuse, land application, total containment, etc.

For proposed UPDES permitted discharges, the following list of alternatives should be considered, evaluated and implemented to the extent feasible:

(a) innovative or alternative treatment options

(b) more effective treatment options or higher treatment levels

(c) connection to other wastewater treatment facilities

(d) process changes or product or raw material substitution

(e) seasonal or controlled discharge options to minimize discharging during critical water quality periods

(f) pollutant trading

(g) water conservation

(h) water recycle and reuse

(i) alternative discharge locations or alternative receiving waters

(j) land application

(k) total containment

(l) improved operation and maintenance of existing treatment systems

(m) other appropriate alternatives

An option more costly than the cheapest alternative may have to be implemented if a substantial benefit to the stream can be realized. Alternatives would generally be considered feasible where costs are no more than 20% higher than the cost of the discharging alternative, and (for POTWs) where the projected per connection service fees are not greater than 1.4% of MAGHI (median adjusted gross household income), the current affordability criterion now being used by the Water Quality Board in the wastewater revolving loan program. Alternatives within these cost ranges should be carefully considered by the discharger. Where State financing is appropriate, a financial assistance package may be influenced by this evaluation, i.e., a less polluting alternative may receive a more favorable funding arrangement in order to make it a more financially attractive alternative.

It must also be recognized in relationship to evaluating options that would avoid or reduce discharges to the stream, that in some situations it may be more beneficial to leave the water in the stream for instream flow purposes than to remove the discharge to the stream.

3. Does the proposed activity have economic and social importance?

Although it is recognized that any activity resulting in a discharge to surface waters will have positive and negative aspects, information must be submitted by the applicant that any discharge or increased discharge will be of economic or social importance in the area.

The factors addressed in such a demonstration may include, but are not limited to, the following:

(a) employment (i.e., increasing, maintaining, or avoiding a reduction in employment);

(b) increased production;

(c) improved community tax base;

(d) housing;

(e) correction of an environmental or public health problem; and

(f) other information that may be necessary to determine the social and economic importance of the proposed surface water discharge.

4. The applicant may submit a proposal to mitigate any adverse environmental effects of the proposed activity (e.g., instream habitat improvement, bank stabilization). Such mitigation plans should describe the proposed mitigation measures and the costs of such mitigation. Mitigation plans will not have any effect on effluent limits or conditions included in a permit (except possibly where a previously completed mitigation project has resulted in an improvement in background water quality that affects a water quality-based limit). Such mitigation plans will be developed and implemented by the applicant as a means to further minimize the environmental effects of the proposed activity and to increase its socio-economic importance. An effective mitigation plan may, in some cases, allow the Director to authorize proposed activities that would otherwise not be authorized.

5. Will water quality standards be violated by the discharge?

Proposed activities that will affect the quality of waters of the state will be allowed only where the proposed activity will not violate water quality standards.

6. Will existing uses be maintained and protected?

Proposed activities can only be allowed if "existing uses" will be maintained and protected. No UPDES permit will be allowed which will permit numeric water quality standards to be exceeded in a receiving water outside the mixing zone. In the case of nonpoint pollution sources, the non-regulatory Section 319 program now in place will address these sources through application of best management practices to ensure that numeric water quality standards are not exceeded.

7. If a situation is found where there is an existing use which is a higher use (i.e., more stringent protection requirements) than that current designated use, the Director will apply the water quality standards and anti-degradation policy to protect the existing use. Narrative criteria may be used as a basis to protect existing uses for parameters where numeric criteria have not been adopted. Procedures to change the stream use designation to recognize the existing use as the designated use would be initiated.

d. Special Procedures for Drinking Water Sources

Depending upon the locations of the discharge and its proximity to downstream drinking water diversions, additional treatment or more stringent effluent limits or additional monitoring, beyond that which may otherwise be required to meet minimum technology standards or in stream water quality standards, may be required by the Director in order to adequately protect public health and the environment. Such additional treatment may include additional disinfection, suspended solids removal to make the disinfection process more effective, removal of any specific contaminants for which drinking water maximum contaminant levels (MCLs) exists, and/or nutrient removal to reduce the organic content of raw water used as a source for domestic water systems.

Additional monitoring may include analyses for viruses, Giardia, Cryptosporidium, other pathogenic organisms, and/or any contaminant for which drinking water MCLs exist. Depending on the results of such monitoring, more stringent treatment may then be required.

The additional treatment/effluent limits/monitoring which may be required will be determined by the Director after consultation with the Division of Drinking Water and the downstream drinking water users.

e. Public Notice

The public will be provided notice and an opportunity to comment on the conclusions of all completed antidegradation reviews. When possible, public notice on the antidegradation review conclusions will be combined with the public notice on the proposed permitting or certifying action. In the case of UPDES permits, public notice will be provided through the normal permitting process, as all draft permits are public noticed for 30 days, and public comment solicited, before being issued as a final permit. The Statement of Basis for the draft UPDES permit will contain information on how the ADR was addressed including results of the Level I and Level II reviews. In the case of Section 404 permits from the Corps of Engineers, the Division of Water Quality will develop any needed 401 Certifications and the public notice may be published in conjunction with the US Corps of Engineers public notice procedures. Other permits requiring a Level II review will receive a separate public notice according to the normal State public notice procedures. The public will be provided notice and an opportunity to comment whenever substantive changes are made to the implementation procedures referenced in Subsection R317-2-3.5.f.

f. Implementation Procedures

The Director shall establish reasonable protocols and guidelines (1) for completing technical, social, and economic need demonstrations, (2) for review and determination of adequacy of Level II ADRs and (3) for determination of additional treatment requirements. Protocols and guidelines will consider federal guidance and will include input from local governments, the regulated community, and the general public. The Director will inform the Water Quality Board of any protocols or guidelines that are developed.

R317-2-4. Colorado River Salinity Standards.

In addition to quality protection afforded by these rules to waters of the Colorado River and its tributaries, such waters shall be protected also by requirements of "Proposed Water Quality Standards for Salinity including Numeric Criteria and Plan of Implementation for Salinity Control, Colorado River System, June 1975" and a supplement dated August 26, 1975, entitled "Supplement, including Modifications to Proposed Water Quality Standards for Salinity including Numeric Criteria and Plan of Implementation for Salinity Control, Colorado River System, June 1975", as approved by the seven Colorado River Basin States and the U.S. Environmental Protection Agency, as updated by the 1978 Revision and the 1981, 1984, 1987, 1990, 1993, 1996, 1999, 2002, 2005, 2008, and 2011 reviews of the above documents.

R317-2-5. Mixing Zones.

A mixing zone is a limited portion of a body of water, contiguous to a discharge, where dilution is in progress but has not yet resulted in concentrations which will meet certain standards for all pollutants. At no time, however, shall concentrations within the mixing zone be allowed which are acutely lethal as determined by bioassay or other approved procedure. Mixing zones may be delineated for the purpose of guiding sample collection procedures and to determine permitted effluent limits.

The size of the chronic mixing zone in rivers and streams shall not to exceed 2500 feet and the size of an acute mixing zone shall not exceed 50% of stream width nor have a residency time of greater than 15 minutes. Streams with a flow equal to or less than twice the flow of a point source discharge may be considered to be totally mixed. The size of the chronic mixing zone in lakes and reservoirs shall not exceed 200 feet and the size of an acute mixing zone shall not exceed 35 feet. Domestic wastewater effluents discharged to mixing zones shall meet effluent requirements specified in R317-1-3.

5.1 Individual Mixing Zones. Individual mixing zones may be further limited or disallowed in consideration of the following factors in the area affected by the discharge:

a. Bioaccumulation in fish tissues or wildlife,

b. Biologically important areas such as fish spawning/nursery areas or segments with occurrences of federally listed threatened or endangered species,

c. Potential human exposure to pollutants resulting from drinking water or recreational activities,

d. Attraction of aquatic life to the effluent plume, where toxicity to the aquatic life is occurring.

e. Toxicity of the substance discharged,

f. Zone of passage for migrating fish or other species (including access to tributaries), or

g. Accumulative effects of multiple discharges and mixing zones.

R317-2-6. Use Designations.

The Board as required by Section 19-5-110, shall group the waters of the state into classes so as to protect against controllable pollution the beneficial uses designated within each class as set forth below. Surface waters of the state are hereby classified as shown in R317-2-13.

6.1 Class 1 -- Protected for use as a raw water source for domestic water systems.

a. Class 1A -- Reserved.

b. Class 1B -- Reserved.

c. Class 1C -- Protected for domestic purposes with prior treatment by treatment processes as required by the Utah Division of Drinking Water

6.2 Class 2 -- Protected for recreational use and aesthetics.

a. Class 2A -- Protected for frequent primary contact recreation where there is a high likelihood of ingestion of water or a high degree of bodily contact with the water. Examples include, but are not limited to, swimming, rafting, kayaking, diving, and water skiing.

b. Class 2B -- Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.

6.3 Class 3 -- Protected for use by aquatic wildlife.

a. Class 3A -- Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.

b. Class 3B -- Protected for warm water species of game fish and other warm water aquatic life, including the necessary aquatic organisms in their food chain.

c. Class 3C -- Protected for nongame fish and other aquatic life, including the necessary aquatic organisms in their food chain.

d. Class 3D -- Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.

e. Class 3E -- Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.

6.4 Class 4 -- Protected for agricultural uses including irrigation of crops and stock watering.

6.5 Class 5 -- The Great Salt Lake.

a. Class 5A Gilbert Bay

Geographical Boundary -- All open waters at or below approximately 4,208-foot elevation south of the Union Pacific Causeway, excluding all of the Farmington Bay south of the Antelope Island Causeway and salt evaporation ponds.

Beneficial Uses -- Protected for frequent primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

b. Class 5B Gunnison Bay

Geographical Boundary -- All open waters at or below approximately 4,208-foot elevation north of the Union Pacific Causeway and west of the Promontory Mountains, excluding salt evaporation ponds.

Beneficial Uses -- Protected for infrequent primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

c. Class 5C Bear River Bay

Geographical Boundary -- All open waters at or below approximately 4,208-foot elevation north of the Union Pacific Causeway and east of the Promontory Mountains, excluding salt evaporation ponds.

Beneficial Uses -- Protected for infrequent primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

d. Class 5D Farmington Bay

Geographical Boundary -- All open waters at or below approximately 4,208-foot elevation east of Antelope Island and south of the Antelope Island Causeway, excluding salt evaporation ponds.

Beneficial Uses -- Protected for infrequent primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

e. Class 5E Transitional Waters along the Shoreline of the Great Salt Lake Geographical Boundary -- All waters below approximately 4,208-foot elevation to the current lake elevation of the open water of the Great Salt Lake receiving their source water from naturally occurring springs and streams, impounded wetlands, or facilities requiring a UPDES permit. The geographical areas of these transitional waters change corresponding to the fluctuation of open water elevation.

Beneficial Uses -- Protected for infrequent primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

R317-2-7. Water Quality Standards.

7.1 Application of Standards

a. The numeric criteria listed in R317-2-14 shall apply to each of the classes assigned to waters of the State as specified in R317-2-6. It shall be unlawful and a violation of these rules for any person to discharge or place any wastes or other substances in such manner as may interfere with designated uses protected by assigned classes or to cause any of the applicable standards to be violated, except as provided in R317-1-3.1.

b. At a minimum, assessment of the beneficial use support for waters of the state will be conducted biennially and available for a 30-day period of public comment and review. Monitoring locations and target indicators of water quality standards shall be prioritized and published yearly. For water quality assessment purposes, up to 10 percent of the representative samples may exceed the minimum or maximum criteria for dissolved oxygen, pH, E. coli, total dissolved solids, and temperature, including situations where such criteria have been adopted on a site-specific basis.

c. Site-specific standards may be adopted by rulemaking where biomonitoring data, bioassays, or other scientific analyses indicate that the statewide criterion is over or under protective of the designated uses or where natural or un-alterable conditions or other factors as defined in 40 CFR 131.10(g) prevent the attainment of the statewide criteria as prescribed in Subsections R317-2-7.2, and R317-2-7.3, and Section R317-2-14.

7.2 Narrative Standards

It shall be unlawful, and a violation of these rules, for any person to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures; or determined by biological assessments in Subsection R317-2-7.3.

7.3 Biological Water Quality Assessment and Criteria

Waters of the State shall be free from human-induced stressors which will degrade the beneficial uses as prescribed by the biological assessment processes and biological criteria set forth below:

a. Quantitative biological assessments may be used to assess whether the purposes and designated uses identified in R317-2-6 are supported.

b. The results of the quantitative biological assessments may be used for purposes of water quality assessment, including, but not limited to, those assessments required by 303(d) and 305(b) of the federal Clean Water Act (33 U.S.C. 1313(d) and 1315(b)).

c. Quantitative biological assessments shall use documented methods that have been subject to technical review and produce consistent, objective and repeatable results that account for methodological uncertainty and natural environmental variability.

d. If biological assessments reveal a biologically degraded water body, specific pollutants responsible for the degradation will not be formally published (i.e., Biennial Integrated Report, TMDL) until a thorough evaluation of potential causes, including nonchemical stressors (e.g., habitat degradation or hydrological modification or criteria described in 40 CFR 131.10 (g)(1 - 6) as defined by the Use Attainability Analysis process), has been conducted.

R317-2-8. Protection of Downstream Uses.

All actions to control waste discharges under these rules shall be modified as necessary to protect downstream designated uses.

R317-2-9. Intermittent Waters.

Failure of a stream to meet water quality standards when stream flow is either unusually high or less than the 7-day, 10-year minimum flow shall not be cause for action against persons discharging wastes which meet both the requirements of R317-1 and the requirements of applicable permits.

R317-2-10. Laboratory and Field Analyses.

10.1 Laboratory Analyses

All laboratory examinations of samples collected to determine compliance with these regulations shall be performed in accordance with standard procedures as approved by the Director by the Utah Office of State Health Laboratory, or by a laboratory certified by the Utah Department of Health.

