

## DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

### Water Quality Control Commission

## REGULATION NO. 34 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR SAN JUAN RIVER AND DOLORES RIVER BASINS

### 5 CCR 1002-34

*[Editor's Notes follow the text of the rules at the end of this CCR Document.]*

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#### 34.1 AUTHORITY

These regulations are promulgated pursuant to section 25-8-101 et seq. C.R.S., as amended, and in particular, 25-8-203 and 25-8-204.

#### 34.2 PURPOSE

These regulations establish classifications and numeric standards for the San Juan and the Dolores River Basins, including all tributaries and standing bodies of water south of the northern Dolores County lines, as indicated in section 34.6. The classifications identify the actual beneficial uses of the water. The numeric standards are assigned to determine the allowable concentrations of various parameters. Discharge permits will be issued by the Water Quality Control Division to comply with basic, narrative, and numeric standards and control regulations so that all discharges to waters of the state protect the classified uses. It is intended that these and all other stream classifications and numeric standards be used in conjunction with and be an integral part of Regulation No. 31 Basic Standards and Methodologies for Surface Water.

#### 34.3 INTRODUCTION

These regulations and tables present the classifications and numeric standards assigned to stream segments listed in the attached tables (See Appendix 34-1). As additional stream segments are classified and numeric standards for designated parameters are assigned for this drainage system, they will be added to or replace the numeric standards in the tables in Appendix 34-1. Any additions or revisions of classifications or numeric standards can be accomplished only after public hearing by the Commission and proper consideration of evidence and testimony as specified by the statute and the "basic regulations".

#### 34.4 DEFINITIONS

See the Colorado Water Quality Control Act and the codified water quality regulations for definitions.

#### 34.5 BASIC STANDARDS

##### (1) Temperature

All waters of the San Juan/Dolores River Basin are subject to the following standard for temperature. (Discharges regulated by permits, which are within the permit limitations, shall not be subject to enforcement proceedings under this standard). Temperature shall maintain a normal pattern of diurnal and seasonal fluctuations with no abrupt changes and shall have no increase in temperature of a magnitude, rate, and duration deemed deleterious to the resident aquatic life. This standard shall not be interpreted or applied in a manner inconsistent with section 25-8-104, C.R.S.

(2) Qualifiers

See Basic Standards and Methodologies for Surface Water for a listing of organic standards at 31.11 Table B and metal standards found at 31.16 Table III. The column in the tables headed "Water + Fish" are presumptively applied to all aquatic life class 1 streams which also have a water supply classification, and are applied to aquatic life class 2 streams which also have a water supply classification, on a case-by-case basis as shown in the Appendix 34-1. The column in the tables at 31.11 and 31.16 Table III headed "Fish Ingestion" is presumptively applied to all aquatic life class 1 streams which do not have a water supply classification, and are applied to aquatic life class 2 streams which do not have a water supply classification, on a case-by-case basis as shown in Appendix 34-1.

(3) Uranium

- (a) All waters of the San Juan/Dolores River Basin, are subject to the following basic standard for uranium, unless otherwise specified by a water quality standard applicable to a particular segment. However, discharges of uranium regulated by permits which are within these permit limitations shall not be a basis for enforcement proceedings under this basic standard.
- (b) Uranium level in surface waters shall be maintained at the lowest practicable level.
- (c) In no case shall uranium levels in waters assigned a water supply classification be increased by any cause attributable to municipal, industrial, or agricultural discharges so as to exceed 16.8-30 µg/L or naturally-occurring concentrations (as determined by the State of Colorado), whichever is greater.
  - (i) The first number in the 16.8-30 µg/L range is a strictly health-based value, based on the Commission's established methodology for human health-based standards. The second number in the range is a maximum contaminant level, established under the federal Safe Drinking Water Act that has been determined to be an acceptable level of this chemical in public water supplies, taking treatability and laboratory detection limits into account. Control requirements, such as discharge permit effluent limitations, shall be established using the first number in the range as the ambient water quality target, provided that no effluent limitation shall require an "end-of-pipe" discharge level more restrictive than the second number in the range. Water bodies will be considered in attainment of this standard, and not included on the Section 303(d) List, so long as the existing ambient quality does not exceed the second number in the range.

(4) Indian Reservations

Some of the waterbodies in the San Juan/Dolores River Basin cross boundaries of Indian Reservations of the Southern Ute and Ute Mountain Ute Tribes. The Commission has included water quality classifications and standards on lands within the boundaries of these reservations in order to avoid a gap in the classifications and standards adopted for the river basins in question. The Southern Ute Indian tribe has not yet been granted authority by EPA to conduct their own water quality program, and EPA has granted the Ute Mountain Ute Indian tribe's application for treatment as a state with respect to adoption of water quality standards. The Commission intends that the classifications and standards that it is adopting apply to the lands in question only to the extent that the state has jurisdiction and is not attempting to resolve that jurisdictional issue here. Segments within Reservation boundaries are noted in the segment description and last column of Tables 34.6(4).

(5) Nutrients

Prior to May 31, 2022, interim nutrient values will be considered for adoption only in the limited circumstances defined at 31.17(e). These circumstances include headwaters, Direct Use Water Supply (DUWS) Lakes and Reservoirs, and other special circumstances determined by the Commission. Additionally, prior to May 31, 2017, only total phosphorus and chlorophyll a will be considered for adoption. After May 31, 2017, total nitrogen will be considered for adoption per the circumstances outlined in 31.17(e).

Prior to May 31, 2022, nutrient criteria will be adopted for headwaters on a segment by segment basis for the San Juan River Basin. Moreover, pursuant to 31.17(e) nutrient standards will only be adopted for waters upstream of all permitted domestic wastewater treatment facilities discharging prior to May 31, 2012 or with preliminary effluent limits requested prior to May 31, 2012, and any non-domestic facilities subject to Regulation 85 effluent limits and discharging prior to May 31, 2012. The following is a list of all permitted domestic wastewater treatment facilities discharging prior to May 31, 2012 or with preliminary effluent limits requested prior to May 31, 2012, and any non-domestic facilities subject to Regulation 85 effluent limits and discharging prior to May 31, 2012 in the San Juan River Basin:

Segment	Permittee	Facility name	Permit No.
COSJPN02a	Bayfield Town of	BAYFIELD TOWN OF	CO0048291
COSJAF12a	Grizzly Peak Water Sales & Distribution LLC	CASCADE VILLAGE WWTF	CO0039691
COSJDO04a	Fort Beyhan LLC	DOLORES RIVER RV PARK AND CABINS	COG588071
COSJDO04a	Dolores Town of	DOLORES WWTF	CO0040509
COSJLP010	Dove Creek Town of	DOVE CREEK WWTF	COG589079
COSJAF05a	Durango City of	DURANGO CITY OF	CO0024082
COSJAF04b	Herrick Durango Land Co LLC	DURANGO NORTH PONDEROSA KOA	COG588020
COSJAF13c	Durango West Metro Dist #2	DURANGO WEST METRO DIST #2 WWTF	COG589115
COSJAF11b	Durango La Plata County Airport	DURANGO/LA PLATA COUNTY AIRPORT	CO0047457
COSJAF10a	Edgemont Ranch Metro Dist	EDGEMONT RANCH METRO DISTRICT WWTF	CO0040266
COSJPN02a	Five Branches Camper Park	FIVE BRANCHES CAMPER PARK	COG588054
COSJAF10	Forest Groves Estates	FOREST GROVES ESTATES WWTP	COG588030
COSJPN02a	Forest Lake Metro Dist	FOREST LAKES METRO DISTRICT	CO0048160
COSJAF05a	Hermosa Sanitation District	HERMOSA SANITATION DISTRICT	COG588010
COSJSJ06a	High Country Lodge LLC	HIGH COUNTRY LODGE	COG588002
COSJPN02a	Pine River Camp LLC	KANAKUK COLORADO YOUTH CAMP	COG588059
COSJLP08	Elegant Hills Park and Estates LLC	LAKESIDE WWTF	COG589098
COSJLP09	Lee Mobile Home Park	LEE MOBILE HOME PARK	COG589070
COSJAF14b	MacArthur Apartments LLC	LIGHTNER CREEK CAMPGROUND	CO0026468
COSJLP05	Mancos Town of	MANCOS TOWN OF	CO0021687
COSJAF13d	Narrow Gauge MHP	NARROW GAUGE MHP	COG589077
COSJSJ06b	Pagosa Springs Sanitation District	PAGOSA SPRINGS SAN DISTRICT WWTF	CO0022845
COSJAF12a	Purgatory Metropolitan District	PURGATORY METROPOLITAN DIST	COG589010
COSJSJ05	San Juan River Village Metro	SAN JUAN RIVER VILLAGE METRO WWTF	COG588013
COSJAF03b	Silverton Town of	SILVERTON TOWN OF WWTF	CO0020311

Segment	Permittee	Facility name	Permit No.
COSJAF05a	South Durango Sanitation District	SOUTH DURANGO SD WWTF	COG588057
COSJLP07a	Cortez Sanitation District	SOUTHWEST WWTF	CO0027545
COSJLP05a	Upper Valley Sanitation	UPPER VALLEY SANITATION DIST.	CO0047147
COSJPN04a	Lipslea Enterprises LLC	VALLECITO RESORT	COG588026
COSJLP07a	Vista Verde Village LLC	VISTA VERDE VILLAGE	CO0037702
COSJPI06d	Pagosa Area Water and San Dist	VISTA WWTF	CO0031755

Prior to May 31, 2022:

- For segments located entirely above these facilities, nutrient standards apply to the entire segment.
- For segments with portions downstream of these facilities, *nutrient standards only apply above these facilities*. A note was added to the total phosphorus and chlorophyll a standards in these segments. The note references the table of qualified facilities at 34.5(5).
- For segments located entirely below these facilities, nutrient standards do not apply.

A note was added to the total phosphorus and chlorophyll a standards in lakes segments as nutrients standards apply only to lakes and reservoirs larger than 25 acres surface area.

## 34.6 TABLES

### (1) Introduction

The numeric standards for various parameters in this regulation and in the tables in Appendix 34-1 were assigned by the Commission after a careful analysis of the data presented on actual stream conditions and on actual and potential water uses. For each parameter listed in the tables in Appendix 34-1, only the most stringent standard is shown. Additional, less stringent standards may apply to protect additional uses and can be found in the tables in Regulation No. 31.

Numeric standards are not assigned for all parameters listed in the tables in Regulation No. 31. If additional numeric standards are found to be needed during future periodic reviews, they can be assigned by following the proper hearing procedures.

### (2) Abbreviations:

(a) The following abbreviations are used in this regulation and the tables in Appendix 34-1:

ac	=	acute (1-day)
°C	=	degrees Celsius
ch	=	chronic (30-day)
CL	=	cold lake temperature tier
CLL	=	cold large lake temperature tier
CS-I	=	cold stream temperature tier one
CS-II	=	cold stream temperature tier two
DM	=	daily maximum temperature
D.O.	=	dissolved oxygen
DUWS	=	direct use water supply
<i>E. coli</i>	=	Escherichia coli
mg/L	=	milligrams per liter

MWAT	=	maximum weekly average temperature
OW	=	outstanding waters
sc	=	sculpin
sp	=	spawning
SSE	=	site-specific equation
t	=	total
T	=	total recoverable
tr	=	trout
TVS	=	table value standard
µg/L	=	micrograms per liter
UP	=	use-protected
WL	=	warm lake temperature tier
WS	=	water supply
WS-II	=	warm stream temperature tier two
WS-III	=	warm stream temperature tier three

(b) In addition, the following abbreviations are used:

Iron (chronic)	=	WS
Manganese (chronic)	=	WS
Sulfate (chronic)	=	WS

These abbreviations mean: For all surface waters with an actual water supply use, the less restrictive of the following two options shall apply as numerical standards, as specified in the Basic Standards and Methodologies at 31.16 Table II and III:

- (i) existing quality as of January 1, 2000; or
- (ii) 

Iron	=	300 µg/L (dissolved)
Manganese	=	50 µg/L (dissolved)
Sulfate	=	250 mg/L (dissolved)

For all surface waters with a “water supply” classification that are not in actual use as a water supply, no water supply standards are applied for iron, manganese or sulfate, unless the Commission determines as the result of a site-specific rulemaking hearing that such standards are appropriate.

(c) Temporary Modification for Water + Fish Chronic Arsenic Standard

- (i) The temporary modification for chronic arsenic standards applied to segments with an arsenic standard of 0.02 µg/L that has been set to protect the Water + Fish qualifier is listed in the Other column in Appendix 34-1 tables as As(ch)=hybrid.
- (ii) For discharges existing on or before 6/1/2013, the temporary modification is: As(ch)=current condition, expiring on 12/31/2024. Where a permit for an existing discharge is reissued or modified while the temporary modification is in effect, the division will include additional permit Terms and Conditions, which may include requirements for additional monitoring, source identification, and characterization of source control and treatment options for reducing arsenic concentrations in effluent.
- (iii) For new or increased discharges commencing on or after 6/1/2013, the temporary modification is: As(ch)=0.02-3.0 µg/L (total recoverable), expiring on 12/31/2024.
  - (a) The first number in the range is the health-based water quality standard previously adopted by the Commission for the segment.

- (b) The second number in the range is a technology-based value established by the Commission for the purpose of this temporary modification.
- (c) Control requirements, such as discharge permit effluent limitations, shall be established using the first number in the range as the ambient water quality target, provided that no effluent limitation shall require an “end-of-pipe” discharge level more restrictive than the second number in the range.

(3) Table Value Standards

In certain instances in the tables in Appendix 34-1, the designation “TVS” is used to indicate that for a particular parameter a “table value standard” has been adopted. This designation refers to numerical criteria set forth in the Basic Standards and Methodologies for Surface Water. The criteria for which the TVS are applicable are on the following table.

**TABLE VALUE STANDARDS**  
(Concentrations in µg/L unless noted)

PARAMETER <sup>(1)</sup>	TABLE VALUE STANDARDS <sup>(2)(3)</sup>
Aluminum(T)	Acute = $e^{(1.3695 \cdot \ln(\text{hardness}) + 1.8308)}$ pH equal to or greater than 7.0 Chronic = $e^{(1.3695 \cdot \ln(\text{hardness}) - 0.1158)}$ pH less than 7.0 Chronic = $e^{(1.3695 \cdot \ln(\text{hardness}) - 0.1158)}$ or 87, whichever is less
Ammonia <sup>(4)</sup>	Cold Water = (mg/L as N) Total $acute = \frac{0.275}{1 + 10^{7.204 - pH}} + \frac{39.0}{1 + 10^{pH - 7.204}}$ $chronic = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * MIN(2.85, 1.45 * 10^{0.028(25 - T)})$ Warm Water = (mg/L as N) Total $acute = \frac{0.411}{1 + 10^{7.204 - pH}} + \frac{58.4}{1 + 10^{pH - 7.204}}$ $chronic (Apr1 - Aug31) = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * MIN(2.85, 1.45 * 10^{0.028(25 - T)})$ $chronic (Sep1 - Mar31) = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * 1.45 * 10^{0.028 * (25 - MAX(T, 7))}$
Cadmium	Acute(warm) <sup>(5)</sup> = $(1.136672 - (\ln(\text{hardness}) * 0.041838)) * e^{(0.9789 \cdot \ln(\text{hardness}) - 3.443)}$ Acute(cold) <sup>(5)</sup> = $(1.136672 - (\ln(\text{hardness}) * 0.041838)) * e^{(0.9789 \cdot \ln(\text{hardness}) - 3.866)}$ Chronic = $(1.101672 - (\ln(\text{hardness}) * 0.041838)) * e^{(0.7977 \cdot \ln(\text{hardness}) - 3.909)}$
Chromium III <sup>(6)</sup>	Acute = $e^{(0.819 \cdot \ln(\text{hardness}) + 2.5736)}$ Chronic = $e^{(0.819 \cdot \ln(\text{hardness}) + 0.5340)}$
Chromium VI <sup>(6)</sup>	Acute = 16 Chronic = 11
Copper	Acute = $e^{(0.9422 \cdot \ln(\text{hardness}) - 1.7408)}$ Chronic = $e^{(0.8545 \cdot \ln(\text{hardness}) - 1.7428)}$
Lead	Acute = $(1.46203 - (\ln(\text{hardness}) * 0.145712)) * e^{(1.273 \cdot \ln(\text{hardness}) - 1.46)}$ Chronic = $(1.46203 - (\ln(\text{hardness}) * 0.145712)) * e^{(1.273 \cdot \ln(\text{hardness}) - 4.705)}$
Manganese	Acute = $e^{(0.3331 \cdot \ln(\text{hardness}) + 6.4676)}$ Chronic = $e^{(0.3331 \cdot \ln(\text{hardness}) + 5.8743)}$

Nickel	Acute = $e^{(0.846*\ln(\text{hardness})+2.253)}$ Chronic = $e^{(0.846*\ln(\text{hardness})+0.0554)}$					
Selenium <sup>(7)</sup>	Acute = 18.4 Chronic = 4.6					
Silver	Acute = $0.5*e^{(1.72*\ln(\text{hardness})-6.52)}$ Chronic = $e^{(1.72*\ln(\text{hardness})-9.06)}$ Chronic(Trout) = $e^{(1.72*\ln(\text{hardness})-10.51)}$					
Temperature	TEMPERATURE TIER	TIER CODE	SPECIES EXPECTED TO BE PRESENT	APPLICABLE MONTHS	TEMPERATURE STANDARD (°C)	
					MWAT	DM
	Cold Stream Tier I	CS-I	brook trout, cutthroat trout	June – Sept.	17.0	21.7
				Oct. – May	9.0	13.0
	Cold Stream Tier II	CS-II	all other cold-water species	April – Oct.	18.3	24.3
				Nov. – March	9.0	13.0
	Cold Lakes	CL	brook trout, brown trout, cutthroat trout, lake trout, rainbow trout, Arctic grayling, sockeye salmon	April – Dec.	17.0	21.2
				Jan. – March	9.0	13.0
	Cold Large Lakes (>100 acres surface area)	CLL	rainbow trout, brown trout, lake trout	April – Dec.	18.3	24.2
				Jan. – March	9.0	13.0
	Warm Stream Tier II	WS-II	brook stickleback, central stoneroller, creek chub, longnose dace, northern redbelly dace, finescale dace, razorback sucker, white sucker, mountain sucker	March – Nov.	27.5	28.6
				Dec. – Feb.	13.8	25.2
	Warm Stream Tier III	WS-III	all other warm-water species	March – Nov.	28.7	31.8
				Dec. – Feb.	14.3	24.9
	Warm Lakes	WL	black crappie, bluegill, common carp, gizzard shad, golden shiner, largemouth bass, northern pike, pumpkinseed, sauger, smallmouth bass, spottail shiner, stonecat, striped bass, tiger muskellunge, walleye, wiper, white bass, white crappie, yellow perch	April – Dec.	26.2	29.3
				Jan. – March	13.1	24.1
Uranium	Acute = $e^{(1.1021*\ln(\text{hardness})+2.7088)}$ Chronic = $e^{(1.1021*\ln(\text{hardness})+2.2382)}$					
Zinc	Acute = $0.978*e^{(0.9094*\ln(\text{hardness})+0.9095)}$ Chronic = $0.986*e^{(0.9094*\ln(\text{hardness})+0.6235)}$ Where hardness is less than 102 mg/L CaCO <sup>3</sup> and mottled sculpin are expected to be present: Chronic (sculpin) = $e^{(2.140*\ln(\text{hardness})-5.084)}$					

**TABLE VALUE STANDARDS - FOOTNOTES**

- (1) Metals are stated as dissolved unless otherwise specified.

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- (2) Hardness values to be used in equations are in mg/L as calcium carbonate and shall be no greater than 400 mg/L, except for aluminum for which hardness shall be no greater than 220 mg/L. The hardness values used in calculating the appropriate metal standard should be based on the lower 95 per cent confidence limit of the mean hardness value at the periodic low flow criteria as determined from a regression analysis of site-specific data. Where insufficient site-specific data exists to define the mean hardness value at the periodic low flow criteria, representative regional data shall be used to perform the regression analysis. Where a regression analysis is not appropriate, a site-specific method should be used. In calculating a hardness value, regression analyses should not be extrapolated past the point that data exist.
- (3) Both acute and chronic numbers adopted as stream standards are levels not to be exceeded more than once every three years on the average.
- (4) For acute conditions the default assumption is that salmonids could be present in cold water segments and should be protected, and that salmonids do not need to be protected in warm water segments. For chronic conditions, the default assumptions are that early life stages could be present all year in cold water segments and should be protected. In warm water segments the default assumption is that early life stages are present and should be protected only from April 1 through August 31. These assumptions can be modified by the commission on a site-specific basis where appropriate evidence is submitted. The "T" in the chronic equations stands for temperature.
- (5) The acute(warm) cadmium equation applies to segments classified as Aquatic Life Warm Class 1 or 2. The acute(cold) cadmium equation applies to segments classified as Aquatic Life Cold Class 1 or 2.
- (6) Unless the stable forms of chromium in a waterbody have been characterized and shown not to be predominantly chromium VI, data reported as the measurement of all valence states of chromium combined should be treated as chromium VI. In addition, in no case can the sum of the concentrations of chromium III and chromium VI or data reported as the measurement of all valence states of chromium combined exceed the water supply standards of 50 µg/L chromium in those waters classified for domestic water use.
- (7) Selenium is a bioaccumulative metal and subject to a range of toxicity values depending upon numerous site-specific variables.
- (4) Discharger Specific Variances
- (a) Animas and Florida River Segment 13c (COSJAF13c)
- Discharger-Specific Variance, Durango West Metro Dist. #2 (COG589115): The first number is the underlying standard previously adopted by the Commission for the segment and represents the long-term goal for the waterbody. The first number will be used for assessing attainment for the waterbody and for the development of effluent limitations. The second number is the Commission's determination of the effluent concentration with the highest degree of protection of the classified use that is feasible for Durango West Metro District. Control requirements, such as discharge permit effluent limitations, shall be established using the first number as the ambient water quality target, provided that no effluent limitation shall require an "end-of-pipe" discharge level more restrictive than the second number during the term of the DSV for the named dischargers.
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(b) La Plata Segment 7a (COSJLP07a)

Discharger-Specific Variance, Vista Verde Village, LLC (CO0037702): Adopted 12/14/2020. Ammonia (acute/chronic) = TVS:14 mg/L from May – October; TVS:24 mg/L from November – April. Expiration date: 6/30/2031. Effluent concentrations shall not exceed the current condition.

(c) La Plata Segment 10 (COSJLP10)

Discharger-Specific Variance, Town of Dove Creek (COG589079): Adopted 12/14/2020. Ammonia (acute/chronic) = TVS:10 mg/L from June – October; TVS:20 mg/L from November - May. Expiration date: 6/30/2025. Effluent concentrations shall not exceed the current condition.

(5) Stream Classifications and Water Quality Standards Tables

The stream classifications and water quality standards tables in Appendix 34-1 are incorporated herein by reference.

The following is information regarding duration and measured form of standards in Appendix 34-1:

- (a) *E. coli* criteria and resulting standards for individual water segments, are established as indicators of the potential presence of pathogenic organisms. Standards for *E. coli* are expressed as a two-month geometric mean. Site-specific or seasonal standards are also two-month geometric means unless otherwise specified.
- (b) All phosphorus standards are based upon the concentration of total phosphorus. For total phosphorus, stream standards are expressed as an annual median and for lakes standards as a summer (July 1 - September 30) average in the mixed layer. For chlorophyll a, stream standards are expressed as a maximum of attached algae and lakes standards as a summer (July 1 - September 30) average in the mixed layer. For additional assessment details, see tables at Regulation 31.17(b) and (d).
- (c) The pH standards of 6.5 (or 5.0) and 9.0 are an instantaneous minimum and maximum, respectively to be applied as effluent limits. In determining instream attainment of water quality standards for pH, appropriate averaging periods may be applied, provided that beneficial uses will be fully protected.
- (d) All mercury standards apply to the total recoverable fraction of all forms, both organic and inorganic, of mercury in water.
- (e) All ammonia, nitrate, and nitrite standards are based upon the concentration reported as nitrogen.

(6) Site-specific Standards, Assessment Locations, and Assessment Criteria

The following criteria and/or locations shall be used when assessing whether a specified waterbody is in attainment of the specified standard.

(a) San Juan Segment 6b: Temperature Assessment Locations

- Mill Creek at 119 Road: 37.245588, -107.004398
- San Juan River below Pagosa Springs: 37.25171, -107.01037

- (b) San Juan Segment 6c: Temperature Assessment Location
  - Above Taylor Canyon: 37.172002, -107.035838
- (c) San Juan Segment 6d: Temperature Assessment Location
  - Above Rio Blanco: 37.121112, -107.044364
- (d) San Juan Segment 6e: Temperature Assessment Location
  - Above Navajo River: 37.04672, -107.1404
- (e) San Juan Segment 6f: Temperature Assessment Location
  - Above Navajo Reservoir: 37.01456, -107.30516
- (f) San Juan Segment 11c: Temperature Assessment Location
  - McCabe Creek at 400 Road: 37.265722, -107.013905
- (g) Piedra Segment 4a: Temperature Assessment Locations
  - Piedra River at Highway 160: 37.224016, -107.342255
  - Devil Creek at State Wildlife Area: 37.172523, -107.295287
- (h) Piedra Segment 4b: Temperature Assessment Location
  - Piedra River at SUIT boundary: 37.141004, -107.355045
- (i) Piedra Segment 4c: Temperature Assessment Location
  - Piedra River below Stollsteimer Creek: 37.112804, -107.38508

**34.7 – 34.14 RESERVED**

## **34.15 STATEMENT OF BASIS AND PURPOSE**

### **I. Introduction**

These stream classifications and water quality standards for State Waters of the San Juan River Basin including all tributaries and standing bodies of water and the Dolores River Basin including all tributaries and standing bodies of water south of the northern Dolores County line in all or parts of Archuleta, Conejos, Dolores, Hinsdale, La Plata, Mineral, Montezuma, Rio Grande and San Juan Counties implement requirements of the Colorado Water Quality Control Act C.R.S. 1973, 25-8-101 et seq. (Cum. Supp. 1981). They also represent the implementation of the Commission's Regulations Establishing Basic Standards and an Antidegradation Standard and Establishing a System for Classifying State Waters, for Assigning Standards, and for Granting Temporary Modifications (the "Basic Regulations")

The Basic Regulations establish a system for the classification of State Waters according to the beneficial uses for which they are suitable or are to become suitable, and for assigning specific numerical water quality standards according to such classifications. Because these stream classifications and standards implement the Basic Regulations, the statement of basis and purpose (Section 3.1.16) of those regulations must be referred to for a complete understanding of the basis and purpose of the regulations adopted herein. Therefore, Section 3.1.16 of the Basic Regulations is incorporated by reference. The focus of this statement of basis and purpose is on the scientific and technological rationale for the specific classifications and standards in the San Juan River Basin.

Public participation was a significant factor in the development of these regulations. A lengthy record was built through public hearings held on May 14, 1981. A total of 10 entities requested and were granted party status by the Commission in accordance with C.R.S. 1973, 24-4-101 et seq. (Cum. Supp. 1980). A supplementary public rulemaking hearing was held September 15, 1981, restricted to those issues raised by the changes in the Act contained in Senate Bill 10 (1981). Such issues included but were not limited to: "The economic reasonableness" evaluation required by 25-8-102(5), the effect on water rights as required by 25-8-104; and the new considerations for the adoption of water quality standards required by 25-8-204 C.R.S. 1973, as amended. The record established in these hearings forms the basis for the classifications and standards adopted.

### **II. General Considerations**

1. These regulations are not adopted as control regulations. Stream classifications and water quality standards are specifically distinguished from control regulations in the Water Quality Control Act, and they need not be adopted as control regulations pursuant to the statutory scheme.
2. The Commission has been requested in public hearings to rule on the applicability of these and other regulations to the operation of water diversion facilities, dams, transport systems, and the consequent withdrawal, impoundment, non-release and release of water for the exercise of water rights. The Commission has determined that any such broad ruling is inappropriate in the context of the present regulations. The request does not raise specific questions as to proposed classifications and standards. However, the Commission has taken into account the fact that some issues are unresolved in adopting classifications and standards. On January 5, 1981, the Commission adopted a policy statement on quality/quantity issues that addresses a number of these concerns. Finally, the Commission has adopted these regulations in compliance with the requirements of the Water Quality Control Act that have bearing on these issues (See e.g.) sections 102, 104, and 503(5).

### **III. Definition of Stream Segments**

1. For purposes of adopting classifications and water quality standards, the streams and water bodies are identified according to river basin and specific water segments.

2. Within each river basin, specific water segments are defined, for which use classifications and numeric water quality standards, if appropriate, are adopted. These segments may constitute a specific stretch of a river mainstem, a specific tributary, a specific lake or reservoir, or a generally defined grouping of waters within the basin (e.g., a specific mainstem segment and all tributaries flowing into that mainstem segment).
3. Segments are generally defined according to the points at which the use, water quality, or other stream characteristics change significantly enough to require a change in use classifications and/or water quality standards. In many cases, such transition points can be specifically identified from available data. In other cases the delineation of segments is based upon best judgments of the points where instream changes in uses, water quality, or other stream characteristics occur.

#### **IV. Use Classifications — Generally**

1. Initially, recommendations for stream segmentation and use classifications are a result of input from 208 plans, water quality data and reports, the Division of Wildlife, and personal knowledge. After a basic outline of stream segments and use classifications was prepared, water quality data from a variety of sources was compared against the “table value” for the proposed use. “Table value” refers to the four tables attached to the “Basic Regulations”. In general, if the mean plus one standard deviation ( $\bar{x} + s$ ) of the available data for the segment indicated that a particular parameter did not exceed the “table value” for that recommended use, the “table value” was listed as the recommended standards for the parameter. If the  $\bar{x} + s$  value was recommended as that standard for that parameter.

Conversely, if the ambient quality ( $\bar{x} + s$ ) for a certain parameter exceeded the “table value” for the protection of a use, and there is information that the use is not in place, the use classification was modified or temporary modifications to the parameters were established. Ambient quality is generally defined as the quality attributable to natural conditions and/or uncontrollable non-point sources.

One exception to the procedure just described is for whole body contact recreation (class 1). If an active domestic waste discharge was located on the segment in question, class 1 recreation was not recommended regardless of the ambient quality, unless there was information to show that the segment was actually used for swimming. This policy was established by the WQCC in order to avoid penalizing a discharger for protecting a use which is not in place and to limit possible harm to aquatic life due to chlorine residuals.