10.2 Field Analyses

All field analyses to determine compliance with these rules shall be conducted in accordance with standard procedures specified by the Utah Division of Water Quality or with methods approved by the Director.

R317-2-11. Public Participation.

Public notices and public hearings will be held for the consideration, adoption, or amendment of the classifications of waters and standards of purity and quality. Public notices shall be published at least twice in a newspaper of general circulation in the area affected at least 30 days prior to any public hearing. The notice will be posted on a State public notice website at least 45 days before any hearing and a notice will be mailed at least 30 days before any hearing to the chief executive of each political subdivision and other potentially affected persons.

R317-2-12. Category 1 and Category 2 Waters.

12.1 Category 1 Waters.

In addition to assigned use classes, the following surface waters of the State are hereby designated as Category 1 Waters:

a. All surface waters geographically located within the outer boundaries of U.S. National Forests whether on public or private lands with the following exceptions:

1. Category 2 Waters as listed in R317-2-12.2.

2. Weber River, a tributary to the Great Salt Lake, in the Weber River Drainage from Uintah to Mountain Green.

b. Other surface waters, which may include segments within U.S. National Forests as follows:

1. Colorado River Drainage

Calf Creek and tributaries, from confluence with Escalante River to headwaters.

Sand Creek and tributaries, from confluence with Escalante River to headwaters.

Mamie Creek and tributaries, from confluence with Escalante River to headwaters.

Deer Creek and tributaries, from confluence with Boulder Creek to headwaters (Garfield County).

Indian Creek and tributaries, through Newspaper Rock State Park to headwaters.

2. Green River Drainage

Price River (Lower Fish Creek from confluence with White River to Scofield Dam.

Range Creek and tributaries, from confluence with Green River to headwaters.

Strawberry River and tributaries, from confluence with Red Creek to headwaters.

Ashley Creek and tributaries, from Steinaker diversion to headwaters.

Jones Hole Creek and tributaries, from confluence with Green River to headwaters.

Green River, from state line to Flaming Gorge Dam.

Tollivers Creek, from confluence with Green River to headwaters.

Allen Creek, from confluence with Green River to headwaters.

3. Virgin River Drainage

North Fork Virgin River and tributaries, from confluence with East Fork Virgin River to headwaters.

East Fork Virgin River and tributaries from confluence with North Fork Virgin River to headwaters.

4. Kanab Creek Drainage

Kanab Creek and tributaries, from irrigation diversion at confluence with Reservoir Canyon to headwaters.

5. Bear River Drainage

Swan Creek and tributaries, from Bear Lake to headwaters.

North Eden Creek, from Upper North Eden Reservoir to headwaters.

Big Creek and tributaries, from Big Ditch diversion to headwaters.

Woodruff Creek and tributaries, from Woodruff diversion to headwaters.

6. Weber River Drainage

Burch Creek and tributaries, from Harrison Boulevard in Ogden to headwaters.

Hardscrabble Creek and tributaries, from confluence with East Canyon Creek to headwaters.

Chalk Creek and tributaries, from Main Street in Coalville to headwaters.

Weber River and tributaries, from Utah State Route 32 near Oakley to headwaters.

7. Jordan River Drainage

City Creek and tributaries, from City Creek Water Treatment Plant to headwaters (Salt Lake County).

Emigration Creek and tributaries, from Hogle Zoo to headwaters (Salt Lake County).

Red Butte Creek and tributaries, from Foothill Boulevard in Salt Lake City to headwaters.

Parley's Creek and tributaries, from 13th East in Salt Lake City to headwaters.

Mill Creek and tributaries, from Wasatch Boulevard in Salt Lake City to headwaters.

Big Cottonwood Creek and tributaries, from Wasatch Boulevard in Salt Lake City to headwaters.

Little Willow Creek and tributaries, from diversion to headwaters (Salt Lake County.)

Bell Canyon Creek and tributaries, from Lower Bells Canyon Reservoir to headwaters (Salt Lake County).

South Fork of Dry Creek and tributaries, from Draper Irrigation Company diversion to headwaters (Salt Lake County).

8. Provo River Drainage

Upper Falls drainage above Provo City diversion (Utah County).

Bridal Veil Falls drainage above Provo City diversion (Utah County).

Lost Creek and tributaries, above Provo City diversion (Utah County).

9. Sevier River Drainage

Chicken Creek and tributaries, from diversion at canyon mouth to headwaters.

Pigeon Creek and tributaries, from diversion to headwaters.

East Fork of Sevier River and tributaries, from Kingston diversion to headwaters.

Parowan Creek and tributaries, from Parowan City to headwaters.

Summit Creek and tributaries, from Summit City to headwaters.

Braffits Creek and tributaries, from canyon mouth to headwaters.

Right Hand Creek and tributaries, from confluence with Coal Creek to headwaters.

10. Raft River Drainage

Clear Creek and tributaries, from state line to headwaters (Box Elder County).

Birch Creek (Box Elder County), from state line to headwaters.

Cotton Thomas Creek from confluence with South Junction Creek to headwaters.

11. Western Great Salt Lake Drainage

All streams on the south slope of the Raft River Mountains above 7000' mean sea level.

Donner Creek (Box Elder County), from irrigation diversion to Utah-Nevada state line.

Bettridge Creek (Box Elder County), from irrigation diversion to Utah-Nevada state line.

Clover Creek, from diversion to headwaters.

All surface waters on public land on the Deep Creek Mountains.

12. Farmington Bay Drainage

Holmes Creek and tributaries, from Highway US-89 to headwaters (Davis County).

Shepard Creek and tributaries, from Haight Bench diversion to headwaters (Davis County).

Farmington Creek and tributaries, from Haight Bench Canal diversion to headwaters (Davis County).

Steed Creek and tributaries, from Highway US-89 to headwaters (Davis County).

12.2 Category 2 Waters.

In addition to assigned use classes, the following surface waters of the State are hereby designated as Category 2 Waters:

a. Green River Drainage

Deer Creek, a tributary of Huntington Creek, from the forest boundary to 4800 feet upstream.

Electric Lake.

R317-2-13. Classification of Waters of the State (see R317-2-6).

13.1 Upper Colorado River Basin

a. Colorado River Drainage

TABLE

Paria River and tributaries, from state line to headwaters				2B	3C	4
All tributaries to Lake Powell except as listed below:				2B	3B	4
Tributaries to Escalante River from confluence with Boulder Creek to headwaters, including Boulder Creek				2B	3A	4
Dirty Devil River and tributaries, from Lake Powell to Fremont River				2B	3C	4
Deer Creek and tributaries, from confluence with Boulder Creek to headwaters				2B	3A	4
Freemont River and tributaries from confluence with Muddy Creek to Capitol Reef National Park, except as listed below:			1C	2B	3C	4
Pleasant Creek and tributaries, from confluence with Fremont						

River to East boundary of Capitol Reef National Park				2B	3C	4
Pleasant Creek and tributaries, from East boundary of Capitol Reef National Park to headwaters		1C		2B	3A	
Fremont River and tributaries, through Capitol Reef National Park to headwaters		1C	2A		3A	4
Muddy Creek and tributaries, from Confluence with Fremont River to Highway U-10 crossing, except as listed below				2B	3C	4
Muddy Creek from confluence with Fremont River to confluence with Ivie Creek				2B	3C	4*
Muddy Creek and tributaries from the confluence with Ivie Creek to U-10				2B	3C	4*
Ivie Creek and its tributaries from the confluence with Muddy Creek to the confluence with Quitchupah Creek				2B	3C	4*

Ivie Creek and its tributaries from the confluence with Quitchapah Creek to U-10, except as listed below:					2B		
3C	4*						
Quitchupah Creek from the confluence with Ivie Creek to U-10					2B		
3C	4*						
Quitchupah Creek and tributaries, from Highway U-10 crossing to headwaters					2B	3	
A	4						
Ivie Creek and tributaries, from Highway U-10 to headwaters					2B	3	
A	4						
Muddy Creek and tributaries, from Highway U-10 crossing to headwaters				1C	2B	3	
A	4						
San Juan River and tributaries from Lake Powell to state line except as listed below:				1C	2A		
3B	4						
Johnson Creek and tributaries, from confluence with Recapture Creek to headwaters				1C	2B	3	
A	4						

Verdure Creek and tributaries, from Highway US-191 crossing to headwaters 2B 3A 4

North Creek and tributaries, from confluence with Montezuma Creek to headwaters 1C 2B 3A 4

South Creek and tributaries, from confluence with Montezuma Creek to headwaters 1C 2B 3A 4

Spring Creek and tributaries, from confluence with Vega Creek to headwaters 2B 3A 4

Montezuma Creek and tributaries, from U.S. Highway 191 to headwaters 1C 2B 3A 4

Colorado River and tributaries, from Lake Powell to state line except as listed below: 1C 2A 3B 4

Indian Creek and tributaries, through Newspaper Rock State Park to headwaters 1C 2B 3A 4

Kane Canyon Creek and tributaries, from confluence with Colorado River to headwaters				2B	3C	4	
Mill Creek and tributaries, from confluence with Colorado River to headwaters	1C	2A	3A	4			
Castle Creek from confluence with the Colorado River to Seventh Day Adventist Diversion	1C	2A	3B	4*			
Onion Creek from the confluence with Colorado River to road crossing above Stinking Springs	1C	2A	3B	4*			
Dolores River and tributaries, from confluence with Colorado River to state line				2B	3C	4	
Roc Creek and tributaries, from confluence with Dolores River to headwaters				2B	3A	4	
LaSal Creek and tributaries from state line to headwaters				2B	3A	4	
Lion Canyon Creek and tributaries,							

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  from state line to headwaters                2B 3
A             4

  Little Dolores River and
  tributaries, from confluence with
  Colorado River to state line                 2B
3C       4

  Bitter Creek and tributaries,
  from confluence with Colorado
  River to headwaters                          2B
3C       4

(*)  Site-specific criteria are associated with th
is use.
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b. Green River Drainage

TABLE

Green River and tributaries, from confluence with Colorado River to state line, except as listed below:			1C	2A	3B 4
Thompson Creek and tributaries from Interstate 70 to headwaters				2B	3C 4
San Rafael River and tributaries from confluence with Green River to confluence with Ferron Creek, except as listed below:				2B	3C
San Rafael River from the confluence with the Green River to Buckhorn Crossing				2B	3C 4*
San Rafael River from Buckhorn Crossing to the confluence with Huntington Creek and Cottonwood Creek				2B	3C 4*
Ferron Creek and tributaries, from confluence with San Rafael River to Millsite Reservoir, except as listed below:				2B	3C 4

Ferron Creek from the confluence with San Rafael River to Highway 10			2B	3C	4*	
Ferron Creek and tributaries, from Millsite Reservoir to headwaters	1C	2B	3A	4		
Huntington Creek and tributaries, from confluence with Cottonwood Creek to Highway U-10 crossing			2B	3C	4*	
Huntington Creek and tributaries from Highway U-10 crossing to headwaters	1C	2B	3A	4		
Cottonwood Creek and tributaries from confluence with Huntington Creek to Highway U-57 crossing, except as listed below:			2B	3C	4	
Cottonwood Creek from the confluence with Huntington Creek to U-57			2B	3C	4*	
Rock Canyon Creek from the confluence with Cottonwood Creek to headwaters			2B	3C	4*	

Cottonwood Creek and tributaries from Highway U-57 crossing to headwaters		1C	2B	3A		4
Cottonwood Canal, Emery County		1C	2B	3E	4	
Price River and tributaries, from confluence with Green River to Carbon Canal Diversion at Price City Golf Course, except as listed below			2B	3C	4	
Price River and tributaries from confluence with Green River to confluence with Soldier Creek			2B	3C	4*	
Price River and tributaries from the confluence with Soldier Creek to Carbon Canal Diversion			2B	3C	4*	
Grassy Trail Creek and tributaries, from Grassy Trail Creek Reservoir to headwaters		1C	2B	3A		4
Price River and tributaries, from Carbon Canal Diversion at Price City Golf Course to Price City Water Treatment Plant intake			2B	3		

A 4

Price River and tributaries, from Price City Water Treatment Plant intake to headwaters 1C 2B 3A 4

Range Creek and tributaries, from confluence with Green River to Range Creek Ranch 2B 3A 4

Range Creek and tributaries, from Range Creek Ranch to headwaters 1C 2B 3A 4

Rock Creek and tributaries, from confluence with Green River to headwaters 2B 3A 4

Nine Mile Creek and tributaries, from confluence with Green River to headwaters 2B 3A 4

Pariette Draw and tributaries, from confluence with Green River to headwaters 2B 3B 3D 4

Willow Creek and tributaries (Uintah County), from confluence with Green River to headwaters 2B 3A 4

White River and tributaries, from confluence with Green River to state line, except as listed below:			2B	3B	4	
Bitter Creek and tributaries from White River to headwaters			2B	3A	4	
Duchesne River and tributaries, from confluence with Green River to Myton Water Treatment Plant intake, except as listed below			2B	3B	4	
Uinta River and tributaries from confluence with Duchesne River to U.S. Highway 40 crossing			2B	3B	4	
Uinta River and tributaries, from U.S. Highway 40 crossing			2B	3A	4	
Power House Canal from confluence with Uinta River to headwaters			2B	3A	4	
Whiterocks River and Canal, from Tridell Water Treatment Plant to headwaters		1C	2B	3A	4	

Duchesne River and tributaries, from Myton Water Treatment Plant intake to headwaters	1C	2B	3A	4			
Lake Fork River and tributaries, from confluence with Duchesne River to headwaters	1C	2B	3A	4			
Lake Fork Canal from Dry Gulch Canal Diversion to Moon Lake	1C	2B	3E	4			
Dry Gulch Canal, from Myton Water Treatment Plant to Lake Fork Canal	1C	2B	3E	4			
Ashley Creek and tributaries, from confluence with Green River to Steinaker diversion		2B	3B	4			
Ashley Creek and tributaries, from Steinaker diversion to headwaters	1C	2B	3A	4			
Big Brush Creek and tributaries from confluence with Green River to Tyzack (Red Fleet) Dam		2B	3B	4			
Big Brush Creek and tributaries, from Tyzack (Red Fleet) Dam to							

headwaters			1C	2B	3A	4	
Jones Hole Creek and tributaries from confluence with Green River to headwaters				2B	3A		
Diamond Gulch Creek and tributaries, from confluence with Green River to headwaters				2B	3A	4	
Pot Creek and tributaries, from Crouse Reservoir to headwaters				2B	3A	4	
Green River and tributaries, from Utah-Colorado state line to Flaming Gorge Dam, except as listed below:			2A	3A	4		
Sears Creek and tributaries, Daggett County				2B	3A		
Tolivers Creek and tributaries, Daggett County				2B	3A		
Red Creek and tributaries, from confluence with Green River to state line				2B	3C	4	

Jackson Creek and tributaries, Daggett County 2B 3A

Davenport Creek and tributaries, Daggett County 2B 3A

Goslin Creek and tributaries, Daggett County 2B 3A

Gorge Creek and tributaries, Daggett County 2B 3A

Beaver Creek and tributaries, Daggett County 2B 3A

O-Wi-Yu-Kuts Creek and tributaries, Daggett County 2B 3A

Tributaries to Flaming Gorge Reservoir, except as listed below 2B 3A 4

Birch Spring Draw and tributaries, from Flaming Gorge Reservoir to headwaters 2B 3C 4

Spring Creek and tributaries, from Flaming Gorge Reservoir to

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  headwaters                                    2B 3
A

All tributaries of Flaming Gorge
Reservoir from Utah-Wyoming state
line to headwaters                              2B 3
A             4

(*)  Site-specific criteria are associated with th
is use.
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13.2 Lower Colorado River Basin

a. Virgin River Drainage

TABLE

Beaver Dam Wash and tributaries, from Motoqua to headwaters					2B	3B 4
Virgin River and tributaries, from state line to Quail Creek diversion, except as listed below:					2B	3B 4
Virgin River from the Utah-Arizona border to Pah Tempe Springs					2B	3B 4*
Virgin River from the Utah-Arizona border to Pah Tempe Springs					2B	3B 4*
Santa Clara River from confluence with Virgin River to Gunlock Reservoir				1C	2B	3B 4
Santa Clara River and tributaries, from Gunlock Reservoir to headwaters					2B	3 A 4
Leeds Creek from confluence with Quail Creek to headwaters					2B	3 A 4

Quail Creek from Quail Creek Reservoir to headwaters		1C		2B	3A		4
Ash Creek and tributaries, from confluence with Virgin River to Ash Creek Reservoir				2B	3A		4
Ash Creek and tributaries, from Ash Creek Reservoir to headwaters				2B	3A		4
Virgin River and tributaries, from the Quail Creek diversion to headwaters, except as listed below:		1C		2B	3C		4
North Creek, from the confluence with Virgin River to headwaters		1C		2B	3C		4*
North Fork Virgin River and tributaries		1C	2A		3A		4
Kolob Creek, from confluence with Virgin River to headwaters				2B	3A		4
East Fork Virgin River, from town of Glendale to headwaters				2B	3A		4

(*) Site-specific criteria are associated with th

is use.

b. Kanab Creek Drainage

TABLE

Kanab Creek and tributaries, from state line to irrigation diversion at confluence with Reservoir Canyon	2B	3C	4
Kanab Creek and tributaries, from irrigation diversion at confluence with Reservoir Canyon to headwaters	2B	3A	4
Johnson Wash and tributaries, from state line to confluence with Skutumpah Canyon	2B	3C	4
Johnson Wash and tributaries, from confluence with Skutumpah Canyon to headwaters	2B	3A	4

13.3 Bear River Basin

a. Bear River Drainage

TABLE

Bear River and tributaries, from Great Salt Lake to Utah-Idaho border, except as listed below:					2B	3B	3D	4
Perry Canyon Creek from U.S. Forest boundary to headwaters					2B	3A		4
Box Elder Creek from confluence with Black Slough to Brigham City Reservoir (Mayor's Pond)					2B	3C		4
Box Elder Creek, from Brigham City Reservoir (Mayor's Pond) to headwaters					2B	3A		4
Salt Creek from confluence with Bear River to Crystal Hot Springs					2B	3B	3D	
Malad River and tributaries, from confluence with Bear River to state line					2B	3C		
Little Bear River and tributaries, from Cutler Reservoir to headwaters, except as listed below:					2B	3		

A		3D	4		
	South Fork Spring Creek from confluence with Pelican Pond Slough Stream to U.S. Highway 89			2B	3
A		3D	4*		
	Logan River and tributaries, from Cutler Reservoir to headwaters			2B	3
A		3D	4		
	Blacksmith Fork and tributaries, from confluence with Logan River to headwaters, except as listed below			2B	3
A			4		
	Sheep Creek and tributaries from Confluence with Blacksmith Fork River to headwaters		1C	2B	3
A			4		
	Newton Creek and tributaries, from Cutler Reservoir to Newton Reservoir			2B	3
A			4		
	Clarkston Creek and tributaries, from Newton Reservoir to headwaters			2B	3
A			4		
	Birch Creek and tributaries, from confluence with Clarkston Creek to headwaters			2B	3

A 4

Summit Creek and tributaries, from confluence with Bear River to headwaters 2B 3 A 4

Cub River and tributaries, from confluence with Bear River to state line, except as listed below: 2B 3B 4

High Creek and tributaries from confluence with Cub River to headwaters 2B 3 A 4

All tributaries to Bear Lake from Bear Lake to headwaters, except as listed below 2B 3 A 4

Swan Springs tributary to Swan Creek 1C 2B 3 A

Bear River and tributaries in Rich County 2B 3 A 4

Bear River and tributaries, from Utah-Wyoming state line to headwaters (Summit County) 2B 3 A 4

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Mill Creek and tributaries, from
state line to headwaters (Summit
County)                                          2B 3
A             4

(*)  Site-specific criteria are associated with th
is use.
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13.4 Weber River Basin

a. Weber River Drainage

TABLE

Willard Creek, from Willard Bay Reservoir to headwaters				2B	3	
A		4				
Weber River, from Great Salt Lake to Slaterville diversion, except as listed below:				2B		
3C	3D		4			
Four Mile Creek from Interstate 15 to headwaters				2B	3	
A		4				
Weber River and tributaries, from Slaterville diversion to Stoddard diversion, except as listed below				2B	3	
A		4				
Ogden River and tributaries, from confluence with Weber River to Pineview Dam, except as listed below:				2A		3
A		4				
Wheeler Creek from confluence with Ogden River to headwaters			1C		2B	3
A		4				
All tributaries to Pineview Reservoir			1C		2B	3
A		4				

Strongs Canyon Creek and tributaries, from U.S. National Forest boundary to headwaters	1C	2B	3A	4	
Burch Creek and tributaries, from Harrison Boulevard in Ogden to Headwaters	1C	2B	3A		
Spring Creek and tributaries, from U.S. National Forest boundary to headwaters	1C	2B	3A	4	
Weber River and tributaries, from Stoddard diversion to headwaters, except as listed below	1C	2B	3A	4	
Silver Creek and tributaries, from the confluence with Weber River to below the confluence with Tollgate Creek	1C	2B	3A	4	
Silver Creek and tributaries, from confluence with Tollgate Creek to headwaters	1C	2B	3A	4*	

a. Jordan River Drainage

TABLE

Jordan River, from Farmington Bay to North Temple Street, Salt Lake City					2B	3B*	3D	4
State Canal, from Farmington Bay to confluence with the Jordan River					2B	3B*	3D	4
Jordan River, from North Temple Street in Salt Lake City to confluence with Little Cottonwood Creek					2B	3B*		4
Surplus Canal from Great Salt Lake to the diversion from the Jordan River					2B	3B*	3D	4
Jordan River from confluence with Little Cottonwood Creek to Narrows Diversion					2B	3	A	4
Jordan River, from Narrows Diversion to Utah Lake				1C	2B	3B		4
City Creek, from Memory Park in Salt Lake City to City Creek Water Treatment Plant					2B	3	A	

City Creek, from City Creek Water Treatment Plant to headwaters 1C 2B 3A

Red Butte Creek and tributaries, from Liberty Park pond inlet to Red Butte Reservoir 2B 3A 4

Red Butte Creek and tributaries, from Red Butte Reservoir to headwaters 1C 2B 3A

Emigration Creek and tributaries, from 1100 East in Salt Lake City to headwaters 2B 3A 4

Parleys Creek and tributaries, from 1300 East in Salt Lake City to Mountain Dell Reservoir 1C 2B 3A

Parleys Creek and tributaries, from Mountain Dell Reservoir to headwaters 1C 2B 3A

Mill Creek (Salt Lake County) from confluence with Jordan River to Interstate 15 2B 3C* 4

Mill Creek (Salt Lake County) and tributaries, from Interstate 15

to headwaters			2B 3
A	4		
Big Cottonwood Creek and tributaries, from confluence with Jordan River to Big Cottonwood Water Treatment Plant			2B 3
A	4		
Big Cottonwood Creek and tributaries from Big Cottonwood Water Treatment Plant to headwaters		1C	2B 3
A			
Deaf Smith Canyon Creek and tributaries		1C	2B 3
A	4		
Little Cottonwood Creek and tributaries, from confluence with Jordan River to Metropolitan Water Treatment Plant			2B 3
A	4		
Little Cottonwood Creek and tributaries, from Metropolitan Water Treatment Plant to headwaters		1C	2B 3
A			
Bells Canyon Creek and tributaries, from Lower Bells Canyon Reservoir to headwaters		1C	2B 3
A			
Little Willow Creek and tributaries,			

from Draper Irrigation Company diversion to headwaters	1C	2B	3A
Big Willow Creek and tributaries, from Draper Irrigation Company diversion to headwaters	1C	2B	3A
South Fork of Dry Creek and tributaries, from Draper Irrigation Company diversion to headwaters	1C	2B	3A
All permanent streams on east slope of Oquirrh Mountains (Coon, Barneys, Bingham, Butterfield, and Rose Creeks)		2B	3D 4
Kersey Creek from confluence of C-7 Ditch to headwaters		2B	3D

(*) Site-specific criteria are associated with this use.

b. Provo River Drainage

TABLE

Provo River and tributaries, from Utah Lake to Murdock Diversion		2B	3
A	4		
Provo River and tributaries, from Murdock Diversion to headwaters, except as listed below:	1C	2B	3
A	4		
Upper Falls drainage above Provo City diversion	1C	2B	3
A			
Bridal Veil Falls drainage above Provo City diversion	1C	2B	3
A			
Lost Creek and tributaries above Provo City diversion	1C	2B	3
A			

c. Utah Lake Drainage

TABLE

Dry Creek and tributaries (above Alpine), from U.S. National Forest boundary to headwaters		2B	3
A	4		
American Fork Creek and tributaries, from diversion at mouth of American Fork Canyon to headwaters		2B	3
A	4		
Spring Creek and tributaries, from Utah Lake near Lehi to headwaters		2B	3
A	4		
Lindon Hollow Creek and tributaries, from Utah Lake to headwaters		2B	
3B	4		
Grove Creek from Murdock Diversion to headwaters	1C	2B	3
A			
Battle Creek from Murdock Diversion to Headwaters	1C	2B	3
A			
Rock Canyon Creek and tributaries (East of Provo), from U.S. National Forest boundary to headwaters	1C	2B	3
A	4		

Mill Race (except from Interstate 15 to the Provo City WWTP discharge) and tributaries, from Utah Lake to headwaters					2B	3B 4
Mill Race from Interstate 15 to the Provo City wastewater treatment plant discharge					2B	3B 4
Spring Creek and tributaries, from Utah Lake (Provo Bay) to 50 feet upstream from the east boundary of the Industrial Parkway Road Right-of-way					2B	3B 4
Tributary to Spring Creek (Utah County) which receives the Springville City WWTP effluent from confluence with Spring Creek to headwaters					2B	3D 4
Spring Creek and tributaries from 50 feet upstream from the east boundary of the Industrial Parkway Road right-of-way to the headwaters					2B	3 A 4
Ironton Canal from Utah Lake (Provo Bay) to the east boundary of the Denver and Rio Grande Western Railroad right-of-way					2B	

3C 4

Ironton Canal from the east boundary of the Denver and Rio Grande Western Railroad right-of-way to the point of diversion from Spring Creek 2B 3A 4

Hobble Creek and tributaries, from Utah Lake to headwaters 2B 3A 4

Dry Creek and tributaries, from Utah Lake (Provo Bay) to U.S. Highway 89 2B 3E 4

Dry Creek and tributaries, from U.S. Highway 89 to headwaters 2B 3A 4

Spanish Fork River and tributaries, from Utah Lake to diversion at Moark Junction 2B 3B 3D 4

Spanish Fork River and tributaries, from diversion at Moark Junction to headwaters 2B 3A 4

Benjamin Slough and tributaries, from Utah Lake to headwaters, except as listed below 2B 3B 4

Beer Creek (Utah County) from 4850 West (in NE1/4NE1/4 sec. 36, T.8.S., R.1.E.) to headwaters	2B	3C	4
Salt Creek from Nephi diversion to headwaters	2B	3A	4
Currant Creek from mouth of Goshen Canyon to Mona Reservoir	2B	3A	4
Currant Creek from Mona Reservoir to headwaters	2B	3A	4
Peteetneet Creek and tributaries, from irrigation diversion above Maple Dell to headwaters	2B	3A	4
Summit Creek and tributaries (above Santaquin), from U.S. National Forest boundary to headwaters	2B	3A	4
All other permanent streams entering Utah Lake	2B	3B	4

a. Sevier River Drainage

TABLE

Sevier River and tributaries, from Sevier Lake to Gunnison Bend Reservoir to U.S. National Forest boundary, except as listed below:						2B	
3C		4					
	Sevier River from Gunnison Bend Reservoir to Clear Lake					2B	
3C		4*					
	Beaver River and tributaries, from Minersville City to headwaters					2B	3
A		4					
	Little Creek and tributaries, from irrigation diversion to headwaters					2B	3
A		4					
	Pinto Creek and tributaries, from Newcastle Reservoir to headwaters					2B	3
A		4					
	Coal Creek and tributaries					2B	3
A		4					
	Summit Creek and tributaries					2B	3
A		4					
	Parowan Creek and tributaries					2B	3
A		4					