2. The use classifications have been established in accordance with the provisions of Section 203 of the Water Quality Control Act and Section 3.1.6 and 3.1.13 of the Basic Regulations.
3. In all cases the basic regulation has been followed, in that an upstream use cannot threaten or degrade a downstream use. Accordingly, upstream segments of a stream are generally the same as, or higher in classification than, downstream segments. In a few cases, tributaries are classified at lower classifications than mainstems, where flow from tributaries does not threaten the quality of mainstem waters and where the evidence indicates that lower classification for the tributaries is appropriate.
4. There have been no “High Quality Class 1” designations assigned in this basin.
5. The Commission has determined that it has the authority to assign the classification “High Quality Waters - Class 1” and “High Quality Waters - Class 2” where the evidence indicates that the requirements of Sections 3.1.13(1)(e) of the basic regulations are met. The appropriateness of this classification has been determined on a case-by-case basis. Streams have in some cases been classified “High Quality - Class 2” for one or more of the following reasons:

- 
- (a) to facilitate the enjoyment and use of the scenic and natural resources of the State in accordance with the Legislative Declaration of the Colorado Water Quality Control Act (25-8-102(1) C.R.S. 1973.
  - (b) to provide a high degree of protection deserving of wilderness areas which are a resource providing a unique experience.
  - (c) they contain threatened species or apply to wild and scenic river study areas or wilderness areas.
  - (d) the concern of the USFS that High Quality 2 classification will unduly burden their management of multiple use areas is not well founded. This is because activities on Forest Service land, i.e. grazing, mineral exploration, trail and road maintenance, are considered as a historical impact upon existing ambient water quality conditions, and are non point sources which are presently not subject to any Water Quality Control Commission regulations.
  - (e) a question exists as to whether existing diversion structures can be maintained consistent with a "High Quality - Class 1" designation. Because of the questions regarding authority to regulate diversions, the Class 1 designation was deemed potentially too rigid. The Commission recognizes its authority to upgrade these segments if and when it is appropriate to do so.
6. In accordance with 25-8-104, C.R.S. 1973, the Commission intends that no provision of this regulation shall be interpreted so as to supercede, abrogate, or impair rights to divert water and apply water to beneficial uses.
7. Qualifiers — Seasonal and Intermittent
- These qualifiers have been used to more fully describe characteristics of certain stream segments.
8. Recreation — Class 1 and Class 2
- In addition to the significant distinction between Recreation - Class 1 and Recreation - Class 2 as defined in Section 3.1.13(1) of the Basic Regulations, the difference between the two classifications in terms of water quality standards is the fecal coliform parameter. Recreation - Class 1 generally has a standard of 200 fecal coliform per 100 ml; Recreation - Class 2 generally has a standard of 2000 fecal coliform per 100 ml.
- In accordance with the Colorado Water Quality Control Act, the Commission has decided to classify as "Recreation - Class 2" those stream segments where primary contact recreation does not exist in the future, regardless of water quality. The Commission has decided to classify as "Recreation - Class 1" only those stream segments where primary contact recreation actually exists, or could reasonably be expected to occur. The reasons for the application of Recreation Class 2 are as follows:
- (a) The mountain streams in this region are generally unsuitable for primary contact recreation because of water temperature and stream flows.
  - (b) Fecal coliform is an indicator organism. Its presence does not always indicate the presence of pathogens. This depends on the source of the fecal coliform. If the source is agricultural runoff as opposed to human sewage, there may be no health hazard and therefore no significant need to reduce the presence of fecal coliform to the 200 per 100 ml. level. Also, control of nonpoint sources is very difficult.
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- (c) Treating sewage to meet the 200 per 100 ml. level generally means the treatment plant must heavily chlorinate its effluent to meet the limitation. The presence of chlorine in the effluent can be significantly detrimental to aquatic life. Post-treatment of effluent to meet the residual chlorine standard is expensive and often results in the addition of more chemicals which have a negative effect on water quality and can be detrimental to aquatic life. Therefore, reducing the need for chlorine is beneficial to aquatic life.
- (d) Even where a treatment plant in this region might treat its effluent to attain the standard of 200 per 100 ml., agricultural runoff and irrigation return flows below the plant may result in the rapid increase of fecal coliform levels. Therefore, the benefits of further treatment are questionable.
- (e) The fecal coliform of 2000 per 100 ml. has been established to provide general public health protection. There is no significant impact on domestic drinking water treatment plants because they provide complete disinfection. The standard of 200 per 100 ml. is not intended to protect the water supply classification.

9. Water Supply Classification

The Commission finds that Colorado is a water short state and that it is experiencing considerable growth which places additional burdens on already scarce water supplies. These considerations mitigate in favor of a conservation approach to protecting future water supplies. Where existing water quality is adequate to protect this use, and in the absence of dischargers to these segments or testimony in opposition to such classification, the water supply use has been assigned because it is reasonable to expect that it may exist in the future in such cases. For stream segments that flow through, or in the vicinity of, municipalities, this conclusion is further justified, since there is a reasonable probability that the use exists or will exist. Where the water supply classification has been opposed, the Commission has evaluated the evidence on a site specific basis, and in many cases the classification has been removed.

**V. Water Quality Standards — Generally**

- 1. The water quality standards for classified stream segments are defined as numeric values for specific water quality parameters. These numeric standards are adopted as the limits for chemical constituents and other parameters necessary to protect adequately the classified uses in all stream segments.
- 2. Not all of the parameters listed in the "Tables" appended to the Basic Regulations are assigned as water quality standards. This complies with Section 3.1.7(c) of the Basic Regulations.  
  
Numeric standards have been assigned for the full range of parameters to a number of segments where little or not data existed specific to the segment. In these cases, there was reason to believe that the classified uses were in place or could be reasonably expected, and that the ambient water quality was as good as or better than the numeric standards assigned.
- 3. A numeric standard for the temperature parameter has been adopted as a basic standard applicable to all waters of the region in the same manner as the basic standards in Section 3.1.11 of the Basic Regulations.

The standard of a 3° C temperature increase above ambient water temperature as defined is generally valid based on the data regarding that temperature necessary to support an "Aquatic Life - Class 1" fishery. The standard takes into account daily and seasonal fluctuations; however, it is also recognized that the 3° C limitation as defined is only appropriate as a guideline and cannot be rigidly applied if the intention is to protect aquatic life. In winter, for example, warm water discharges may be beneficial to aquatic life. It is the intention of the Commission in adopting the standard to prevent radical temperature changes in short periods of time which are detrimental to aquatic life.

4. Numeric standards for seventeen organic parameters have been adopted as basic standards applicable to all waters of the region in the same manner as the basic standards in Section 3.1.11 of the Basic Regulations. These standards are essential to a program designed to protect the waters of the State regardless of specific use classifications because they describe the fundamental conditions that all waters must meet to be suitable for any use.

It is the decision of the Commission to adopt these standards as basic standards because the presence of the organic parameters is not generally suspected. Also, the values assigned for these standards are not detectable using routine methodology and there is some concern regarding the potential for monitoring requirements if the standards are placed on specific streams. This concern should be alleviated by Section 3.1.14(5) of the Basic Regulations but there is uncertainty regarding the interpretation of those numbers by other entities. Regardless of these concerns, because these constituents are highly toxic, there is a need for regulating their presence in State waters. Because the Commission has determined that they have uniform applicability here, their inclusion as basic standards for the region accomplishes this purpose.

5. In many cases, the numeric water quality standards are taken from the "Tables" appended to the Basic Regulations. These table values are used where actual ambient water quality data in a segment indicates that the existing quality is substantially equivalent to, or better than, the corresponding table values. This has been done because the table values are adequate to protect the classified uses.

Consistent with the Basic Regulations, the Commission has not assumed that the table values have presumptive validity or applicability. This accounts for the extensive data in the record on ambient water quality. However, the Commission has found that the table values are generally sufficient to protect the use classifications. Therefore, they have been applied in the situations outlined in the preceeding paragraph as well as in those cases where there is insufficient data in the record to justify the establishment of different standards. The documentary evidence forming the basis for the table values is included in the record.

6. In many cases, instream ambient water quality provides the basis for the water quality standards (See 7 below). In those cases where the classified uses presently exist or have a reasonable potential to exist despite the fact that instream data reflects ambient conditions of lower water quality than the table values, instream values have been used. In these cases, the evidence indicates that instream values are adequate to protect the uses. In those cases where temporary modifications are appropriate, instream values are generally reflected in the temporary modification and table values are reflected in the corresponding water quality standard. (Goals are established for the appropriate classification affected by the parameter).

Cases in which water quality standards reflect these instream values usually involve the metal parameters. On many stream segments elevated levels of metals are present due to natural or unknown causes, as well as mine seepage from inactive or abandoned mines. These sources are difficult to identify and impractical or impossible to control. The classified aquatic life uses may be impacted and/or may have adjusted to the conditions. In either case, the water quality standards are deemed sufficient to protect the uses that are present.

7. The Commission rejected the proposal to assign only “temporary” standards pending additional data collection to verify or modify values assigned. Concerned parties concurred that triennial review will lead to updating of standards as necessary. Furthermore, limited financial resources will be focused upon streams with permitted discharges.
8. In those cases where there was no data for a particular segment, or where the data consists of only a few samples for a limited range of parameters, “table values” were generally recommended. Data at the nearest downstream point was used to support this conclusion. In some cases, where the limited data indicated a problem existed, additional data was collected to expand the data base. Additionally, where there may not be existing data on present stream quality, the Commission anticipates that if necessary, additional data will be collected prior to a hearing required by C.R.S. 1973, 25-8-204(3), as amended.
9. In most cases in establishing standards based on instream ambient water quality, a calculation is made based upon the mean (average) plus one standard deviation ( $\bar{x} + s$ ) for all sampling points on a particular stream segment. Since a standard deviation is not added to the water quality standard for purposes of determining the compliance with the standard, this is a fair method as applied to discharges.

Levels that were determined to be below the detectable limits of the sampling methodology employed were averaged in as zero rather than at the detectable limit. This moves the mean down but since zero is also used when calculating wasteload allocations, this method is not unfair to dischargers.

Metals present in water samples may be tied up in suspended solids when the water is present in the stream. In this form they are “available” to fish and may not be detrimental to aquatic life. Because the data of record does not distinguish as to availability, some deviation from table values, as well as the use of  $\bar{x} + s$ , is further justified because it is unlikely that the total value in all samples analyzed is in available form.

A number of different statistical methodologies could have been used where ambient water quality data dictates the standards. All of them have both advantages and disadvantages. It is recognized that the  $\bar{x} + s$  methodology also has weaknesses, in that the standard may not reflect natural conditions in a stream 100 per cent of the time, even though the use of  $\bar{x} + s$  already allows for some seasonal variability. However the use of this methodology is nevertheless justified since it provides the most meaningful index of stream quality of all methodologies proposed for setting stream standards.

10. No water quality standards are set below detectable limits for any parameter, although certain parameters may not be detectable at the limit of the standards using routine methodology. However, it must be noted that stream monitoring, as opposed to effluent monitoring, is generally not the responsibility of the dischargers but of the State. Furthermore, the purpose of the standards is to protect the classified uses and some inconvenience and expense as to monitoring is therefore justifiable.

Section 3.1.15(5) of the Basic Regulations states that “dischargers will not be required to regularly monitor for any parameters that are not identified by the Division as being of concern”. Generally, there is no requirement for monitoring unless a parameter is in the effluent guidelines for the relevant industry, or is deemed to be a problem as to a specific discharge.

11. The dissolved oxygen standard is intended to apply to the epilimnion and metalimnion strata of lakes and reservoirs. Respiration by aerobic micro-organisms as organic matter is consumed is the primary cause of a natural decrease in dissolved oxygen and anaerobic conditions in the hypolimnion. Therefore, this stratum is exempt from the dissolved oxygen standard.



12. Where numeric standards are established based on historic instream water quality data at the level of  $\bar{x} + s$ , it is recognized by the Commission that measured instream parameter levels might exceed the standard approximately 15 percent of the time.
13. It is the Commission's intention that the Division implement and enforce all water quality standards consistent with the manner in which they have been established.
14. Hardness/Alkalinity  
  
Where hardness and alkalinity numbers differed, the Commission elected to use alkalinity as the controlling parameter, in order to be consistent with other river basins and because testimony from the Division staff indicated that in most cases alkalinity has a greater effect on toxic form of metals than does hardness.

#### **VI. Water Quality Standards for Unionized Ammonia**

On some Class 2 Warm Water Aquatic Life streams containing similar aquatic life communities to those found in the plains streams of the South Platte & Arkansas Basins, .1 mg/l ammonia was selected as being appropriate to protect such aquatic life.

These streams generally contain both lesser numbers and types of species than those inhabiting class 1 streams due to physical habitat characteristics, flow or irreversible water quality characteristics. The Commission felt that the incremental expense to meet a 0.06 mg/l unionized ammonia standard for present or potential dischargers along these streams cannot be justified. Low flow, in these segments is often intermittent or highly impacted by diversions.

Specifically, the Commission has relaxed unionized ammonia standards to .1 mg/l or greater on such streams for the following reasons:

1. limited nature of the aquatic life present;
2. limited recreational value of species present;
3. habitat limitations, primarily flow and streambed characteristics, that impose significant limitations on the nature of aquatic life, even if ammonia reductions were attained;
4. rapid dissipation of ammonia in streams, reducing the impact of such discharges downstream; and
5. economic costs of ammonia removal, especially where such costs would fall primarily on publicly-owned treatment works, and while the availability of construction grant funds is questionable.
6. Biosurveys with support from a bioassay conducted on fathead minnows performed in the Cache la Poudre River, show that a .1 mg/l standard is appropriate to protect existing biota in the stream. The results of these studies may be reasonably extrapolated to similar plains streams; i.e., those streams that demonstrate similar chemical, physical, and biological characteristics.

Not all warmwater streams are comparable in terms of flow habitat, and types and numbers of species of aquatic life. Therefore, some variations in an appropriate ammonia standard must be tolerated, with the objective of protecting existing aquatic life. The Commission found this approach preferable to totally removing the aquatic life classification from impacted or marginal aquatic life streams.

## **VII. Water Quality Standards for Uranium**

Given the threat that radioactivity from uranium may pose to human health, it is advisable to limit uranium concentrations in streams to the maximum extent practicable. The Commission has adopted a standard of 40 pCi/l or natural background where higher, for the following reasons:

1. 40 pCi/l generally reflects background concentrations of uranium that may be found in streams in Colorado and therefore this amount approximates routine human exposure.
2. The statistical risk of human health hazards is small at 40 pCi/l.
3. 40 pCi/l is an interim level, established now pending the outcome of further studies currently underway.

## **VIII. Water Quality Standards for Cyanide**

The Commission acknowledges that total cyanide is to be used in State Discharge permits until a method is authorized by EPA for measuring free cyanide, even though free cyanide is the parameter of concern. While cyanide has received special treatment in cases discussed in the segment - by - segment section which follows, a free cyanide standard based on Table Values has been established for most segments.

## **IX. Linkage of classifications and Standards**

The Commission holds that the classifications which it adopts and the standards it assigns to them are linked. Disapproval by EPA of the standards may require reexamination by the Commission of the appropriateness of its original classification.

The reason for the linkage is that the Commission recognizes that there is a wide variability in the types of aquatic life in Colorado streams which require different levels of protection. Therefore, the numbers were chosen in some cases on a site specific basis to protect the species existing in that segment. If any reclassification is deemed a downgrading, then it will be based upon the grounds that the original classification was in error.

## **X. Economic Reasonableness**

The Commission finds that these use classifications and water quality standards are economically reasonable. The Commission solicited and considered evidence of the economic impacts of these regulations. This evaluation necessarily involved a case-by-case consideration of such impacts, and reference is made to the fiscal impact statement for this analysis. Generally, a judgment was made as to whether the benefits in terms of improving water quality justified the costs of increased treatment. In the absence of evidence on economic impacts for a specific segment, the Commission concluded that the regulations impose no unreasonable economic burden.

## **XI. Classifications and Standards - Special Cases**

1. Page 1, Segment 2 - San Juan River in Archuleta County (proposed as page 1, segment 2)

At issue was the recommendation contained in the Regional Water Quality Management "208" Plan that flow deficiencies and silt attributable to the San Juan - Chama diversion limited use of the segment to agriculture. Although both warm and cold water species, including trout, were observed in the segment, the Commission found from the evidence that there was perennial flow sufficient to support the aquatic life use proposed.

In view of controversy in the testimony concerning flow, the Commission considered the recommendation in the "208 Plan, yet classified the aquatic life use as class 1, cold water because other testimony indicated that recorded stream flows were ample to support aquatic life.

2. Page 2, Segment 8

This segment was incorporated into segment 5 of page 1.

3. Page 2, Segment 10

The "208" Plan was relied on by the Commission and no other evidence on this segment was presented.

4. Page 3, Segment 3 - Piedra River

The Commission retained the cold water aquatic life class 1 classification after finding that although one small portion of the segment may be intermittent, due to diversion, it quickly remakes itself and the intermittent portion is very small compared with the total length of the segment. The Commission also notes that its decision will have no impact on any discharger.

5. Page 4, Segment 2(a) and 2(b) Los Pinos River (proposed as page 4, segment 2)

The resegmentation recommended by the Division is consistent with segmentation described in the Regional (208) Plan.

6. Page 6, Segment 2 - Animas and Florida Rivers

This is a large segment, exhibiting many water quality variables throughout its length. Although there is some evidence of insect life at points in the segment, the evidence regarding the presence of aquatic life is contradictory, and there is no evidence of fish life being present. In the absence of sufficient data to support the classification of any portion of this segment for aquatic life, the current status is being retained and no aquatic life, the current status is being retained and no aquatic life use is assigned. The Commission expects further information to be developed through studies sponsored by the Standard Metals Corporation and the Division.

The Commission declined to assign an agricultural classification to the segment due to the absence in the record of any evidence of an agricultural use in the segment.

7. Page 6, Segment 6

Since Cement Creek and its tributaries are degraded by abandoned mine drainage and past discharges, the Commission did not assign aquatic and agricultural classifications to the segment as had been proposed. The segment does not currently have an aquatic life classification, and thus the status quo is maintained. The Commission placed recreation in the class 2 category as the basic use and found no agricultural use to be in place.

8. Page 7, Segment 7

The Woodling Study indicates that Mineral Creek from its source to its confluence with South Mineral Creek is highly toxic due to mineralization and there is not a likelihood that the sources of that toxicity will be corrected in 20 years. However the Commission concluded that there was likely to be aquatic life in that portion of Mineral Creek from below South Fork to Silverton. By changing the stream segment description such that it covers the mainstem of Mineral Creek including all tributaries from the source to a point immediately above the confluence with South Mineral Creek, the Commission was enabled to preserve the aquatic life classification on South Mineral Creek and the remaining portion of Mineral Creek into Silverton.

9. Page 8, Segment 12(a) and 12(b) (proposed as page 6, segment 12)

Lemon Reservoir was resegmented as 12(a) for the purposes of classifying it Recreation Class 1 in recognition of known use appropriate to that classification.

10. Page 8, Segment 13(a) and 13(b)

Segment 13 included Junction Creek. The Resegmentation was to separate Junction Creek as 13(a) so that different standards could be assigned to it to protect its use as a water supply for a fish hatchery. The Commission felt that the testimony supported: (a) classification of the stream for cold water aquatic life class 2 because of poor habitat and low flow conditions; and (b) assignment of numeric standards to protect the fish hatchery. The Commission felt that the use was in place and that the assignment of these standards was economically reasonable. It does not appear that discharges from trailer parks into this segment adversely impact this use. There was insufficient evidence in the record for the Commission to conclude that there would be any economic impact on such dischargers.

11. Page 8, Segment 15

Testimony was received by the Commission from the Purgatory Water and Sanitation District that the water supply classification was not applicable below the reservoir. The Commission concurred and determined that there should be no more than a class 2 aquatic life classification for this segment because of its intermittent flow and poor habitat characteristics. It was recommended that recreation class 2, agriculture and water supply be designated for the protection of the reach above the reservoir. Despite opposition to the water supply classification by Purgatory Water and Sanitation District based upon the absence of such use below Duncan Reservoir, the Commission finds that the presence of this use at other locations justifies the classification. This should not impact the District because the numeric standards for protection of the use are less stringent than those for protection of aquatic life and should be met by the discharger without additional treatment facilities.

12. Page 11, Segment 3 - Dolores River in Dolores County

Even though the regional "208" Plan recommended that the segment be classified for a water supply use, the Commission received no testimony that there was such use in the segment. Because of high levels of manganese and the lack of evidence of in place water supply use, the Commission did not so classify the segment. Anaconda Corporation proposed numeric standards for silver and mercury. The Division recommended to the Commission that it not utilize the Anaconda proposals for those constituents because they were based on limited data, unusually high values, and questionable analytical techniques. It had not been documented that the levels of those constituents proposed by Anaconda had been routinely found in the stream. Due to this lack of certainty with respect to these metals values, the Commission did not choose to use the Anaconda data on mercury and silver.

#### **34.16 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE:**

The provisions of 25—8-202(1)(a)(b) and (2); and 25-8-204 C.R.S. provide the specific statutory authority for the numeric standards that were adopted.

The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statements of basis and purpose and fiscal impact.

#### **BASIS AND PURPOSE - SAN JUAN AND DOLORES RIVER BASINS**

The basis and purpose for the changes by segment is as follows:

Segment 6, Piedra River -This segment contains the lakes listed for inclusion in the proposed Segment 7. In order to separate these lakes from this segment, the description must be changed.

Segment 7, Piedra River -The lakes listed are all fisheries and a majority of them are used for sport fishing. Their present inclusion in Segment 6 does not represent their actual use, i.e., Class 1 Aquatic Life, or provide standards to protect this use. The Commission has classified all reservoirs in Segment 7 as Warm Water Class 1 instead of Cold Water Class 1 on the basis that: 1) all reservoirs are already heavily managed, including aeration; 2) trout have been introduced into the reservoirs and do not occur naturally; and 3) at least temperature excursions above that require for cold water classification occur.

The Commission notes that the data base supporting this change in classification to warm water Class 1 is not extensive and further water quality monitoring is encouraged.

Segment 15, Animas River - Studies conducted by the Water Quality Control Division indicate that both Goulding Creek and Nary Draw are intermittent streams more appropriately classified under Segment 15 than under Segment 12a. The change in the description of Segment 15 will accomplish this and provide adequate protection of the uses.

Segment 8, La Plata River, Mancos- River, McElmo Creek, and San Juan River -The change in description to include Dolores County will include those streams which are unclassified under the existing description.

Change in basin description at top of pages 9 and 10 of the Tables -Change is needed to accurately reflect the streams included in this section with the change in description of Segment 8.

#### **34.17 BASIS AND PURPOSE:**

At the triennial review of the San Juan and Dolores River Basins in May, 1985, the Water Quality Control Division pointed out that the Division had recently (April, 1985) granted a variance to the limitation for cadmium in Anaconda Company's Rizo Mine discharge permit. The underlying stream concentration which was used to support the variance was 0.002 mg/l, and was based upon an  $\bar{x} + s$  calculation of fifteen cadmium data points above the St. Louis ponds discharge collected in 1981. The rationale for the variance anticipated the establishment of a revised cadmium standard through the established standards setting procedure of the Water Quality Control Commission, and noted that subsequent to that procedure, an amended discharge elimination in Anaconda's discharge permit would be written.

This amendment initiates the standards setting process envisioned when the cadmium variance was granted to Anaconda with the expectation that the variance will expire upon adoption of a new standard.

The revision of the cadmium standard from 0.0004 mg/l to 0.0012 mg/l is based upon a review of data supplied by Anaconda at stations D2 and D3 above the discharge point on the Dolores River. Consideration was also given to the existing table value for cadmium at the ambient hardness levels in the river, and the draft position on cadmium is being considered by the Basic Standards Task Force.

**34.18 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE; AUGUST, 1989 HEARING ON MULTIPLE SEGMENTS**

The provisions of 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; 25-8-207 and 25-8-402 C.R.S. provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted, in compliance with 24-4-103(4), C.R.S., the following statement of basis and purpose.

**BASIS AND PURPOSE:**

First, the Commission has adopted new introductory language for the tables, in section 3.4.6(2). The purpose of this language is to explain the new references to "table value standards"(TVS) that are contained in the Tables. The other changes considered and adopted are addressed below.

**A. Jurisdiction on Tribal Lands**

On the issue of classifying and setting standards on tribal lands, the Commission was advised to classify and set standards as they would for waters on non-tribal lands with the understanding that the Commission is not attempting to assert jurisdiction or to usurp the authority of the tribe to classify and set standards for waters within the boundaries of the reservation.

**B. Table Value Standards for Metals**

San Juan, Segment 7;  
Los Pinos, Segment 4;  
Animas, Segment 5;  
Dolores, Segments 5 and 7.

Numerical standards for metals for these segments have in most instances previously been based on table values contained in Table III of the Basic Standards and Methodologies for Surface Water. Table III has been substantially revised, effective September 30, 1988. A few of these segments had no new data to indicate that new table value standards are not appropriate. There are also some of these segments whose previous standards were based in part on ambient quality, since their quality did not meet old table values based on alkalinity ranges. However, these segments generally have much higher hardness than alkalinity, and the new table values (based on hardness-dependent equations) are now appropriate as standards.

**C. New High Quality 2 Designations**

San Juan, Segments 1, 5, and 9;  
Piedra, Segments 3 and 5;  
Los Pinos, Segment 2a;  
Animas, Segments 8a, 10, 11, 12a, 12b, and 14;  
La Plata, Segments 1 and 4;  
Dolores, Segments 4 and 10.

From the information available, it appears that the existing quality of these segments meets or exceeds the quality specified by the revised criteria in Table III, and new acute and chronic table value standards based thereon have therefore been adopted.

Second, in addition to these standards changes, the use classifications have been revised where necessary so that each of these segments has the following classifications:

Recreation - Class 1  
Cold Water Aquatic Life - Class 1  
Water Supply

Agriculture

**D. Existing High Quality 2 Segments; New Classifications and Standards**

San Juan, Segment 4;  
Piedra, Segments 1 and 2;  
Los Pinos, Segment 1;  
Animas and Florida, Segment 1;  
Dolores, Segment 1.

These segments were already described as High Quality Class 2, as all are wilderness and wild and scenic rivers. Available information indicates that the parallel new High Quality 2 designation continues to be appropriate for each, along with new table value numeric standards and equations for cold water aquatic life classifications, i.e., acute (trout) for cadmium and zinc and chronic (trout) for silver.

The following use classifications, and associated table value standards, have been adopted for these segments:

Recreation - Class 1  
Cold Water Aquatic Life - Class 1  
Water Supply  
Agriculture

**E. Existing High Quality 2 Segments; New Classifications and Standards**

San Juan, Segments 3, 10, and 11;  
Piedra, Segment 6; Los Pinos, Segment 6;  
Animas and Florida, Segments 3, 4, 9, 13b, and 15;  
La Plata, Mancos, McElmo, and San Juan, Segments 2, 3, 5, 6, 7, and 8;  
Dolores, Segment 9 and 11.

These segments all qualify for a Use-Protected designation based either on their present classifications or the existing standards contain three or more of the following metals parameters whose concentrations, based on total recoverable metals, indicate they may be worse than that specified in Table III for the protection of aquatic life class 1 use: cadmium, copper, iron, lead, or zinc.

**F. New Use-Protected Designation; Table Value Standards**

Piedra, Segment 7;  
Animas and Florida, Segment 13a.

These segments qualify for a Use-Protected designation based upon their classification. Previous standards were based on table values and no new data was presented to indicate new table value standards are not appropriate.

For these segments, acute and chronic table value standards have been adopted for arsenic, cadmium, chromium (III and IV), copper, iron, lead, manganese, mercury, nickel, selenium, silver, and zinc.

**G. Revised Recreation Classification**

San Juan, Segments 2 and 6;  
Piedra, Segment 4;

Los Pinos, Segment 2b;  
La Plata, Segment 9

The recreation classification on these segments has been upgraded from Class 2 to Class 1 (whole body immersion is likely) because the stream sampling data indicate that the fecal coliform standard 200/100 ml is not being exceeded, and conditions are normally considered suitable for swimming or intentional whole body contact. This action was taken in response to a concern raised by the EPA regarding segments not attaining "fishable/swimmable" uses.

#### **H. Other Revisions**

1. Los Pinos, Segments 3 and 5.

Based on stream sampling data for Segment 3, table value standards were established as were ambient standards for cadmium and lead. For Segment 5, ambient standards for cadmium and lead were added; table value standards were added for the remaining metals.

2. San Juan, Segment 9 (Four Corners Area)

Table Value Standards for metals have been adopted for this segment with the exception of total recoverable iron whose 50 percentile value is 2200 ug/l. In addition, the recreation classification has been changed from Class 2 to Class 1 with a fecal coliform standard of 200/100 ml.

#### **34.19 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE; FEBRUARY, 1990 EMERGENCY RULEMAKING HEARING**

The provisions of 25-8-208 and 25-8-402 C.R.S. provide the specific statutory authority for action on these regulatory amendments.

#### **BASIS AND PURPOSE:**

The Commission held this emergency rulemaking hearing to readopt the classifications and numeric standards for the San Juan River and Dolores River Basins to correct errors in the original filing. The affected regulation was amended on November 7, 1989 and was filed within the required timeframes with the Secretary of State's Office and the Office of Legislative Legal Services. The Commission learned shortly after the filings that three (3) pages had been inadvertently left out of the regulation, and that a typographical error appeared throughout the classification and standards tables that are part of the regulation. The Commission office was able to correct the errors with a replacement filing with the Secretary of State's Office so that the regulation published in the CCR (Colorado Code of Regulation) correctly reflects the Commission's actions.

The Office of Legislative Legal Services notified the Commission that it could not accept the corrected materials as they had not been submitted within the 20 day timeframe called for in section 24-4-103 (8) (d), C.R.S. of the "State Administrative Procedure Act". It was suggested that the Commission needed to repromulgate the rules that contained the errors submitted in November, 1989 and resubmit them.

The Commission elected to proceed on an emergency rulemaking basis to avoid any confusion that could result due to the fact that the two filings are currently not the same. Therefore, the Commission adopted the corrected version of the regulation at an emergency rulemaking hearing on February 6, 1990. Final action on the readoption is scheduled for June 5, 1990.



**34.20 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE; JUNE, 1990 RULEMAKING HEARING**

The provisions of 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; 25-8-207 and 25-8-402 C.R.S. provide the specific statutory authority for action on these regulatory amendments.

**BASIS AND PURPOSE:**

The Commission held this rulemaking hearing to make permanent the emergency hearing that was held in February, 1990 to readopt the classifications and numeric standards for the San Juan River and Dolores River Basins to correct errors in the original filing. The affected regulation was amended on November 7, 1989 and was filed within the required timeframes with the Secretary of State's Office and the Office of Legislative Legal Services. The Commission learned shortly after the filings that three (3) pages had been inadvertently left out of the regulation, and that a typographical error appeared throughout the classification and standards tables that are part of the regulation. The Commission office was able to correct the errors with a replacement filing with the Secretary of State's Office so that the regulation published in the CCR (Colorado Code of Regulation) correctly reflects the Commission's actions.

The Office of Legislative Legal Services notified the Commission that it could not accept the corrected materials as they had not been submitted within the 20 day timeframe called for in section 24-4-103 (8) (d), C.R.S. of the "State Administrative Procedure Act". It was suggested that the Commission needed to repromulgate the rules that contained the errors submitted in November, 1989 and resubmit them.

The Commission elected to proceed on an emergency rulemaking basis to avoid any confusion that could result due to the fact that the two filings are currently not the same. Therefore, the Commission adopted the corrected version of the regulation at an emergency rulemaking hearing on February 6, 1990.

**34.21 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; MARCH 1, 1993 HEARING:**

The provisions of 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402 C.R.S. provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4), C.R.S., the following statement of basis and purpose.

**BASIS AND PURPOSE:**

The changes to the designation column eliminating the old High Quality 1 and 2 (HQ1, HQ2) designations, and replacing HQ1 with Outstanding Waters (OW) designation were made to reflect the new mandates of section 25-8-209 of the Colorado Water Quality Act which was amended by HB 92-1200. The Commission believes that the immediate adoption of these changes and the proposals contained in the hearing notice is preferable to the alternative of waiting to adopt them in the individual basin hearings over the next three years. Adoption now should remove any potential for misinterpretation of the classifications and standards in the interim.

In addition, the Commission made the following minor revisions to all basin segments to conform them to the most recent regulatory changes:

1. The glossary of abbreviations and symbols were out of date and have been replaced by an updated version in section 3.4.6(2).
2. The organic standards in the Basic Standards were amended in October, 1991, which was subsequent to the basin hearings. The existing table was based on pre-1991 organic standards and are out of date and no longer relevant. Deleting the existing table and referencing the Basic Standards will eliminate any confusion as to which standards are applicable.

3. The table value for ammonia and zinc in the Basic Standards was revised in October, 1991. The change to the latest table value will bring a consistency between the tables in the basin standards and Basic Standards.
4. The addition of acute un-ionized ammonia is meant to bring a consistency with all other standards that have both the acute and chronic values listed. The change in the chlorine standard is based on the adoption of new acute and chronic chlorine criteria in the Basic Standards in October, 1991.

Finally, the Commission confirms that in no case will any of the minor update changes described above change or override any segment-specific water quality standards.

**34.22 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; MARCH 1, 1993 HEARING:**

The provisions of 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402 C.R.S. provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4), C.R.S., the following statement of basis and purpose.

**BASIS AND PURPOSE:**

On November 30, 1991, revisions to "The Basic Standards and Methodologies for Surface Water" 3.10 ( 5 CCR 1002-8), became effective. As part of the revisions, the averaging period for the selenium criterion to be applied as a standard to a drinking water supply classification was changed from a 1-day to a 30-day duration. The site-specific standards for selenium on drinking water supply segments were to be changed at the time of rulemaking for the particular basin. Only one river basin, the South Platte, has gone through basin-wide rulemaking since these revisions to the "Basic Standards". Through an oversight, the selenium standards was not addressed in the rulemaking for this basin and has since become an issue in a wasteload allocation being developed for segments 15 and 16 of the South Platte. Agreement on the wasteloads for selenium is dependent upon a 30-day averaging period for selenium limits in the effected parties permits. Therefore, the parties requested that a rulemaking hearing be held for the South Platte Basin to address changing the designation of the 10 ug/l selenium standard on all water supply segments from a 1-day to a 30-day standard. The Water Quality Control Division, foreseeing the possibility of a selenium issue arising elsewhere in the state, made a counter proposal to have one hearing to change the designation for the selenium standard on all water supply segments statewide. The Commission and the parties concerned with South Platte segments 15 and 16 agreed that this would be the most judicious way to address the issue.