Tributaries to Sevier River from Sevier Lake to Gunnison Bend Reservoir from U.S. National Forest boundary to headwaters, including: 2B 3A 4

Pioneer Creek and tributaries, Millard County 2B 3A 4

Chalk Creek and tributaries, Millard County 2B 3A 4

Meadow Creek and tributaries, Millard County 2B 3A 4

Corn Creek and tributaries, Millard County 2B 3A 4

Sevier River and tributaries, below U.S. National Forest boundary from Gunnison Bend Reservoir to Annabella Diversion, except as listed below 2B 3B 4

Sevier River between Gunnison Bend Reservoir and DMAD Reservoir 2B 3B 4*

Oak Creek and tributaries Millard County 2B 3

A 4

Round Valley Creek and tributaries, Millard County 2B 3A 4

Judd Creek and tributaries, Juab County 2B 3A 4

Meadow Creek and tributaries, Juab County 2B 3A 4

Cherry Creek and tributaries, Juab County 2B 3A 4

Tanner Creek and tributaries, Juab County 2B 3E 4

Baker Hot Springs, Juab County 2B 3D 4

Chicken Creek and tributaries, Juab County 2B 3A 4

San Pitch River and tributaries, from confluence with Sevier River to Highway U-132 crossing, except as listed below: 2B 3C 3D 4

San Pitch River from below Gunnison Reservoir to the Sevier River 2B 3C 3D 4*

Twelve Mile Creek (South Creek) and tributaries, from U.S. National Forest boundary to headwaters 2B 3A 4

Six Mile Creek and tributaries, Sanpete County 2B 3A 4

Manti Creek (South Creek) and tributaries, from U.S. National Forest boundary to headwaters 2B 3A 4

Ephraim Creek (Cottonwood Creek) and tributaries, from U.S. National Forest to headwaters 2B 3A 4

Oak Creek and tributaries, from U.S. National Forest boundary near Spring City to headwaters 2B 3A 4

Fountain Green Creek and tributaries, from U.S. National Forest boundary to headwaters 2B 3A 4

San Pitch River and tributaries, from Highway U-132 crossing to headwaters 2B 3
A 4

Lost Creek from the confluence with Sevier River to U.S. National Forest boundary 2B
3C 3D 4*

Brine Creek-Petersen Creek from the confluence with the Sevier River to Highway U-119 Crossing 2B
3C 3D 4*

Tributaries to Sevier River from Gunnison Bend Reservoir to Annabella diversion from U.S. National Forest boundary to headwaters 2B 3
A 4

Sevier River and tributaries, from Annabella diversion to headwaters 2B 3
A 4

Monroe Creek and tributaries, from diversion to headwaters 2B 3
A 4

Little Creek and tributaries, from irrigation diversion to headwaters 2B 3
A 4

Pinto Creek and tributaries, from Newcastle Reservoir to headwaters 2B 3

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A             4

Coal Creek and tributaries                    2B 3
A             4

Summit Creek and tributaries                  2B 3
A             4

Parowan Creek and tributaries                 2B 3
A             4
Duck Creek and tributaries             1C     2B 3
A             4

(*)  Site-specific criteria are associated with th
is use.
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13.7 Great Salt Lake Basin

a. Western Great Salt Lake Drainage

TABLE

Grouse Creek and tributaries, Box Elder County		2B	3
A	4		
Muddy Creek and tributaries, Box Elder County		2B	3
A	4		
Dove Creek and tributaries, Box Elder County		2B	3
A	4		
Pine Creek and tributaries, Box Elder County		2B	3
A	4		
Rock Creek and tributaries, Box Elder County		2B	3
A	4		
Fisher Creek and tributaries, Box Elder County		2B	3
A	4		
Dunn Creek and tributaries, Box Elder County		2B	3
A	4		
Indian Creek and tributaries, Box Elder County		2B	3
A	4		

Tenmile Creek and tributaries, Box Elder County 2B 3A 4

Curlew (Deep) Creek, Box Elder County 2B 3A 4

Blue Creek and tributaries, Box Elder County, from Bear River Bay, Great Salt Lake to Blue Creek Reservoir 2B 3D 4*

Blue Creek and tributaries from Blue Creek Reservoir to headwaters 2B 3B 4*

All perennial streams on the east slope of the Pilot Mountain Range 1C 2B 3A 4

Donner Creek and tributaries, from irrigation diverion to Utah-Nevada state line 2B 3A 4

Bettridge Creek and tributaries, from irrigation diverion to Utah-Nevada state line 2B 3A 4

North Willow Creek and tributaries, Tooele County 2B 3A 4

South Willow Creek and tributaries,
Tooele County 2B 3
A 4

Hickman Creek and tributaries,
Tooele County 2B 3
A 4

Barlow Creek and tributaries,
Tooele County 2B 3
A 4

Clover Creek and tributaries,
Tooele County 2B 3
A 4

Faust Creek and tributaries,
Tooele County 2B 3
A 4

Vernon Creek and tributaries,
Tooele County 2B 3
A 4

Ophir Creek and tributaries,
Tooele County 2B 3
A 4

Soldier Creek and tributaries, from
the Drinking Water Treamtent Facility
to headwaters, Tooele County 1C 2B 3
A 4

Settlement Canyon Creek and
tributaries, Tooele County 2B 3

A 4

Middle Canyon Creek and tributaries,
Tooele County 2B 3
A 4

Tank Wash and tributaries,
Tooele County 2B 3
A 4

Basin Creek and tributaries,
Juab and Tooele Counties 2B 3
A 4

Thomas Creek and tributaries,
Juab County 2B 3
A 4

Indian Farm Creek and tributaries,
Juab County 2B 3
A 4

Cottonwood Creek and tributaries,
Juab County 2B 3
A 4

Red Cedar Creek and tributaries,
Juab County 2B 3
A 4

Granite Creek and tributaries,
Juab County 2B 3
A 4

Trout Creek and tributaries,

Juab County 2B 3
A 4

Birch Creek and tributaries,
Juab County 2B 3
A 4

Deep Creek and tributaries, from
Rock Spring Creek to headwaters,
Juab and Tooele Counties 2B 3
A 4

Cold Spring, Juab County 2B
3C 3D

Cane Spring, Juab County 2B
3C 3D

Lake Creek, from Garrison (Pruess)
Reservoir to Nevada state line 2B 3
A 4

Snake Creek and tributaries,
Millard County 2B
3B 4

Salt Marsh Spring Complex,
Millard County 2B 3
A

Twin Springs, Millard County 2B
3B

Tule Spring, Millard County 2B
3C 3D

Coyote Spring Complex, Millard
County 2B
3C 3D

Hamblin Valley Wash and tributaries,
from Nevada state line to headwaters
(Beaver and Iron Counties) 2B
3D 4

Indian Creek and tributaries, Beaver
County, from Indian Creek Reservoir
to headwaters 2B 3
A 4
Shoal Creek and tributaries,
Iron County 2B 3
A 4

(*) Site-specific criteria are associated with th
is use.

b. Farmington Bay Drainage

TABLE

Corbett Creek and tributaries, from Highway to headwaters		2B	3A 4
Kays Creek and tributaries, from Farmington Bay to U.S. National Forest boundary		2B	3B 4
North Fork Kays Creek and tributaries, from U.S. National Forest boundary to headwaters		2B	3A 4
Middle Fork Kays Creek and tributaries, from U.S. National Forest boundary to headwaters	1C	2B	3A 4
South Fork Kays Creek and tributaries, from U.S. National Forest boundary to headwaters	1C	2B	3A 4
Snow Creek and tributaries		2B	3C 4
Holmes Creek and tributaries, from Farmington Bay to U.S. National Forest boundary		2B	3B 4

Holmes Creek and tributaries, from U.S. National Forest boundary to headwaters 1C 2B 3A 4

Baer Creek and tributaries, from Farmington Bay to Interstate 15 2B 3B 4

Baer Creek and tributaries, from Interstate 15 to U.S. Highway 89 2B 3B 4

Baer Creek and tributaries, from U.S. Highway 89 to headwaters 1C 2B 3A 4

Shepard Creek and tributaries, from U.S. National Forest boundary to headwaters 1C 2B 3A 4

Farmington Creek and tributaries, from Farmington Bay Waterfowl Management Area to U.S. National Forest boundary 2B 3B 4

Farmington Creek and tributaries, from U.S. National Forest boundary to headwaters 1C 2B 3A 4

Rudd Creek and tributaries, from

Davis aqueduct to headwaters			2B 3
A	4		
Steed Creek and tributaries, from U.S. National Forest boundary to headwaters		1C	2B 3
A	4		
Davis Creek and tributaries, from U.S. Highway 89 to headwaters			2B 3
A	4		
Lone Pine Creek and tributaries, from U.S. Highway 89 to headwaters			2B 3
A	4		
Ricks Creek and tributaries, from Highway Interstate 15 to headwaters		1C	2B 3
A	4		
Barnard Creek and tributaries, from U.S. Highway 89 to headwaters			2B 3
A	4		
Parrish Creek and tributaries, from Davis Aqueduct to headwaters			2B 3
A	4		
Deuel Creek and tributaries, (Centerville Canyon) from Davis Aqueduct to headwaters			2B 3
A	4		
Stone Creek and tributaries, from Farmington Bay Waterfowl Management			

Area to U.S. National Forest Boundary			2B	3
A	4			
Stone Creek and tributaries, from U.S. National Forest boundary to headwaters		1C	2B	3
A	4			
Barton Creek and tributaries, from U.S. National Forest boundary to headwaters			2B	3
A	4			
Mill Creek (Davis County) and tributaries, from confluence with State Canal to U.S. National Forest boundary			2B	
3B	4			
Mill Creek (Davis County) and tributaries, from U.S. National Forest boundary to headwaters		1C	2B	3
A	4			
North Canyon Creek and tributaries from U.S. National Forest boundary to headwaters			2B	3
A	4			
Howard Slough			2B	
3C	4			
Hooper Slough			2B	
3C	4			

Willard Slough			2B
3C	4		
Willard Creek to Headwaters		1C	2B 3
A	4		
Chicken Creek to Headwaters		1C	2B 3
A	4		
Cold Water Creek to Headwaters		1C	2B 3
A	4		
One House Creek to Headwaters		1C	2B 3
A	4		
Garner Creek to Headwaters		1C	2B 3
A	4		

13.8 Snake River Basin

a. Raft River Drainage (Box Elder County)

TABLE

Raft River and tributaries 2B 3
A 4

Clear Creek and tributaries, from
Utah-Idaho state line to headwaters 2B 3
A 4

Onemile Creek and tributaries, from
Utah-Idaho state line to headwaters 2B 3
A 4

George Creek and tributaries, from
Utah-Idaho state line to headwaters 2B 3
A 4

Johnson Creek and tributaries, from
Utah-Idaho state line to headwaters 2B 3
A 4

Birch Creek and tributaries, from
state line to headwaters 2B 3
A 4

Pole Creek and tributaries, from
state line to headwaters 2B 3
A 4

Goose Creek and tributaries 2B 3
A 4

Hardesty Creek and tributaries, from

```
state line to headwaters                          2B 3
A             4

Meadow Creek and tributaries,
from state line to headwaters                     2B 3
A             4
```

13.9 All irrigation canals and ditches statewide, except as otherwise designated: 2B, 3E, 4

13.10 All drainage canals and ditches statewide, except as otherwise designated: 2B, 3E

13.11 National Wildlife Refuges and State

Waterfowl Management Areas, and other Areas Associated with the Great Salt Lake

TABLE

Bear River National Wildlife Refuge, Box Elder County	2B 3B 3D
Bear River Bay	
Open Water below approximately 4,208 ft.	5C
Transitional Waters approximately 4,208 ft. to Open Water	5E
Open Water above approximately 4,208 ft.	2B 3B 3D
Browns Park Waterfowl Management Area, Daggett County	2B 3A 3D
Clear Lake Waterfowl Management Area, Millard County	2B 3C 3D
Desert Lake Waterfowl Management Area, Emery County	2B 3C 3D
Farmington Bay WaterfowlManagement Area, Davis and Salt Lake Counties	2B 3C 3D

Farmington Bay

Open Water below approximately
4,208 ft.
5D
Transitional Waters approximately
4,208 ft. to Open Water
5E
Open Water above approximately
4,208 ft. 2B
3B 3D

Fish Springs National
Wildlife Refuge, Juab County 2B
3C 3D

Harold Crane Waterfowl
Management Area, Box Elder
County 2B
3C 3D

Gilbert Bay

Open Water below approximately
4,208 ft.
5A
Transitional Waters approximately
4,208 ft. to Open Water
5E
Open Water above approximately
4,208 ft. 2B
3B 3D

Gunnison Bay

Open Water below approximately
4,208 ft.
5B
Transitional Waters approximately
4,208 ft. to Open Water
5E
Open Water above approximately
4,208 ft. 2B
3B 3D

Howard Slough Waterfowl
Management Area, Weber County 2B
3C 3D

Locomotive Springs Waterfowl
Management Area, Box Elder County 2B
3B 3D
Ogden Bay Waterfowl Management
Area, Weber County 2B
3C 3D

Ouray National Wildlife Refuge,
Uintah County 2B
3B 3D

Powell Slough Waterfowl
Management Area, Utah County 2B
3C 3D

Public Shooting Grounds Waterfowl
Management Area, Box Elder County 2B
3C 3D

Salt Creek Waterfowl Management

```
Area, Box Elder County                          2B
3C 3D

Stewart Lake Waterfowl Management
Area, Uintah County                             2B
3B    3D

Timpie Springs Waterfowl
Management Area, Tooele County                  2B
3B    3D
```