The change in the averaging period may cause a slight increase in selenium loads to those segments which have CPDS permits regulating selenium on the basis of a water supply standard. However, these segments are only five in number and the use will still be fully protected on the basis that the selenium criterion is based on 1975 national interim primary drinking water regulations which assumed selenium to be a potential carcinogen. It has since been categorized as a non-carcinogen and new national primary drinking water regulations were promulgated in 1991 that raised the standard to 50 ug/l.

The Commission also corrected a type error in the TVS for Silver by changing the sign on the exponent for the chronic standard for Trout from +10.51 to - 10.51.

**34.23 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE; SEPTEMBER 12, 1994 HEARING:**

The provisions of 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402 C.R.S. provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4), C.R.S., the following statement of basis and purpose.

## **BASIS AND PURPOSE**

### **A. BACKGROUND**

Between 1991 and 1993 the Water Quality Control Division, in cooperation with several federal, state, local and private interests conducted an intensive water quality investigation of the Animas River and its tributaries from Elk Creek to the headwaters. The objectives of the study were to characterize the current chemical, biological, and physical conditions of the Animas River and selected tributaries above Elk Creek and to quantify the areas of highest metal loadings and determine the potential for water quality improvement sufficient to allow naturally reproducing trout populations; and to prioritize sites for remedial projects based on relative loading, environmental impact, feasibility, cost, and benefits.

The water quality of this area is extensively impacted by heavy metals which are attributed to both natural and anthropogenic factors. The results of the investigation have been used to identify the beneficial uses and water quality that are currently being achieved or that may reasonably be achieved within a twenty year period through restoration of disturbed sites.

### **B. OVERVIEW**

The starting point for the Commission's analysis is a conclusion that appears to be shared by most, if not all, of the participants in this rulemaking proceeding: current water quality in the Animas River Basin can and should be improved. For example, quoting from the Statement of the Animas River Stakeholders' Group:

All stakeholders agree that current water quality can and should be protected from any further degradation; all agree that there are opportunities to make improvements, and that improvement is desirable even if it were not mandated; all agree that the task before us now is to identify the sources of significant human-caused loadings and find ways to remediate them.

Beyond this starting point, there was considerable debate in the hearing, and among Commission members in its initial deliberations, regarding the most appropriate and constructive way to encourage and stimulate the desired water quality improvement. One perspective offered was that the Commission should adopt underlying numerical and narrative standards for the critical segments in question that would establish goals for water quality improvement, tempered by temporary modifications that recognize current water quality. An alternative perspective suggested that adopting such goals as legally effective standards before the feasibility of specific clean-up projects had been determined—and the achievable improvement quantified—may hinder the cooperative, community-based effort that has been evolving to identify, prioritize and acquire funding for remediation projects.

Following extensive discussion and debate, the Commission has decided to adopt a hybrid result that consists of two components. First, the set of proposals advanced by the Water Quality Control Division staff, based on the promulgation of underlying goal-based numerical and narrative standards for the critical segments, is adopted by the Commission with a three-year delayed effective date. The Commission finds that the evidence submitted in the hearing provides a sound scientific basis for the adoption of the Division's proposal, with the caveat that three-year temporary modifications almost certainly will not provide an adequate period in which to achieve water quality improvement that will attain the underlying standards. The issue of temporary modifications is discussed further below.

The second component of the action being taken by the Commission is the adoption of ambient quality-based standards that will be in place for the critical segments until the effective date of the goal-based standards described above. The purpose of taking this step, as opposed to adopting the goal-based standards with an immediate effective date, is to encourage the cooperative, community-based effort toward water quality improvement that has begun in the basin, unencumbered by the potential implications of the goal-based standards being in effect. This action is an experiment, intended to assess the ability of a cooperative process to achieve meaningful progress toward water quality improvement without the underlying improvement goal being reflected in currently effective, legally binding water quality standards.

If substantial progress toward water quality improvement—through the identification, prioritization and implementation of remediation projects—is achieved within the next three years, and if it appears three years from now that the lack of legal effectiveness of the goal-based standards will provide the best stimulus for further progress, further delay in the effective date of the goal-based standards can be considered by the Commission at that time. Of course, such progress could also demonstrate that the identified goals are achievable, or that they should be refined in some manner.

If, however, substantial and diligent progress toward water quality improvement is not achieved over the next three years, it is the intent of the Commission that the goal-based standards should and will be allowed to go into effect at that time to stimulate further progress. In a new rulemaking hearing, the burden should be on those that have argued that clean-up will be more successful with a cooperative effort working toward a goal, without that goal being reflected in currently effective water quality standards, to demonstrate the success of this experiment.

The Water Quality Control Commission expects that the cooperative effort will be successful and is attempting by this action to send that message to all stakeholders. To those concerned about the potential impacts on property owners of goal-based standards being in effect, the message is that the Commission wants to encourage this locally-driven, cooperative watershed improvement initiative by demonstrating as much flexibility as possible. To federal agencies or others with potential resources to devote to water quality improvement efforts, the message is that working toward such improvement in this basin is an extremely high priority for the State of Colorado. To the Water Quality Control Division and those that supported their proposal in this rulemaking proceeding, the message is that the Commission has been persuaded—based on the unprecedented level of monitoring and analysis that has occurred in this basin—that a sound scientific justification has been provided for the adoption of goal-based water quality standards, and that these standards should be allowed to go into effect unless it is demonstrated that the pending experiment in cooperative watershed management can succeed without this legal impetus. To all of the residents of the Animas River Basin, the message is that the Commission is concerned about water quality in your basin and is willing to work with you to explore whatever options appear most likely to facilitate progress toward water quality improvement in the least disruptive and most expeditious manner.

In summary, the Commission's action in revising the Animas River Basin water quality classifications and standards should in no way be interpreted as a sanctioning of the status quo. To repeat, current water quality in the Animas River Basin can and should be improved. The purpose of the Commission's action is to establish a clear goal of attaining such improvement, while providing regulatory flexibility intended to encourage cooperative efforts toward such improvement.

### **C. IMPLICATIONS OF THE HYBRID ACTION**

Because of the unorthodox nature of the hybrid action being taken, the Commission believes that it may be important to clarify its understanding regarding the implications of this action for various activities or decisions that will need to be undertaken by others during the next three years.

For any existing point source discharge permit that may come up for renewal during the next three years, or for any new wastewater discharge permit issued during this period, the Commission intends that the permit would be written based on the ambient quality-based standards then in effect, along with other applicable effluent quality restrictions. The Commission also understands that ambient quality-based standards would require the continuation of current treatment levels for permit renewals, to assure that further degradation of water quality does not occur.

To the extent that general or individual storm water permits may be required for some sites in the basin, the Commission understands that the water quality standards now being adopted are not likely to affect the content of the first round of any such permits, which are anticipated to be based principally on the implementation of best management practices (BMPs). Such initial BMPs are not likely to be significantly different whether they are deemed to be technology-based or water quality-based.

Finally, as discussed above, the Commission intends this action to provide a clear message to other agencies, entities and persons involved with potential nonpoint source clean-up projects that the Animas River Basin is in fact a high priority for such efforts. The delayed effective date for goal-based standards should not be interpreted to in any way lessen the priority of this basin; rather, as discussed above, this hybrid action is intended to provide flexibility for the cooperative, community-based efforts toward clean-up while at the same time clarifying that improvement is the goal.

#### **D. DELAYED CLASSIFICATIONS AND STANDARDS**

This portion of this statement describes the basis for the goal-based standards that are scheduled to go into effect three years after the effective date of this action.

The upper Animas water quality study found that the Animas River and several tributaries above Maggie Gulch (segment 2), the Animas River from Cement Creek to Mineral Creek (segment 3b), Cement Creek and its tributaries (segment 7), and Mineral Creek above the confluence with South Mineral Creek (segment 8) do not support diverse forms of aquatic life owing to poor water quality and limited physical habitat. The imposition of effluent limits required under the Federal Act for point sources and cost-effective and reasonable best management practices (BMP's) for nonpoint sources are not likely to lead to the establishment of aquatic life in these segments. Additionally, federal regulation (40 C.F.R. 131.10) allows excluding an aquatic life classification where naturally occurring pollutant concentrations prevent the attainment of the use and/or human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place. Therefore, an aquatic life classification is not being adopted for these segments. Downstream use classifications, however, depend on maintaining or improving the water quality in these segments. The Commission has therefore, determined that narrative standards for metals based on the application of BMP's to nonpoint sources and the continuation of current treatment levels for existing point sources for these segments establish an appropriate goal for water quality in these segments. Narrative (and for zinc in segment 3b, numerical) temporary modifications have been adopted based on current ambient quality in these segments, to assure no additional degradation of downstream segments.

The Commission recognizes that even with aggressive clean-up efforts, it may take many years to achieve in-stream quality that attains the underlying goal-based standards. Three-year temporary modifications are being adopted in an attempt to avoid conflict with the current EPA policy that temporary modifications are variances that can not be extend for longer than three years without being readopted. The Commission anticipates that many, if not all, of the temporary modifications being adopted in this proceeding will need to be extended beyond three years to attain the underlying standards, even considering the delayed effective date of that portion of the action that includes temporary modifications.

The Commission has further determined that the Animas River between Maggie Gulch and Cement Creek (segment 3a) supports a population of brook trout that appears to be naturally reproducing in that it consists of multiple age classes. The segment also contains a diversity of macrobenthos and possesses physical habitat similar to other streams in the Southern Rocky Mountain ecoregion. Although the concentration of several metals, especially cadmium and zinc, are higher than what is required to protect the most sensitive aquatic life species, they are lower than the chronic toxic criteria for brook trout. Therefore a cold water aquatic life class 1 classification is being established to protect the resident aquatic life found in this segment. Ambient standards for cadmium and zinc are adopted to ensure that downstream use classifications and standards are not jeopardized. The imposition of effluent limits required under the Federal Act for point sources and cost-effective and reasonable best management practices for nonpoint sources are not likely to lead to the establishment of the most sensitive aquatic life species in this segment. However, consistent with its prior practice, the Commission has determined that the most sensitive species need not be present to find that a segment is “capable of sustaining a wide variety of cold water biota, including sensitive species”, warranting a cold water class 1 classification. Section 3.1.7(1)(b)(ii) authorizes ambient standards where natural or irreversible man-induced ambient levels are higher than TVS but are adequate to protect the classified uses.

Mineral Creek between South Mineral Creek and the Animas River, renumbered segment 9b, was already classified aquatic life cold water class 1, with total recoverable table value standards. The upper Animas water quality study showed that pH, aluminum, copper, iron, and zinc greatly exceed TVS in this segment and that both fish and macroinvertebrates are absent from the segment. The physical habitat assessment, however, found it comparable to other habitats within the Southern Rocky Mountain ecoregion. Because most of the aluminum, copper, iron, and zinc are contributed from two areas, there may be a potential to reduce loading from either or both of these areas. The Commission chose not to remove the aquatic life classification until it has been demonstrated that sources cannot be remedied within a twenty year period or would cause more environmental damage than to leave it in place. The Commission adopted TVS for segment 9b, together with temporary modifications for aluminum, copper, iron, and zinc based on ambient quality until the feasibility of remediation has been established. A use-protected designation has been added to this segment based on four key parameters with existing quality worse than table values.

The Animas River between Mineral Creek and Elk Creek, renumbered segment 4a, has not previously had an aquatic life classification. The upper Animas water quality study found that the water quality below Mineral Creek is suitable for brook trout and has physical habitat similar to other aquatic life streams in the Southern Rocky Mountain ecoregion. Some improvement in water quality from Cement Creek, Mineral Creek, and/or the Upper Animas may enable the water quality of the segment to support brown trout. However, the imposition of effluent limits required under the Federal Act for point sources and cost-effective and reasonable best management practices for nonpoint sources are not likely to lead to the establishment of aquatic life uses including the most sensitive species in this segment. The Commission adopted the aquatic life cold class 1 classification as a goal and TVS for this segment, except for the zinc standard which is based on the chronic toxic criterion for brown trout. Consistent with its prior practice, the Commission has determined that the most sensitive species need not be present or attainable to find that a segment is or may become “capable of sustaining a wide variety of cold water biota, including sensitive species”, warranting a cold water class 1 classification. A temporary modification for zinc, based on the ambient quality, has been adopted until the feasibility for load reduction has been established.

#### **E. AMBIENT QUALITY-BASED STANDARDS**

This portion of this statement describes the basis for the ambient quality-based standards that are adopted for the three-year period starting with the effective date of this action.

For segments 2, 3b, 7 and 8, the Commission has adopted a narrative standard based on existing ambient quality for all metals to be applicable for the next three years. For segments 4a, 4b, and 9b, for this same time period the Commission has adopted ambient-quality based numerical standards for specific metals for which ambient quality currently is higher (worse than) table values. These standards are intended to protect the aquatic life that is currently in place in these segments until the goal-based standards go into effect. As discussed above, the primary basis for adopting these numerical and narrative ambient quality-based standards is to provide maximum regulatory flexibility to encourage the cooperative, community-based effort toward clean-up to proceed. This approach provides time in which additional information can be developed regarding the feasibility of specific remedial efforts that will result in water quality improvement.

Having ambient standards in place for the next three years means that any point source permits issued or renewed during this period will be based on those ambient standards, along with other applicable effluent quality restrictions, rather than being based on the more stringent goal-based standards. At the same time, the ambient standards should help assure that no additional degradation in water quality occurs for these segments in the next three years while clean-up actions are being examined and initiated.

For segment 4a, the aquatic life cold class 2 classification and the use-protected designation proposed by Sunnyside have been adopted for the next three years, since this classification and designation appear to be more consistent with the ambient standards applicable during that period. As discussed above, at the end of three years the use-protected designation would expire and the aquatic life classification would become cold water class 1.

For segment 9b, the currently applicable class 1 aquatic life classification has been left in place, even though ambient standards proposed by Sunnyside have been adopted for the next three years. The Commission believes that a downgrading of the classification of this segment is premature, pending additional analysis of clean-up opportunities. As noted above, the use-protected designation proposed by the Division and several parties has also been adopted.

## **F. OTHER ISSUES**

The above discussion, like the evidence submitted at the hearing, focuses principally on appropriate aquatic life classifications and associated water quality standards. In this hearing the Commission also added an agriculture classification to segments 2, 3a, and 7, based on evidence regarding the presence of grazing. In addition, the Commission changed the recreation classification from class 2 to class 1 for segments 4a, 4b, 5a, and 5b, based on evidence regarding the presence of primary contact recreation. Finally, fecal coliform standards for segments 2 and 3a were changed from 2,000 to 200/ml, to provide additional protection that better reflects current ambient conditions. There are no affected point sources on these segments.

### **34.24 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: MARCH 14, 1995 HEARING (San Juan and Dolores River Basins revisions)**

The provisions of 25-8-202(1)(a), (b) and (2); 25-8-204; and 25-8-402 C.R.S. provide the specific statutory authority for the adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

## **BASIS AND PURPOSE**

The Water Quality Control Division (Division) proposed that the Water Quality Control Commission consider the following changes to the Classifications and Numeric Standards for San Juan River and Dolores River Basins, 3.4.0. The basis and purpose for the changes are organized by topic.

**A. Resegmentation**

Several of the segments contained waters that crossed into or were on the Southern Ute and Ute Mountain Indian Reservations. Both tribes are in the process of developing classifications and standards for waters within their reservations and it was agreeable to both tribes that those segments should be bi-furcated to indicate which portions are on tribal lands and to ease their future removal from the state standards system when the tribes' standards are approved by the U. S. Environmental Protection Agency. The segments on the Southern Ute Reservation, at the request of the Southern Ute Tribe, have been maintained at the classifications and standards in effect prior to this rulemaking hearing. The standards on some segments on the Ute Mountain Reservation, after discussion with tribal representatives, were changed to parallel the changes made by the state on the adjacent segments. These were all related to changes from total recoverable to dissolved metals standards where data indicated table value standards for metals were appropriate.

In addition to the bifurcation of segments, all segments, new and old, which delineate tributaries have added wetlands to their descriptions to clarify that all tributary wetlands have the same classifications and standards as the tributary streams, lakes and reservoirs.

The DOW identified several areas requiring resegmentation or changes to standards in order to protect fisheries. Therefore, the following changes were made. Mill Creek and Echo Canyon Reservoir were reassigned from San Juan segment 11 to San Juan segment 6a. Weber Canyon was reassigned from Mancos segment 6 to Mancos segment 5a. Summit Reservoir was reassigned from Dolores segment 11 to Dolores segment 4. Narraguinnep, Puett and Totten Reservoirs are reassigned from McElmo Creek segment 8 to McElmo Creek segment 11. According to new information, these waters support fisheries, fish consumption, and intensive recreation, and are suitable for domestic use. Therefore, this new segment 11 was assigned classifications of Recreation class 1, Aquatic Life Warm 1, Water Supply and Agriculture, with appropriate table value standards.

**B. Segments Converted to Dissolved Metals Standards**

There were several segments which still had metals standards based on the old total recoverable criteria. Review of metals data submitted to the hearing allowed the metal standards on the following segments to be appropriately converted from total recoverable to dissolved standards:

- San Juan River segment 6a
- Piedra River segment 4a
- La Plata River segment 2a
- Mancos River segments 5a and 5b
- McElmo Creek segment 7
- Dolores River segments 2, 3, 5, 6, and 9

**C. Revision of Classifications or Standards to Meet the Fishable/Swimmable Goals of Clean Water Act**

Several segments in the San Juan-Dolores river basins did not have use classifications which met the swimmable goals of the Clean Water Act. Consistent with strategies adopted by the Commission, these segments which are designated recreation class 2 and have no point source dischargers to the segment have had their fecal coliform standard set equal to 200/100 ml. These segments are:

- La Plata River segment 2a
- Dolores River segments 2, 3, 5, 6, 8, and 9



**D. Manganese and Mercury Standards**

On all segments classified for water supply and aquatic life uses, the total recoverable manganese standard of 1,000 ug/l was stricken. The aquatic life manganese criterion was changed in 1991 revisions to the Basic Standards from total recoverable to dissolved and on these segments a more stringent dissolved manganese water supply standard of 50 ug/l is in place.

Mercury standards designated as total recoverable (Trec) were changed to Total (tot). This change reflects the Basic Standards designation of total mercury as the appropriate form of mercury for final residual value (FRV) standards.

**E. Deletion of Use-Protected Designation**

One segment classified aquatic class 1, Piedra River segment 7, was found to have a use-protected designation which was based on prior basic standards requirements pertaining to waters classified as warmwater aquatic life class 1, recreation class 2. The designation was removed to conform to the requirements now in effect.

**F. Water Supply Classifications and Standards**

New data on several segments showed the water quality to be suitable for a water supply classification. The water supply classifications and standards were added to the following segments:

San Juan River segment 6a  
Piedra River segment 4a  
McElmo Creek segment 11

**PARTIES TO THE MARCH, 1995 RULEMAKING HEARING**

1. Pagosa Springs Sanitation District
2. Southwestern Water Conservation District
3. Southern Ute Indian Tribe
4. Pagosa Area Water and Sanitation District
5. Board of County Commissioners of San Juan County
6. U.S. Environmental Protection Agency's Region VIII Office
7. Colorado Division of Wildlife

**34.25 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE (1995 Silver hearing)**

The provisions of C.R.S. 25-8-202(1)(b), (2) and 25-8-204; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

The changes described below are being adopted simultaneously for surface water in all Colorado river basins.

This action implements revisions to the Basic Standards and Methodologies for Surface Water adopted by the Commission in January, 1995. As part of a July, 1994 rulemaking hearing, the Commission considered the proposal of various parties to delete the chronic and chronic (trout) table values for silver in Table III of the Basic Standards. As a result of that hearing, the Commission found that the evidence demonstrated that ionic silver causes chronic toxicity to fish at levels below that established by the acute table values. It was undisputed that silver is present in Colorado streams and in the effluent of municipal and industrial dischargers in Colorado. The evidence also demonstrated that the removal of silver from wastewater can be costly. However, there was strongly conflicting scientific evidence regarding the degree to which silver does, or could in the absence of chronic standards, result in actual toxicity to aquatic life in Colorado surface waters. In particular, there was conflicting evidence regarding the degree to which the toxic effects of free silver are mitigated by reaction with soluble ligands to form less toxic compounds and by adsorption to particulates and sediments.

The Commission concluded that there is a need for additional analysis of the potential chronic toxicity of silver in streams in Colorado. The Commission encouraged the participants in that hearing, and any other interested parties, to work together to develop additional information that will help resolve the differences in scientific opinions that were presented in the hearing. The Commission believes that it should be possible to develop such information within the next three years.

In the meantime, the Commission decided as a matter of policy to take two actions. First, the chronic and chronic (trout) table values for silver have been repealed for the next three years. The Commission is now implementing this action by also repealing for the next three years, in this separate rulemaking hearing, all current chronic table value standards for silver previously established on surface waters in Colorado. Any acute silver standards and any site-specific silver standards not based on the chronic table values will remain in effect. The Commission intends that any discharge permits issued or renewed during this period will not include effluent limitations based on chronic table value standards, since such standards will not currently be in effect. In addition, at the request of any discharger, any such effluent limitations currently in permits should be deleted.

The second action taken by the Commission was the readoption of the chronic and chronic (trout) table values for silver, with a delayed effective date of three years from the effective date of final action. The Commission also is implementing this action by readopting chronic silver standards with a corresponding delayed effective date at the same time that such standards are deleted from the individual basins. The Commission has determined that this is an appropriate policy choice to encourage efforts to reduce or eliminate the current scientific uncertainty regarding in-stream silver toxicity, and to assure that Colorado aquatic life are protected from chronic silver toxicity if additional scientific information is not developed. If the current scientific uncertainty persists after three years, the Commission believes that it should be resolved by assuring protection of aquatic life.

In summary, in balancing the policy considerations resulting from the facts presented in the July 1994 rulemaking hearing and in this hearing, the Commission has chosen to provide relief for dischargers from the potential cost of treatment to meet chronic silver standards during the next three years, while also providing that such standards will again become effective after three years if additional scientific information does not shed further light on the need, or lack of need, for such standards.

Finally, the Division notes that arsenic is listed as a TVS standard in all cases where the Water Supply classification is not present. This is misleading since Table III in the Basic Standards lists an acute aquatic life criterion of 360 ug/l and a chronic criterion of 150 ug/l for arsenic, but a more restrictive agriculture criterion of 100 ug/l. It would be clearer to the reader of the basin standards if, for each instance where the standard "As(ac/ch)=TVS" appears, the standard "As=100(Trec)" is being inserted as a replacement. This change should make it clear that the agriculture protection standard would prevail in those instances where the more restrictive water supply use protective standard (50 ug/l) was not appropriate because that classification was absent.

The chemical symbol for antimony (Sb) was inadvertently left out of the "Tables" section which precedes the list of segments in each set of basin standards. The correction of this oversight will aid the reader in understanding the content of the segment standards. Also preceding the list of segment standards in each basin is a table showing the Table Value Standards for aquatic life protection which are then referred to as "TVS" in the segment listings. For cadmium, two equations for an acute table value standard should be shown, one for all aquatic life, and one where trout are present. A third equation for chronic table value should also be listed. The order of these three equations should be revised to first list the acute equation, next the acute (trout) equation, followed by the chronic equation. This change will also aid the reader in understanding the intent of the Table Value Standards.

**PARTIES TO THE PUBLIC RULEMAKING HEARING JUNE 12, 1995**

1. Coors Brewing Company
2. The Silver Coalition
3. Cyprus Climax Metals Company
4. The City of Fort Collins
5. The City of Colorado Springs

**34.26 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JULY, 1997 RULEMAKING**

The provisions of sections 25-8-202 and 25-8-401, C.R.S., provide the specific statutory authority for adoption of the attached regulatory amendments. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

**BASIS AND PURPOSE**

The Commission has adopted a revised numbering system for this regulation, as a part of an overall renumbering of all Water Quality Control Commission rules and regulations. The goals of the renumbering are: (1) to achieve a more logical organization and numbering of the regulations, with a system that provides flexibility for future modifications, and (2) to make the Commission's internal numbering system and that of the Colorado Code of Regulations (CCR) consistent. The CCR references for the regulations will also be revised as a result of this hearing.

**34.27 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; NOVEMBER, 1997 RULEMAKING**

The provisions of 25-8-202(1)(a) and (b); 25-8-203; 25-8-204; and 25-8-402 C.R.S. provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

In 1995, the Water Quality Control Commission adopted underlying goal-based numerical and narrative standards with temporary modifications for segments 2, 3b, 4a, 4b, 7, 8 and 9b of the Animas River Basin. The underlying goal-based standards were adopted with a three-year delayed effective date. In the interim, ambient quality-based standards were adopted for the critical segments to protect aquatic life currently in place in these segments. The critical segments did not meet the underlying goal based numeric standards, and it was not clear that the goal-based standards were in fact achievable within a 20-year period. Numeric standards were adopted in other segments of the river where supported by existing water quality. The overall purpose for adopting the underlying goal-based standards with temporary modifications was to encourage continuation of an existing community-based, cooperative watershed improvement initiative designed to improve water quality in the Animas River Basin unencumbered by the potential implications of the goal-based standards being in effect.

The Commission charged the Animas Stakeholders Group with the responsibility to determine the feasibility of specific clean-up projects, the quantification of achievable improvements and to identify, prioritize and acquire funding for remediation projects. Based on this work, the Commission expected that recommendations would be made for the permanent adoption of the underlying goal-based numeric standards or for alternative standards that would be achievable within a 20-year period. The Stakeholders have worked successfully toward accomplishment of this end. Significant progress has taken place in the basin in completion of feasibility studies, identification and prioritization of specific clean-up projects, initial funding for projects and on-the-ground remediation work in process. Evidence was submitted in the rulemaking regarding the work accomplished to date, additional work in progress or planned in the near future, and a schedule for the additional work planned during the next three years. Part of the planned work will be completed in conjunction with the U.S. Department of the Interior Abandoned Mined Land Initiative, which is designed to develop practical characterization and remediation methodologies for federal land managers and others to be used in a watershed management approach. The Animas Basin is one of two national pilot projects for this initiative. From this information, it is apparent that additional time is needed to finish studies to adequately characterize pollution sources, quantify feasible remediation levels, and define habitat limitations along with the potential for aquatic life. Completion of this work is necessary to provide a comprehensive recommendation to the Commission for ultimate numeric/narrative standards.

In order to allow the ongoing community-based, cooperative watershed improvements initiative an opportunity to continue the promising effort that is currently underway, the Commission has decided that the delayed effective date of underlying goal-based standards (and associated temporary modifications) should be delayed for another three years, to March 2, 2001.

With this extension, the Commission has the following expectations for: (1) preparation by the Stakeholders of a use attainability analysis which proposes aquatic life uses which are potentially attainable, specifies the causes of water quality impairment, determines the sources which may be controlled, and provides an economic evaluation of such a proposal; (2) that the Stakeholders, in conjunction with the Division of Wildlife develop recommendations for an appropriate underlying standard for zinc for segment 4a, as part of the use attainability analysis; and (3) that the delay until March 2, 2001 approved by the Commission for the effective date of underlying standards is adequate for all study to be completed and appropriate standards to be established.

Finally, the Commission notes that the action taken here is a unique approach to the unique situation present in the Animas River Basin, including the presence of a cooperative, community-based effort with unusually broad participation. This action should not be viewed as a precedent for other site-specific hearings.

#### **PARTIES TO THE RULEMAKING HEARING**

1. Animas River Stakeholders Group
2. Colorado Division of Wildlife
3. Town of Silverton
4. Sunnyside Gold Corporation
5. The Silver Wing Company, Inc
6. Southwestern Water Conservation District of Colorado
7. Gold King Mines Corporation
8. US EPA Region VIII
9. Southern Ute Indian Tribe

#### **34.28 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; NOVEMBER, 1998 RULEMAKING**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

## **BASIS AND PURPOSE**

The Commission has recently approved a new schedule for triennial reviews of water quality classifications and standards for all river basins in Colorado. In this hearing the Commission has extended the expiration dates of temporary modifications [and, for the Animas Basin, the effective dates of underlying standards] without substantive review, so that the next substantive review of the temporary modifications can occur as part of the overall triennial review of water quality standards for the particular watershed. This will avoid the need for multiple individual hearings that would take staff resources away from implementation of the new triennial review schedule.

### **34.29 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; MAY, 2001 AND JULY, 2001 RULEMAKING**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

## **BASIS AND PURPOSE**

### **I. Animas and Florida River Segments**

The primary focus of this portion of the hearing was to revisit the aquatic life classifications and standards for streams in the Animas River Basin that have elevated levels of various metals. The water quality of this area is extensively impacted by heavy metals which are attributed to both natural and anthropogenic sources. Those impacts attributed to past human activities are largely the result of the extensive mining that has occurred in this basin over a period of several decades. It is evident that remediation of these impacts is a complex challenge that will require considerable time and effort.

Subsequent to the last major review of these streams, a use attainability analysis (UAA) was prepared by the Animas River Stakeholders Group (ARSG). Over the last several months, this UAA has provided the focal point for extensive discussions involving the Water Quality Control Division, the Colorado Division of Wildlife, U. S. EPA, the U.S. Forest Service, the U. S. Bureau of Land Management, and other participants in the stakeholders group. The Commission wishes to acknowledge and express its appreciation for this extensive collaborative effort. The Commission believes that the revised Animas River Basin classifications and standards adopted as a result of this hearing provide a major step forward in the long-term resolution of water quality issues in this basin. The Commission encourages all of those involved in this effort to continue to work cooperatively in furthering ARSG's mission of improving the water quality in the Animas River and its tributaries.

### **Upper Animas Segmentation**

The Commission adopted several changes to the segmentation for streams in the Animas River Basin. The Commission changed descriptions for several segments to correct inaccuracies and to include tributaries previously left out of descriptions. The Commission changed the segment division between segments 4b and 5a to better reflect a natural division between the segments in terms of topography, geomorphology and land use patterns. The Commission also moved the dividing line between segments 4a and 4b upstream to Deer Park Creek, which is the first significant inflow of good quality water below the confluence with Mineral Creek. The streams formerly in segment 9a have been moved to segment 6, and the previous segment 9b renumbered as segment 9. Finally, recognizing the need for a new segment to cover a tributary to the Animas River not previously classified, the Commission created segment 3c to include Arrastra Gulch and applied site-specific standards as described below. Big Horn Creek and all tributaries on the west side of Mineral Creek above its confluence with South Mineral Creek except for a lower portion of Middle Fork of Mineral Creek and the mainstem of Mineral Creek (segment 8), were reclassified as part of segment 6.

## **Overview of Aquatic Life Classifications and Standards**

The UAA focused primarily on identifying the achievable remediation and associated water quality for segments 3a, 4a, and 9b (now segment 9) of the Animas. Some of the metals standards previously adopted for these segments were disapproved by EPA in 1998. The UAA identified the water quality that would result from remediation of selected priority sites where metals loadings were determined to be anthropogenic and reversible. Based upon this analysis, and the associated biological evidence submitted, the Commission revised the aquatic life classifications for segment 9b (now segment 9) and for resegmented segment 4a. In addition, the Commission has specified aquatic life indicators in the "goal qualifier" column for these three segments. These indicators identify biological goals for future water quality in these segments.

Numerical standards for these three segments adopted at this time are based on the conclusions of the UAA regarding what remediation is achievable. In some cases, identified remediation goals are expected to attain Table Value Standards. In other cases, site-specific standards are adopted based on the UAA's projections of what water quality will be attained at specific gages in the three key segments as a result of anticipated remediation. Remediation potentials and limitations have been explored in great detail and the resulting site-specific standards are scientifically defensible, recognizing, however, that there is significant uncertainty as discussed below. The standards are reflective of ambitious cleanup goals estimated at a cost of 20 to 30 million dollars. The goals are particularly ambitious given foreseeable funding availability and liability restrictions that may detrimentally affect remediation activity (e.g. there remains a lack of a "Good Samaritan" provision in the federal Clean Water Act).