13.12 Lakes and Reservoirs. All lakes and any reservoirs greater than 10 acres not listed in 13.12 are assigned by default to the classification of the stream with which they are associated.

a. Beaver County

TABLE

Anderson Meadow Reservoir			2B 3
A		4	
Manderfield Reservoir			2B 3
A		4	
LaBaron Reservoir			2B 3
A		4	
Kents Lake			2B 3
A		4	
Minersville Reservoir			2B 3
A	3D	4	
Puffer Lake			2B 3
A			
Three Creeks Reservoir			2B 3
A		4	

b. Box Elder County

TABLE

Cutler Reservoir (including portion in Cache County)								2B	3B	3D	4
Etna Reservoir								2B	3A		4
Lynn Reservoir								2B	3A		4
Mantua Reservoir								2B	3A		4
Willard Bay Reservoir							1C	2A	3B	3D	4

c. Cache County

TABLE

Hyrum Reservoir			2A	3A 4
Newton Reservoir			2B	3A 4
Porcupine Reservoir			2B	3A 4
Pelican Pond			2B	3B 4
Tony Grove Lake			2B	3A 4

d. Carbon County

TABLE

Grassy Trail Creek Reservoir		1C	2B	3A 4
Olsen Pond			2B	3B 4
Scofield Reservoir		1C	2B	3A 4

e. Daggett County

TABLE

Browne Reservoir			2B	3
A	4			
Daggett Lake			2B	3
A	4			
Flaming Gorge Reservoir (Utah portion)		1C	2A	3
A	4			
Long Park Reservoir		1C	2B	3
A	4			
Sheep Creek Reservoir			2B	3
A	4			
Spirit Lake			2B	3
A	4			
Upper Potter Lake			2B	3
A	4			

f. Davis County

TABLE

Farmington Ponds	2B	3
A	4	
Kaysville Highway Ponds	2B	3
A	4	
Holmes Creek Reservoir	2B	
3B	4	

g. Duchesne County

TABLE

Allred Lake			2B	3
A	4			
Atwine Lake			2B	3
A	4			
Atwood Lake			2B	3
A	4			
Betsy Lake			2B	3
A	4			
Big Sandwash Reservoir		1C	2B	3
A	4			
Bluebell Lake			2B	3
A	4			
Brown Duck Reservoir			2B	3
A	4			
Butterfly Lake			2B	3
A	4			
Cedarview Reservoir			2B	3
A	4			
Chain Lake #1			2B	3
A	4			
Chepeta Lake			2B	3

A 4

Clements Reservoir 2B 3
A 4

Cleveland Lake 2B 3
A 4

Cliff Lake 2B 3
A 4

Continent Lake 2B 3
A 4

Crater Lake 2B 3
A 4

Crescent Lake 2B 3
A 4

Daynes Lake 2B 3
A 4

Dean Lake 2B 3
A 4

Doll Lake 2B 3
A 4

Drift Lake 2B 3
A 4

Elbow Lake 2B 3
A 4

Farmers Lake 2B 3
A 4

Fern Lake 2B 3
A 4

Fish Hatchery Lake 2B 3
A 4

Five Point Reservoir 2B 3
A 4

Fox Lake Reservoir 2B 3
A 4

Governors Lake 2B 3
A 4

Granddaddy Lake 2B 3
A 4

Hoover Lake 2B 3
A 4

Island Lake 2B 3
A 4

Jean Lake 2B 3
A 4

Jordan Lake 2B 3
A 4

Kidney Lake 2B 3
A 4

Kidney Lake West 2B 3
A 4

Lily Lake 2B 3
A 4

Midview Reservoir (Lake Boreham) 2B
3B 4

Milk Reservoir 2B 3
A 4

Mirror Lake 2B 3
A 4

Mohawk Lake 2B 3
A 4

Moon Lake 1C 2A 3
A 4

North Star Lake 2B 3
A 4

Palisade Lake 2B 3
A 4

Pine Island Lake 2B 3
A 4

Pinto Lake 2B 3
A 4

Pole Creek Lake 2B 3

A 4

Potters Lake 2B 3
A 4

Powell Lake 2B 3
A 4

Pyramid Lake 2A 3
A 4

Queant Lake 2B 3
A 4

Rainbow Lake 2B 3
A 4

Red Creek Reservoir 2B 3
A 4

Rudolph Lake 2B 3
A 4

Scout Lake 2A 3
A 4

Spider Lake 2B 3
A 4

Spirit Lake 2B 3
A 4

Starvation Reservoir 1C 2A 3
A 4

Superior Lake			2B 3
A	4		
Swasey Hole Reservoir			2B 3
A	4		
Taylor Lake			2B 3
A	4		
Thompson Lake			2B 3
A	4		
Timothy Reservoir #1			2B 3
A	4		
Timothy Reservoir #6			2B 3
A	4		
Timothy Reservoir #7			2B 3
A	4		
Twin Pots Reservoir		1C	2B 3
A	4		
Upper Stillwater Reservoir		1C	2B 3
A	4		
X - 24 Lake			2B 3
A	4		

h. Emery County

TABLE

Cleveland Reservoir				2B	3
A	4				
Electric Lake				2B	3
A	4				
Huntington Reservoir				2B	3
A	4				
Huntington North Reservoir			2A		
3B	4				
Joes Valley Reservoir			2A		3
A	4				
Millsite Reservoir		1C	2A		3
A	4				

i. Garfield County

TABLE

Barney Lake		2B 3 A
	4	
Cyclone Lake		2B 3 A
	4	
Deer Lake		2B 3 A
	4	
Jacobs Valley Reservoir		2B 3C 3D
	4	
Lower Bowns Reservoir		2B 3 A
	4	
North Creek Reservoir		2B 3 A
	4	
Panguitch Lake		2B 3 A
	4	
Pine Lake		2B 3 A
	4	
Oak Creek Reservoir (Upper Bowns)		2B 3 A
	4	
Pleasant Lake		2B 3 A
	4	
Posey Lake		2B 3

```
A             4

Purple Lake                                   2B 3
A             4

Raft Lake                                     2B 3
A             4

Row Lake #3                                   2B 3
A             4

Row Lake #7                                   2B 3
A             4

Spectacle Reservoir                           2B 3
A             4

Tropic Reservoir                              2B 3
A             4

West Deer Lake                                2B 3
A             4

Wide Hollow Reservoir                         2B 3
A             4
```

j. Iron County

TABLE

Newcastle Reservoir			2B 3A
	4		
Red Creek Reservoir			2B 3A
	4		
Yankee Meadow Reservoir			2B 3A
	4		

k. Juab County

TABLE

Chicken Creek Reservoir			2B 3C 3D
	4		
Mona Reservoir			2B 3B
	4		
Sevier Bridge (Yuba) Reservoir			2A 3B
	4		

l. Kane County

```
TABLE

Navajo Lake                                          2B 3
A             4
```

m. Millard County

```
TABLE

DMAD Reservoir                                       2B
3B          4

Fools Creek Reservoir                                2B
3C 3D    4

Garrison Reservoir (Pruess Lake)                     2B
3B          4

Gunnison Bend Reservoir                              2B
3B          4
```

n. Morgan County

TABLE

East Canyon Reservoir		1C	2A	3
A	4			
Lost Creek Reservoir		1C	2B	3
A	4			

o. Piute County

TABLE

Barney Reservoir		2B	3
A	4		
Lower Boxcreek Reservoir		2B	3
A	4		
Manning Meadow Reservoir		2B	3
A	4		
Otter Creek Reservoir		2B	3
A	4		
Piute Reservoir		2B	3
A	4		
Upper Boxcreek Reservoir		2B	3
A	4		

p. Rich County

TABLE

Bear Lake (Utah portion)	2A	3	A 4
Birch Creek Reservoir	2B	3	A 4
Little Creek Reservoir	2B	3	A 4
Woodruff Creek Reservoir	2B	3	A 4

q. Salt Lake County

TABLE

Decker Lake			2B 3B 3D 4
Lake Mary	1C	2B	3A
Little Dell Reservoir	1C	2B	3A
Mountain Dell Reservoir	1C	2B	3A

r. San Juan County

TABLE

Blanding Reservoir #4		1C	2B	3
A	4			
Dark Canyon Lake		1C	2B	3
A	4			
Kens Lake			2B	3
A*	4			
Lake Powell (Utah portion)		1C	2A	
3B	4			
Lloyds Lake		1C	2B	3
A	4			
Monticello Lake			2B	3
A	4			
Recapture Reservoir			2B	3
A	4			

(*) Site-specific criteria are associated with this use.

s. Sanpete County

TABLE

Duck Fork Reservoir 2B 3
A 4

Fairview Lakes 1C 2B 3
A 4

Ferron Reservoir 2B 3
A 4

Lower Gooseberry Reservoir 1C 2B 3
A 4

Gunnison Reservoir 2B
3C 4

Island Lake 2B 3
A 4

Miller Flat Reservoir 2B 3
A 4

Ninemile Reservoir 2B 3
A 4

Palisade Reservoir 2A 3
A 4

Rolfson Reservoir 2B
3C 4

Twin Lakes 2B 3

```
A              4


Willow Lake                                        2B 3
A              4
```

t. Sevier County

TABLE

Annabella Reservoir	2B	3A 4
Big Lake	2B	3A 4
Farnsworth Lake	2B	3A 4
Fish Lake	2B	3A 4
Forsythe Reservoir	2B	3A 4
Johnson Valley Reservoir	2B	3A 4
Koosharem Reservoir	2B	3A 4
Lost Creek Reservoir	2B	3A 4
Redmond Lake	2B	3B 4
Rex Reservoir	2B	3A 4
Salina Reservoir	2B	3

```
A              4

Sheep Valley Reservoir                          2B 3
A              4
```

u. Summit County

TABLE

Abes Lake		2B	3
A	4		
Alexander Lake		2B	3
A	4		
Amethyst Lake		2B	3
A	4		
Beaver Lake		2B	3
A	4		
Beaver Meadow Reservoir		2B	3
A	4		
Big Elk Reservoir		2B	3
A	4		
Blanchard Lake		2B	3
A	4		
Bridger Lake		2B	3
A	4		
China Lake		2B	3
A	4		
Cliff Lake		2B	3
A	4		
Clyde Lake		2B	3

A 4

Coffin Lake 2B 3
A 4

Cuberant Lake 2B 3
A 4

East Red Castle Lake 2B 3
A 4

Echo Reservoir 1C 2A 3
A 4

Fish Lake 2B 3
A 4
Fish Reservoir 2B 3
A 4

Haystack Reservoir #1 2B 3
A 4

Henrys Fork Reservoir 2B 3A
4

Hoop Lake 2B 3
A 4

Island Lake 2B 3
A 4

Island Reservoir 2B 3
A 4

Jesson Lake 2B 3

A	4		
Kamas Lake		2B	3
A	4		
Lily Lake		2B	3
A	4		
Lost Reservoir		2B	3
A	4		
Lower Red Castle Lake		2B	3
A	4		
Lyman Lake		2A	3
A	4		
Marsh Lake		2B	3
A	4		
Marshall Lake		2B	3
A	4		
McPheters Lake		2B	3
A	4		
Meadow Reservoir		2B	3
A	4		
Meeks Cabin Reservoir		2B	3
A	4		
Notch Mountain Reservoir		2B	3
A	4		

Red Castle Lake 2B 3
A 4

Rockport Reservoir 1C 2A 3
A 4

Ryder Lake 2B 3
A 4

Sand Reservoir 2B 3
A 4

Scow Lake 2B 3
A 4

Smith Moorehouse Reservoir 1C 2B 3
A 4

Star Lake 2B 3
A 4

Stateline Reservoir 2B 3
A 4

Tamarack Lake 2B 3
A 4

Trial Lake 1C 2B 3
A 4

Upper Lyman Lake 2B 3
A 4

Upper Red Castle 2B 3
A 4

Wall Lake Reservoir		2B 3
A	4	
Washington Reservoir		2B 3
A	4	
Whitney Reservoir		2B 3
A	4	

v. Tooele County

TABLE

Blue Lake	2B	3B 4
Clear Lake	2B	3B 4
Grantsville Reservoir	2B 3	A 4
Horseshoe Lake	2B	3B 4
Kanaka Lake	2B	3B 4
Rush Lake	2B	3B
Settlement Canyon Reservoir	2B 3	A 4
Stansbury Lake	2B	3B 4
Vernon Reservoir	2B 3	A 4

w. Uintah County

TABLE

Ashley Twin Lakes (Ashley Creek)	1C	2B	3A 4
Bottle Hollow Reservoir		2B	3A 4
Brough Reservoir		2B	3A 4
Calder Reservoir		2B	3A 4
Crouse Reservoir		2B	3A 4
East Park Reservoir		2B	3A 4
Fish Lake		2B	3A 4
Goose Lake #2		2B	3A 4
Matt Warner Reservoir		2B	3A 4
Oaks Park Reservoir		2B	3A 4
Paradise Park Reservoir		2B	3

A 4

Pelican Lake 2B
3B 4

Red Fleet Reservoir 1C 2A 3
A 4

Steinaker Reservoir 1C 2A 3
A 4

Towave Reservoir 2B 3
A 4

Weaver Reservoir 2B 3
A 4

Whiterocks Lake 2B 3
A 4

Workman Lake 2B 3
A 4

x. Utah County

TABLE

Big East Lake						2B	3
A		4					
Salem Pond					2A		3
A		4					
Silver Flat Lake Reservoir						2B	3
A		4					
Tibble Fork Resevoir						2B	3
A		4					
Utah Lake					2A		
3B	3D		4				

y. Wasatch County

TABLE

Currant Creek Reservoir		1C		2B	3A 4
Deer Creek Reservoir		1C	2A		3A 4
Jordanelle Reservoir		1C	2A		3A 4
Mill Hollow Reservoir				2B	3A 4
Strawberry Reservoir		1C		2B	3A 4

z. Washington County

TABLE

Baker Dam Reservoir				2B	3
A	4				
Gunlock Reservoir			1C	2A	
3B	4				
Ivins Reservoir				2B	
3B	4				
Kolob Reservoir				2B	3
A	4				
Lower Enterprise Reservoir				2B	3
A	4				
Quail Creek Reservoir			1C	2A	
3B	4				
Sand Hollow Reservoir			1C	2A	
3B	4				
Upper Enterprise Reservoir				2B	3
A	4				

aa. Wayne County

TABLE

Blind Lake		2B	3
A	4		
Cook Lake		2B	3
A	4		
Donkey Reservoir		2B	3
A	4		
Fish Creek Reservoir		2B	3
A	4		
Mill Meadow Reservoir		2B	3
A	4		
Raft Lake		2B	3
A	4		

bb. Weber County

TABLE

Causey Reservoir		2B	3
A	4		
Pineview Reservoir		1C 2A	3
A	4		

13.13 Unclassified Waters

All waters not specifically classified are presumptively classified: 2B, 3D

R317-2-14. Numeric Criteria.

TABLE 2.14.1

NUMERIC CRITERIA FOR DOMESTIC, RECREATION, AND AGRICULTURAL USES

Parameter	Domestic Source	Recreation and Aesthetics	Agriculture
	1C(1)	2A	2B	4
BACTERIOLOGICAL (30-DAY GEOMETRIC MEAN) (NO.)/100 ML) (7)				
E. coli	206	126	206	
MAXIMUM (NO.)/100 ML) (7)				
E. coli	668	409	668	
PHYSICAL				
pH (RANGE)	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0
Turbidity Increase (NTU)		10	10	
METALS (DISSOLVED, MAXIMUM MG/L) (2)				

Arsenic	0.01		
0.1			
Barium	1.0		
Beryllium	<0.004		
Cadmium	0.01		
0.01			
Chromium	0.05		
0.10			
Copper			
0.2			
Lead	0.015		
0.1			
Mercury	0.002		
Selenium	0.05		
0.05			
Silver	0.05		
INORGANICS			
(MAXIMUM MG/L)			
Bromate	0.01		
Boron			
0.75			
Chlorite	<1.0		
Fluoride	4.0		
Nitrates as N	10		
Total Dissolved			
Solids (4)			
1200			
	RADIOLOGICAL		
(MAXIMUM pCi/L)			
Gross Alpha	15		
15			
Gross Beta	4 mrem/yr	Radium 22	
6, 228			
(Combined)	5		

Strontium 90	8		
Tritium	20000		
Uranium	30		
ORGANICS (MAXIMUM UG/L)			
2,4-D 94-75-7	70		
2,4,5-TP 93-72-1	10		
Alachlor 15972-60-8	2		
Atrazine 1912-24-9	3		
Carbofuran 1563-66-2	40		
Dichloroethylene (cis-1,2) 156-59-2	70		
Dalapon 75-99-0	200		
Di(2ethylhexl)adipate 103-23-1	400		
Dibromochloropropane 96-12-8	0.2		
Dinoseb 88-85-7	7		
Diquat 85-00-7	20		
Endothall 145-73-3	100		
Ethylene Dibromide 106-93-4	0.05		
Glyphosate 1071-83-6	700		
Xylenes 1330-20-7	10,000		
POLLUTION INDICATORS (5)			
BOD (MG/L)	5	5	5
Nitrate as N (MG/L)	4	4	
Total Phosphorus as P (MG/L)(6)	0.05	0.05	

FOOTNOTES:

(1) See also numeric criteria for water and organism in Table 2.14.6.

(2) The dissolved metals method involves filtration of the sample in the field, acidification of the sample in the field, no digestion process in the laboratory, and analysis by approved laboratory methods for the required detection levels.

(3) Reserved

(4) SITE SPECIFIC STANDARDS FOR TOTAL DISSOLVED SOLIDS (TDS)

Blue Creek and tributaries, Box Elder County, from Bear River Bay, Great Salt Lake to Blue Creek Reservoir: March through October daily maximum 4,900 mg/l and an average of 3,800 mg/l; November through February daily maximum 6,300 mg/l and an average of 4,700 mg/l. Assessments will be based on TDS concentrations measured at the location of STORET 4960740.

Blue Creek Reservoir and tributaries, Box Elder County, daily maximum 2,100 mg/l;

Castle Creek from confluence with the Colorado River to Seventh Day Adventist Diversion: 1,800 mg/l;

Cottonwood Creek from the confluence with Huntingt
on Creek to
Highway U-57: 3,500 mg/l;

Ferron Creek from the confluence with San Rafael R
iver to Highway
U-10: 3,500 mg/l;

Huntington Creek and tributaries from the confluen
ce with
Cottonwood Creek to Highway U-10: 4,800 mg/l;

Ivie Creek and its tributaries from the confluence
with Muddy
Creek to the confluence with Quitchupah Creek: 3,
800 mg/l
provided that total sulfate not exceed 2,000 mg/l
to
protect the livestock watering agricultural existi
ng use;

Ivie Creek and its tributaries from the confluence
with
Quitchupah Creek to Highway U-10: 2,600 mg/l;

Lost Creek from the confluence with Sevier River t
o U.S.
National Forest boundary: 4,600 mg/l;

Muddy Creek and tributaries from the confluence wi
th Ivie Creek
to Highway U-10: 2,600 mg/l;

Muddy Creek from confluence with Fremont River to
confluence with

Ivie Creek: 5,800 mg/l;

North Creek from the confluence with Virgin River to headwaters:
2,035 mg/l;

Onion Creek from the confluence with Colorado River to road
crossing above Stinking Springs: 3000 mg/l;

Brine Creek-Petersen Creek, from the confluence with the Sevier
River to Highway U-119 Crossing: 9,700 mg/l;

Price River and tributaries from confluence with Green River to
confluence with Soldier Creek: 3,000 mg/l;

Price River and tributaries from the confluence with Soldier
Creek to Carbon Canal Diversion: 1,700 mg/l;

Quitchupah Creek and tributaries from the confluence with Ivie
Creek to Highway U-10: 3,800 mg/l provided that total sulfate not
exceed 2,000 mg/l to protect the livestock watering agricultural
existing use;

Rock Canyon Creek from the confluence with Cottonwood Creek to
headwaters: 3,500 mg/l;

San Pitch River from below Gunnison Reservoir to t

he Sevier
River: 2,400 mg/l;

San Rafael River from the confluence with the Gree n River to
Buckhorn Crossing: 4,100 mg/l;

San Rafael River from the Buckhorn Crossing to the confluence
with Huntington Creek and Cottonwood Creek: 3,500 mg/l;

Sevier River between Gunnison Bend Reservoir and D MAD Reservoir:
1,725 mg/l;

Sevier River from Gunnison Bend Reservoir to Craft s Lake:
3,370 mg/l;

Silver Creek and tributaries, Summit County, from confluence
with Tollgate Creek to headwaters: maximum 1,900 m g/L.

South Fork Spring Creek from confluence with Pelic an Pond
Slough Stream to U.S. Highway 89 1,450 mg/l
(Apr.-Sept.)
1,950 mg/l
(Oct.-March)

Virgin River from the Utah/Arizona border to Pah T empe Springs:
2,360 mg/l

(5) Investigations should be conducted to develop more information where these pollution indicator levels are exceeded. These indicators are superseded by numeric criteria in waters where promulgated.

(6) Total Phosphorus as P (mg/l) indicator for lakes and reservoirs shall be 0.025.

(7) Where the criteria are exceeded and there is a reasonable basis for concluding that the indicator bacteria E. coli are primarily from natural sources (wildlife), e.g., in National Wildlife Refuges and State Waterfowl Management Areas, the criteria may be considered attained provided the density attributable to non-wildlife sources is less than the criteria. Exceedences of E. coli from nonhuman nonpoint sources will generally be addressed through appropriate Federal, State, and local nonpoint source programs.

Measurement of E. coli using the "Quanti-Tray 2000" procedure is approved as a field analysis. Other EPA approved methods may also be used.

For water quality assessment purposes, up to 10% of

representative samples may exceed the 668 per 100 ml criterion
(for 1C and 2B waters) and 409 per 100 ml (for 2A waters). For
small datasets, where exceedences of these criteria are
observed, follow-up ambient monitoring should be conducted to
better characterize water quality.

TABLE 2.14.2

NUMERIC CRITERIA FOR AQUATIC WILDLIFE(8)

Parameter	Aquatic Wildlife				
	3A	3B	3C	3D	5
PHYSICAL					
Total Dissolved Gases	(1)	(1)			
Minimum Dissolved Oxygen (MG/L) (2)(2a)					
30 Day Average	6.5	5.5	5.0	5.0	
7 Day Average	9.5/5.0	6.0/4.0			
Minimum	8.0/4.0	5.0/3.0	3.0	3.0	
Max. Temperature(C)(3)	20	27	27		
Max. Temperature Change (C)(3)	2	4	4		
pH (Range)(2a)	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0
Turbidity Increase (NTU)	10	10	15	15	
METALS (4)					

(DISSOLVED, UG/L)(5)				
Aluminum				
4 Day Average (6)	87	87	87	87
1 Hour Average	750	750	750	750
Arsenic (Trivalent)				
4 Day Average	150	150	150	150
1 Hour Average	340	340	340	340
Cadmium (7)				
4 Day Average	0.72	0.72	0.72	0.72
1 Hour Average	1.8	1.8	1.8	1.8
Chromium (Hexavalent)				
4 Day Average	11	11	11	11
1 Hour Average	16	16	16	16
Chromium (Trivalent) (7)				
4 Day Average	74	74	74	74
1 Hour Average	570	570	570	570
Copper (7)				
4 Day Average	9	9	9	9

	1 Hour Average	13	13	13	13
	Cyanide (Free)				
	4 Day Average	5.2	5.2	5.2	5.2
	1 Hour Average	22	22	22	22
	Iron (Maximum)	1000	1000	1000	1000
	Lead (7)				
	4 Day Average	2.5	2.5	2.5	2.5
	1 Hour Average	65	65	65	65
	Mercury				
	4 Day Average	0.012	0.012	0.012	0.012
	Nickel (7)				
	4 Day Average	52	52	52	52
	1 Hour Average	468	468	468	468
	Selenium				
	4 Day Average	4.6	4.6	4.6	4.6
	1 Hour Average	18.4	18.4	18.4	18.4
	Selenium (14)				
	Gilbert Bay (Class 5A)				
	Great Salt Lake				

	Geometric Mean over Nesting Season (mg/kg dry wt)				12.5
	Silver				
	1 Hour Average (7)	3.2	3.2	3.2	3.2
	Tributyltin				
	4 Day Average	0.072	0.072	0.072	0.072
	1 Hour Average	0.46	0.46	0.46	0.46
	Zinc (7)				
	4 Day Average	120	120	120	120
	1 Hour Average	120	120	120	120
	INORGANICS (MG/L) (4)				
	Total Ammonia as N (9)				
	30 Day Average	(9a)	(9a)	(9a)	(9a)
	1 Hour Average	(9b)	(9b)	(9b)	(9b)
	Chlorine (Total Residual)				
	4 Day Average	0.011	0.011	0.011	0.011
	1 Hour Average	0.019	0.019	0.019	0.019

Hydrogen Sulfide (Undissociated, Max. UG/L)	2.0	2.0	2.0	2.0
Phenol(Maximum)	0.01	0.01	0.01	0.01
RADIOLOGICAL (MAXIMUM pCi/L)				
ORGANICS (UG/L) (4)				
Acrolein				
4 Day Average	3.0	3.0	3.0	3.0
1 Hour Average	3.0	3.0	3.0	3.0
Aldrin				
1 Hour Average	1.5	1.5	1.5	1.5
Carbaryl				
4 Day Average	2.1	2.1	2.1	2.1
1 Hour Average	2.1	2.1	2.1	2.1
Chlordane				
4 Day Average	0.0043	0.0043	0.0043	0.0043
1 Hour Average	1.2	1.2	1.2	1.2
Chlorpyrifos				
4 Day Average	0.041	0.041	0.04	

1 0.041
1 Hour Average 0.083 0.083 0.08
3 0.083

4,4' -DDT
4 Day Average 0.0010 0.0010 0.00
10 0.0010
1 Hour Average 0.55 0.55 0.55
0.55

Diazinon
4 Day Average 0.17 0.17 0.17
0.17
1 Hour Average 0.17 0.17 0.17
0.17

Dieldrin
4 Day Average 0.056 0.056 0.05
6 0.056
1 Hour Average 0.24 0.24 0.24
0.24

Alpha-Endosulfan
4 Day Average 0.056 0.056 0.05
6 0.056
1 Hour Average 0.11 0.11 0.11
0.11

beta-Endosulfan
4 Day Average 0.056 0.056 0.05
6 0.056
1 Day Average 0.11 0.11 0.11
0.11

Endrin

	4 Day Average	0.036	0.036	0.036	0.036
	1 Hour Average	0.086	0.086	0.086	0.086
	Heptachlor				
	4 Day Average	0.0038	0.0038	0.0038	0.0038
	1 Hour Average	0.26	0.26	0.26	0.26
	Heptachlor epoxide				
	4 Day Average	0.0038	0.0038	0.0038	0.0038
	1 Hour Average	0.26	0.26	0.26	0.26
	Hexachlorocyclohexane (Lindane)				
	4 Day Average	0.08	0.08	0.08	0.08
	1 Hour Average	1.0	1.0	1.0	1.0
	Methoxychlor (Maximum)	0.03	0.03	0.03	0.03
	Mirex (Maximum)	0.001	0.001	0.001	0.001
	Nonylphenol				
	4 Day Average	6.6	6.6	6.6	6.6
	1 Hour Average	28.0	28.0	28.0	28.0

Parathion				
4 Day Average	0.013	0.013	0.013	0.013
1 Hour Average	0.066	0.066	0.066	0.066
PCBs				
4 Day Average	0.014	0.014	0.014	0.014
Pentachlorophenol (11)				
4 Day Average	15	15	15	15
1 Hour Average	19	19	19	19
Toxaphene				
4 Day Average	0.0002	0.0002	0.0002	0.0002
1 Hour Average	0.73	0.73	0.73	0.73
POLLUTION INDICATORS (10)				
Gross Alpha (pCi/L)	15	15	15	15
Gross Beta (pCi/L)	50	50	50	50
BOD (MG/L)	5	5	5	5
Nitrate as N (MG/L)	4	4	4	
Total Phosphorus as P(MG/L) (12)	0.05	0.05		

FOOTNOTES:

(1) Not to exceed 110% of saturation.