The Commission also notes that additional information appears to be needed to determine attainable/protective water quality conditions in this basin over the long term. There is more than the usual amount of uncertainty associated with the various proposals considered in this hearing. There is uncertainty associated with the remediation targets because there may be additional reversible anthropogenic sources which have not yet been identified or fully characterized. There is uncertainty associated with the biological targets, because for some parameters there is a lack of toxicity data for key species of concern. In view of these uncertainties, the Commission emphasizes the importance of ongoing monitoring efforts and future studies in the Animas Basin to resolve the important issues that have been identified. It is the Commission's expectation that these efforts will proceed and will lead to refinement in the remediation goals in the basin, and in the associated determination of attainable water quality classifications and standards, in the future triennial reviews. Again, the Commission wishes to commend the cooperative efforts and the substantial local initiative that have brought the analysis to this stage. The Commission strongly encourages continued cooperation as these challenges are addressed in the future.

## **Site-specific Aquatic Life Classifications and Standards**

When segment 9b (now segment 9) was designated aquatic cold water class 1 in 1995, there was little or no data indicating that dissolved aluminum concentrations and total recoverable iron concentrations reached toxic levels because few or no winter water quality samples had been taken. Winter water quality samples taken since that time indicate dissolved aluminum concentrations almost three times the acute table value standard for aquatic life and total recoverable iron concentrations have been found to be four times the chronic table value standard for aquatic life. The Commission determined that the vast majority of sources of aluminum and iron are not associated with mining sites identified for remediation. In addition, the Commission heard testimony that no fish and few macroinvertebrates are found in segment 9b (now segment 9). Therefore, the Commission changed the use classification of cold water aquatic life class 1 to cold water aquatic life class 2 for segment 9b (now segment 9). Site-specific standards are applied for iron, aluminum, copper, and zinc based upon remediation goals presented by the ARSG.

The Commission determined that after remediation of identified priority loading sources, aluminum, iron, and copper concentrations will continue to exceed chronic table value standards for aquatic life during portions of the year in segment 4a. The Commission also determined that after remediation, zinc concentrations will continue to exceed acute and chronic table value standards for aquatic life year round. Based on this information, the Commission removed the use classification goal of cold water aquatic life class 1 from segment 4a and retained the use classification of cold water aquatic life class 2. Site-specific standards are applied for iron, aluminum and zinc based upon remediation goals presented by the ARSG.

In addition, the Commission recognized that there are few identified priority sources of cadmium, manganese, and zinc in or upstream of segment 3a. These constituents will continue to exceed aquatic life table value standards either year-round or during part of the year after remediation of the reversible sources. The UAA did not identify the large amount of metal loading entering segment 3a with any specific source. The Commission recognized the many unknowns and uncertainties in the analysis of source loadings in segment 3a. Therefore, the Commission applied site-specific standards based upon remediation goals to segment 3a for these constituents and encouraged the ARSG to continue their characterization efforts to determine the unknown sources of loading. The aluminum standards for segments 3a, 4a and 9 have been specified as "total recoverable", since that sampling fraction correlates better with the principal aquatic life toxicity studies available than the dissolved fraction.

As noted above, the Commission has adopted a new segment 3c for Arrastra Gulch, with a cold water aquatic life class 2 classification. The existing ambient quality for copper and zinc exceed the acute table value standards, therefore, chronic ambient standards could not be adopted. Acute table value standards for copper and zinc were adopted along with temporary modifications set at existing ambient quality. This provides time for the ARSG to investigate Arrastra Gulch and prepare appropriate chronic standards at the next triennial review.

During the hearing, the Commission heard evidence that iron is a major driver in the chemical processes that lower pH. The Commission determined that because most iron sources are not associated with priority remediation sites in the Upper Animas Basin, for some segments and some portions of the year, pH levels are unlikely to reach table value standards for aquatic life with remediation of mine sites. Therefore, the Commission applied seasonal, site-specific pH standards to segments 4a and 9b (now segment 9).

The adopted standards will protect existing aquatic populations and should allow for significant increases in biological diversity, population size, and aquatic health. At this time, there is no assurance that other human-caused conditions or sources of pollution preventing the attainment of Table Value Standards and higher uses can be remedied, given current technologies and regulatory conditions; nor is there assurance that additional remediation will not be feasible in the future. Particularly in view of the uncertainty noted above, as these restrictions to further water quality improvements change it will be necessary to review additional remediation possibilities and to implement standards reflective of these possibilities at future triennial reviews.

Temporary modifications were reviewed and extended to December 31, 2006 for segments 2, 3b, 7, 8 and 9.

### **Other Classification and Standards Issues**

The following resegmentation was adopted:

Animas and Florida, Segment 11: Mainstem of Florida River was separated into Segments 11a and 11b to recognize the Southern Ute Indian Reservation boundary.

Animas and Florida, Segments 13b and 13c: These segment descriptions were clarified to recognize the Southern Ute Indian Reservation boundary. This change in descriptions corrects the duplicate classification of these tributaries.

Animas and Florida, Segments 15: Cascade Creek was deleted from the segment description. Cascade Creek now is included in Segment 12a which better reflects its cold water class 1 aquatic life use.

Animas/Florida segment 1 was designated outstanding waters (OW) due to its meeting the criteria in section 31.8(2)(a).

Ambient quality-based standards were removed from the following segments due to new data and/or changes to the Basic Standards which indicated ambient standards were no longer appropriate: segments 2, 3a, 3b, 4a, 4b, 7, 8, 9b.

“Fish Ingestion” and “Water + Fish Ingestion” standards for organic chemicals are discussed in section II.J. of this Statement of Basis and Purpose. For the Animas and Florida Rivers, Fish Ingestion standards were adopted for segment 13a and Water + Fish Ingestion standards were adopted for segments 13b and 13c.

Animas/Florida River, segments 13b, 13c where investigation showed that aquatic life was present were upgraded with the addition of the full suite of inorganic standards to protect aquatic life.

Water supply classifications and associated standards were adopted for segments 11b, 13b and 13c.

Agriculture classifications are added to segment 4a and to the new segment 3c based on existing or potential grazing uses. In addition, numerical standards are adopted to protect the existing agriculture classifications for segments 2, 7, and 8. In each case, no manganese standard was adopted, because the conditions associated with that criterion are not present.

Recreation classifications were changed from class 2 to class 1a for segments 2, 3a, 3b, 6, 7, 8, 9a, 9b, 13a, 13b, 13c, and 15. For several of these segments, the Southwestern Water Conservation District submitted use attainability analyses proposing that a recreation class 2 classification be retained. However, these UAAs were submitted after the deadline for submission of such information for this hearing and generally lacked site-specific analysis of recreation uses on the segments addressed. Existing recreation class 1 classifications were changed to class 1a for segments 1, 4a, 4b, 5a, 5b, 10, 11a, 12a, 12b, and 14. A recreation class 1a classification was also adopted for new segment 11b.

The Commission notes that the last paragraph of section 31.6(2)(b) will apply to future changes to the recreation classifications where a proper showing is made through a use attainability analysis that a recreation class 2 classification is appropriate, without application of the other downgrading criteria in this section. Moreover, the Commission is relying in part on previous representations from EPA that completion of a use attainability analysis showing that a lower recreation classification is appropriate satisfies applicable downgrading criteria. Based on these factors, the Commission intends that in a future rulemaking hearing the test for adopting a recreation class 2 classification would be the same as if it had been considered in this hearing.

Based on evidence submitted by the Town of Silverton, the Commission established a seasonal recreation class 1a classification for segment 3b, for the period of May 15 through September 10 and recreation class 2 for the remainder of the year.



## II. Other River Segments

### A. Resegmentation

Some segments were renumbered and/or created in the basin due to information which showed that: a) the original reasons for segmentation no longer applied; b) new water quality data showed that streams should be resegmented based on changes in their water quality; and/or c) certain segments could be grouped together in one segment because they had similar quality and uses. The following changes were made:

San Juan, Segment 8: This segment was created to recognize the portions of Navajo Reservoir that are on state lands.

San Juan, Segments 11 and 12: Tributaries to the San Juan River were separated out of Segments 11 and 12 to better identify the tributaries from Fourmile Creek to the Southern Ute Indian Reservation (11a) and from the Southern Ute Indian Reservation to the Colorado/New Mexico border (11b). All remaining tributaries to the San Juan River in Archuleta County were moved to Segments 12a and 12b. Segment 12b is within the Southern Ute Indian Reservation.

Los Pinos, Segment 6b: All remaining tributaries to the San Juan River in La Plata County were moved to Segments 7a and 7b. Those within the Southern Ute Indian Reservation are in Segment 7b.

La Plata, Segment 2b: The segment description was modified to only include the mainstem of the La Plata River. Wetlands, lakes and reservoirs to the La Plata River are now included in Segments 10a and 10b with their tributary systems.

La Plata, Segment 7: Mainstem of McElmo Creek was separated into Segments 7a and 7b to recognize the Ute Mountain Ute Indian Reservation boundaries. In addition, Yellowjacket Creek was added to Segment 7a from Segment 8 to better reflect its warm water class 1 aquatic life use.

La Plata, Segments 8 and 10: Tributaries to McElmo Creek were separated into Segments 8a and 8b to recognize the Ute Mountain Ute Indian Reservation boundaries.

La Plata, Segments 8 and 10: All remaining tributaries to the San Juan River in Dolores and Montezuma Counties were moved to Segments 10a and 10b. The portions within the Ute Mountain Ute Indian Reservation are included in Segment 10b.

Dolores, Segment 7: The segment description was changed to exclude the upper portion of Coal Creek which is located within the Lizard Head Wilderness Area.

### B. Manganese

The aquatic life manganese criterion was initially changed in the 1997 revisions to the Basic Standards (5 CCR 1002-31) from a single chronic dissolved criterion to acute and chronic hardness-based equations. The equations were further modified in the 2000 revisions to the Basic Standards. The new manganese acute and chronic equations were added as table value standards in 34.6(3). As a result of the adoption of these new TVS, all segments classified for aquatic life use that had a chronic total recoverable manganese standard of 1,000 µg/L had the 1,000 standard stricken and replaced with Mn(ac/ch)=TVS.

**C. Selenium**

The regulation in 34.6 (3) listed the table value standards for selenium as Acute=135 µg/L and Chronic=17 µg/L. This was updated to reflect the existing acute and chronic criteria for selenium listed in the Basic Standards as Acute=18.4 µg/L and Chronic=4.6 µg/L which was adopted in 2000 by the Commission. This change means that all segments with standards for selenium given as TVS now have these lower acute and chronic standards. Because of this change, on all segments classified for a water supply use, the chronic total recoverable selenium of 10 µg/L was stricken and replaced with Se(ac/ch)=TVS.

**D. Outstanding Waters Designations**

Several segments or waterbodies were designated outstanding waters (OW) due to their meeting certain criteria pursuant to section 31.8(2)(a). Segments which already included wilderness areas in their description were designated OW. The water quality of the following segments met the 12 parameter test and other requirements of 31.8(2)(a):

San Juan River, Segment 4  
Piedra River, Segment 1  
Los Pinos River, Segment 1  
Dolores River, Segment 1

**E. Removal of Use Protected Designation**

The Division proposed that a number of aquatic life class 2 waterbodies be assigned undesignated status under the state antidegradation regulation due to the presence of Colorado State species of special concern. State regulations governing the “use-protected” designation allow this exception if the Commission determines that the waters are of exceptional ecological significance. The Commission believes that a number of important issues have been raised in this hearing regarding when and how this exception should be applied, and that further examination of these issues should occur. Nevertheless, for purposes of this hearing, the Commission, based upon a concern over the protection of classified uses and the absence of evidence of potential injury to permitted entities, has decided to accept the change to reviewable water status for the following

San Juan River, Segment 10  
La Plata, Segments 5a, 5b, 6a and 6b.

Based upon representations made by certain parties to this rulemaking, the Commission endorses the formation of a workgroup to address the following topics and develop recommendations to be submitted to the Commission

- The relationship between the “exceptional ecological significance” exception to use-protected designations and the aquatic life class 2 basis for applying use-protected designations
- The need for and content of guidance to determine what water bodies are exceptionally ecologically, significant
- The roles of a) water quality data; b) the nexus between water quality conditions and species decline, and c) other stressors
- The need for and nature of any amendments to the state antidegradation regulation if the presence of species of special concern constitute a basis for modification to the antidegradation designation of a water body.

The above listed segments would then be reviewed in light of the work group recommendations in the next triennial review of these basins.

The Commission urges that the work group process to address these issues move forward as expeditiously as possible. The Commission intends that the actions taken in this rulemaking not serve in any way as a precedent with respect to decisions in future Commission rulemaking proceedings.

**F. Recreation Classifications/Fecal Coliform and E. Coli Standards**

The biological standards were updated to include the dual standards for E. coli and fecal coliform, which were adopted by the Commission in the 2000 revisions to the Basic Standards. As stated in the statement of basis for the Basic Standards revisions, the Commission intends that dischargers will have the option of either parameter being used in establishing effluent limitations in discharge permits. In making section 303(d) listing decisions, in the event of a conflict between fecal coliform and E. coli data, the E. coli data will govern. The Commission believes that these provisions will help ease the transition from fecal coliform to E. coli standards.

In a continuation of the Commission's efforts to comply with the requirements contained in the federal Clean Water Act that all waters of the nation should be suitable for recreation in and on the water (known as the "swimmable" goal), the Commission reviewed all Recreation Class 2 segments. In Colorado, the "swimmable" goal translates into Recreation Class 1a, with the 200/100 ml fecal coliform and 126/100 ml E. Coli standard, and Class 1b with the 325/100 ml fecal coliform and 205/100 ml E. coli standard. Class 1a indicates waters where primary contact uses have been documented or are presumed to be present. Class 1b indicates waters where no use attainability analysis has been performed demonstrating that a recreation class 2 classification is appropriate, but for which no existing primary contact uses have been documented following a reasonable level of inquiry. To maintain the existing Recreation Class 2 with the 2000/100 ml standard on a segment, a use attainability analysis must be conducted that shows that it is unlikely that a Recreation Class 1 activity could exist.

There was considerable evidence and testimony submitted in this hearing regarding what activities should be considered primary contact recreation. Section 31.13(1)(a) of the Basic Standards provides a non-exclusive list of primary contact activities. In this hearing, much discussion focused on the issue of whether "child's play" in streams that are too shallow to accommodate the primary contact uses listed in the Basic Standards should be considered a primary contact use. The Commission does not believe that a theoretical potential for child's play means that all streams should be classified Recreation Class 1a or 1b. However, the Commission concludes that the evidence submitted demonstrates that there is a potential risk of ingestion of small quantities of water by children playing in relatively shallow streams, based on the hand-to-mouth pathway, which warrants Recreation Class 1 protection in appropriate circumstances as elaborated below. Thus, such ingestion may occur in streams where whole body immersion is not likely.

This does not mean, as suggested by some, that all water bodies would be reclassified as Recreation Class 1a or 1b based on some potential for child's play. Rather, the Commission intends that a stream should be classified Recreation Class 1a or 1b due to the presence or potential for child's play only where the evidence demonstrates a likelihood of such activity on a frequently occurring basis. Therefore, child's play may be an appropriate basis for a Recreation Class 1a or 1b classification in a developed area where there is easy access to a stream for children and it is likely that children will desire to play in the stream; it may not be an appropriate basis for such classifications in areas where it is not expected that children will be playing in a stream on a frequently occurring basis. Factors such as lack of adequate flow, excessive flows, remoteness from developed areas, physical limitations to access, steep banks, and visibly poor water quality may make it unlikely that child's play will take place on a frequently occurring basis.

The Commission anticipates that these classification decisions will require case-by-case judgments until more experience is gathered with this issue.

A recreation Class 1a or 1b classification of a segment is not intended to imply that the owner or operator of property surrounding any waterbody in a segment would allow access for primary contact recreation. The application of recreation classifications to state waters pursuant to these provisions does not create any rights of access on or across private property for the purposes of recreation in or on such waters. A recreation Class 1a classification is intended to only affect the use classification and water quality standards of a segment, and does not imply public or recreational access to waters with restricted access within a segment.

For segments changing to recreation Class 1a because no information was available about actual recreational uses, the last paragraph of section 31.6(2)(b) will apply to future changes to the recreation classification where a proper showing is made through a use attainability analysis that a recreation Class 2 classification is appropriate, without application of the other downgrading criteria in this section. Moreover, the Commission is relying in part on the testimony from EPA that completion of a use attainability analysis showing that a lower recreation classification is appropriate satisfies applicable downgrading criteria. Based on these factors, the Commission intends that in a future rulemaking hearing, the test for adopting a recreation Class 2 classification would be the same as if it had been considered in this hearing.

Based on the information received that showed Recreation Class 1a uses are in place or are presumed to be present in at least a portion of the segment, the Commission changed the following segments from Class 2 to Class 1a with a 200/100 ml fecal coliform and 126/100 ml E. coli standard:

San Juan River, Segments: 10  
Los Pinos River, Segments: 6a, 6b  
Dolores River, Segments: 2, 3, 5, 6, 7, 8, 11

Based on the information received, where a reasonable level of inquiry failed to identify any existing class 1 uses of the waters in these segments, the Commission changed the following segments to Class 1b with a 325/100 ml fecal coliform and 205/100 ml E. coli standard:

Piedra River, Segments: 6a, 6b

New segments created in this rulemaking where information was received that showed Recreation Class 1a uses are in place or are presumed to be present in at least a portion of the segment, are:

San Juan River, Segment: 8  
Los Pinos River, Segments: 7a, 7b  
La Plata River, Segments: 7b, 8a, 8b, 10a, 10b

The following segments with existing Recreation Class 1 classifications were changed to Class 1a:

San Juan River, Segments: 1, 2, 4, 5, 6a, 6b, 7, 9a, 9b  
Piedra River, Segments: 1, 4a, 4b  
Los Pinos River, Segments: 1, 2a, 2b, 3, 4a, 4b, 5  
La Plata River, Segments: 1, 4, 7a, 9, 11  
Dolores River, Segments: 1, 4, 10

For the following segments, the Commission adopted seasonal recreation classifications, based on evidence of differences in actual or potential uses at different times of the year

San Juan Segments 3, 12a, 12b:	Class 1b, May 1 through October 31 Class 2, November 1 through April 30
San Juan Segments 11a, 11b:	Class 1a, May 1 through October 31 Class 2, November 1 through April 30
Piedra River, Segments 2, 3, 5:	Class 1a, May 1 through October 31 Class 2, November 1 through April 30
Piedra River, Segment 7:	Class 1a, March 1 through November 30 Class 2, December 1 through February 28
La Plata River, Segments 2a, 2b:	Class 1a, May 1 through October 31 Class 1b, November 1 through April 30
La Plata River, Segments 4, 5a, 5b:	Class 1a, May 1 through October 31 Class 2, November 1 through April 30
La Plata River, Segments 6a, 6b:	Class 1b, May 1 through October 31 Class 2, November 1 through April 30
Dolores River, Segment 9:	Class 1a, May 1 through October 31 Class 2, November 1 through April 30

The following segments retained their Recreation Class 2 classification with 2,000/100 ml fecal coliform and 630/100 ml E. coli standards after sufficient evidence was received that a Recreation Class 1a use was unattainable, due to limited streamflows.

La Plata River, Segments 3a, 3b

#### **G. Aquatic Life Segments without Full Standards**

The Commission reviewed information regarding Aquatic Life Class 2 segments where the full set of inorganic aquatic life protection standards have not been applied. Generally, these are dry segments with only rudimentary aquatic life. The Commission's policy has been that rather than adopt the full set of inorganic standards for these segments, standards for dissolved oxygen, pH and fecal coliform provide sufficient protection.

Segments where investigation showed that aquatic life was present were upgraded with the addition of the full suite of inorganic standards to protect aquatic life. These segments are:

San Juan River, Segments: 10, 11a,  
11b Piedra River, Segments: 6a, 6b  
La Plata River, Segments: 3a, 3b, 6a, 6b, 8a, 8b  
Dolores River, Segment 11

#### **H. Ambient Quality-Based Standards**

There are several segments in the San Juan Basin that contain standards based on existing ambient quality. Ambient standards are adopted where natural or irreversible man-induced conditions result in water quality levels higher (i.e. worse) than table value standards. EPA had requested that the Commission review the information that is the basis for these standards as well as any new information that would indicate whether they are still appropriate, need to be modified, or should be dropped. The Division reviewed the reason for the ambient standards and provided testimony that justified ambient standards being retained without adjustment on the following segments:

La Plata River, Segment 9

The Division reviewed the information about ambient water quality levels and provided testimony that justified revising the ambient standards on the following segments:

La Plata River, Segment 7a

Ambient standards were removed from the following segments due to new data and/or changes to the Basic Standards which indicated ambient standards were no longer appropriate:

Los Pinos River, Segment 5  
Dolores River, Segment 9

**I. Temporary Modifications**

There were several segments which had temporary modifications that were reviewed, and decisions were made to delete or to extend them, either as is or with modification of the numeric limits.

A temporary modification was adopted for La Plata, Segment 4, for copper with an expiration date of 12/31/06. A temporary modification was also adopted for Dolores River, Segment 9, for zinc with an expiration date of 12/31/06.

**J. Organic Chemical Standards**

The organic chemical standards were updated to include changes adopted by the Commission in the 2000 revisions to the Basic Standards (see section 31.11 in Regulation No. 31). "Water + Fish" organic chemical standards are presumptively applied to all Aquatic Life Class 1 streams which also have a Water Supply classification, and are applied to Aquatic Life Class 2 streams which also have a Water Supply classification, on a case-by-case basis. The "Fish Ingestion" organic chemical standards are presumptively applied to all Aquatic Life Class 1 streams which do not have a Water Supply classification, and are applied to aquatic life class 2 streams which do not have a Water Supply classification, on a case-by-case basis. Existing site-specific applications of additional organics (as noted in the Qualifier column of Table 34.7) were modified to conform to this change.

Information was reviewed regarding Aquatic Life Class 2 segments that have fish that are presently being taken for human consumption or have fisheries that would indicate the potential for human consumption. That information showed that six additional segments had the potential for consumption of fish. These waterbodies were designated to receive the full protection of numeric Fish Ingestion or Water + Fish organic standards:

Fish Ingestion: La Plata 2a; Dolores 9  
Water + Fish: Dolores 11

**K. Water Supply Classification**

These segments had the Water Supply classification added to them or are new segments with a water supply use. The associated water supply standards will now apply to segments:

San Juan River, Segments: 6b, 8  
Piedra River, Segments: 4b, 6a, 6b  
Dolores River, Segment 11

**L. Modification of Water Supply Standards**

Water supply standards were modified to conform to the changes made by the Commission in the 2000 revisions to the Basic Standards (see Regulation No. 31 at section 31.11(6)). The Commission modified the water supply standards for iron, manganese, and sulfate that are based on secondary drinking water standards (based on aesthetics as opposed to human-health risks). The numeric values in the tables were changed to Fe(ch) = WS (dis), Mn(ch) = WS (dis), and SO<sub>4</sub> = WS. These abbreviations mean that for all surface waters with an actual water supply use, the less restrictive of the following two options shall apply as numerical standards, as discussed in the Basic Standards and Methodologies at section 31.11(6): either (i) existing quality as of January 1 2000; or (ii) Iron = 300 µg/L (dissolved); Manganese = 50 µg/L (dissolved); Sulfate = 250 mg/L (dissolved). For all surface waters with a "Water Supply" classification that are not in actual use as a water supply, no water supply standards are applied for iron, manganese or sulfate, unless the Commission determined as the result of a site-specific rulemaking hearing that such standards are appropriate.

**M. Tribally-Owned Lands**

Many of the waterbodies in the southern parts of these basins are located on tribally-owned lands specifically those of the Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe. Waters on tribally-owned lands are not regulated by the WQCC. Both Tribes are in the process of developing water quality standards for waters on their tribally-owned lands. The Commission has segmented the waterbodies which cross reservation boundaries. Water quality standards for waterbodies crossing reservation boundaries were reviewed by the Division in cooperation with Tribal representatives to ensure that the classified uses and numeric standards were consistent. The Commission included water quality classifications and standards on lands within the boundaries of these reservations in agreement with the Southern Ute and Ute Mountain Ute Indian Tribes in order to avoid a gap in the classifications and standards adopted for the river basins in question, since these Tribes have not yet been granted authority by EPA to conduct their own water quality program. Section 34.5 (4) was added to clarify this issue.

**N. Agriculture Standards**

Numeric standards to protect agriculture uses were adopted for the following segments:

San Juan, Segment: 3  
Los Pinos, Segments: 6a, 6b

**O. Other Site-Specific Revisions**

The Commission corrected several typographical and spelling errors, clarified segment descriptions and made the following site-specific revisions:

La Plata, Segment 2a: The classification was changed from aquatic life warm 2 to cold 2 because information was presented that indicated the aquatic community includes trout species.

La Plata, Segment 7a: The classification was changed from aquatic life warm 2 to warm 1 and removed the Use Protection designation, because information was presented that indicated the aquatic community is diverse and includes DOW species of special concern.

**PARTIES TO THE RULEMAKING HEARING**

1. Animas River Stakeholders Group
2. Colorado Wild, San Juan Citizen's Alliance, Sierra Club-Rocky Mountain Chapter, Colorado Environmental Coalition and The Wilderness Society

3. U.S. Department of the Interior, Bureau of Land Management
4. Sunnyside Gold Corporation
5. The Southwestern Water Conservation District
6. Silver Wing Company, Inc.
7. U.S. Department of Agriculture Forest Service
8. Shenandoah Mining Company Incorporated
9. Town of Silverton
10. Pagosa Area Water and Sanitation District
11. Peter Butler
12. U.S. Department of the Interior National Park Service
13. Climax Molybdenum Company
14. Tri-State Generation and Transmission Association, Inc.
15. Town of Olathe
16. The Board of County Commissioners of the County of Gunnison
17. Gunnison County Stockgrowers Association, Inc.
18. High Country Citizens' Alliance and Western Slope Environmental Resource Council
19. The City of Grand Junction
20. Homestake Mining Company
21. The Board of County Commissioners of the County of San Miguel
22. Mt. Crested Butte Water and Sanitation District
23. Colorado River Water Conservation District
24. Town of Cedaredge
25. The Board of County Commissioners of the County of Mesa
26. The Uncompahgre Valley Water Users Association
27. Umetco Minerals Corporation
28. The Colowyo Coal Company, L.P.
29. The Uncompahgre Valley Association
30. Town of Crested Butte
31. The City of Delta
32. Trapper Mining, Inc.
33. The Colowyo Coal Company, L.P.
34. The City of Grand Junction
35. Colorado River Water Conservation District
36. Yellow Jacket Water Conservation District
37. The Town of Meeker
38. The City of Fruita
39. Exxon Mobil Corporation
40. Shell Frontier Oil & Gas Inc.
41. The Board of County Commissioners of the County of Mesa
42. American Soda, LLP
43. The Rio Blanco Water Conservancy District
44. Colorado Division of Wildlife
45. The Northern Colorado Water Conservancy District and its Municipal Subdistrict
46. Upper Gunnison River Water Conservancy District
47. U.S. EPA Region
48. Ralph E. Clark III
49. U.S. Department of the Interior

**34.30 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JULY, 2002  
RULEMAKING**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.



## **BASIS AND PURPOSE**

As a result of major rulemaking hearings in May and July, 2001, the Commission adopted extensive revisions to the water quality designation, classifications and standards for the waters in this basin. Subsequent to the filing of the final action documents resulting from that rulemaking, minor errors were identified in the published revisions. Errors in the water quality designation for San Juan segment 10, manganese standard for Animas River segment 4a, the segment description for Animas River segment 4b, and typographical errors for Animas River segments 9 and 12a were corrected in this rulemaking.

### **34.31 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; DECEMBER 12, 2005 RULEMAKING, EFFECTIVE MARCH 2, 2006**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

## **BASIS AND PURPOSE**

In the process of digitally mapping the segments in the San Juan and Dolores River Basins, the Division discovered errors and inconsistencies between segment descriptions. To resolve these issues the Commission adopted changes in the following segment descriptions:

San Juan segment 8

Dolores segments 6 and 10

The Commission has also adopted the deletion of San Juan Segment 7.

### **34.32 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 12, 2006 RULEMAKING; ADOPTED AUGUST 14, 2006; EFFECTIVE JANUARY 1, 2007**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

## **BASIS AND PURPOSE**

### **A. Waterbody Segmentation**

Some renumbering and/or creation of new segments in the basin was made due to information which showed that: a) the original reasons for segmentation no longer applied; b) new water quality data showed that streams should be resegmented based on changes in their water quality; and/or c) certain segments could be grouped together in one segment because they had similar quality and uses. The following changes were made:

Animas River Basin segment 12c was created for Hermosa Creek and tributaries above Long Hollow, except for the East Fork of Hermosa Creek. The East Fork of Hermosa Creek was excluded from this segment due to uncertainty of future development in this drainage by Durango Mountain Ski Resort.

La Plata River Basin segment 4b was created for Mancos Reservoir (a.k.a. Jackson Gulch Lake).

La Plata River Basin segment 6c was created for waters within Mesa Verde National Park. These waters were proposed as "outstanding waters."

La Plata River Basin segment 8c was created for the Unnamed Tributary to Ritter Draw.

Dolores River Basin segment 4b was created for McPhee Reservoir and Summit Reservoir.

B. Revised Aquatic Life Use Classifications

The Commission reviewed information regarding existing aquatic communities. There were no changes to the Aquatic Life Use Classifications in the San Juan Basin.

C. Recreation Classifications and Standards

As part of the Basic Standards hearing of 2005, recreation classifications were revised into four new classifications. The Commission reviewed the previous segment classifications (1a, 1b and 2) and determined the appropriate new classification based on classification criteria presented as part of the Basic Standards Hearing, use attainability analyses or other basis. In addition, during the 2005 Basic Standards Hearing, the transition from the use of the fecal coliform standard to E. coli standard was completed. Fecal coliform criteria were deleted from the numeric standards.

Based on the information that showed existing primary contact recreation use is in place in at least a portion of the segment, the Commission changed the following segments from Recreation Class 1a to Recreation Class E with a 126/100 ml E. coli standard:

San Juan River Basin segments: 1, 2, 4, 5, 6a, 6b, 8, 9a, 9b and 10

Piedra River Basin segments: 1, 4a and 4b

Los Pinos River Basin segments: 1, 2a, 2b, 3, 4a, 4b, 5, 6a, 6b, 7a, 7b

Animas River and Florida River Basin segments: 1, 2, 3a, 3c, 4a, 4b, 5a, 5b, 6, 7, 8, 9, 10, 11a, 11b, 12a, 12b, 13a, 13b, 13c, 14 and 15

La Plata River Basin segments: 7a, 7b, 8a, 8b, 9, 10a, 10b and 11

Dolores River Basin segments: 1, 2, 3, 4a, 5, 6, 7, 8, 10, and 11

The following segments were converted from Recreation Class 1b to Recreation Class P with a 205/100 ml E. coli standard:

Piedra River Basin segments: 6a and 6b

La Plata River Basin segment: 1

Based on review of existing Use Attainability Analyses showing that primary contact recreation is not attainable, the following segments were converted from Recreation Class 2 to Recreation Class N classification with 630/100 ml E. coli standard:

La Plata River Basin segments: 3a and 3b

The following segments with seasonal Recreation Class 1a/Recreation Class 2 classification were converted to Class E/Class N (some include changes to the seasons in parentheses):

San Juan River Basin segments: 11a and 11b

Piedra River Basin segments: 2, 3, (new seasons are Class E: April 1-Oct. 31, Class N: Nov. 1-March 31) 5 and 7

Animas River and Florida River Basin segment: 3b

La Plata River Basin segments: 2a, 4a, 5a and 5b

Dolores River Basin segment: 9

The following segments with seasonal Recreation Class 1a/Recreation Class 1b classification were converted to Class E/Class P (some include changes to the seasons in parentheses):

La Plata River Basin segment: 2b

The following segments with seasonal Recreation Class 2/Recreation Class 1b classification were converted to Class N/Class P:

San Juan River Basin segments: 3, 12a and 12b

La Plata River Basin segments 6a and 6b

**D. Addition of Water Supply Use Classification and Standards**

Based on review of information regarding the location of public water supplies, no additional WS classifications and standards were added to Regulation No. 34.