(2) These limits are not applicable to lower water levels in deep impoundments. First number in column is for when early life stages are present, second number is for when all other life stages present.

(2a) These criteria are not applicable to Great Salt Lake impounded wetlands. Surface water in these wetlands shall be protected from changes in pH and dissolved oxygen that create significant adverse impacts to the existing beneficial uses. To ensure protection of uses, the Director shall develop reasonable protocols and guidelines that quantify the physical, chemical, and biological integrity of these waters. These protocols and guidelines will include input from local governments, the regulated community, and the general public. The Director will inform the Water Quality Board of any protocols or guidelines that are developed.

(3) Site Specific Standards for Temperature Kens Lake: From June 1st - September 20th, 27 degrees C.

(4) Where criteria are listed as 4-day average and 1-hour average concentrations, these concentrations should not

be exceeded more often than once every three years on the
average.

(5) The dissolved metals method involves filtration of
the sample in the field, acidification of the sample in the
field, no digestion process in the laboratory, and analysis by
EPA approved laboratory methods for the required
detection levels.

(6) The criterion for aluminum will be implemented as
follows:

Where the pH is equal to or greater than 7.0 and the
hardness is equal to or greater than 50 ppm as CaC03 in the
receiving water after mixing, the 87 ug/1 chronic criterion
(expressed as total recoverable) will not apply, and aluminum
will be regulated based on compliance with the 750 ug/1 acute
aluminum criterion (expressed as total recoverable).

(7) Hardness dependent criteria. 100 mg/l used.
Conversion factors for ratio of total recoverable metals to
dissolved metals must also be applied.

In waters with a hardness greater than 400 mg/l as CaC03,
calculations will assume a hardness of 400 mg/l as CaC03. See

Table 2.14.3 for complete equations for hardness and conversion factors.

(8) See also numeric criteria for organism only in Table 2.14.6.

(9) The following equations are used to calculate Ammonia criteria concentrations:

(9a) The thirty-day average concentration of total ammonia nitrogen (in mg/l as N) does not exceed, more than once every three years on the average, the chronic criterion calculated using the following equations.

Fish Early Life Stages are Present:

mg/l as N (Chronic) = $((0.0577/(1+10^{7.688-pH})) + (2.487/(1+10^{pH-7.688}))) * MIN (2.85, 1.45*10^{0.028*(25-T)})$

Fish Early Life Stages are Absent:

mg/1 as N (Chronic) = $((0.0577/(1+10^{7.688-pH})) + (2.487/(1+10^{pH-7.688}))) * 1.45*10^{0.028* (25-MAX(T,7))})$

Mill Creek (Salt Lake County) from confluence with Jordan River to Interstate 15, Jordan River from 900 South Street to confluence with Mill Creek, Surplus Canal from 900 South Street to diversion from the Jordan River, Fish Early Life Stages are Present:

mg/l as N (Chronic) = $0.9405 * ((0.0278/(1+10^{7.688-pH})) + ((1.1994/(1+10^{pH-7.688}))) * MIN(6.920,(7.547*10^{0.028*(20-T)})))$

Mill Creek (Salt Lake County) from confluence with Jordan River to Interstate 15, Jordan River from 900 South Street to confluence with Mill Creek, Surplus Canal from 900 South Street to diversion from the Jordan River, Fish Early Life Stages are Absent:

mg/L as N (chronic) = 09.405 * (((0.0278/(1+$10^{7.688-pH}$)) + (1.1994/(1+$10^{pH-7.688}$))) * (7.547*$10^{0.028*(20-MAX(T,7))}$)

(9b) The one-hour average concentration of total ammonia nitrogen (in mg/l as N) does not exceed, more than once every three years on the average the acute criterion calculated using the following equations.

Class 3A:

mg/l as N (Acute) = (0.275/(1+$10^{7.204-pH}$)) + (39.0/1+$10^{pH-7.204}$))

Class 3B, 3C, 3D:

mg/l as N (Acute) = 0.411/(1+$10^{7.204-pH}$)) + (58.4/(1+$10^{pH-7.204}$))

Mill Creek (Salt Lake County) from confluence with Jordan River to Interstate 15, Jordan River from 900 South Street to confluence with Mill Creek, Surplus Canal from 900 South Street to diversion from the Jordan River:

mg/l as N (Acute) = 0.729 * (((0.0114/(1+$10^{7.204-pH}$))+(1.6181/(1+$10^{pH-7.204}$))) * MIN(51.93,(62.15*$10^{0.036*(20-T)}$))

In addition, the highest four-day average with

in the 30-day
period should not exceed 2.5 times the chronic cri terion.
The "Fish Early Life Stages are Present" 30-day av erage total
ammonia criterion will be applied by default unles s it is
determined by the Director, on a site-specific bas is, that it
is appropriate to apply the "Fish Early Life Stage s are
Absent" 30-day average criterion for all or some p ortion of
the year. At a minimum, the "Fish Early Life Stag es are
Present" criterion will apply from the beginning o f spawning
through the end of the early life stages. Early l ife stages
include the pre-hatch embryonic stage, the post-ha tch free
embryo or yolk-sac fry stage, and the larval stage for the
species of fish expected to occur at the site. Th e Director
will consult with the Division of Wildlife Resourc es in making
such determinations. The Division will maintain i nformation
regarding the waterbodies and time periods where a pplication
of the "Early Life Stages are Absent" criterion is determined
to be appropriate.

(10) Investigation should be conducted to dev

elop more
information where these levels are exceeded.

(11) pH dependent criteria. pH 7.8 used in table. See
Table 2.14.4 for equation.

(12) Total Phosphorus as P (mg/l) as a pollution indicator
for lakes and reservoirs shall be 0.025. These indicators are
superseded by numeric criteria in waters where promulgated.

(13) Reserved

(14) The selenium water quality standard of 12.5 (mg/kg dry
weight) for Gilbert Bay is a tissue based standard using the
complete egg/embryo of aquatic dependent birds using Gilbert Bay
based upon a minimum of five samples over the nesting season.
Assessment procedures are incorporated as a part of this
standard as follows:

Egg Concentration Triggers: DWQ Responses

Below 5.0 mg/kg: Routine monitoring with sufficient intensity
to determine if selenium concentrations within the Great Salt
Lake ecosystem are increasing.

5.0 mg/kg: Increased monitoring to address data gaps,
loadings, and areas of uncertainty identified from

initial Great
Salt Lake selenium studies.

6.4 mg/kg: Initiation of a Level II Antidegradatio
n review by the
State for all discharge permit renewals or new dis
charge permits
to Great Salt Lake. The Level II Antidegradation r
eview may
include an analysis of loading reductions.

9.8 mg/kg: Initiation of preliminary TMDL studies
 to evaluate
selenium loading sources.

12.5 mg/kg and above: Declare impairment. Formaliz
e and
implement TMDL.

Antidegradation
Level II Review procedures associated with this st
andard are
referenced at R317-2-3.5.C.

TABLE

1-HOUR AVERAGE (ACUTE) CONCENTRATION OF TOTAL AMMONIA AS N (MG/L)

pH	Class 3A	Class 3B, 3C, 3D
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	1

```
4.4
     7.8                  8.11                 1
2.1
     7.9                  6.77                 1
0.1
     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                  0.89                 1.
32
```

TABLE

30-DAY AVERAGE (CHRONIC) CONCENTRATION OF

TOTAL AMMONIA AS N (MG/l)

Fish Early Life Stages Present

Temperature, C

pH	0	14	16	18	20	22	24	26	28	30
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	2.18
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  0.90
 8.1   2.10  2.10  1.91  1.68  1.47  1.29  1.14
1.00  0.88  0.77
 8.2   1.79  1.79  1.63  1.43  1.26  1.11  0.97
0.86  0.75  0.66
 8.3   1.52  1.52  1.39  1.22  1.07  0.94  0.83
0.73  0.64  0.56
 8.4   1.29  1.29  1.17  1.03  0.91  0.80  0.70
0.62  0.54  0.48
 8.5   1.09  1.09  0.99  0.87  0.76  0.67  0.59
0.52  0.46  0.40
 8.6   0.92  0.92  0.84  0.73  0.65  0.57  0.50
0.44  0.39  0.34
 8.7   0.78  0.78  0.71  0.62  0.55  0.48  0.42
0.37  0.33  0.29
 8.8   0.66  0.66  0.60  0.53  0.46  0.41  0.36
0.32  0.28  0.24
 8.9   0.56  0.56  0.51  0.45  0.40  0.35  0.31
0.27  0.24  0.21
 9.0   0.49  0.49  0.44  0.39  0.34  0.30  0.26
0.23  0.20  0.18
```

TABLE

30-DAY AVERAGE (CHRONIC) CONCENTRATION OF TOTAL AMMONIA AS N (MG/l)

	Fish Early Life Stages Absent							
	Temperature, C							
pH	0-7	8	9	10	11	12	13	14 16
6.5	10.8	10.1	9.51	8.92	8.36	7.84	7.36	6.89 6.06
6.6	10.7	9.99	9.37	8.79	8.24	7.72	7.24	6.79 5.97
6.7	10.5	9.81	9.20	8.62	8.08	7.58	7.11	6.66 5.86
6.8	10.2	9.58	8.98	8.42	7.90	7.40	6.94	6.51 5.72
6.9	9.93	9.31	8.73	8.19	7.68	7.20	6.75	6.33 5.56
7.0	9.60	9.00	8.43	7.91	7.41	6.95	6.52	6.11 5.37
7.1	9.20	8.63	8.09	7.58	7.11	6.67	6.25	5.86 5.15
7.2	8.75	8.20	7.69	7.21	6.76	6.34	5.94	5.57 4.90
7.3	8.24	7.73	7.25	6.79	6.37	5.97	5.60	5.25 4.61
7.4	7.69	7.21	6.76	6.33	5.94	5.57	5.22	4.89 4.30
7.5	7.09	6.64	6.23	5.84	5.48	5.13	4.81	4.51 3.97
7.6	6.46	6.05	5.67	5.32	4.99	4.68	4.3	

```
8  4.11  3.61
  7.7      5.81  5.45  5.11  4.79  4.49  4.21  3.9
5  3.70  3.25
  7.8      5.17  4.84  4.54  4.26  3.99  3.74  3.5
1  3.29  2.89
  7.9      4.54  4.26  3.99  3.74  3.51  3.29  3.0
9  2.89  2.54
  8.0      3.95  3.70  3.47  3.26  3.05  2.86  2.6
8  2.52  2.21
  8.1      3.41  3.19  2.99  2.81  2.63  2.47  2.3
1  2.17  1.91
  8.2      2.91  2.73  2.56  2.40  2.25  2.11  1.9
8  1.85  1.63
  8.3      2.47  2.32  2.18  2.04  1.91  1.79  1.6
8  1.58  1.39
  8.4      2.09  1.96  1.84  1.73  1.62  1.52  1.4
2  1.33  1.17
  8.5      1.77  1.66  1.55  1.46  1.37  1.28  1.2
0  1.13  0.990
  8.6      1.49  1.40  1.31  1.23  1.15  1.08  1.0
1  0.951 0.836
  8.7      1.26  1.18  1.11  1.04  0.976 0.915 0.8
58 0.805 0.707
  8.8      1.07  1.01  0.944 0.885 0.829 0.778 0.7
29 0.684 0.601
  8.9      0.917 0.860 0.806 0.758 0.709 0.664 0.6
23 0.584 0.513
  9.0      0.790 0.740 0.694 0.651 0.610 0.572 0.5
36 0.503 0.442

  pH        18    20    22    24    26    28    30
  6.5      5.33  4.68  4.12  3.62  3.18  2.80  2.4
6
  6.6      5.25  4.61  4.05  3.56  3.13  2.75  2.4
2
```

```
  6.7      5.15  4.52  3.98  3.50  3.07  2.70  2.3
7
  6.8      5.03  4.42  3.89  3.42  3.00  2.64  2.3
2
  6.9      4.89  4.30  3.78  3.32  2.92  2.57  2.2
5
  7.0      4.72  4.15  3.65  3.21  2.82  2.48  2.1
8
  7.1      4.53  3.98  3.50  3.08  2.70  2.38  2.0
9
  7.2      4.41  3.78  3.33  2.92  2.57  2.26  1.9
9
  7.3      4.06  3.57  3.13  2.76  2.42  2.13  1.8
7
  7.4      3.78  3.32  2.92  2.57  2.26  1.98  1.7
4
  7.5      3.49  3.06  2.69  2.37  2.08  1.83  1.6
1
  7.6      3.18  2.79  2.45  2.16  1.90  1.67  1.4
7
  7.7      2.86  2.51  2.21  1.94  1.71  1.50  1.3
2
  7.8      2.54  2.23  1.96  1.73  1.52  1.33  1.1
7
  7.9      2.24  1.96  1.73  1.52  1.33  1.17  1.0
3
  8.0      1.94  1.71  1.50  1.32  1.16  1.02  0.8
97
  8.1      1.68  1.47  1.29  1.14  1.00  0.879 0.7
33
  8.2      1.43  1.26  1.11  1.073 0.855 0.752 0.6
61
  8.3      1.22  1.07  0.941 0.827 0.727 0.639 0.5
62
  8.4      1.03  0.906 0.796 0.700 0.615 0.541 0.4
```