**E Agriculture Standards**

Numeric Standards to protect Agricultural Uses were adopted for the following segments:

San Juan River Basin segments: 12a and 12b

Los Pinos River Basin segments: 7a and 7b

La Plata River Basin segments: 10a and 10b

**F. Changes to Antidegradation Designation**

Outstanding Waters Designation: Based on evidence that shows the water quality meets the requirements of 31.8(2)a, the OW designation was added to the following segments in Mesa Verde National Park: Segment COSJLP06c was created for waters within Mesa Verde National Park.

Based on evidence that shows the water quality meets the requirements of 31.8(2)(a), the OW designation was added to Hermosa Creek and its tributaries (except the East Fork of Hermosa Creek) above Long Hollow. A new segment, Segment COSJAF12c was created for these waters. The Commission understands that there are existing land uses, including grazing permits, in place in the watershed. The evidence demonstrates that these existing land uses are compatible with the Outstanding Water designation since the current high level of water quality has been attained with these uses in place. It is the Commission's intent that this OW designation should not be used to establish additional permit requirements for existing uses within this area.

Decoupling Cold 2 and UP: As part of the Basic Standards hearing of 2005, the Commission eliminated the direct linkage between cold-water aquatic life class 2 and the use-protected designation. Therefore, all cold-water aquatic life class 2 segments that are use-protected were reviewed to determine if that designation is still warranted. The following segments are now reviewable:

Los Pinos River Basin segments: 6a, 6b, 7a and 7b

Animas River and Florida River Basin segments: 13a, 13b, 13c and 15

La Plata River Basin segment: 2a  
Dolores River Basin segments: 9 and 11

Decoupling Aquatic Life Warm 2 and UP Also as part of the Basic Standards hearing of 2005, the Commission decided that the presence of a warm water class 2 classification would still be a presumptive basis for applying a use-protected designation; however, that presumption can be overcome if there is data showing that the water is of high quality. Therefore, the Commission reviewed all warm water class 2 segments to determine if the use protected designation is still warranted. The following segment is now reviewable:

San Juan River Basin segment: 3

**G. Ambient Quality-Based Standards**

There are several segments in the Basins that are assigned standards based on existing ambient water quality. Ambient standards are adopted where natural or irreversible man-induced conditions result in exceedances of table value standards. The Commission reviewed the information that is the basis for these standards as well as any new information that would indicate whether they are still appropriate, need to be modified, or should be dropped. The Commission did not adopt any changes to the ambient quality-based standards.

**H. Aquatic Life Ammonia Standards**

At the June 2005 Basic Standards rulemaking, the Commission adopted the 1999 Update of Ambient Water Quality Criteria for Ammonia (US EPA, Office of Water, EPA-822-R-99-014, December 1999) as the numeric ammonia criteria for Colorado. These new criteria are in the form of total ammonia rather than un-ionized ammonia. The Commission modified the ammonia equations in 34.6(3) and footnotes to conform to Regulation No. 31. In cases where dischargers need time beyond one permit term to assure compliance with new permit limits, temporary modifications have been adopted. These are listed below in the temporary modification section.

**I. Aquatic Life Metals Standards**

**New Table Value Standards:** As part of the Basic Standards hearing of 2005, new zinc and cadmium table values were adopted. The acute and chronic zinc and cadmium equations in 34.6(3) were modified to conform to Regulation No. 31.

**Site-Specific Zinc Standards for Sculpin:** In low hardness situations (hardness below 113 mg/L) the new zinc equation is not protective of sculpin, a native west-slope fish species. The Commission adopted sculpin-specific zinc equation as site-specific standards for the following segments that are inhabited by sculpin that also have low hardness:

San Juan River Basin segments: 5, 6a and 9a  
Piedra River Basin segments: 2, 3, 4a and 5  
Los Pinos River Basin segments: 2a and 4a  
Animas River and Florida River Basin segment: 10  
La Plata River Basin segments 1 and 2a  
Dolores River Basin segments: 1, 2, 5, 7 and 11

J. Arsenic Standards

For arsenic, each use (except recreation) has a different arsenic ("As") value, including Fish Ingestion (FI) and Water Plus Fish (W+F). In different combinations of uses, different values become the most limiting. In order to eliminate the confusion, the Commission added the operative value to the individual segments. The following matrix displays the most limiting arsenic criteria.

**Most Limiting Arsenic Criteria  
Depending on the Possible Combinations of Uses and Qualifiers**

<b>If the Use Classifications were:</b>	<b>These Arsenic Standards were Applied (dissolved unless otherwise noted)</b>
Class 1 aquatic life, water supply	As(ac) = 340, As(ch) = 0.02 (trec)
Class 2 aquatic life (water + fish standards), water supply	As(ac) = 340, As(ch) = 0.02(trec)
Class 2 aquatic life (no fish ingestion standards), water supply	As(ac) = 340, As(ch) = 0.02 - 10(trec)
Class 1 aquatic life	As(ac) = 340, As(ch) = 7.6(trec)
Class 2 aquatic life (fish ingestion standards)	As(ac) = 340, As(ch) = 7.6(trec)
Class 2 aquatic life (no fish ingestion standards), agriculture	As(ac) = 340, As(ch) = 100 (trec)
Agriculture only	As(ch) = 100 (trec)
Water supply only	As(ch) = 0.02 - 10(trec)

K. Uranium Standards

Uranium standards were not added for any segments in this basin.

L. Temporary Modifications

All temporary modifications were re-examined to determine whether to delete the temporary modification or to extend them, either as existing or with modifications of the numeric standards. Because of the June 2005 changes to Regulation No. 31, temporary modifications were not automatically extended if non-attainment persisted.

The following segments had temporary modifications that are being removed because there are no discharge permits on these segments. Non-attainment of underlying standards shall be addressed through listing and prioritization of TMDLs or through implementation of approved TMDLs:

La Plata River Basin segment 4a: (Cu)  
Dolores River Basin segment 9: (Zn)

The following segments have new or extended temporary modifications. As specified in 61.8(2)(c)(iii) (the Permit Rules, Regulation No. 61), where a temporary modification has been adopted, limits in permits are to be set based on the temporary modification and the provision strictly limiting the loading from the facility does not apply. These temporary modifications will be subject to review and rulemaking for the two years before their scheduled expiration in order to track progress towards the full attainment of water body standards and uses.

San Juan River Basin segment 11a: Fe(ch)=1100 ug/l; expiration date 12/31/2011. This temporary modification is intended to allow Pagosa Area Water and Sanitation District (Snowball WTP) adequate time to assess any potential changes to its discharge permit. This need for this temporary modification will be reviewed in 2009 and 2010.

La Plata River Basin segment 3a: Fe(ch)=1920 ug/l; expiration date 12/31/2011. This temporary modification is intended to allow a discharger adequate time to assess any potential changes to its discharge permit. This need for this temporary modification will be reviewed in 2009 and 2010.

La Plata River Basin segment 5a: NH<sub>3</sub> = old TVS, expiration date 12/31/2011; This temporary modification is intended to allow the dischargers such as the Town of Mancos adequate time to assess any potential facility changes that will be required to assure compliance with new ammonia limits. This temporary modification will be reviewed in 2009 and 2010.

La Plata River Basin segment 7a: NH<sub>3</sub> = old TVS, expiration date 12/31/2011; This temporary modification is intended to allow the dischargers such as the City of Cortez adequate time to assess any potential facility changes that will be required to assure compliance with new ammonia limits. This temporary modification will be reviewed in 2009 and 2010.

La Plata River Basin segment 8a: NH<sub>3</sub> = old TVS, expiration date 12/31/2011; Fe(ch)=1500 ug/l; expiration date 12/31/2011. These temporary modifications are intended to allow the dischargers such as the City of Cortez and Dove Creek adequate time to assess any potential facility changes that will be required to assure compliance with new ammonia limits. This temporary modification will be reviewed in 2009 and 2010.

La Plata River Basin segment 8c: NH<sub>3</sub> = existing quality, expiration date 12/31/2013; This temporary modification is intended to allow Lee Mobile Home Park adequate time to assess any potential facility changes that will be required to assure compliance with new ammonia limits. This temporary modification will be reviewed in 2009 and 2010.

The Upper Animas River Basin is a historic mining region undergoing remedial efforts led by the Animas River Stakeholder Group. There are approved TMDLs for the basin that cover all segments and parameters that are in non-attainment of water quality standards. Due to historic mining there are numerous other point-source discharges to nine segments in the Upper Animas River Basin that are not currently permitted. The Commission decided to retain and update temporary modifications to the historic mining impacted segments to allow flexibility in remedial efforts.

Animas River Basin segment 2: Existing ambient quality for all metals. This temporary modification is intended to allow the TMDL directed remedial efforts adequate time to address non-attainment of standards. This need for this temporary modification will be reviewed in 2009 and 2010.

Animas River Basin segment 3a: Cd(ch)=3.0, Mn(ch)=3203, Zn(ch)=862. This temporary modification is intended to allow the TMDL directed remedial efforts adequate time to address non-attainment of standards. This need for this temporary modification will be reviewed in 2009 and 2010.

Animas River Basin segment 3b: Existing ambient quality for all metals. This temporary modification is intended to allow the TMDL directed remedial efforts adequate time to address non-attainment of standards. This need for this temporary modification will be reviewed in 2009 and 2010.

Animas River Basin segment 3c: Cu(ch)=6.6, Zn(ch)=184, no Cu, Zn acute. This temporary modification is intended to allow the TMDL directed remedial efforts adequate time to address non-attainment of standards. This need for this temporary modification will be reviewed in 2009 and 2010.

Animas River Basin segment 4a: Al(ch)=2523 (trec), Fe(ch)=4204 (trec), Zn(ch) = 730 ug/L, Cu(ch) = 20 ug/L; Cd(ch) = 2.5 u/L, pH= 5.3; expiration date 12/31/2011. This temporary modification is intended to allow the TMDL directed remedial efforts adequate time to address non-attainment of standards. This need for this temporary modification will be reviewed in 2009 and 2010.

Animas River Basin segment 4b: Zn(ch)=184. This temporary modification is intended to allow the TMDL directed remedial efforts adequate time to address non-attainment of standards. This need for this temporary modification will be reviewed in 2009 and 2010.

Animas River Basin segment 7: Existing ambient quality for all metals. This temporary modification is intended to allow the TMDL directed remedial efforts adequate time to address non-attainment of standards. This need for this temporary modification will be reviewed in 2009 and 2010.

Animas River Basin segment 8: Existing ambient quality for all metals. This temporary modification is intended to allow the TMDL directed remedial efforts adequate time to address non-attainment of standards. This need for this temporary modification will be reviewed in 2009 and 2010.

Animas River Basin segment 9: Al(ch)=3544(Trec), Cu(ch)=22, Fe(ch)=5023(Trec), Zn(ac/ch)=340. This temporary modification is intended to allow the TMDL directed remedial efforts adequate time to address non-attainment of standards. This need for this temporary modification will be reviewed in 2009 and 2010.

M. Other changes

The hearing of section 34.5(4) has changed to "Indian Reservations" as a more accurate description. In addition, the test of this section was revised to reflect EPA's approval of the Ute Mountain Utes' treatment as a state status for the adoption of water quality standards.

The Commission corrected several typographical and spelling errors, and clarified segment descriptions.

The reference to "Water+Fish Organics" was corrected to "Water+Fish Standards" to incorporate the appropriate standards from both the organics table and the metal parameter table in Regulation No. 31.

The segment description for Piedra segment 5 was changed to include "Williams Creek Reservoir."

The segment description for Dolores segment 5 was changed to include "Groundhog Reservoir."

Acute copper and zinc TVS were added to the table for Animas River segment 3c.

PARTIES TO THE RULEMAKING HEARING

1. San Juan Citizens Alliance
2. Tri-State Generation and Transmission Association
3. National Park Service
4. Mountain Coal Company
5. West Elk Mine
6. Homestake Mining Company of California
7. Umetco Minerals Corporation
8. Lee Mobile Home Park

9. The Southwest Mesa County Rural Services Public Improvement District
10. Animas River Stakeholders Group
11. Board of County Commissioners of the County of Gunnison, Colorado
12. The Town of Silverton
13. The Town of Cedaredge
14. The Town of Olathe
15. High Country Citizens Alliance
16. Upper Gunnison River Water Conservancy District
17. Colorado Trout Unlimited
18. The City of Grand Junction
19. Gunnison County Stockgrowers Association, Inc.
20. The Southwestern Water Conservation District
21. Vista Verde Village LLC
22. The Colorado Division of Wildlife
23. Nucla Sanitation District
24. Town of Naturita
25. The Pagosa Area Water and Sanitation District
26. The Boxelder Sanitation District
27. City of Ouray
28. Norwood Sanitation District
29. U.S. Environmental Protection Agency
30. Colorado River Water Conservation District

**34.33 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE: January 2007 Rulemaking Hearing; Final Action February 12, 2007; Revisions effective July 1, 2007**

The provisions of section 25-8-202(1)(b), 25-8-204; 25-8-402, C.R.S., provide the specific statutory authority for adoption. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

**BASIS AND PURPOSE:**

The Commission revised the basin-wide temperature standards as part of the 2007 rulemaking hearing. These changes clarify the numeric temperature standards that will be in effect until the basin-wide rulemaking hearing in June of 2011. At that time, the Commission intends to consider segment specific temperature standards for all segments with aquatic life uses.

The Commission applied 17°C as an interim chronic standard for small, high elevation streams that are likely to be habitat for brook trout and cutthroat trout. First, second and third order streams are defined at section 31.5 in the Basic Standards.

The Commission also applied 18.2°C as an interim chronic standard to waters designated by the Colorado Wildlife Commission as "Gold Medal Fisheries". The Commission agrees that it is important to protect these fisheries that provide important recreational and tourism opportunities in the headwaters of Colorado. This standard is based on a criterion to protect rainbow trout. The Colorado Division of Wildlife presented evidence that rainbow trout thrive in Gold Medal fisheries because they are provided the necessary forage base and thermal conditions to maximize their consumption and growth. Because these thermal conditions also represent the upper temperature tolerance range for this species, it was determined that an interim standard of 20°C would not be adequate to protect these fisheries.

For the remainder of the cold water segments, the Commission left the current 20°C in place as an interim standard with the clarification that it is a chronic standard. The existing 30°C criterion for warm water segments was left in place as an interim standard with the clarification that it is also to be applied as a chronic standard.

**PARTIES TO THE RULEMAKING HEARING**



1. The Temperature Group (City of Aurora, City of Boulder, Colorado Springs Utilities, Littleton/Englewood Wastewater Treatment, The Metro Wastewater Reclamation District, Colorado Mining Association, Colorado Rock Products Association, Tri-State Generation & Transmission Assn., Xcel Energy, Denver Water, Northern Colorado Water Conservancy District, Southeastern Colorado Water Conservancy District)
2. City of Grand Junction
3. City of Loveland
4. City of Pueblo
5. Metro Wastewater Reclamation District
6. City of Aurora
7. City of Boulder
8. Colorado River Water Conservation District
9. Colorado Wastewater Utility Council
10. Bear Creek Watershed Association
11. Chatfield Watershed Authority
12. Mountain Coal Company, L.L.C.
13. Northern Colorado Water Conservancy District
14. Colorado Rock Products Association
15. Littleton/Englewood Wastewater Treatment Plant
16. Northwest Colorado Council of Governments
17. Southeastern Colorado Water Conservancy District
18. Colorado Mining Association
19. Colorado Division of Wildlife
20. South Platte Coalition for Urban River Evaluation
21. City and County of Denver
22. City of Colorado Springs and Colorado Springs Utilities
23. City of Westminster
24. Board of Water Works of Pueblo
25. Coors Brewing Company
26. City and County of Broomfield
27. Centennial Water and Sanitation District
28. Plum Creek Wastewater Authority
29. Climax Molybdenum Company
30. Cripple Creek & Victor Gold Mining Company
31. Tri-State Generation and Transmission Association
32. Xcel Energy
33. Sky Ranch Metropolitan District No. 2
34. Parker Water and Sanitation District
35. CAM-Colorado and CAM Mining LLC
36. Aggregate Industries - WCR, Inc.
37. Grand County Water and Sanitation District #1, Winter Park Water and Sanitation District, Winter Park West Water and Sanitation District and Fraser Sanitation District
38. Trout Unlimited and Colorado Trout Unlimited
39. Colorado Contractors Association
40. United States Environmental Protection Agency, Region 8
41. Hot Springs Lodge and Pool
42. Denver Regional Council of Governments

**34.34 STATEMENT OF BASIS SPECIFIC STATUTORY AUTHORITY AND PURPOSE DECEMBER 2009 RULEMAKING REGARDING TEMPORARY MODIFICATIONS; FINAL ACTION FEBRUARY 8, 2010; EFFECTIVE DATE JUNE 30, 2010**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

## BASIS AND PURPOSE

Pursuant to the requirements in the Basic Standards (at 31.7(3)), the Commission reviewed the status of temporary modifications to determine whether the temporary modification should be modified, eliminated or extended.

Ammonia: Temporary modifications of ammonia standards were reviewed.

Deleted: Ammonia temporary modifications were deleted on the following segments because in most cases permits had recently been reissued for dischargers on the segments. Compliance schedules in the permits are adequate to address any necessary treatment plant upgrade issues. In other cases, no permits now discharge to this segment.

La Plata, etc segments 5a and 8a

Modified: La Plata, etc. segment 7a: The chronic ammonia temporary modification was modified to clarify that the chronic standard's value is 0.06 mg/l, rather than just "TVS old." "Type iii" was added to identify that there is significant uncertainty regarding the appropriate underlying standard. The expiration date was extended to 12/31/2012 to allow time for additional study.

Other Parameters: Temporary modifications for other parameters were also reviewed.

Deleted: Temporary modification were deleted on the following segment because no permitted discharge has been identified that needs a temporary modification.

La Plata, etc segment 3a iron

Extension of expiration dates: The Commission has decided to delay the basin-wide review of water quality classifications and standards for this basin until June 2012, to accommodate an issue-specific rulemaking for nutrient criteria in June 2011. Consistent with that decision, the expiration dates of the temporary modifications on the following segments that are currently scheduled to expire on 12/31/2011 are extended to 12/31/2012. These will be reviewed again in the December 2010 and December 2011 Temporary Modification hearing.

San Juan segment 11a  
Animas and Florida segments 2, 3a, 3b, 3c, 4a, 4b, 7, 8, and 9  
La Plata, etc. segment 8a

The Commission would like to emphasize that its intent and expectation is that the issues that necessitated adoption of these temporary modifications should be resolved as soon as possible and in a manner that takes full advantage of the opportunities provided by the December 2010 and December 2011 reviews of temporary modifications. The Commission recognizes that it is important to resolve uncertainty regarding the underlying standards so that temporary modifications can be eliminated and any needed pollution controls can be put in place in a timely manner.

## PARTIES TO THE RULEMAKING

1. City of Grand Junction
2. City of Colorado Springs and Colorado Springs Utilities
3. Tri-Lakes, Upper Monument, Security and Fountain Wastewater Treatment Facilities
4. Paint Brush Hills Metropolitan District
5. Pueblo West Metropolitan District
6. City of La Junta
7. Seneca Coal Company
8. Tri-State Generation and Transmission Association

9. Plum Creek Wastewater Authority
10. Centennial Water and Sanitation District
11. City and County of Broomfield
12. City of Fort Collins
13. Metro Wastewater Reclamation District
14. City of Black Hawk and the Black Hawk/Central City Sanitation District
15. Colorado Division of Wildlife
16. U.S. Environmental Protection Agency

**34.35 STATEMENT OF BASIN SPECIFIC STATUTORY AUTHORITY AND PURPOSE, FEBRUARY 8, 2010 RULEMAKING REGARDING TEMPORARY MODIFICATION FOR RITTER DRAW, EFFECTIVE DATE JUNE 30, 2010**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

The Commission added "Type iii" to the temporary modification of the ammonia standard for an unnamed tributary of Ritter Draw (La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma and Dolores County, segment 8c) in recognition that there is uncertainty regarding the appropriate underlying standard. A review of the hearing record shows that when this temporary modification was originally adopted (2006) testimony was presented that identified uncertainty regarding the aquatic life use. At that time, the type of temporary modification was not identified for each temporary modification. The Commission's current action is intended to recognize that time is needed to resolve the uncertainty about the appropriate standard before compliance is required.

**34.36 STATEMENT OF BASIS SPECIFIC STATUTORY AUTHORITY AND PURPOSE DECEMBER 2010 RULEMAKING REGARDING TEMPORARY MODIFICATIONS; FINAL ACTION JANUARY 10, 2011; EFFECTIVE DATE JUNE 30, 2011**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

Pursuant to the requirements in the Basic Standards (at 31.7(3)), the Commission reviewed the status of temporary modifications to determine whether the temporary modification should be modified, eliminated or extended.

The type iii temporary modification of ammonia standards on La Plata segment 7a was reviewed. It will expire on 12/31/2012. It is anticipated that site-specific standards will be considered as part of the basin-wide review in June 2012.

Temporary modifications of metal standards in the Upper Animas Basin (Animas River segments 2, 3a, 3b, 3c, 4a, 4b, 7, 8 and 9) were reviewed. They will expire on 12/31/2012. It is anticipated that the Animas River Stakeholder Group will present a more comprehensive review as part of the basin-wide review in June 2012.

The temporary modifications of the iron standard on San Juan segment 11a and La Plata segment 8a were reviewed. They will expire on 12/31/2012. When originally adopted, time was allotted to allow dischargers time to assess potential changes to their discharge permits. It is anticipated that these will be addressed as part of the basin-wide review in June 2012.

**PARTIES TO THE RULEMAKING HEARING**

1. Paint Brush Hills Metropolitan District
2. Tri-State Generation and Transmission Association
3. Seneca Coal Company
4. Mountain Water and Sanitation District
5. City of Grand Junction
6. Colorado Division of Wildlife
7. City of Boulder
8. U. S. Environmental Protection Agency
9. City of Colorado Springs and Colorado Springs Utilities

**34.37 STATEMENT OF BASIS SPECIFIC STATUTORY AUTHORITY AND PURPOSE JUNE 13, 2011 RULEMAKING REGARDING TEMPORARY MODIFICATIONS; EFFECTIVE DATE JANUARY 1, 2012**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

The Commission's decision to delay consideration of nutrient criteria until March 2012 resulted in cancelation of the December 2011 review of temporary modifications and a three-month delay of the Regulation #34 basin-wide review. Accordingly, the Commission considered the expiration dates of temporary modifications expiring on or before December 31, 2012 in a written comment rulemaking. The Commission extended the expiration dates of the following temporary modifications to March 31, 2013. They would be reviewed during the September 2012 basin-wide rulemaking hearing.

San Juan segment 11a (Fe)  
Animas segment 2 (all metals)  
Animas segment 3a (Cd, Mn, Zn)  
Animas segment 3b (all metals)  
Animas segment 3c (Cu, Zn)  
Animas segment 4a (Al, Fe, Zn, Cu, Cd, pH)  
Animas segment 4b (Zn)  
Animas segment 7 (all metals)  
Animas segment 8 (all metals)  
Animas segment 9 (Al Cu, Fe, Zn)  
La Plata etc, segment 7a (NH<sub>3</sub>)  
La Plata etc, segment 8a (Fe).

**34.38 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; SEPTEMBER 10, 2012 RULEMAKING; FINAL ACTION NOVEMBER 5, 2012; EFFECTIVE DATE MARCH 30, 2013**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE:**

- A. Waterbody Segmentation

The Commission split lakes and reservoirs from segments that also contained streams, so that new temperature standards could be adopted. Lakes and reservoirs were deleted from the following segments that previously encompassed streams and lakes and reservoirs:

San Juan River segments: 1a, 3, 4, 5, 6a, 9a, 9b, 11a, 11b, 12a  
Piedra River segments: 1, 5, 6a, 6b  
Los Pinos River segments: 1, 4a, 6a, 6b  
Animas and Florida River segments: 1, 3c, 6, 7, 8, 12a, 13b, 13c  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 1, 3a, 3b, 4a, 6a, 6b, 7a, 8a, 8b, 10a, 10b  
Upper Dolores River segments: 1, 5a, 11

The following segments were created for lakes and reservoirs:

San Juan River segments: 13, 14, 15a, 15b, 16, 17, 18a, 18b, 19  
Piedra River segments: 8, 9, 10, 11a, 11b  
Los Pinos River segments: 8, 9, 10, 11a, 11b  
Animas and Florida River segments: 16, 17, 18, 19, 20, 21, 22, 23, 24  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22  
Upper Dolores River segments: 12, 13, 14, 15

The following segment was deleted when the constituent water bodies were merged with other segments:

San Juan River segment: 12b

Some existing stream segments were divided into two or more segments at the point where a change in temperature tiers occurred. The following segments were created or revised to facilitate adoption of the new temperature standards into individual segments:

San Juan River segments: 1a, 1b, 7, 8, 9a  
Piedra River segments: 2a, 2b  
Animas and Florida River segments: 10a, 10b, 14a, 14b  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 3a, 3c, 4a, 4c, 6a

The following segments were created or revised based upon water quality and/or aquatic life data which showed that streams should be resegmented or grouped with another segment for which there was similar water quality and designated uses:

San Juan River segments: 11b  
Animas and Florida River segments: 12a, 12d, 13b, 13d, 14a  
Dolores River segments 5a, 5b

The following segment descriptions were edited to improve clarity, fix typographical errors, update numbering and correct spelling:

San Juan River segments: 2, 5, 6a, 9a, 10, 11a, 11b, 12a  
Piedra River segments: 4a, 5, 6a  
Los Pinos River segments: 7a, 7b, 8  
Animas and Florida River segments: 6, 12a, 13a, 13b, 15  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 4b, 7b, 10a, 10b  
Upper Dolores River segment: 1

**B. Revised Aquatic-Life Use Classifications and Standards**

The Commission reviewed information regarding the existing aquatic communities. Class 2 segments with exceptionally high MMI scores, or fish data showing the presence of a wide variety of species, were upgraded from Class 2 to Class 1.

The following segments were upgraded from Warm 2 to Warm 1:

La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 2b, 5a, 5b  
San Juan River segment: 11b (revised to include water bodies from the former segment 12b)

The following segments were upgraded from Cold 2 to Cold 1:

La Plata River, Mancos, River, McElmo Creek and San Juan River segment: 2a  
Animas and Florida River segments: 12a, 12d

Fish Ingestion qualifiers were added to the following segments, based upon review of available data:

Piedra River segment 11a  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 14

Fish Ingestion qualifiers were deleted for the following segment that was upgraded from Class 2 to Class 1, since fish ingestion is presumed for all Class 1 waters:

La Plata River, Mancos, River, McElmo Creek and San Juan River segment: 2a

The following segment was upgraded from Warm 2 to Cold 1 based on biological data showing that the segments have cold-water species, or cold-water species are expected to be present:

La Plata River, Mancos, River, McElmo Creek and San Juan River segment: 3c

The following segments were designated as Aquatic Life Warm 2 or Cold 2, but lacked standards to fully support the Aquatic Life Use. Available data indicates that the Aquatic Life Use is attainable, and therefore the full suite of standards protective of aquatic life was added to the following segments:

San Juan River segments: 3, 12, 19  
Los Pinos River segments: 6a, 6b, 11a, 11b  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 10a, 10b

Some new lake segments were split from stream segments with no Aquatic Life Use. These new lake segments were designated as Aquatic Life Cold 2, because the Aquatic Life UAAs did not include data from these lakes. The full suite of standards protective of aquatic life was added to the following segments:

Animas and Florida River segments: 19, 20

A Use Attainability Analysis was prepared to downgrade the following segment from Cold 1 to Warm 1:

San Juan River segment: 8

A Use Attainability Analysis was prepared to remove the Aquatic Life Use and standards:

Animas and Florida River segment: 13d

**C. Recreation Classifications and Standards**

Newly created segments were given the same Recreation Use classification as the segment from which they were split, unless there was insufficient evidence to support keeping that classification, or evidence to show that the use classification was inappropriate or that recreation use had changed.

The following segments with year-round or seasonal Recreation N standards were upgraded to Recreation E:

La Plata River, Mancos, River, McElmo Creek and San Juan River segment: 3c  
La Plata River, Mancos, River, McElmo Creek and San Juan River segment: 14

The following segments with year-round or seasonal Recreation P standards were upgraded to Recreation E:

Piedra River segment: 11a  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 1, 12

The following segment with year-round or seasonal Recreation N standards was upgraded to Recreation P:

La Plata River, Mancos, River, McElmo Creek and San Juan River segment: 13

**D. Water Supply Use Classification and Standards**

Based on review of information regarding the location of alluvial wells, where the evidence demonstrates a reasonable potential for a hydrological connection between the surface water and the wells, the Water Supply Use classification and standards were added to the following segments:

San Juan River segments: 10, 11a  
Animas and Florida River segments: 9, 13a  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 2a, 2b, 3b, 4c, 5a, 8a  
Upper Dolores River segment: 3

A Use Attainability Analysis was prepared to remove the Water Supply Use and standards from the following segment:

Animas and Florida River segment: 13d

**E. Agriculture Standards**

A review of the standards associated with the Agriculture Use classification showed that many segments were missing a chronic chromium III standard to protect the use. The chronic chromium III standard to protect the Aquatic Life Use classification may be not be protective of the Agriculture Use in some high hardness situations. A chromium III standard of  $CrIII(ch)=100(Trec)$ , was added to the following segments classified for Agriculture Use, but not for Water Supply, which has a more restrictive chromium III standard:

San Juan River segments: 11b, 18b  
Los Pinos River segments: 7a, 7b  
Animas and Florida River segment: 3a  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 6a, 6b, 6c, 7a, 7b, 8b, 8c, 9, 13, 14, 16, 17, 18, 19

Several segments with the Agriculture Use classification were missing a standard for nitrate. A nitrate standard of 100 mg/l was added to the following segments:

Los Pinos River segments: 7a, 7b  
Animas and Florida River segments: 3a, 3c, 4a, 17, 19, 20  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 3a, 5b, 6a, 6b, 6c, 7a, 7b, 8b, 8c, 9, 13, 14, 16, 17, 18, 19, 20

Molybdenum: In 2010, the Commission adopted a new standard for molybdenum to protect cattle from the effects of molybdenosis. The table value adopted at that time was 300 ug/l, but included an assumption of 48 mg/day of copper supplementation to ameliorate the effects of molybdenosis. State and local experts on cattle nutrition indicated that copper supplementation in region is common, but is not universal. Therefore, copper supplementation assumption was removed from the equation, which yields a standard of 160 ug/l. The Commission expects that this value may be revised when data on the copper and molybdenum content of local forage becomes available. The Commission also notes that in view of EPA disapproval of the 300 ug/l table value in the Basic Standards and Methodologies for Surface Water, the Commission intends to review this value during the next Basic Standards triennial review.

The Agriculture Use table value assumes that the safe copper:molybdenum ratio is 4:1. Food and water intake is based on a 273 kg (600 lb) feeder steer consuming 6.8 kg/day of dry matter and 20% of its body weight in water per day. Total copper and molybdenum intakes are calculated from the following equations:

$$\text{Cu intake mg/day} = [([\text{Cu}] \text{ forage, mg/kg}) \times (\text{forage intake, kg/day})] + [([\text{Cu}] \text{ water, mg/l}) \times (\text{water intake, L/day})] + (\text{Cu supplementation, mg/day})$$

$$\text{Mo intake mg/day} = [([\text{Mo}] \text{ forage, mg/kg}) \times (\text{forage intake, kg/day})] + [([\text{Mo}] \text{ water, mg/l}) \times (\text{water intake, L/day})] + (\text{Mo supplementation, mg/day})$$

The assumed values for these equations are as follows:

[Cu] forage = 7 mg/kg, [Mo] forage = 0.5 mg/kg, forage intake = 6.8 kg/day, [Cu] water = 0.008 mg/L, [Mo] water = 0.375 mg/L, water intake = 54.6 L/day, Cu supplementation = 0 mg/day, Mo supplementation = 0 mg/day.

A molybdenum standard of 160 ug/l was adopted for all segments in Regulation 34 with an Agriculture Use classification; except for La Plata segment 6c, because grazing is not allowed within Mesa Verde National Park. No molybdenum standard was applied to Animas and Florida River segment 3b, because it does not have an Agriculture Use classification.