```
75
  8.5      0.870 0.765 0.672 0.591 0.520 0.457 0.4
01
  8.6      0.735 0.646 0.568 0.499 0.439 0.396 0.3
39
  8.7      0.622 0.547 0.480 0.422 0.371 0.326 0.2
87
  8.8      0.528 0.464 0.408 0.359 0.315 0.277 0.2
44
  8.9      0.451 0.397 0.349 0.306 0.269 0.237 0.2
08
  9.0      0.389 0.342 0.300 0.264 0.232 0.204 0.1
79
```

TABLE 2.14.3a

EQUATIONS TO CONVERT TOTAL RECOVERABLE METALS STANDARD WITH HARDNESS (1) DEPENDENCE TO DISSOLVED METALS STANDARD BY APPLICATION OF A CONVERSION FACTOR (CF).

Parameter	4-Day Average (Chronic) Concentration (UG/L)
CADMIUM	CF * $e^{(0.7977*\ln(\text{hardness})-3.909)}$ CF = 1.101672 - ln(hardness) (0.041838)
CHROMIUM III	CF * $e^{(0.8190(\ln(\text{hardness})) + 0.6848}$ CF = 0.860
COPPER	CF * $e^{(0.8545(\ln(\text{hardness})) -1.702)}$ CF = 0.960
LEAD	CF * $e^{(1.273(\ln(\text{hardness}))-4.705)}$ CF = 1.46203 - ln(hardness)(0.145712)
NICKEL	CF * $e^{(0.8460(\ln(\text{hardness}))+0.0584)}$ CF = 0.997
SILVER	N/A
ZINC	Cf * $e^{(0.8473(\ln(\text{hardness}))+0.884)}$ CF = 0.986

TABLE 2.14.3b

EQUATIONS TO CONVERT TOTAL RECOVERABLE METALS STANDARD WITH HARDNESS (1) DEPENDENCE TO DISSOLVED METALS STANDARD BY APPLICATION OF A CONVERSION FACTOR (CF).

Parameter	1-Hour Average (Acute) Concentration (UG/L)
CADMIUM	$CF * e^{(0.9789*\ln(\text{hardness})-3.866)}$ $CF = 1.136672 - \ln(\text{hardness})(0.041838)$
CHROMIUM (III)	$CF * e^{(0.8190(\ln(\text{hardness})) +3.7256)}$ $CF = 0.316$
COPPER	$CF * e^{(0.9422(\ln(\text{hardness}))- 1.700)}$ $CF = 0.960$
LEAD	$CF * e^{(1.273(\ln(\text{hardness}))-1.460)}$ $CF = 1.46203 - \ln(\text{hardness})(0.145712)$
NICKEL	$CF * e^{(0.8460(\ln(\text{hardness})) +2.255)}$ $CF= 0.998$
SILVER	$CF * e^{(1.72(\ln(\text{hardness}))- 6.59)}$ $CF = 0.85$
ZINC	$CF * e^{(0.8473(\ln(\text{hardness})) +0.884)}$ $CF = 0.978$

FOOTNOTE:

(1) Hardness as mg/l $CaCO_3$.

TABLE 2.14.4

EQUATIONS FOR PENTACHLOROPHENOL

(pH DEPENDENT)

4-Day Average (Chronic) Concentration (UG/L)	1-Hour Average (Acute) Concentration (UG/L)
$e^{(1.005(pH))-5.134}$	$e^{(1.005(pH))-4.869}$

TABLE 2.14.5

SITE SPECIFIC CRITERIA FOR DISSOLVED OXYGEN FOR JORDAN RIVER, SURPLUS CANAL, AND STATE CANAL

(SEE SECTION 2.13)

DISSOLVED OXYGEN:	
May-July	
7-day average	5.5 mg/l
30-day average	5.5 mg/l
Instantaneous minimum	4.5 mg/l
August-April	
30-day average	5.5 mg/l
Instantaneous minimum	4.0 mg/l

TABLE 2.14.6

LIST OF HUMAN HEALTH CRITERIA (CONSUMPTION)

Chemical Parameter and CAS #	Water and Organism (ug/L)	Organism Only (ug/L)
	Class 1C	Class 3A,3B,3C,3D
Antimony 7440-36-0	5.6	640
Arsenic 7440-38-2	A	A
Beryllium 7440-41-7	C	C
Chromium III 16065-83-1	C	C
Chromium VI 18540-29-9	C	C
Copper 7440-50-8	1,300	
Mercury 7439-97-6	A	A
Nickel 7440-02-0	610	4,600
Selenium 7782-49-2	170	4,200
Thallium 7440-28-0	0.24	0.47
Zinc 7440-66-6	7,400	26,000

Free Cyanide 57-12-5 4
400
Asbestos 1332-21-4 7 million
Fibers/L
2,3,7,8-TCDD Dioxin 1746-01-6 5.0 E -9 B
5.1 E-9 B
Acrolein 107-02-8 3
400
Acrylonitrile 107-13-1 0.061
7.0
Benzene 71-43-2 2.1 B
51 B
Bromoform 75-25-2 7.0 B
120 B
Carbon Tetrachloride 56-23-5 0.4 B
5 B
Chlorobenzene 108-90-7 100 MCL
800
Chlorodibromomethane 124-48-1 0.80 B
21 B
Chloroform 67-66-3 60 B
2,000 B
Dichlorobromomethane 75-27-4 0.95 B
27 B
1,2-Dichloroethane 107-06-2 9.9 B
2,000 B
1,1-Dichloroethylene 75-35-4 300 MCL
20,000
1,2-Dichloropropane 78-87-5 0.90 B
31 B
1,3-Dichloropropene 542-75-6 0.27
12
Ethylbenzene 100-41-4 68
130
Methyl Bromide 74-83-9 100

10,000
Methylene Chloride 75-09-2 20 B
1,000 B
1,1,2,2-Tetrachloroethane
79-34-5 0.2 B
3 B
Tetrachloroethylene 127-18-4 10 B
29 B
Toluene 108-88-3 57
520
1,2 -Trans-Dichloroethylene
156-60-5 100 MCL
4,000
1,1,1-Trichloroethane 71-55-6 10,000 MCL
200,000
1,1,2-Trichloroethane 79-00-5 0.55 B
8.9 B
Trichloroethylene 79-01-6 0.6 B
7 B
Vinyl Chloride 75-01-4 0.022
1.6
2-Chlorophenol 95-57-8 30
800
2,4-Dichlorophenol 120-83-2 10
60
2,4-Dimethylphenol 105-67-9 100
3,000
2-Methyl-4,6-Dinitrophenol
534-52-1 2
30
2,4-Dinitrophenol 51-28-5 10
300
3-Methyl-4-Chlorophenol
59-50-7 500
2,000

Pentachlorophenol 87-86-5 0.03 B
0.04 B
Phenol 108-95-2 4,000
300,000
2,4,5-Trichlorophenol 95-95-4 300
600
2,4,6-Trichlorophenol 88-06-2 1.5 B
2.8 B
Acenaphthene 83-32-9 70
90
Anthracene 120-12-7 300
400
Benzidine 92-87-5 0.00014 B
0.011 B
BenzoaAnthracene 56-55-3 0.0012 B
0.0013 B
BenzoaPyrene 50-32-8 0.00012 B
0.00013 B
BenzobFluoranthene 205-99-2 0.0012 B
0.0013 B
BenzokFluoranthene 207-08-9 0.012 B
0.013 B
Bis2-Chloro1methylether
542-88-1 0.00015
0.017
Bis2-Chloro1methylethylether
108-60-1 200 B
4000
Bis2-ChloroethylEther
111-44-4 0.030 B
2.2 B
Bis2-Chloroisopropy1Ether
39638-32-9 1,400
65,000
Bis2-EthylhexylPhthalate

117-81-7 0.32 B
0.37 B
Butylbenzyl Phthalate
85-68-7 0.10
0.10
2-Chloronaphthalene 91-58-7 800
1,000
Chrysene 218-01-9 0.12 B
0.13 B
Dibenzoa,hAnthracene 53-70-3 0.00012 B
0.00013 B
1,2-Dichlorobenzene 95-50-1 1,000
3,000
1,3-Dichlorobenzene 541-73-1 7
10
1,4-Dichlorobenzene 106-46-7 300
900
3,3-Dichlorobenzidine
91-94-1 0.049 B
0.15 B
Diethyl Phthalate 84-66-2 600
600
Dimethyl Phthalate 131-11-3 2,000
2,000
Di-n-Butyl Phthalate 84-74-2 20
30
2,4-Dinitrotoluene 121-14-2 0.049 B
1.7 B
Dinitrophenols 25550-58-7 10
1,000
1,2-Diphenylhydrazine
122-66-7 0.03 B
0.2 B
Fluoranthene 206-44-0 20
20

Fluorene 86-73-7 50
70
Hexachlorobenzene 118-74-1 0.000079 B
0.000079 B
Hexachlorobutadiene 87-68-3 0.01 B
0.01 B
Hexachloroethane 67-72-1 0.1 B
0.1 B
Hexachlorocyclopentadiene
77-47-4 4
4
Ideno 1,2,3-cdPyrene
193-39-5 0.0012 B
0.0013 B
Isophorone 78-59-1 34 B
1,800 B
Nitrobenzene 98-95-3 10
600
N-Nitrosodiethylamine 55-18-5 0.0008 B
1.24 B
N-Nitrosodimethylamine
62-75-9 0.00069 B
3.0 B
N-Nitrosodi-n-Propylamine
621-64-7 0.0050 B
0.51 B
N-Nitrosodiphenylamine
86-30-6 3.3 B
6.0 B
N-Nitrosopyrrolidine 930-55-2 0.016 B
34 B
Pentachlorobenzene 608-93-5 0.1
0.1
Pyrene 129-00-0 20
30

1,2,4-Trichlorobenzene
  120-82-1 0.071 MCL
0.076
Aldrin 309-00-2 0.00000077 B
0.00000077 B
alpha-BHC 319-84-6 0.00036 B
0.00039 B
beta-BHC 319-85-7 0.0080 B
0.014 B
gamma-BHC (Lindane) 58-89-9 4.2 MCL
4.4
Hexachlorocyclohexane (HCH)
  Technical 608-73-1 0.0066
0.010
Chlordane 57-74-9 0.00031 B
0.00032 B
4,4-DDT 50-29-3 0.000030 B
0.000030 B
4,4-DDE 72-55-9 0.000018 B
0.000018 B
4,4-DDD 72-54-8 0.00012 B
0.00012 B
Dieldrin 60-57-1 0.0000012 B
0.0000012 B
alpha-Endosulfan 959-98-8 20
30
beta-Endosulfan 33213-65-9 20
40
Endosulfan Sulfate 1031-07-8 20
40
Endrin 72-20-8 0.03
0.03
Endrin Aldehyde 7421-93-4 1
1
Heptachlor 76-44-8 0.0000059 B

0.0000059 B

Heptachlor Epoxide 1024-57-3 0.000032 B

0.000032 B

Methoxychlor 72-43-5 0.02

0.02

Polychlorinated Biphenyls

(PCBs) 1336-36-3 0.000064 B,D

0.000064 B,D

Toxaphene 8001-35-2 0.00070 B

0.00071 B

FOOTNOTES:

A. See Table 2.14.2

B. Based on carcinogenicity of 10-6 risk.

C. EPA has not calculated a human criterion for this contaminant. However, permit authorities should address this contaminant in NPDES permit actions using the State's existing narrative criteria for toxics

D. This standard applies to total PCBs.

TABLE 2.14.7

NUTRIENT CRITERIA FOR CLASSES 2A and 2B (1)

Nutrient Parameters	Criteria
Periphyton	125 mg/m2 chlorophyll-a or 49 g/m2 ash free dry mass

FOOTNOTES:

(1)Applicable to all Category 1 and Category 2 streams with the following exceptions: Quitchupah Creek through Convulsion Canyon from U. S. Forest Service boundary upstream to East Spring Canyon headwaters; North Fork of Quitchupah Creek from the U. S. Forest Service boundary upstream to its confluence with South Fork; Huntington Creek from U. S. Forest Service boundary to confluence with Crandall Creek and Crandall Creek to headwaters.

TABLE 2.14.8

NUTRIENT CRITERIA FOR CLASSES 3A, 3B, 3C, and 3D(1)

Nutrient Parameters	Criteria(2)
Total Phosphorus	0.035 mg/L)(3), and
Total Nitrogen	0.40 mg/L)(3),
	or
Total Phosphorus	0.080 mg/L(3), and
Total Nitrogen	0.80 mg/L(3), and
Filamentous Algae	33% cover(4), or
Gross Primary Production	6 g O2/m2-day(5),
or	
Ecosystem Respiration	5 g O2/m2-day(5)

FOOTNOTES:

(1)Applicable to all Category 1 and Category 2 streams with the following exceptions: Quitchupah Creek through Convulsion Canyon from U. S. Forest Service boundary upstream to East Spring Canyon headwaters; North Fork of Quitchupah Creek from the U. S. Forest Service boundary upstream to its confluence with South Fork; Huntington Creek from U. S. Forest Service boundary to confluence with Crandall Creek and Crandall Creek to headwaters.

(2)For water quality assessments, Table 8, Decision Matrix That
Will Be Used to Assess Support of Headwater Aquatic Life Uses for
Nutrient-related Water Quality Problems, "Proposed Nutrient
Criteria: Utah Headwater Streams", Utah Division of Water Quality,
March, 2019 is incorporated by reference.

(3)Not to be exceeded seasonal average for the index period
of algal growth through senescence.

(4)Not to be exceeded average based on at least 3 transects
perpendicular to stream flow and spatially dispersed along a reach
of at least 50 meters

(5) Not to be exceeded during the index period of algal
growth through senescence.

KEY

water pollution, water quality standards

Date of Enactment or Last Substantive Amendment

July 1, 2019

Notice of Continuation

September 26, 2017

Authorizing, Implemented, or Interpreted Law

19-5; FWPCA 33 USC 1251, 1311-1317, 1329

Additional Information

Contact

For questions regarding the *content* or *application* of rules under Title R317, please contact the promulgating agency (Environmental Quality, Water Quality). A list of agencies with links to their homepages is available at http://www.utah.gov/government/agencylist.html or from http://www.rules.utah.gov/contact/agencycontacts.htm.