#### **F. Changes to Antidegradation Designation**

**Outstanding Waters:** Based on evidence that shows the water quality meets the requirements of section 31.8(2)(a), and on the presence of conservation populations of native cutthroat trout in all three streams, the Outstanding Waters designation was added to Rio Lado, Little Taylor Creek and Spring Creek (Dolores River segment 5b). The Commission has determined that the evidence demonstrates that the three criteria for an Outstanding Waters designation set forth in section 31.8(2)(a) are met for this proposal. The Commission also notes that the outreach undertaken by Trout Unlimited as proponent of this designation helps to demonstrate broad support for the conclusion that these waters constitute an outstanding natural resource and that the additional protection provided by this designation is appropriate.

The Commission understands that there are existing land uses, including grazing permits, in place in the watershed. The evidence demonstrates that these existing land uses are compatible with the Outstanding Waters designation, since the current high level of water quality has been attained with these uses in place. It is the Commission's intent that this Outstanding Waters designation should not be the basis upon which federal, state or local agencies place more onerous or costly conditions upon permits or approvals existing at the time of the designation, or upon any renewals thereof.



Further, acknowledging that the adoption of the Outstanding Waters designation for identified segments is a discretionary undertaking by the Commission, with such designations not being subject to federal approval or disapproval, the Commission may, in the future, remove the Outstanding Waters designation from any such segment in accordance with the state substantive and procedural rules then in effect.

The Commission has not adopted the Outstanding Waters designations proposed by WildEarth Guardians for multiple segments. The Commission is not persuaded that the fact of being located within an area identified as a “roadless area” is sufficient to demonstrate that the waters in question constitute an outstanding natural resource. Moreover, the proponents did not provide adequate data to persuasively demonstrate the current quality of the waters in question. Finally, the Commission notes that the proponents did not demonstrate a substantial level of public outreach that might have helped to demonstrate a consensus that the criteria in section 31.8(2)(a) are met.

Decoupling Cold 2 and UP: As part of the Basic Standards hearing of 2005, the Commission eliminated the direct linkage between Cold-Water Aquatic Life Class 2 and the Use-Protected designation. The Commission reviewed available water quality data for all Cold 2 segments that were Use-Protected to determine if that designation was still warranted. The following segment(s) are now Reviewable:

Animas and Florida River segments: 17, 19, 20

Decoupling Aquatic Life Warm 2 and UP: As part of the Basic Standards hearing of 2005, the Commission decided that the presence of a Warm Water Class 2 classification would still be a presumptive basis for applying a Use-Protected designation; however, that presumption can be overcome if there is data showing that the water is of high quality. The Commission reviewed available water quality data for all Warm 2 segments to determine if the Use-Protected designation is still warranted. The following segment(s) are now Reviewable:

San Juan River segments: 11b (revised to include water bodies from the former segment 12b), 12

Other Changes to Antidegradation: The following segment was upgraded from “Warm 2” to “Warm 1” and the Antidegradation designation is now Reviewable:

La Plata River, Mancos, River, McElmo Creek and San Juan River segment: 2b

The following segment was upgraded from “Warm 2” to “Cold 1” and the antidegradation designation is now Reviewable:

La Plata River, Mancos, River, McElmo Creek and San Juan River segment: 3c

#### **G. Ambient Quality-Based Standards**

Ambient standards are adopted where natural or irreversible man-induced conditions result in exceedances of table value standards. The Commission reviewed the information that is the basis for these standards, as well as any new information that would indicate whether they are still appropriate, need to be modified, or should be dropped. The following segments have ambient-based or other site-specific standards:

Animas and Florida River segments: 2, 3a, 3b, 4a, 7, 8, 9

La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 7a, 9

No changes were made to the ambient quality-based standards for these segments.

A site-specific manganese standard of 255 ug/L was added to Dolores Segment 3. This value was calculated as the 85<sup>th</sup> percentile of available data from 1/1/1995 – 12/31/2012, and is expected to be representative of conditions on January 1, 2000, consistent with 31.11(6)).

H. Aquatic Life Metals Standards

New Table Value Standards: The zinc, zinc sculpin, and aluminum table values were revised in the 2010 Basic Standards hearing. The acute and chronic zinc, zinc sculpin, and aluminum equations in 34.6(3) were modified to conform to Regulation No. 31.

Site-Specific Zinc Standards for Mottled Sculpin: In low hardness situations (hardness below 102 mg/L), the zinc equation is not protective of mottled sculpin (*Cottus bairdi*), a native west-slope fish species. The Commission did not add a sculpin-specific zinc equation to any segment in Regulation 34.

The Commission deleted the zinc sculpin standards from the following new and revised lake segments, where mottled sculpin are not expected to be present:

San Juan River segments: 8, 17  
Piedra River segments: 8, 10  
Los Pinos River segment: 10  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 12, 13  
Upper Dolores River segments: 12, 13, 14, 15

Chromium III Standards: A review of chromium III standards showed that the standard associated with the Water Supply Use classification is not protective of aquatic life where the average hardness is low (less than 61 mg/l). A chromium III standard, CrIII(ch)=TVS was added to following segments with Aquatic Life and Water Supply Use classifications that did not previously include this standard:

San Juan River segments: 1a, 1b, 2, 3, 4, 5, 6a, 6b, 7, 8, 9a, 9b, 10, 11a, 11b, 12, 13, 14, 15a, 15b, 16, 17, 18a, 18b, 19  
Piedra River segments: 1, 2a, 2b, 3, 4a, 4b, 5, 6a, 6b, 7, 8, 9, 10, 11a, 11b  
Los Pinos River segments: 1, 2a, 2b, 3, 4a, 4b, 5, 8, 9, 10  
Animas and Florida River segments: 1, 5a, 5b, 6, 10a, 10b, 11a, 11b, 12a, 12c, 12d, 13b, 13c, 14a, 15, 16, 21, 22, 23, 24  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 1, 3b, 4a, 4b, 11, 12, 15  
Upper Dolores River segments: 1, 2, 3, 4a, 4b, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15

The acute chromium III standard, CrIII(ac)=TVS was deleted from the following segments with Aquatic Life and Water Supply Use classifications that have the CrIII(ac)=50 ug/l standard:

San Juan River segment: 11a  
Animas and Florida River segment: 4b  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 2a, 2b, 3b

Arsenic Standards: A review of arsenic standards showed that the acute standard for the protection of aquatic life was missing in some segments. An Acute Arsenic standard of 340 ug/l was added to the following segments:

Los Pinos River segments: 6a, 6b, 7a, 7b, 11a, 11b

I. Uranium Standards

At the 2010 Basic Standards rulemaking hearing, the Commission changed the Water Supply table value for uranium from 30 ug/L to a hyphenated standard of 16.8-30 ug/L. The Commission revised the language in 34.5(3)(c) to reflect the change to the basin-wide standard. A new section 34.5(3)(c)(i) was added to explain the hyphenated standard. Subsection 34.5(3)(d) was deleted because it was redundant with 34.5(3)(c).

**J. Temporary Modifications**

All existing Temporary Modifications were re-examined to determine if they should be allowed to expire or to extend them. Temporary Modifications were not automatically extended if non-attainment persisted due to revisions made to the Temporary Modification provisions in 2005 and 2010.

The following segments had Temporary Modifications that were not extended:

San Juan River segment: 11a  
Animas and Florida River segments: 2, 3a, 3b, 3c, 4a, 4b, 7, 8, 9  
La Plata River, Mancos, River, McElmo Creek and San Juan River segment: 8a

The following segments have new or extended "Type A" Temporary Modifications for ammonia:

Animas and Florida River segment: 13b  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 7a, 8c

Temporary Modifications were added or extended for existing discharges to these segments, based upon evidence that the dischargers could not meet water quality based effluent limits for ammonia. The Commission's intent is to preserve the status quo during the term of the Temporary Modification. Existing discharges to these segments shall continue to be authorized to discharge ammonia at their current permitted concentration and flow levels, including a "report only" value. The Division will work with the existing dischargers to determine whether the table value standard for ammonia is necessary to protect the Aquatic Life Uses of these segments. The uncertainty in the standard for each segment may be resolved through a site-specific standard or a discharger specific variance. The Commission does not intend that Temporary Modifications set at "current condition" will apply to new or expanded facilities. The progress on resolving the uncertainty with the ammonia standards will be reviewed in the annual Temporary Modification hearing in December 2013.

The following segment has a new "Type B" Temporary Modification:

Animas and Florida River segment: 3b

For Animas River Segment 3b, the Commission adopted a Type B Temporary Modification for copper, cadmium and zinc with a narrative value of "current condition", and an expiration date of December 31, 2017. The Commission's intent is to preserve the status quo during the term of the Temporary Modification. Existing discharges to Animas River Segment 3b shall continue to be authorized to discharge copper, cadmium and zinc at their current permitted concentration and flow levels, including a "report only" value. Historic mining impacts upstream from Silverton indicate that elevated levels of copper, cadmium and zinc in the Animas River may be due to irreversible human-induced conditions. Since remediation options are still be evaluated, and some improvement in water quality may be gained, it is not yet feasible to quantify the extent of irreversible impacts. The Commission does not intend that Temporary Modifications set at "current condition" will apply to new or expanded facilities. The progress on resolving the uncertainty with the cadmium, copper and zinc standards will be reviewed in the annual Temporary Modification hearing in December 2015.

**K. Temperature**

New table values were adopted for temperature in the 2007 Basic Standards hearing, and revised in the 2010 Basic Standards hearing. Temperature standards were applied to individual segments based upon the fish species expected to be present as provided by Parks and Wildlife, temperature data, and other available evidence.

The following segments have a Cold Stream Tier I temperature standard (CS-I):

San Juan River segments: 1a, 4, 5, 7  
Piedra River segments: 1, 2a, 3, 5  
Los Pinos River segments: 1, 4a, 5  
Animas and Florida River segments: 1, 3a, 3c, 4a, 4b, 6, 9, 10a, 12a, 12c, 12d, 13b, 14a, 15  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 1, 4a  
Upper Dolores River segments: 1, 2, 3, 5a, 5b, 6, 7, 8, 9, 10, 11

The following segments have a Cold Stream Tier II temperature standard (CS-II):

San Juan River segments: 1b, 2, 6a, 6b, 9a, 9b, 10  
Piedra River segments: 2b, 4a, 4b  
Los Pinos River segments: 2a, 2b, 4b, 6a, 6b, 7a, 7b  
Animas and Florida River segments: 5a, 5b, 10b, 11a, 11b, 13a, 13c, 14b  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 2a, 3c, 4c  
Upper Dolores River segment: 4a

The following segments have a Warm Stream Tier II temperature standard (WS-II):

San Juan River segments: 3, 11a, 11b  
Piedra River segment: 6a  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 2b, 3a, 3b, 5a, 5b, 6a, 6b, 7a, 7b, 8a, 8b, 9

The following segments have a Warm Stream Tier III temperature standard (WS-III):

San Juan River segment: 12a  
Piedra River segment: 6b  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 6c, 8c, 10a, 10b

The following segments have a Cold Lakes temperature standard (CL):

San Juan River segments: 13, 15a, 15b, 16, 17  
Piedra River segments: 9, 10  
Los Pinos River segments: 8, 10, 11a, 11b  
Animas and Florida River segments: 16, 17, 18, 19, 20, 21, 23, 24  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 12, 15  
Upper Dolores River segments: 12, 14, 15

The following segments have a Large Cold Lakes (greater than 100 acres surface area) temperature standard (CLL):

Piedra River segment: 8  
Los Pinos River segments: 3, 9  
Animas and Florida River segments: 12b, 22  
La Plata River, Mancos, River, McElmo Creek and San Juan River segment: 4b  
Upper Dolores River segments: 4b, 13

The following segments have a Warm Lakes temperature standard (WL):

San Juan River segments: 8, 14, 18a, 18b, 19  
Piedra River segments: 7, 11a, 11b  
La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 11, 13, 14, 16, 17, 18, 19, 20, 21, 22

A temperature standard was not adopted for several segments which do not have a designated Aquatic Life Use:

Animas and Florida River segments: 2, 3b, 7, 8, 13d

The Commission recognizes that in some cases there is uncertainty about the temperature standards adopted in this hearing. The uncertainty stems from a lack of data about temperature or the aquatic community or where there is a conflict between the lines of evidence. In particular, there was very limited data available for segments within the Southern Ute and Ute Mountain Indian Reservations. It is the Commission's intent that the Division and interested parties work to resolve the uncertainty for the following segments:

San Juan River segments: 2, 6b, 9b, 11b, 15b, 18b

Piedra River segments: 4b, 6b, 11b

Los Pinos River segments: 2b, 4b, 6b, 7b, 11b

Animas and Florida River segments: 5b, 11b, 13c, 24

La Plata River, Mancos, River, McElmo Creek and San Juan River segments: 2b, 3b, 5b, 6b, 7b, 8b, 9, 10b, 14, 17, 20, 22

**L. Other Site-Specific Revisions**

La Plata River, Mancos, River, McElmo Creek and San Juan River 2b: The discrepancy between the Recreation Use season and the E. coli standard season was corrected. The fecal coliform standard was also deleted.

Upper Dolores River segment 11: The typographical error in the Agriculture designated use was corrected.

**M. Tribally-Owned Lands**

The Southern Ute Indian Tribe raised an issue with the wording of section 34.5(4). The Commission deleted the phrase "in agreement with the Southern Ute and Ute Mountain Ute Indian Tribes". This section was added in 2001 and referred to a verbal staff level agreement at that time.

**PARTIES TO THE RULEMAKING HEARING**

1. Trout Unlimited
2. WildEarth Guardians
3. National Park Service, Curecanti National Recreation Area
4. Mountain Coal Company
5. U.S. Energy Corp.
6. Climax Molybdenum Company
7. Gunnison County
8. Gunnison County Stockgrowers Association, Inc.
9. Homestake Mining Company of California
10. Colorado Parks and Wildlife
11. High Country Citizens' Alliance
12. Town of Crested Butte
13. Upper Gunnison River Water Conservancy District
14. Dolores Water Conservancy District
15. Town of Hotchkiss
16. Town of Olathe
17. Town of Silverton
18. Atlantic Richfield Company
19. City of Delta

- 20. Environmental Protection Agency
- 21. R Squared, Inc.
- 22. Wright Water Engineers, Inc.
- 23. San Juan Citizens Alliance
- 24. Colorado Sand and Gravel Association

**34.39 FINDINGS IN SUPPORT OF ADOPTION OF EMERGENCY REVISIONS; MAY 13, 2013**

The Commission adopted the corrections to the zinc table value equations as an emergency action, making the revisions effective immediately. If the Commission does not adopt revisions as an emergency, the effective date would be delayed and discharge permits with zinc limits may be issued incorrectly, which would result in an unnecessary adverse impact on the public. The Commission finds that these amount to exigent circumstances which warrant emergency adoption of these interim revisions to the relevant water quality standards. The Commission further finds that these emergency revisions are imperatively necessary to preserve public health and welfare and that compliance with the procedural requirements of section 24-4-2103, C.R.S., resulting in further delay would be contrary to the public interest.

The changes to the zinc equation are to be effective immediately upon adoption by the Commission, and continue in effect until the effective date of permanent regulations.

**34.40 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; MAY 13, 2013 RULEMAKING; EFFECTIVE DATE SEPTEMBER 30, 2013**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE:**

The Commission adopted revisions to Regulation #34 after a rulemaking hearing in September 2012. Changes to two table value criteria that were made in the 2010 Basic Standards hearing were inadvertently overlooked at the time the proposal for that rulemaking was developed: revisions to the zinc standard equations and temperature values for the Warm Stream tier 2 subclass. In today's action the Commission adopted the corrections to the table values for these parameters in section 34.6. The changes to the zinc equations were adopted as an emergency temporary action (see 34.39) and as a permanent action. Since this is the initial implementation of the new temperature standards in this basin it is not anticipated that the changes to the temperature table values will result in adverse impacts in any permitting action or to the public.

**34.41 STATEMENT OF BASIS SPECIFIC STATUTORY AUTHORITY AND PURPOSE APRIL 8, 2013 RULEMAKING; FINAL ACTION MAY 13, 2013 EFFECTIVE DATE SEPTEMBER 30, 2013**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

## **BASIS AND PURPOSE**

In August of 2005, the Commission adopted revisions to the Basic Standards and Methodologies for Surface Waters (Regulation #31) to add a Water + Fish (W+F) table value standard for chronic arsenic of 0.02 micrograms per liter ( $\mu\text{g/L}$ ). W+F standards are numeric human health-based water quality standards that are calculated protective values that take into account the combined exposure from the pollutant in drinking water and the pollutant accumulated in fish flesh. This criterion automatically went into effect for Aquatic Life Class 1 waters which also have a Domestic Water Supply use, when the changes to the Basic Standards became effective. It was also adopted on a segment by segment basis for Aquatic Life class 2 waters with Domestic Water Supply where the Commission determined there are fish of a catchable size of species that are normally consumed. Because of the complicated nature of the arsenic standards, specific values were added to the basin tables in the basin hearings between 2006 and 2009.

In this hearing, the Commission adopted temporary modifications for W+F chronic arsenic where a permitted discharger with a water quality-based effluent limit compliance problem exists. The adopted temporary modification is listed in the regulation tables as "As(ch)=hybrid". An explanation of the temporary modification and its expected implementation into control requirements, such as Colorado Discharge Permit System (CDPS) effluent limitations, is described in 34.6(2)(d). The temporary modification was established by the Commission to allow for a temporarily less stringent application of the chronic arsenic standard in control requirements for both existing discharges and new or increased discharges.

For discharges existing on or before 6/1/2013, the temporary modification adopted for W+F chronic arsenic is "current condition", expiring on 12/31/2021. The Commission intends that, when implementing the temporary modification of "current condition" in a CDPS permit, the Division will assess the current effluent quality, recognizing that it changes over time due to variability in treatment facility removal efficiency and influent loading from natural or anthropogenic sources, and due to changes in the influent flow and concentration over time. Maintaining the current condition will include maintaining permitted total arsenic loading to a treatment facility from arsenic contributors at the levels existing on the effective date of the temporary modification, while expressly allowing for variability in such loading due to changes in effluent quality as described above and due to changes in the influent flow and concentration over time within the permitted design flow of that facility. The Commission understands that the Division's past practice implementing this requirement in permits has been through reporting regarding the arsenic loading to the facility, and not through numeric effluent limitations. The Commission intends that the Division will continue this practice. For facilities that lack enough representative data to quantify arsenic loading, the permittee may satisfy reporting requirements through narrative descriptions of potential sources of arsenic. No permit action shall be approved that allows an increase in permitted total arsenic loading to a treatment facility. The expiration date of the temporary modification was set at 12/31/21 to allow for CDPS permits that are issued prior to the effective date of anticipated changes to the chronic arsenic standard in the 2016 Basic Standards Rulemaking to not have the temporary modification expire within the term of a permit. The Commission adopted this temporary modification to allow time for the Division, dischargers and stakeholders to continue a workgroup process to resolve the uncertainty regarding the appropriateness of the W+F chronic arsenic standard of 0.02  $\mu\text{g/L}$  with respect to a technologically feasible level of treatment.

For new or increased discharges that commence on or after 6/1/2013, the temporary modification adopted is  $As(ch) = 0.02\text{--}3.0\text{ }\mu\text{g/L}$  (Trec), expiring on 12/31/2021. The Commission decided that since the technologically achievable arsenic level is less stringent than the calculated W+F criterion, the temporary modification for new or increased discharges will be a range of  $0.02\text{--}3.0\text{ }\mu\text{g/L}$ . The first number in the range is the health-based value, based on the Commission's established methodology for human health-based standards that protect against the combined exposure of drinking water and eating fish. The second number in the range is the Commission's initial determination of a technologically achievable value for arsenic, set at  $3.0\text{ }\mu\text{g/L}$ . Control requirements, such as discharge permits effluent limitations, shall be established using the first number in the range as the ambient water quality target, provided that no effluent limitation shall require an "end of pipe" discharge level more restrictive than the second number in the range during the effective period for this temporary modification. The expiration date of the temporary modification was set at 12/31/21 to allow for CDPS permits that are issued prior to the effective date of anticipated changes to the chronic arsenic standard in the 2016 Basic Standards Rulemaking to not have the temporary modification expire within the term of a permit. The Commission adopted this temporary modification to allow time for the Division, dischargers and stakeholders to continue a workgroup process to resolve the uncertainty regarding the appropriateness of the W+F chronic arsenic standard of  $0.02\text{ }\mu\text{g/L}$  with respect to a technologically feasible level of treatment.

The technologically feasible level of  $3.0\text{ }\mu\text{g/L}$  for arsenic is based upon testimony heard by the Commission at the December 13, 2011 Emergency Revisions to Regulation #38. At the December 13, 2011 hearing, the Commission determined, as a practical manner, that  $3.0\text{ }\mu\text{g/L}$  is the lowest level that is technologically achievable for common types of water treatment facilities. At the April 8, 2013 Rulemaking, the Commission heard testimony that concurred with the finding from December 13, 2011 that an initial reasonable lower limit of treatment technology for arsenic is  $3.0\text{ }\mu\text{g/L}$ , pending further investigation by the Division, dischargers and stakeholders. The Division intends to address the uncertainty of the W+F chronic arsenic standard with respect to a technologically feasible level of treatment through a continued workgroup process, and propose a revised W+F chronic arsenic standards as part of the 2016 Basic Standards Rulemaking Hearing.

Temporary modifications were adopted on the following segments. The segments identified have the previously adopted W+F chronic arsenic standard of  $0.02\text{ }\mu\text{g/L}$  and an identified CDPS permit or permits that discharge immediately to or directly above the identified segment.

- San Juan River 2
- San Juan River 4
- San Juan River 5
- San Juan River 6a
- Piedra River 1
- Piedra River 2a
- Piedra River 4b
- Piedra River 5
- Los Pinos River 1
- Los Pinos River 2a
- Los Pinos River 2b
- Los Pinos River 4a
- Los Pinos River 4b
- Animas and Florida River 4b
- Animas and Florida River 5a
- Animas and Florida River 5b
- Animas and Florida River 6
- Animas and Florida River 10b
- Animas and Florida River 11a
- Animas and Florida River 11b
- Animas and Florida River 12a
- Animas and Florida River 13b
- Animas and Florida River 13c



Animas and Florida River 14a  
Animas and Florida River 14b  
La Plata River, Mancos River, McElmo Creek, And San Juan River in Montezuma County and Dolores County 1  
La Plata River, Mancos River, McElmo Creek, And San Juan River in Montezuma County and Dolores County 4a  
Dolores River 8  
Dolores River 11

#### **PARTIES TO THE RULEMAKING HEARING**

1. Colorado Mining Association
2. Union Gold, Inc.
3. Colorado Department of Transportation
4. City of Colorado Springs and Colorado Springs Utilities
5. Town of Crested Butte
6. Mountain Coal Company
7. Centennial Water and Sanitation District
8. MillerCoors, LLC
9. Plum Creek Wastewater Authority
10. Tri-State Generation & Transmission Association
11. Climax Molybdenum Company
12. Littleton/Englewood Wastewater Treatment Plant
13. Eagle River Water and Sanitation District
14. City of Boulder
15. City and County of Denver
16. Parker Water and Sanitation District
17. U.S. Energy Corp.
18. U.S. Environmental Protection Agency
19. City of Greeley

#### **34.42 STATEMENT OF BASIS SPECIFIC STATUTORY AUTHORITY AND PURPOSE DECEMBER 9, 2013 RULEMAKING REGARDING TEMPORARY MODIFICATIONS; FINAL ACTION MARCH 11, 2014 EFFECTIVE DATE JUNE 30, 2014**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

#### **BASIS AND PURPOSE**

Pursuant to the requirements in the Basic Standards (at 31.7(3)), the Commission reviewed the status of temporary modifications scheduled to expire before December 31, 2015, to determine whether the temporary modification should be modified, eliminated or extended. Temporary modifications of standards on three segments were reviewed.

Temporary Modifications for ammonia on the following segments were reviewed:

Animas and Florida River segment: 13b  
La Plata River, Mancos River, McElmo Creek, and San Juan River segments: 7a, 8c

Temporary Modifications were extended for existing discharges to these segments in 2012, based upon evidence that the dischargers could not meet water quality based effluent limits for ammonia. The uncertainty in the standard for each segment may be resolved through a site-specific standard or a discharger specific variance. The expiration dates were extended to 6/30/2015. The Division intends to have proposals ready to resolve the uncertainty with the ammonia standards for the annual Temporary Modification hearing in December 2014.

#### **PARTIES TO THE RULEMAKING HEARING**

1. Rio Grande Silver, Inc.
2. Black Hawk/Central City Sanitation District and City of Black Hawk
3. Centennial Water & Sanitation District, City of Littleton, City of Englewood
4. Colorado Parks and Wildlife
5. Homestake Mining Company of California
6. Metro Wastewater Reclamation District
7. South Platte Coalition for Urban River Evaluation (SP CURE)
8. City of Boulder
9. Seneca Coal
10. Tri-State Generation and Transmission Association
11. City of Fort Collins
12. MillerCoors, LLC
13. Environmental Protection Agency
14. Barr Lake and Milton Reservoir Watershed Association
15. Plum Creek Water Reclamation Authority

#### **34.43 STATEMENT OF BASIS SPECIFIC STATUTORY AUTHORITY AND PURPOSE AUGUST 11, 2014 RULEMAKING HEARING; FINAL ACTION AUGUST 11, 2014; EFFECTIVE DATE MARCH 1, 2015**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

#### **BASIS AND PURPOSE**

In 2010, the Commission adopted the discharger specific variance provisions at Regulation 31.7(4), which allow a temporary water quality standard to be adopted in cases where water quality based effluent limits are not feasible to achieve. A DSV is a hybrid standard that maintains the long-term water quality goal of fully protecting all designated uses, while temporarily authorizing an alternative effluent limit (AEL) to be developed for a specific pollutant and specific point source discharge where compliance with the water quality based effluent limit (WQBEL) is not feasible.

In reliance upon Durango West Metropolitan District #2's (DWMD's) commitment to implement upgrades and a continued maintenance program, the Commission adopted a DSV for Animas and Florida Segment 13b for ammonia that represents the highest degree of protection of the classified use that is feasible for DWMD. For ammonia, the monthly chronic total ammonia effluent limits for DWMD shall not be more restrictive than 15 mg/L prior to 12/31/2024. The Commission expects that DWMD will submit a progress report for the San Juan Basin Issues Formulation Hearing in November 2016 and expects that report to include information regarding whether there are any downstream domestic water supply wells that are impacted by the discharge.

#### **PARTIES TO THE RULEMAKING HEARING**

1. Durango West Metropolitan District #2
2. Colorado Parks and Wildlife

3. U.S. Environmental Protection Agency

**34.44 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; DECEMBER 8, 2014 RULEMAKING; FINAL ACTION JANUARY 12, 2015; EFFECTIVE DATE JUNE 30, 2015**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

Pursuant to the requirements in the Basic Standards (at 31.7(3)), the Commission reviewed the status of temporary modifications scheduled to expire before December 31, 2016, to determine whether the temporary modification should be modified, eliminated or extended. Temporary modifications of standards on 2 segments were reviewed.

Extension: The Commission extended the expiration date of ammonia temporary modifications on the following segments.

La Plata, etc. segments 7a and 8c

Temporary modifications of the ammonia standards for these segments, due to expire on 6/30/2015, were extended to 6/30/2016. The Division is working with small domestic dischargers on these segments to explore the possibility of proposing discharger specific variances. Progress continues to be made to improve water treatment for these segments.

**PARTIES TO THE RULEMAKING HEARING**

1. Pioneer Natural Resources USA, Inc. and XTO Energy, Inc.
2. U.S. Energy Corp.
3. Plum Creek Water Reclamation Authority
4. Upper Clear Creek Watershed Association
5. Upper Thompson Sanitation District
6. Colorado Parks and Wildlife
7. U.S. Environmental Protection Agency
8. High Country Conservation Advocates
9. Metro Wastewater Reclamation District
10. Climax Molybdenum Company
11. Rio Grande Silver, Inc.
12. City of Pueblo
13. Tri-State Generation and Transmission, Inc.
14. Centennial Water and Sanitation District
15. Xcel Energy
16. MillerCoors
17. Seneca Coal Company
18. Peabody-Sage Creek Mining, LLC
19. City of Boulder

**34.45 STATEMENT OF BASIS AND PURPOSE REGARDING THE ADOPTION OF NON-SUBSTANTIVE CHANGES TO THE CLASSIFICATION AND NUMERIC STANDARDS FOR SAN JUAN RIVER AND DOLORES RIVER BASINS, JANUARY 11, 2016 RULEMAKING; EFFECTIVE DATE MARCH 1, 2016**

The provisions of C.R.S. 25-8-202(1)(i) and 25-8-401(2) provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

The Commission, in a public rulemaking hearing adopted extensive changes to the format of this regulation. The Commission does not intend to change any existing designations, use classifications or standards, or the implementation of any standards as the results of changing the format.

This rulemaking was in response to longstanding issues with managing the information contained in the standards tables. The changes made in this hearing reflect a change from storing the information in word processing documents to storing the information in a relational database. This change in platform will provide better consistency, facilitate error checking as well as a more readable format for the standards tables. Storing the information in a database allows it to be used more efficiently by other programs in the Division.

While it was the Commission's intent not to change the substantive meaning of the regulations in this rulemaking, in cases where there was ambiguity the revised regulation reflects the Commission's interpretation of the previous format based on Regulation #31 (the Basic Standards and Methodologies for Surface Water ) and the experience of the Commission and its staff.

**Overall format changes:** The new format displays parameters by name, rather than by period table element abbreviations. The section formerly titled "Temporary Modifications and Qualifiers" does not appear in the new format. Instead, there is a separate section for qualifiers, and an "Other" section. Temporary modifications, variances and other footnotes are displayed in the "Other" section. Many items that were formerly in the "Temporary Modifications and Qualifiers" column will be displayed in the "Other" column and will have a different appearance or modified wording, although the information is substantively the same. Each footnote in the "Other" section is preceded by a heading that indicates where the footnote applies:

- Footnotes regarding a use classification will begin with the heading "Classification..."
- Footnotes regarding the antidegradation designation begin with the heading "Designation..."
- Footnotes that relate to a particular standard begin with the name of the parameter, for example "Selenium(chronic)= ..."

**Constraints of the new format:** Some adjustments were made to the way that data is displayed in order to be compatible with the functions of the Standards Database. Database organization requires that information which relates to multiple standards must be attached to each individual parameter. For example, a segment with a temporary modification listed for "all parameters" in the old format will have a temporary modification listed for each individual parameter in the new format. There are also spacing constraints in the new format, which require some information to be moved either to the "other" box on the new format, or moved out of the segment entirely and into another location in the regulation.

**Clarification of changes:** The shift to a database organizational structure required consistency in the way each data element is addressed. To insure that data is stored and displayed correctly, the following changes were made

- The “type” of temporary modification is no longer displayed in the segment tables, since they have no regulatory effect and have been inconsistently displayed.
- In the old format, waters that had a reviewable antidegradation designation were identified by the absence of either “UP” or “OW” in the designation column. These segments now display the word “reviewable” under the designation heading. There needed to be a value in the designation column for every segment.
- Dissolved standards are not specifically noted as dissolved in the new format. All metals standards are dissolved unless noted with a “T” or a “t”. For example, a manganese standard in the old format of “WS(dis)” is displayed as “WS” in the new format.
- A new footnote 7 was added to clarify that although E. coli is listed in the “chronic” column, the standard is a two-month geometric mean rather than a 30-day average. The language of footnote 7 was taken from Regulation 31, Table 1, footnote 7.
- A new footnote 8 was added to indicate that all phosphorus standards are based upon the concentration of total phosphorus. In the old format, individual phosphorus standards were noted as “total” in some basins and not others.
- A new footnote 9 was added to clarify that although pH is listed in the “acute” column, the standard is not applied as a 1-day average. The language of footnote 7 was taken from Regulation 31, Table 1, footnote 3.
- Physical and Biological Parameters: Some parameters are not specifically identified in the old format segment tables as acute or chronic. The new format requires that each parameter is placed in either the acute or chronic column. Specifically, these parameters and the basis for being identified as acute or chronic are as follows:
  - pH (acute) – Regulation #31, Table 1, footnote 3
  - E. Coli (chronic) – Regulation #31, Table 1, footnote 7
  - D.O. (chronic) – Regulation #31, Table 1, footnote 1
  - cyanide (acute) – Regulation #31, Table 2
  - sulfide (chronic) - Regulation #31, Table 2
  - nitrate (acute) - Regulation #31, Table 2
  - nitrite (chronic) – not specified in Regulation #31. Nitrite has been implemented as a 30-day average standard in permits and assessments.
  - chloride (chronic) Regulation #31, Table 2
  - boron (chronic) - Regulation #31, Table 2
  - sulfate (chronic) Regulation #31, Table 2
- The previous format used Footnote 1 instead of Footnote A for the arsenic hybrid standard. The label for the footnote was changed from “1” to “A” but the text of the footnote did not change.

- The footnote on Animas and Florida Segment 2 was modified to reduce the text to less than 200 characters, which is the maximum that can be included in the segment. Text longer than 200 characters has to be moved to a footnote outside the segment table (either at the front of the regulation or following the segment tables). The text change is as follows:

“The concentration of dissolved aluminum, cadmium, copper, iron, lead, manganese, and zinc that is directed toward maintaining and achieving standards established for segments 3a,4a and 4b.”

- The footnote regarding the variance conditions on Animas and Florida Segment 13b was moved to 34.6(4)(a) because it exceeded 200 characters and could not be shortened without substantively changing the meaning of the text.

**34.46 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; DECEMBER 14, 2015 RULEMAKING; FINAL ACTION JANUARY 11, 2016; EFFECTIVE DATE JUNE 30, 2016**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

Pursuant to the requirements in the Basic Standards (at 31.7(3)), the Commission reviewed the status of temporary modifications scheduled to expire before December 31, 2017, to determine whether the temporary modification should be modified, eliminated or extended. Temporary modifications of standards on 3 segments were reviewed.

Animas River segment 3b: Temporary modifications of the cadmium, copper and zinc standards. The Town of Silverton has presented evidence that they are making progress on the plan for eliminating the need for the temporary modification. The Commission made no change to the expiration date of 12/31/2017 as the original time allotment was deemed adequate.

La Plata et al. segments 7a and 8c: Temporary modifications of the ammonia standards for these segments were extended to 6/30/2018. The Division is working with small domestic dischargers on these segments to explore the possibility of proposing discharger specific variances. Progress continues to be made to improve water treatment for these segments.

**PARTIES TO THE RULEMAKING HEARING**

1. City of Delta
2. Resurrection Mining Company
3. U.S. Energy Corp.
4. City of Pueblo
5. Peabody Sage Creek Mining and Seneca Coal Company
6. Climax Molybdenum Company
7. Rio Grande Silver
8. City of Colorado Springs and Colorado Springs Utilities
9. Tri-State Generation and Transmission Association, Inc.
10. High Country Conservation Advocates
11. U.S. Environmental Protection Agency
12. Colorado Parks and Wildlife
13. Town of Crested Butte and Coal Creek Watershed Coalition
14. Public Service Company of Colorado

**34.47 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; DECEMBER 12, 2016 RULEMAKING; FINAL ACTION JANUARY 9, 2017; EFFECTIVE DATE JUNE 30, 2017**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

Pursuant to the requirements in the Basic Standards (at 31.7(3)), the commission reviewed the status of temporary modifications scheduled to expire before December 31, 2018, to determine whether the temporary modification should be modified, eliminated or extended.

No action: The commission took no action on the temporary modifications on the following segments since they will be addressed in the basin wide hearing in June 2017.

Animas River Segment 3b: temporary modification of the cadmium, copper and zinc standards (expire 12/31/2017).

La Plata Segment 7a: temporary modification of the ammonia standards (expire 12/31/2018).

La Plata Segment 8c: temporary modification of the ammonia standards (expire 12/31/2018).

**New Temporary Modifications of the Arsenic Standard:**

Consistent with the actions taken in 2013, the commission adopted a temporary modification of the arsenic standard on segments on the following list, with an expiration date of 12/31/2021. At the April 8, 2013 rulemaking, the commission heard testimony that concurred with the finding from a December 13, 2011 hearing that an initial reasonable lower limit of treatment technology for arsenic is 3.0 µg/L, pending further investigation by the division, dischargers and stakeholders. The temporary modification was established by the commission to allow for a temporarily less stringent application of the chronic arsenic standard in control requirements for both existing discharges and new or increased discharges.

San Juan River Segment 9a  
San Juan River Segment 11a  
Piedra River Segment 7  
Los Pinos River Segment 5  
Animas Florida River Segment 10a  
Animas Florida River Segment 13a  
Animas Florida River Segment 22  
La Plata River Segment 2b  
La Plata River Segment 5a  
La Plata River Segment 12  
Dolores River Segment 1  
Dolores River Segment 2  
Dolores River Segment 3  
Dolores River Segment 4a  
Dolores River Segment 4b  
Dolores River Segment 5a  
Dolores River Segment 5b

**PARTIES TO THE RULEMAKING HEARING**

1. Colorado Parks and Wildlife
2. Resurrection Mining Company
3. Public Service Company of Colorado
4. City of Pueblo
5. Peabody Sage Creek Mining Company and Seneca Coal Company
6. Tri-State Generation and Transmission Association, Inc.
7. Climax Molybdenum Company
8. Rio Grande Silver, Inc.
9. Mt. Emmons Mining Company
10. Plum Creek Water Reclamation Authority
11. Environmental Protection Agency
12. Raytheon Company
13. City of Boulder Open Space and Mountain Parks
14. High Country Conservation Advocates
15. City of Colorado Springs and Colorado Springs Utilities
16. City of Black Hawk and Black Hawk/Central City Sanitation District
17. Town of Crested Butte and Coal Creek Watershed Coalition
18. Parker Water and Sanitation District

**34.48 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 12, 2017 RULEMAKING; FINAL ACTION AUGUST, 2017; EFFECTIVE DATE DECEMBER 31, 2017**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE:**

**A. Water Body Segmentation**

Some segments were renumbered, combined, or new segments were created to facilitate appropriate organization of water bodies in this regulation. Renumbering and/or creation of new segments was made based on information that showed: a) the original reason for segmentation no longer applied; b) significant differences in uses, water quality and/or physical characteristics warrant a change in standards on only a portion of the existing segment; and/or c) certain segments could be merged into one segment because they had similar water quality and uses. The following changes were made:

Animas Florida Segments 2 and 3a: The boundary between Segments 2 and 3a was moved upstream from Maggie Gulch to Minnie Gulch, in order to facilitate a change in use classifications and standards on this portion of the mainstem of the Animas River.

Animas Florida Segments 5b through 5d: Segment 5b was divided into Segments 5b through 5d. The proposed boundaries were developed in consultation with the Southern Ute Indian Tribe, and the resegmentation provides a framework for working toward common water quality standards on waters where there is a jurisdictional dispute.

Animas and Florida Segment 11c: All tributaries to the Florida River formerly in Segment 13c were moved to Segment 11c to improve the organization of waters in this basin.



Animas Florida Segment 13c: The unnamed tributary to Coal Gulch was moved to Segment 13c to facilitate a change in the water supply use classification and standards. All water bodies formerly included in Segment 13c were moved to the new Segment 13e, 13f or 11c to improve the organization of waters in this basin.

Animas Florida Segment 13e and 13f: Tributaries to the Animas River were moved to the new Segment 13e (above Basin Creek) and 13f (Basin Creek to New Mexico Border). The proposed boundaries were developed in consultation with the Southern Ute Indian Tribe, and the resegmentation provides a framework for working toward common water quality standards on waters where there is a jurisdictional dispute.

Dolores River Segments 5a: Beaver Creek and Plateau Creek were moved from Segment 5a to a new Segment 11c to facilitate a change in the use classifications and temperature standards.

Dolores River Segments 10a and 10b: Segment 10 was split into Segments 10a and 10b to change the temperature standards on the West Dolores River below Fish Creek from CS-I to CS-II.

Dolores River Segments 11a, 11b and 11c: Segment 11 was split into Segments 11a, 11b and 11c to facilitate changes to the aquatic life use classifications and temperature standards on tributaries to the Dolores River.

La Plata Segment 2b, 2c and 2d: The mainstem of the La Plata River from the Southern Ute Indian Reservation to the Colorado/New Mexico border was split into Segments 2b, 2c and 2d. The proposed boundaries were developed in consultation with the Southern Ute Indian Tribe, and the resegmentation provides a framework for working toward common water quality standards on waters where there is a jurisdictional dispute.

La Plata Segment 3a and 3e: East Alkali Gulch and Hay Gulch were moved from Segment 3a to Segment 3e to facilitate changes to the water supply and aquatic life use classifications and standards.

La Plata Segments 3c and 3d: East Cherry Creek moved from Segment 3c to a new Segment 3d to facilitate changing the temperature standard from CS-II to CS-I.

La Plata Segments 5, 6a, 7b, 8, 10 and 17: Segments 5, 6a, 7b, 8, 10 and 17 were revised and/or renumbered to facilitate the exclusion of water bodies inside the Ute Mountain Ute Indian Reservation. Former Segments 5b, 6b, 7b, 8b, 9, 10b, 20, 21 and 22 were deleted entirely, as these contained water bodies entirely within the Ute Mountain Ute Indian Reservation.

La Plata Segment 6b: The East Fork of Muddy Creek and East Canyon were moved to a new Segment 6b to facilitate a change in the water supply use classification and standards.

La Plata Segment 7b: A portion of the mainstem of McElmo Creek moved to a new Segment 7b to facilitate a change in the water supply use classification and standards.

Los Pinos Segments 2b, 2c and 2d and 4b: Segment 2b was split into 2b, 2c, and 2d. All of the water bodies previously included in Segment 4b were moved either to Segment 2c (Beaver Creek) or Segment 2d (Ute Creek and Spring Creek). The proposed boundaries were developed in consultation with the Southern Ute Indian Tribe, and the resegmentation provides a framework for working toward common water quality standards on waters where there is a jurisdictional dispute.

Los Pinos Segment 6: Los Pinos Segment 6 was revised to exclude Segment 4b. The Segment number was revised from 6a to 6, since the number for 6b was no longer needed.

Los Pinos Segment 7a: Los Pinos Segment 6b was changed to 7a and the segment description was revised to exclude Segments 2b, 2c and 2d.

Los Pinos Segment 7b: The segment description for Segment 7b was revised to include only Trail Canyon and its tributaries. Other tributaries formerly included in Los Pinos Segment 7b were moved to San Juan Segment 11b (direct tributaries to Navajo Reservoir), as it is a more appropriate sub-basin for the geographic location of these tributaries.

Piedra Segment 4a: A portion of Devil Creek was moved from Segment 5 to 4a to facilitate changes to the temperature standards.

Piedra Segment 4b and 4c: Segment 4b was split into Segments 4b and 4c to facilitate changes to the temperature standards.

Piedra Segment 5a and 5b: Segment 5 was split into Segments 5a and 5b to facilitate changing the temperature standard from CS-I to CS-II on some of the tributaries to the Piedra River.

Piedra Segment 6c: Stollsteimer Creek was moved from Segment 6b to 6c to facilitate a change in the temperature standards.

Piedra Segment 6d: Steven's Draw was moved from Segment 6a to a new Segment 6d to facilitate a change in the water supply use classification and standards.

San Juan Segments 5 and 6a: The segment description for Segments 5 and 6a was revised in order to facilitate changing the temperature standard on the mainstem of the San Juan River from CS-I to CS-II for the portion between the West Fork and Fourmile Creek.

San Juan Segments 6a through 6f: Segments 6a was divided into two segments, Segments 6a and 6b. The former Segment 6b was renumbered as Segment 6c, and waters from this segment were divided into four Segments 6c through 6f. These changes in segmentation were made to facilitate changes to temperature standards on the mainstem of the San Juan River below Pagosa Springs.

San Juan Segment 11c: A new Segment 11c was created to facilitate changes to the aquatic life use classifications and standards for McCabe Creek.

Segment descriptions were also edited to improve clarity, correct typographical errors, and correct spelling errors. These changes are listed in Section Q

## **B. Aquatic Life Use Classifications and Standards**

The commission reviewed information regarding the existing aquatic communities. For segments lacking an Aquatic Life use classification, a use was added where biological information demonstrated that these waters are capable of sustaining aquatic biota. Additionally, Class 2 segments with high MMI scores or a wide variety of fish species were upgraded from Class 2 to Class 1.

The following segments were upgraded from no Aquatic Life use to Aquatic Life Cold 1:

Animas Florida segment: 2 (a portion was moved from Segment 3a, resulting in the upgrade)

The following segments were upgraded from Cold 2 to Cold 1:

Dolores River segment: 9

For segments where the existing aquatic communities are not aligned with the Aquatic Life use, the following segments were upgraded from Warm to Cold:

San Juan River segment 11c

For segments where the existing aquatic communities are not aligned with the Aquatic Life use, the following segments were downgraded from Cold to Warm:

San Juan River segment: 2  
Dolores River segment: 11c

The commission reviewed all Class 2 segments that have fish that are “of a catchable size and which are normally consumed and where there is evidence that fishing takes places on a recurring basis.” Water + Fish or Fish Ingestion standards were applied to the following segments:

San Juan River segment: 19  
Los Pinos River segment: 6  
Animas Florida River segment: 11c  
La Plata River segments: 3b, 19

### **C. Recreation Use Classifications and Standards**

The commission reviewed information regarding the current Recreation use classifications and evidence pertaining to actual or potential primary contact recreation, and no changes were adopted at this time. In addition, newly created segments were given the same Recreation use classification as the segment from which they were split, unless there was insufficient evidence to support keeping that classification, or evidence to show that the existing use classification was inappropriate.

### **D. Water Supply Use Classification and Standards**

The commission added a Water Supply use classification and standards where the evidence demonstrated a reasonable potential for a hydrological connection between surface water and alluvial wells used for drinking water. The Water Supply use classification and standards were added to the following segments:

San Juan River segment: 11b  
La Plata River segments: 3e, 7b  
Los Pinos River segments: 6, 7

The commission removed the Water Supply use classification and standards where the evidence demonstrated that a Water Supply use does not currently exist due to flow or other conditions, and that such a use is not reasonably expected in the future due to water rights, source water options, or other conditions. The water supply standard for chloride was retained for these segments, given concerns regarding the protection of aquatic life by the existing Water Supply standard. The Water Supply use classification and standards, except for chloride, were removed from the following segments:

Animas Florida segment: 13c  
Piedra River segment: 6d

For the segments where the Water Supply use classification and standards were removed, the commission adopted the division’s proposal to retain the 250 mg/L chronic (30-day average) standards for chloride as an interim step, based on evidence presented demonstrating the toxic effects of chloride on aquatic life. Retaining the current chloride standard is necessary to protect the assigned Aquatic Life uses and to ensure that these waters are free from substances toxic to aquatic life in accordance with 31.11(1)(a)(iv). The commission retained the numeric standard for chloride because narrative standards have often proved challenging to implement, and interim numeric standards will provide implementable interim standards while allowing time for development of robust replacement criteria based on the latest scientific information.

The commission recognizes that there is scientific uncertainty about the appropriate standards for chloride and/or sulfate to protect the Aquatic Life use, and that appropriate standards may need to recognize that toxicity is affected by site water characteristics (similar to the influence of hardness on the toxicity of dissolved metals). The commission's intention is that future revisions to the numeric standards assigned to these segments, and also to Regulation No. 31 (i.e., aquatic life-based table values chloride and/or sulfate), can be considered if: (1) EPA issues new or updated CWA § 304(a) Aquatic Life criteria recommendations, (2) another state adopts new or revised Aquatic Life criteria and EPA approves, or (3) protective criteria otherwise become available that incorporate the latest scientific information on the risks to aquatic life posed by these pollutants.

#### E. Agriculture Use Classification and Standards

A review of the segments with an existing Agriculture use classification showed that some segments were missing one or more standards to protect that use. The full suite of Agriculture standards was added to the following segments:

Dolores River segment: 9

The commission reviewed all segments with lacking an Agriculture use. Based on an evaluation of the available data and information, no changes were adopted at this time.

#### F. Other Standards to Protect Agriculture, Aquatic Life, and Water Supply Uses

- Molybdenum:** In 2010, the commission adopted a new standard for molybdenum to protect cattle from the effects of molybdenosis. The table value adopted at that time was 300 µg/L, but included an assumption of 48 mg/day of copper supplementation to ameliorate the effects of molybdenosis. State and local experts on cattle nutrition indicated that copper supplementation in the region is common, but is not universal. Therefore, the copper supplementation assumption was removed from the equation, which then yielded a standard of 160 µg/L. That standard was applied in recent basin reviews.

In the 2015 Regulation No. 38 hearing, the commission adopted a standard of 150 µg/L, based on an improved understanding of the dietary- and water-intake rates for various life-stages of cattle. This standard is protective of all life-stages of cattle (including lactating cows and growing heifers, steers and bulls) at all times of year.

The Agriculture table value assumes that the safe copper:molybdenum ratio is 4:1. Food and water intake is based on growing heifers, steers, and bulls consuming 6.7 kg/day of dry matter and 56.8 liters of water per day. Total copper and molybdenum intakes are calculated from the following equations:

$$\text{Cu intake mg/day} = [([\text{Cu}] \text{ forage, mg/kg}) \times (\text{forage intake, kg/day})] + [([\text{Cu}] \text{ water, mg/l}) \times (\text{water intake, L/day})] + (\text{Cu supplementation, mg/day})$$

$$\text{Mo intake mg/day} = [([\text{Mo}] \text{ forage, mg/kg}) \times (\text{forage intake, kg/day})] + [([\text{Mo}] \text{ water, mg/l}) \times (\text{water intake, L/day})] + (\text{Mo supplementation, mg/day})$$

The assumed values for these equations are as follows:

$$\begin{aligned} [\text{Cu}] \text{ forage} &= 7 \text{ mg/kg}, [\text{Mo}] \text{ forage} = 0.5 \text{ mg/kg}, \text{forage intake} = 6.7 \text{ kg/day}, [\text{Cu}] \text{ water} = 0.008 \text{ mg/L}, \\ \text{water intake} &= 56.8 \text{ L/day}, \text{Cu supplementation} = 0 \text{ mg/day}, \\ \text{Mo supplementation} &= 0 \text{ mg/day}. \end{aligned}$$

In 2010, the commission also adopted a new standard for molybdenum to protect the Water Supply use that was calculated in accordance with Policy 96-2.

A molybdenum standard of 150 µg/L was adopted for all segments in Regulation No. 34 that have an Agriculture use classification, and where livestock or irrigated forage are present or expected to be present. The following segments do *not* have an Agriculture or a Water Supply use classification. No molybdenum standard was applied to these segments:

Animas Florida Segment 3b

2. **Cadmium for Aquatic Life:** The commission adopted updated hardness-based cadmium Aquatic Life standards on a targeted, site-specific basis in cold waters to reflect the most up-to-date science. The new standards, released by the U.S. Environmental Protection Agency (EPA) in March 2016, are protective of sensitive cold water aquatic life (i.e., trout). The cadmium criteria recommended by EPA and adopted by the commission are as follows:

$$\begin{aligned}\text{Acute} &= e^{(0.9789 \cdot \ln(\text{hardness}) - 3.866)} \cdot (1.136672 - (\ln(\text{hardness}) \cdot (0.041838))) \\ \text{Chronic} &= e^{(0.7977 \cdot \ln(\text{hardness}) - 3.909)} \cdot (1.101672 - (\ln(\text{hardness}) \cdot (0.041838)))\end{aligned}$$

EPA's updated cadmium criteria are less stringent than Colorado's current cadmium standards when water hardness is greater than 45 mg/L CaCO<sub>3</sub>. Although the criteria are less stringent, they were developed using the latest science and are protective of aquatic life, and it is expected that Colorado's state-wide cadmium standards will likely be updated using the 2016 EPA cadmium criteria at a later date. Therefore, the commission determined it was appropriate to adopt the new criteria for waters known to be impaired for cadmium to ensure forthcoming clean-up goal development and Total Maximum Daily Load (TMDL) evaluations are based on the most relevant water quality standards available. The updated cadmium standards were adopted for the following segments:

Animas Florida segments: 3a, 3c, 4a, 4b, 6 and 9  
Dolores River segment: 9

3. **Cadmium, Nickel, and Lead for Water Supply:** A review of the cadmium, nickel, and lead standards showed that uses were not always adequately protected by the standards currently in the tables. Depending on hardness, the Aquatic Life standards for cadmium, lead, and nickel were not protective of the Water Supply use. The division reviewed all segments in Regulation No. 34 to determine if the current standards applied to each segment are fully protective of the assigned uses, and revised or added standards where appropriate.

The cadmium Water Supply standard was added because the acute Aquatic Life standard is not protective when the hardness was greater than 200 mg/L in non-trout streams and 345 mg/L in trout streams; the lead Water Supply standard was added because the acute Aquatic Life standard is not protective when hardness is greater than 79 mg/L; and the nickel Water Supply standard was added because the chronic Aquatic Life standard is not protective when hardness is greater than 216 mg/L. Cadmium, lead, and nickel Water Supply standards were added to the following segments:

San Juan segments: 1a, 1b, 2, 4, 5, 6a, 6b, 6c, 6d, 6e, 6f, 7, 8, 9a, 9b, 10, 11a, 11b, 11c, 13, 15a, 15b, 16, 17

Piedra River segments: 1, 2a, 2b, 3, 4a, 4b, 4c, 5a, 5b, 6a, 6b, 6c, 7, 8, 9, 10, 11a, 11b

Los Pinos segments: 1, 2a, 2b, 2c, 2d, 3, 4, 5, 6, 7a, 8, 9, 10

Animas Florida segments: 1, 4b, 5a, 5b, 5c, 5d, 5e, 6, 9, 10a, 10b, 11a, 11b, 11c, 12a, 12b, 12c, 12d, 13a, 13b, 13e, 13f, 14a, 14b, 15, 16, 18, 21, 22, 23, 24

La Plata River segments: 1, 2a, 2b, 2c, 2d, 3b, 3c, 3d, 3e, 4a, 4b, 4c, 5, 6b, 7b, 8, 11, 12, 15

Dolores River segments: 1, 2, 3, 4a, 4b, 5a, 5b, 6, 7, 8, 10a, 10b, 11a, 11b, 11c, 12, 13, 14, 15

- 4. Aquatic Life Criteria for Selenium and Ammonia:** The commission declined to adopt EPA's revised 304(a) Aquatic Life criteria for selenium and ammonia at this time; however, the division is committed to evaluating these new criteria. Studies are currently underway for each parameter to improve understanding of these criteria in the context of water quality conditions in Colorado and how these criteria may be adopted and implemented in Colorado in the future.

#### **G. Antidegradation Designations**

The commission reviewed all Warm 2 segments designated Use Protected to determine if the Use Protected designation was still warranted. Based upon available water quality data that meet the criteria of 31.8(2)b, the Use Protected designation was removed from the following segments:

Piedra River segment: 6a  
La Plata River segment: 3b

#### **H. Ambient Quality-Based Standards**

Ambient quality-based standards are adopted where a comprehensive analysis has been conducted demonstrating that elevated existing water quality levels are the result of natural conditions or are infeasible to reverse, but are adequate to protect the highest attainable use. [

The commission reviewed all existing site-specific standards. Based on an evaluation of the available data and information, no changes were adopted at this time.

#### **I. Temporary Modifications**

All existing Temporary Modifications were examined to determine if they should be allowed to expire or if they should be extended, either unchanged or with changes to the numeric limits.

The commission deleted or allowed to expire on 12/31/2017 certain temporary modifications on the following segments:

Animas Florida River segment: 3b (cadmium and zinc)

The commission revised or extended Temporary Modification on the following segments:

Animas Florida Segments 3b and 4a: Temporary modifications of the copper standards were extended to 12/31/2022 on Segment 3b and adopted on Segment 4a. The Town of Silverton presented evidence that additional time is needed to resolve the uncertainty regarding the underlying copper standards. There is uncertainty regarding the degree to which existing concentrations of copper are irreversible, because the U.S. EPA Superfund Program is evaluating potential remediation projects in the watershed that may reduce loading of copper to the Animas River. There is also uncertainty regarding the degree to which the copper loading from Silverton's effluent is irreversible, and Silverton will complete an alternatives analysis to resolve this uncertainty and determine how much copper reduction is feasible. Therefore, the commission extended the expiration date of the "current conditions" temporary modifications for copper to 12/31/2022.

La Plata Segment 7a and 9: The commission extended the ammonia temporary modifications on La Plata Segment 7a and 9. There is uncertainty regarding the degree to which the ammonia loading from Lee Mobile Home Park's and Vista Verde's effluent discharges is irreversible, and these facilities will complete an alternatives analysis to resolve this uncertainty and determine how much water quality improvement is feasible. Therefore, the commission extended the expiration date of the temporary modifications for copper to 6/30/2020. The commission changed the operative value of the temporary modification from "old TVS" to "current condition" on La Plata Segment 7a to be consistent with the commission's current practice for temporary modifications. Since the "old TVS" is no longer referenced in Appendix 34-1, the old ammonia standard equations and related footnotes were deleted from 34.6.

To remain consistent with the commission's decisions regarding arsenic in section 34.41, all existing temporary modifications for arsenic of "As(ch)=hybrid" (expiration date of 12/31/21) were retained. An arsenic temporary modification was added to the following segments, which had an existing or newly added chronic arsenic standard 0.02 µg/L and a permitted discharger with a water quality-based effluent limit compliance problem:

Los Pinos River segments: 6

#### **J. Discharger Specific Variances**

There is currently one segment in the San Juan and Dolores River Basins (Animas Florida Segment 13c) that has a discharger specific variance (DSV) for ammonia. The commission reviewed the basis for this DSV and the available information regarding progress toward achieving the highest attainable water quality. The commission determined that this DSV is still appropriate and does not require revision at this time.

#### **K. Temperature Standards for Rivers and Streams**

The commission revised temperature criteria in Regulation No. 31 in 2007, and again in 2010, based on the development of the Colorado Temperature Database and a lengthy stakeholder process. In 2012, the new temperature standards were adopted for all segments with an Aquatic Life use classification in Regulation No. 34. In June 2016, temperature criteria in Regulation No. 31 were further revised, including changes to the temperature table value standards, revision of warm water winter acute standards, and the addition of footnotes to protect lake trout and mountain whitefish.

1. **Colorado Temperature Database Update:** The Colorado Temperature Database was updated in 2016 to reflect the most recent research regarding the thermal requirements of Colorado's fishes, which allowed for adoption of an overall update of the cold and warm water acute and chronic temperature table value standards. In this hearing, the commission adopted revisions at 34.6(3) to bring this regulation into conformity with the revised table value standards found in Table I of Regulation No. 31.
2. **Warm Water Winter Acute Table Values:** The 2016 updates to the temperature database also allowed for the adoption of revisions to the warm water winter acute table values. When seasonal numeric temperature standards were first adopted in 2007, warm water winter acute and chronic standards were simply set at half the summer season table values, recognizing a pattern seen in cold waters. In 2016, the acute winter table values for warm water fish were revised based on lethal temperature thresholds established in laboratory experiments for fish acclimated to "winter" temperatures. Standards derived using this new method more accurately protect warm water fish from acute thermal effects in winter. In this hearing, the commission adopted revisions at 34.6(3) to bring this regulation into conformity with the revised warm water winter acute temperature table value standards found in Table I of Regulation No. 31.
3. **Mountain Whitefish and Lake Trout Footnotes:** In 2016, the commission adopted two footnotes to Table I of Regulation No. 31 to allow for additional thermal protection of mountain whitefish and lake trout where appropriate. These species were given special standards due to their thermal sensitivity and limited distributions. In Regulation No. 34, there are no water bodies where lake trout are expected to occur, or where thermally-sensitive spawning and early life stages of mountain whitefish are known to occur, based upon information provided by Colorado Parks and Wildlife. No changes were adopted at this time to protect mountain whitefish or lake trout.
4. **Refinement of Temperature Standards**

Since temperature criteria were revised in Regulation No. 31 in 2007, the division and others have worked to ensure that appropriate temperature standards were adopted for segments throughout the state. At times, this effort to assign temperature standards has also included reevaluation of the existing Aquatic Life use classifications, and use revisions have been proposed and adopted where appropriate. Incremental progress continues as temperature standards are refined based on the experience and data gains that have occurred since initial adoption of temperature standards.

In the 2016 Regulation No. 31 hearing, the commission declined to adopt the division's proposal for statewide solutions for temperature transition zones and shoulder seasons, in favor of a basin-by-basin consideration of temperature standards on a site-specific basis. The basin-by-basin approach was selected as it allows for consideration of temperature attainability and ambient quality-based site-specific temperature standards issues in the context of multiple lines of evidence and site-specific contravening evidence. The sections below describe the considerations and methods used to develop and support the site-specific temperature standards revisions adopted in this basin hearing.



- i. Existing Uncertainty: While a great deal of progress has been made regarding the development and implementation of temperature standards, uncertainty still remains for some segments due to the lack of site-specific temperature or aquatic community information or conflicts between the lines of evidence. This uncertainty was highlighted in the statement of basis and purpose language for the 2012 Regulation No. 34 Rulemaking Hearing at 34.38.K. To address this uncertainty, these segments were targeted for additional data collection where possible, and all new information collected for these segments was evaluated as part of this basin review.
- ii. Attainability: Following the commission's 2016 direction to consider attainability issues using a basin-by-basin approach, the division reviewed all available information to identify segments where attainability issues may exist based upon available instream temperature data and expected in-stream summer maximum weekly average temperatures (MWATs). Expected MWATs were determined using regression analysis of temperature and elevation and the NorWeST Stream Temperature Regional Database and Model. This screening found that many segments, or portions of segments, were not expected to attain the summer or winter chronic temperature standards. These waters were targeted for additional review, as were waters listed as impaired for temperature on the 2016 303(d) List.
- iii. Aquatic Life Use: For these selected segments, the division conducted a comprehensive, site-specific review of the existing use classification and temperature standards. Fishery data provided by Colorado Parks and Wildlife (CPW) was evaluated to identify fish species expected to occur, whether reproduction is expected (i.e., stocked, transient, or resident species), age class structures, and any other relevant information regarding aquatic life communities. For segments where little or no information on fish species expected to occur existed, fish population data from adjacent and representative water bodies was utilized when possible.
- iv. Thermal Drivers: In cases where temperature standards to protect the highest attainable use were determined, but the temperature standards were not attainable, site-specific factors that influence in-stream temperature were evaluated to identify any correctable anthropogenic thermal sources. All available data on temperature, hydrology, hydro-modification, canopy cover, groundwater influence, point and non-point thermal sources, and other relevant information was reviewed.

Based upon information regarding the species expected to occur, temperature data, physical habitat, land cover/use, groundwater inputs, flow conditions, and all other available information regarding thermal drivers, the commission adopted revisions of temperature standards for the segments listed below where water quality is not feasible to improve or where the thermal regime is the result of natural conditions, but is sufficient to protect the highest attainable use.

The following segments were changed from CS-I to CS-II:

San Juan River segment: 6a  
Piedra River segment: 5b  
Dolores River segment: 10b, 11b

The following segments were changed from CS-II to CS-I:

La Plata River segment: 3d

The following segments were changed from CS-II to WS-II:

San Juan River segment 2  
Dolores River segment 11c

The following segments were changed from WS-II to CS-II:

La Plata River segment 3e

The following segments were changed from WS-III to WS-II:

Piedra River segment: 6c

Ambient temperature standards were adopted where a use attainability analysis was conducted demonstrating that elevated ambient temperatures are the result of natural conditions or are not feasible to improve to the level required by the current numeric standard, but are adequate to protect the highest attainable use. Ambient temperature standards were adopted for the following segments:

San Juan River segments: 6b, 6c, 6d, 6e, 6f, 11c  
Piedra River segments: 4a, 4b, 4c

Adequate data or resources were not always available to support a revision of the use classification or a temperature standards change. In these cases, no change was proposed. It is the commission's intent that the division and interested parties work to resolve the uncertainty. There is uncertainty regarding the appropriate use classifications and temperature standards to protect the highest attainable use still exist for the following segments:

San Juan River segments: 3, 9a and 9b  
Los Pinos River segments: 2c, 2d, 4b, 7a and 11b  
Animas Florida segment: 4a, 5b – 5e, 11a, 11b, 11c, 13b, 13c, 13f, 14b  
La Plata River segments: 2b, 2c, and 2d

Moving forward with this site-specific approach, the commission encourages the division to consider whether any additional information would be appropriate to be included in the use attainability analyses.

#### **L. Ambient Quality-Based Temperature Standards for Lakes**

The WAT standard was found to be unattainable for a number of cold large lakes and reservoirs where evidence indicated there are healthy cold water fish populations. Because summertime temperature in the mixed layer for large lakes and reservoirs is very well correlated to the water body's elevation, the commission adopted ambient temperature standards for large lakes wherever data were available to characterize a WAT and the thermal characteristics of the lakes and reservoirs were determined to be the result of natural or irreversible man-induced conditions. Ambient temperature standards were adopted for the following lakes:

Dolores River: 4b (McPhee and Summit Lakes)

## M. Nutrients

In March 2012, the commission adopted interim nutrient values in the Basic Standards (Regulation No. 31) and created a new statewide control regulation (Regulation No. 85) to address nutrients in Colorado. Regulation 31.17 includes interim nutrient values for total phosphorus, total nitrogen, and chlorophyll a for both lakes and reservoirs, and rivers and streams. Due to the phased implementation approach adopted with these criteria (31.17(e)), the commission considered adoption of only total phosphorus and chlorophyll a standards at this time. Nitrogen standards were not considered as part of this rulemaking hearing, but will be considered in the next triennial review, currently scheduled for June 2020.

Total phosphorus and chlorophyll a standards were adopted for waters upstream of all permitted domestic wastewater treatment facilities discharging prior to May 31, 2012 or with preliminary effluent limits requested prior to May 31, 2012, and any non-domestic facilities subject to Regulation No. 85 effluent limits and discharging prior to May 31, 2012. A new section (4) was added at 34.5 describing implementation of the interim nutrient values into the tables at 34.6, and includes a table which lists these facilities and the segment to which they discharge.

For segments located entirely above these facilities, nutrient standards apply to the entire segment.

For segments with portions downstream of these facilities, *nutrient standards only apply above these facilities*. A note was added to the total phosphorus and chlorophyll a standards in these segments. The note references the table of qualified facilities at 34.5(5).

For segments located entirely below these facilities, nutrient standards do not apply.

For rivers and streams segments, total phosphorus standards were adopted for segments with an Aquatic Life use. Chlorophyll a standards were adopted for segments with either an E or P Recreation use classification.

For lakes and reservoirs segments, a note was added to total phosphorus and chlorophyll standards adopted for lakes in the tables at 34.6, as these standards only apply to lakes larger than 25 acres.

31.17(e)(ii) also allows the commission to adopt numeric nutrient standards for Direct Use Water Supply (DUWS) lakes and reservoirs. No proposals were made to adopt standards based on this provision in this rulemaking (see section N).

31.17(e)(iii) also allows the commission to adopt numeric nutrient standards for circumstances where the provisions of Regulation No. 85 are not adequate to protect waters from existing or potential nutrient pollution. No proposals were made to adopt standards based on this provision in this rulemaking.

Chlorophyll a standards were adopted for the following segments:

San Juan River segments: 1a, 1b, 2, 3, 4, 5, 6a, 6b, 7, 8, 9a, 9b, 10, 11a, 11b, 11c, 12, 13, 14, 15a, 15b, 16, 17, 18a, 18b, 19

Piedra River segments: 1, 2a, 2b, 3, 4a, 5a, 5b, 6a, 6b, 6c, 6d, 8, 9, 10, 11a, 11b

Los Pinos River segments: 1, 2a, 4, 5, 6, 7a, 7b, 8, 9, 10, 11a, 11b

Animas Florida River segment: 1, 2, 3a, 3b, 3c, 6, 7, 8, 9, 10a, 10b, 11c, 12a, 12b, 12c, 12d, 13a, 13b, 13c, 13d, 13e, 13f, 14a, 14b, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

La Plata River segments: 1, 2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 3e, 4a, 4b, 4c, 5, 6a, 6b, 6c, 7a, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19

Dolores River segments: 1, 2, 3, 4a, 4b, 5a, 5b, 6, 7, 8, 9, 10a, 10b, 11a, 11b, 11c, 12, 13, 14, 15

Total Phosphorus standards were adopted for the following segments:

San Juan River segments: 1a, 1b, 2, 3, 4, 5, 6a, 6b, 7, 8, 9a, 9b, 10, 11a, 11b, 11c, 12, 13, 14, 15a, 15b, 16, 17, 18a, 18b, 19

Piedra River segments: 1, 2a, 2b, 3, 4a, 5a, 5b, 6a, 6b, 6c, 6d, 8, 9, 10, 11a, 11b

Los Pinos River segments: 1, 2a, 4, 5, 6, 7a, 7b, 8, 9, 10, 11a, 11b

Animas Florida River segment: 1, 3a, 3c, 6, 9, 10a, 10b, 11c, 12a, 12b, 12c, 12d, 13a, 13b, 13c, 13e, 13f, 14a, 14b, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

La Plata River segments: 1, 2a, 2b, 2c, 2d, 3a, 3b, 3c, 3d, 3e, 4a, 4b, 4c, 5, 6a, 6b, 6c, 7a, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19

Dolores River segments: 1, 2, 3, 4a, 4b, 5a, 5b, 6, 7, 8, 9, 10a, 10b, 11a, 11b, 11c, 12, 13, 14, 15

#### **N. Direct Use Water Supply Sub-classification**

Also in the March 2012 rulemaking hearing, the commission adopted a sub-classification of the Domestic Water Supply Use called "Direct Use Water Supply Lakes and Reservoirs Sub-classification" (DUWS), in Regulation No. 31, at 31.13(1)(d)(i). This sub-classification is for Water Supply lakes and reservoirs where there is a plant intake location in the lake or reservoir or a man-made conveyance from the lake or reservoir that is used regularly to provide raw water directly to a water treatment plant that treats and disinfects raw water. The commission has begun to apply this sub-classification and anticipates that it will take several basin reviews to evaluate all the reservoirs in the basin. The commission adopted the DUWS sub-classification on the following reservoirs and added "DUWS" to the classification column in the standards tables. The public water systems are listed along with the reservoirs and segments.

Piedra River segment: 7 (Hatcher and Stevens Reservoirs)

Animas Florida River segment: 23 (City Reservoir #1 and Lake Durango)

La Plata River segment: 4b (Jackson Gulch Reservoir)

Dolores River segment: 4b (McPhee Reservoir)

31.17(e)(ii) also allows the commission to adopt numeric nutrient standards for DUWS lakes and reservoirs. No proposals were made to adopt standards based on this provision in this rulemaking.

#### **O. Other/Site-Specific Revisions**

The commission revised segment descriptions and/or deleted entire segments to exclude all waters within the Ute Mountain Ute Indian Tribe from Regulation No. 34:

La Plata River, Mancos River, McElmo Creek, and San Juan River in Montezuma County and Dolores County: Segments 5, 6a, 7b, 8, 10 and 17

#### **P. Duration of nitrite standard**

The commission corrected the duration of the nitrite standard from chronic to acute on all segments. When the commission adopted the new format for tables in 2016, all nitrite standards were incorrectly included in the "chronic" standards column.

**Q. Typographical and Other Errors**

The following edits were made to segment descriptions to improve clarity and correct typographical errors:

Los Pinos River segments: 4, 6  
Animas Florida River segment: 4b, 5a, 6, 10b, 11b, 13b  
La Plata River segments: 6a, 9, 14

**PARTIES TO THE RULEMAKING HEARING**

1. Town of Silverton
2. Animas River Stakeholders Group
3. Homestake Mining Company
4. Mt. Emmons Mining Company
5. Colorado Parks and Wildlife
6. Colorado Waste Water Utility Council
7. Ouray Silver Mines Inc.
8. Trout Unlimited
9. U.S. Environmental Protection Agency, Region 8 Office
10. Towns of Hotchkiss, Lake City, Olathe, Ridgway
11. Southwestern Water Conservation District
12. Dolores Water Conservancy District
13. High Country Conservation Advocates
14. Upper Gunnison River Water Conservancy District
15. Littleton/Englewood Wastewater Treatment Plant
16. Eagle River Water and Sanitation District
17. Town of Crested Butte, Gunnison County, Coal Creek Watershed Coalition
18. Northern Colorado Water Conservancy District
19. Tri-State Generation and Transmission Association, Inc.
20. Climax Molybdenum Company
21. Northwest Colorado Council of Governments Water Quality/Quantity Committee

**34.49 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; DECEMBER 10, 2018 RULEMAKING; FINAL ACTION JANUARY 14, 2019; EFFECTIVE DATE JUNE 30, 2019**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE:**

Pursuant to the requirements in the Basic Standards (at 31.7(3)), the commission reviewed the status of temporary modifications scheduled to expire before December 31, 2020 to determine whether the temporary modification should be modified, eliminated, or extended.

For the temporary modifications set to expire after the effective date of this hearing, the commission reviewed progress toward resolving the uncertainty in the underlying standard and/or the extent to which conditions are a result of natural or anthropogenic conditions, and evaluated whether the temporary modifications were still necessary. The commission took no action on the following temporary modifications:

La Plata Segment 7a (COSJLP07a): temporary modification of the ammonia standards (expires 6/30/2020). Vista Verde continues to make progress on resolving the uncertainty regarding the degree to which the ammonia loading from Vista Verde's effluent discharge is irreversible, and will complete an alternatives analysis to resolve this uncertainty and determine how much water quality improvement is feasible. The commission made no change to the expiration date, as the original time allotment was deemed adequate to resolve the uncertainty.

La Plata Segment 9 (COSJLP09): temporary modification of the ammonia standards (expires 6/30/2020). Lee Mobile Home Park continues to make progress on resolving the uncertainty regarding the degree to which the ammonia loading from Lee Mobile Home Park's effluent discharge is irreversible, and will complete an alternatives analysis to resolve this uncertainty and determine how much water quality improvement is feasible. The commission made no change to the expiration date, as the original time allotment was deemed adequate to resolve the uncertainty.

**34.50 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; DECEMBER 9, 2019 RULEMAKING; FINAL ACTION JANUARY 13, 2020; EFFECTIVE DATE JUNE 30, 2020**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

Pursuant to the requirements in the Basic Standards (at 31.7(3)), the commission reviewed the status of temporary modifications scheduled to expire before December 31, 2021 to determine whether the temporary modification should be modified, eliminated, or extended.

For the temporary modifications set to expire after the effective date of this hearing, the commission reviewed progress toward resolving the uncertainty in the underlying standard and/or the extent to which conditions are a result of natural or anthropogenic conditions, and evaluated whether the temporary modifications were still necessary.

**A. Temporary Modifications for Standards Other than Arsenic**

The commission extended the following temporary modifications:

La Plata Segment 7a (COSJLP07a): The commission extended the temporary modifications for Ammonia (ac/ch) = current condition on La Plata Segment 7a until 06/30/2021. Vista Verde continues to make progress on resolving the uncertainty regarding the degree to which the ammonia loading from Vista Verde's effluent discharge is irreversible, and is working with the division to complete an alternatives analysis to resolve this uncertainty and determine how much water quality improvement is feasible. Vista Verde will participate in the small ammonia lagoons discharger specific variance (DSV) rulemaking hearing, which is anticipated to take place by December of 2020.

La Plata Segment 9 (COSJLP09): The commission extended the temporary modifications for Ammonia (ac/ch) = current condition on La Plata Segment 9 until 06/30/2021. Lee Mobile Home Park continues to make progress on resolving the uncertainty regarding the degree to which the ammonia loading from Lee Mobile Home Park's effluent discharge is irreversible, and is working with the division to complete an alternatives analysis to resolve this uncertainty and determine how much water quality improvement is feasible. Vista Verde will participate in the small ammonia lagoons discharger specific variance (DSV) rulemaking hearing, which is anticipated to take place by December of 2020.

**B. Temporary Modifications for Arsenic**

The temporary modification of the chronic arsenic standard, which applies to numerous segments with a standard of 0.02 µg/l to protect the Water + Fish use, was extended from 12/31/2021 to 12/31/2024. No changes were made to the temporary modification operative values at 34.6(2)(c). For discharges existing on or before 6/1/2013, the temporary modification remains at As(ch)=current condition and numeric effluent limits will be developed by the division using the division's implementation method (WQCD Exhibit L). For new or increased discharges that commence on or after 6/1/2013, the temporary modification remains at 0.02–3.0 µg/L (total recoverable). The extension provides time to resolve the uncertainty in the underlying standard for arsenic to protect human health. Significant uncertainty remains regarding the appropriate standard to protect the use and the extent to which ambient levels of arsenic are the result of natural or irreversible conditions. In addition, there is widespread instream non-attainment of the underlying standard and predicted or demonstrated compliance problems with permit limits based on the underlying standard, as demonstrated in the division's Prehearing Statement.

It is anticipated that the uncertainty regarding the appropriate underlying standard for arsenic to protect human health will be resolved by June 2024, with the adoption of new statewide arsenic use-based standards. The division presented (WQCD Exhibit E) a detailed plan to resolve the multifaceted uncertainty for arsenic. The plan includes conducting a field study to investigate the proportion of inorganic (versus total) arsenic in the tissue of fish collected from Colorado waters, deriving a bioaccumulation or bioconcentration factor for arsenic, appropriate for use in Colorado, and characterizing ambient levels of arsenic in surface waters and groundwater statewide. As discussed below, the division will also be gathering, through permit requirements, targeted data from facilities benefiting from the arsenic temporary modification (WQCD Exhibit D). These data will help the division to better understand the contribution of arsenic in effluent from permitted facilities to ambient levels of arsenic in Colorado waters and will inform the extent to which ambient levels of arsenic are the result of natural or irreversible conditions.

Effluent arsenic concentration data from facilities throughout the state demonstrate that many facilities will likely have issues meeting effluent limits based on the anticipated revised arsenic water quality standard to protect human health. As a result, there is a widespread need to make progress to understand sources of arsenic and options for source control and treatment. To ensure such progress is made, when implementing the "current condition" temporary modification in permits, the division will include additional permit Terms and Conditions, which may include requirements for additional monitoring, source identification, and characterization of source control and treatment options for reducing arsenic concentrations in effluent (WQCD Exhibit D). Under the duration of the temporary modification, facilities would not be required to implement facility improvements to meet a specified effluent limit; however, facilities may be required to evaluate arsenic source control and treatment options for their facility. For purposes of evaluating options to reduce arsenic concentrations in effluent, the arsenic treatment removal recognized in the 2013 Arsenic Rulemaking (3 µg/L) can be used as a point of reference until the uncertainty in the underlying standard is resolved. Implementation guidance for these requirements was included in WQCD Exhibit D. These requirements are reasonable and would not cause undue economic burden for facilities, but will ensure that progress is being made toward future attainment of the underlying standards and protection of the classified uses. Implementation of these requirements would function to increase the amount of time facilities would have for long-term planning and encourage data collection that would facilitate implementation of the most appropriate source reduction and treatment options and selection of the most appropriate regulatory pathways once the new underlying standard is adopted for arsenic.

### **C. Implementation of Current Condition Temporary Modifications into Permits**

Several parties to the hearing raised concerns regarding the implementation of current condition temporary modifications into permits, as described in WQCD Exhibit L. The commission was persuaded that the division has existing legal authority to proceed with implementation of these temporary modifications in the absence of a rule or policy addressing this specifically. However, the commission believes it would be beneficial to develop a policy, and therefore requested that the division work toward developing a division policy about how the division will proceed with implementing current condition temporary modifications into permits. The commission requested that the division report back to the commission next year, potentially as part of the division's annual update to the commission regarding the 10-Year Water Quality Roadmap, regarding what the division believes is a reasonable timeline and process for developing such a policy. The commission encouraged the division to continue with its current efforts at transparency and implementation of current condition temporary modifications consistent with the evidence presented in the rulemaking, including Exhibit L, into permits prior to the development of a policy.

#### **34.51 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; DECEMBER 9, 2019 RULEMAKING; FINAL ACTION JANUARY 13, 2020; EFFECTIVE DATE JUNE 30, 2020**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

### **BASIS AND PURPOSE**

#### **A. Aquatic Life Standards for Cadmium**

Cadmium is a naturally-occurring element frequently found alongside other metals, and numerous treatment techniques are available to remove cadmium from wastewater. Cadmium has both acute and chronic effects on aquatic life, and can negatively impact survival, growth, reproduction, immune and endocrine systems, development, and behavior.

The commission revised the hardness-based cadmium table value standards to protect the Aquatic Life use. The updated standards incorporate toxicity data that have become available since the cadmium standards were last updated in the 2005 Regulation No. 31 rulemaking hearing. The updated standards are based on the United States Environmental Protection Agency's (EPA) "Aquatic Life Ambient Water Quality Criteria – 2016" and toxicity data that have become available since EPA's recommended criteria were released in 2016.

The updated standards include two acute equations (acute(cold) and acute(warm)) and one chronic equation. The acute(cold) and chronic equations are the same as the acute and chronic criteria recommended by EPA in 2016. The acute(cold) equation, which is lowered to protect trout, is protective of trout and other sensitive cold water species and applies in segments classified as Aquatic Life Cold Class 1 or 2. The acute(warm) equation, which is not lowered to protect trout, is protective of warm water species and applies in segments classified as Aquatic Life Warm Class 1 or 2. The chronic equation is protective of both cold and warm water aquatic life and applies in segments classified as either Aquatic Life Cold Class 1 or 2 or Aquatic Life Warm Class 1 or 2.

Compared to the previous cadmium table value standards, the updated standards are generally less stringent. The acute(cold) standard is less stringent than the previous acute(trout) standard when water hardness is greater than 45 mg/L CaCO<sub>3</sub>. The acute(warm) equation is less stringent than the previous acute standard when water hardness is greater than 101 mg/L CaCO<sub>3</sub>. The updated chronic equation is less stringent than the previous chronic standard at all water hardness values.



In the past, Colorado has had separate acute equations for waters with trout and waters without trout. The updated standards include separate acute equations for cold waters (both with and without trout) and warm waters. This change in approach is due to the addition of toxicity data showing that sculpin, which inhabit cold waters, are also sensitive to cadmium. To ensure protection of sculpin and other sensitive cold water aquatic life in waters where trout are absent, the acute(cold) equation applies to all cold waters. As a result, the acute trout (tr) qualifier for cadmium is no longer needed on select cold water segments and was deleted from all segments where it had applied.

During the 2017 basin review, the commission adopted EPA's 2016 recommended criteria as site-specific standards in select cold water segments. The updated table value standards for cold waters are the same as EPA's 2016 recommended criteria. Therefore, to reflect the commission's state-wide adoption of the updated table value standards, the cadmium "SSE" were replaced with "TVS" on the following segments:

Animas Florida: 3a, 3c, 4a, 4b, 6 and 9

Dolores River: 9

## **B. Clarifications to Appendix 34-1**

To improve the clarity and usability of the tables, an acronym list was added to the front of Appendix 34-1 and the footnote referencing Section 34.6 was also simplified.

### **34.52 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; DECEMBER 14, 2020 RULEMAKING; FINAL ACTION FEBRUARY 8, 2021; EFFECTIVE DATE JUNE 30, 2021**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

#### **BASIS AND PURPOSE**

Pursuant to the requirements in the Basic Standards (at 31.7(3)), the commission reviewed the status of temporary modifications scheduled to expire before December 31, 2022 to determine whether the temporary modification should be modified, eliminated, or extended.

For the temporary modifications set to expire after the effective date of this hearing, the commission reviewed progress toward resolving the uncertainty in the underlying standard and/or the extent to which conditions are a result of natural or anthropogenic conditions, and evaluated whether the temporary modifications were still justified.

The commission took no action on the following temporary modifications:

Animas River segments 3b and 4a (COSJAF03b and COSJAF04a): temporary modifications of the acute and chronic copper standards (expire 12/31/2022). The Town of Silverton provided an update regarding progress being made in implementing the plan to resolve uncertainty and demonstrating the ongoing justification for the temporary modifications.

There continues to be demonstrated instream nonattainment, predicted compliance issues, and remaining uncertainty regarding the appropriate underlying standards to protect the uses and the extent to which instream and effluent conditions are reversible. The update provided by the Town of Silverton included details regarding the scheduled investigations and actions to resolve the uncertainty pertaining to the reversibility of copper concentrations in their effluent by 12/31/2022. This work includes improvements to the collection systems to reduce inflow and infiltration, as well as improvements to the wastewater treatment facility.

The operative value of the temporary modifications is the narrative "current conditions." In future reviews of these temporary modifications, the commission will use the following values to compare to the most recent five years of representative data to determine if effluent and waterbody quality is maintained and ensure that the existing uses are protected. These values are for use by the commission in future reviews of the temporary modification and are not intended to direct implementation of "current condition" temporary modifications in permits:

- 1) effluent potentially dissolved copper = 143 µg/L (based on the maximum 30-day average of data from 3/31/2014 – 2/29/2020)
- 2) instream dissolved copper = 9.5 and 12.6 µg/L (based on the 85th and 95th percentiles, respectively, of data from 4/22/2014 – 2/26/2020 at site WQCD 82 [21COL001\_WQX-000082 in the Water Quality Portal])

The commission took no action on the temporary modifications set to expire on or before the effective date of this hearing, allowing the following temporary modifications to expire and be deleted from Appendix 34-1:

La Plata Segment 9 (COSJLP09): acute and chronic ammonia (expires 6/30/2021)

**34.53 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; DECEMBER 14, 2020 RULEMAKING; FINAL ACTION FEBRUARY 8, 2021 EFFECTIVE DATE JUNE 30, 2021**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

**A. La Plata Segment 7a**

The commission adopted a discharger specific variance (DSV) for La Plata Segment 7a (COSJLP07a) for ammonia that represents the highest degree of protection of the classified use that is economically feasible for Vista Verde Village Mobile Home Park (Vista Verde). The ammonia acute and chronic alternative effluent limits are, 24 mg/L from November through April and 14 mg/L from May through October. The seasonal change in limits is intended to address changes in treatment performance due to temperature. Since aerated lagoons have long detention times (greater than 30 days) and do not provide the opportunity to control for daily variation, the AELs shall apply to both the acute and chronic WQBELs. The DSV requires that Vista Verde's ammonia effluent concentrations do not exceed the current condition at any time during the variance. To ensure that the requirements of the DSV do not result in any lowering of currently attained ambient water quality, the commission relies on the implementation of numeric initial effluent limits to be developed in a method consistent with the division's policy for current condition temporary modifications (Clean Water Policy 13). The DSV will expire on 6/30/2031.

A comprehensive alternatives analysis demonstrated that compliance with the ammonia WQBELs would cause substantial and widespread adverse social and economic impacts in the area where the discharge is located. Alternatives that would achieve compliance, such as replacing the lagoon with a mechanical plant or consolidation with the nearest city, would result in costs that the entity would not be able to pay while still operating a viable business. The commission determined that closing the mobile home park would result in the loss of affordable housing to the typically low-income residents of Vista Verde.

The commission adopted a DSV with an alternative effluent limit that is based upon the expected ammonia effluent quality that will be achieved through feasible improvements to the lagoon. There is some uncertainty in the final effluent quality that will be achieved. Vista Verde will collect additional data to characterize the effectiveness of the improvements, which the commission will review upon re-evaluation of the AEL at future hearings. Since the basis for this DSV is economic feasibility, at future re-evaluations of the DSV, the commission will review whether economic conditions have changed in a way that would make additional reductions in ammonia feasible.

The commission expects that Vista Verde will submit a progress report including updated facility data and improvements to date for the commission's review of the DSV and the AEL at the June 2022 and June 2027 rulemaking hearings. The commission will re-evaluate the requirements of the DSV at these rulemaking hearings, and will consider whether the information at that time demonstrates an ability to reliably achieve lower ammonia concentrations than the AEL originally adopted. If warranted, the commission will modify the AEL to reflect the highest attainable condition.

**B. La Plata Segment 10**

The commission adopted a DSV for La Plata Segment 10 (COSJLP10) for ammonia that represents the highest degree of protection of the classified use that is economically feasible for the Town of Dove Creek. The ammonia AEL is 20 mg/L from November through May and 10 mg/L from June through October. The seasonal change in limits is intended to address changes in treatment performance due to temperature. Since aerated lagoons have long detention times (greater than 30 days) and do not provide the opportunity to control for daily variation, the AELs shall apply to both the acute and chronic WQBELs. The DSV requires that the Town of Dove Creek's ammonia effluent concentrations do not exceed the current condition at any time during the variance. To ensure that the requirements of the DSV do not result in any lowering of currently attained ambient water quality, the commission relies on the implementation of numeric initial effluent limits to be developed in a method consistent with the division's policy for current condition temporary modifications (Clean Water Policy 13). The DSV will expire on 6/30/2025.

A comprehensive alternatives analysis demonstrated that compliance with the ammonia WQBELs would cause substantial and widespread adverse social and economic impacts in the area where the discharge is located. Treatment that would allow the Town of Dove Creek to meet the ammonia WQBELs, such as replacing the lagoon with a mechanical plant, would result in user fees that exceed the community's ability to pay. The commission determined that any alternative that would result in user fees exceeding 1.25% of median household income for the Town of Dove Creek's residents was economically infeasible at this time, due to the current economic conditions in the Town of Dove Creek, including a high level of debt per capita and a local median household income that is significantly lower than the State's average.

The commission adopted a DSV with an AEL that is based upon the expected ammonia effluent quality that will be achieved through feasible improvements to the lagoon. There is some uncertainty in the final effluent quality that will be achieved. Dove Creek will collect additional data to characterize the effectiveness of the improvements, which the commission will review upon re-evaluation of the AEL. The commission expects that Dove Creek will submit a progress report for the commission's review of the DSV and the AEL at the June 2022 rulemaking hearing. The requirements of the DSV will be reviewed during the re-evaluation rulemaking hearing, and will either remain as the AEL identified at the time of the adoption of the variance or be modified to reflect the highest attainable condition. If a subsequent variance is warranted, the Town of Dove Creek may propose a new DSV at the December 2024 rulemaking hearing.

**34.54 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 14-15, 2021 RULEMAKING; FINAL ACTION AUGUST 9, 2021; EFFECTIVE DATE DECEMBER 31, 2021**

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

**BASIS AND PURPOSE**

**I. DISCHARGER-SPECIFIC VARIANCES**

The commission deleted subsections 34.6(4) (a) and (b), which described the regulatory basis and implementation of discharger-specific variances, because this information was revised and consolidated into 31.7(4).

**II. CLEANUP, CORRECTIONS, AND CLARIFICATIONS**

**A. Sulfate**

34.6(2)(b)(ii) was edited to clarify that the sulfate standard applies to dissolved sulfate concentrations. As an ion, sulfate is found in water only in the dissolved state; therefore, either unfiltered or filtered samples may be used to determine sulfate concentrations.

**B. Reformat Hardness-based Equations**

The following changes were made to the hardness-based table value standard equations at 34.6(3) to improve compatibility with Excel and align with corrections made to Regulation No. 31:

- Acute and chronic aluminum, chromium III, copper, lead, manganese, nickel, silver, uranium, and zinc: the first bracket was replaced with the symbol \* and the second bracket was deleted from the equation.
- Acute and chronic cadmium: extra spaces were removed.
- Acute and chronic lead: the brackets were deleted and a parenthesis was moved within the conversion factor.
- Acute silver:  $\frac{1}{2}$  was replaced with 0.5\* in the equation.

**C. Chromium Footnote**

The commission revised Footnote 6 of the Table Value Standards table to improve the clarity of the footnote, which directs the implementation of the trivalent (III) and hexavalent (VI) chromium standards when data for the individual valence states are unavailable. Chromium data are infrequently reported for chromium III and chromium VI individually. Instead, data are typically reported as the total of all valence states of chromium present in the sample. This is primarily due to the difficulty of accurately measuring chromium III concentrations and the instability of chromium when the sample is acidified for analysis of the total recoverable fraction. While chromium III and chromium VI are the valence states most often found in natural waters, chromium is unstable and can convert between forms in water and in the bodies of humans and aquatic life. However, chromium VI is more water soluble and a known carcinogen. Depending on the classified use, the chromium VI standards are the same as or more stringent than the chromium III standards (Table III). Therefore, when data for individual chromium species are unavailable, the use of the chromium VI standards to assess data reported as total chromium (i.e., the total of all valence states of chromium) will ensure protection of human health and aquatic life. In addition, Footnote 6 was modified to clarify that neither the sum of the concentrations of chromium III and chromium VI (when reported individually) nor the total chromium concentration (i.e., the total of all valence states of chromium) should exceed the Water Supply standards of 50 µg/L for chromium III and chromium VI in water bodies with a Water Supply use classification.

**D. Duration of Nitrite Aquatic Life Standard**

The commission corrected the duration of all nitrite standards with a value of 0.05 or 0.5 mg/L from acute to chronic on all segments. The nitrite standards in this basin pre-date the nitrite standards in Regulation No. 31 (chloride-based equations). There has been confusion in recent years regarding the correct duration for these standards. There is no record available that explains the basis for these standards or the intended duration (acute or chronic). Based upon a comparison with the nitrite standards in Regulation No. 31, nitrite values of 0.05 and 0.5 mg/L are more consistent with the chronic values calculated using the chloride-based equations. Also, the study that the commission relied upon when adopting the nitrite standards in Regulation No. 31 indicates that these values are protective as chronic standards (1986 Nitrogen Cycle Committee of the Basic Standards Review Task Force Proposed Nitrogenous Water Quality Standards for the State of Colorado). In order to resolve the inconsistencies in the duration of the nitrite standards currently adopted in Regulation Nos. 32-38, the commission determined that these nitrite values should be consistently listed as chronic standards. Over time, the commission expects that these nitrite standards may be replaced with the more recent and well-documented chloride equation-based standards in Regulation No. 31.

**E. Uranium**

To improve the clarity of the regulation, the commission included references to the basin-wide uranium standards at 34.5(3) in the Appendix 34-1 tables. For the acute and chronic uranium standards for all segments, the commission included a reference to 34.5(3) to clarify that the basic standard at 34.5(3) applies to all waters in Regulation No. 34. Because these standards already applied basin-wide, there is no practical effect of this change. This change brings the regulation into alignment with Regulation Nos. 32, 33, 36, 37, and 38; the commission made this change in those regulations during triennial reviews in 2018 through 2020.

## **F. Mercury**

To improve the clarity of the regulation, the commission added Total Recoverable notation (T) to the mercury Aquatic Life and Water Supply standards. The standards apply to the total recoverable fraction of all forms, both organic and inorganic, of mercury in water. Multiple forms of mercury exist in the environment and these forms differ dramatically in both their potential to cause toxic effects and their availability for uptake by organisms. Certain aquatic conditions can lead to the conversion to the highly bioaccumulative, toxic, organic form (methylmercury). The mercury standards are designed to provide protection from the accumulation of those toxic forms and therefore, the standards address all forms of mercury. The addition of the Total Recoverable notation does not represent a change in current Colorado policy or procedures. This change brings the regulation into alignment with Regulation Nos. 32, 33, 36, 37, and 38; the commission made this change in those regulations during triennial reviews in 2018 through 2020.

## **G. Housekeeping**

The following edits were made to improve clarity, correct typographical errors, and improve consistency across the basin regulations (Regulation Nos. 32-38) and with Regulation No. 31:

- All variations of *E. coli* were edited to display a consistent format in the regulation and appendix tables.
- At 34.5(2) 'Table B' was added to the reference to organic standards at 31.11 to align with changes to Regulation No. 31.
- At 34.6(1), text was added to clarify that the tables in Appendix 34-1 only show the most stringent standards, and that additional, less stringent standards may be found in Regulation No. 31.
- The reference to the 'temporary modification and qualifiers' column at 34.6(2)(c)(i) was replaced with 'Other' to align with a previous change to the appendix tables.
- References to "Trec" were replaced with "total recoverable" or "T".
- Footnote 4 of the Table Value Standards table was modified to clarify that the "T" in the chronic ammonia equations stands for temperature.
- Information was added at 34.6(5) specifying that the mercury standards apply to the total recoverable fraction of all forms, both organic and inorganic, of mercury in water. This change brings the regulation into alignment with Regulation Nos. 32, 33, 36, 37, and 38; the commission made this change in those regulations during triennial reviews in 2018 through 2020.
- Information was added at 34.6(5) specifying that the ammonia, nitrate, and nitrite standards are to be reported as nitrogen. This is consistent with the description of the standards as they are included in Table II of Regulation No. 31. This change brings the regulation into alignment with Regulation Nos. 33, 37, and 38; the commission made this change in those regulations during triennial reviews in 2019 through 2020.

- The formatting of the tables in Appendix 34-1 was modified to include only parameters that have been adopted in a majority of segments. The tables include rows for physical and biological, inorganic, and metals for all parameters which the commission commonly adopts into segments. In segments where there is no numeric standard for a commonly adopted parameter, a blank row for that parameter is included to show the commission's site-specific decision not to adopt a numeric standard for that parameter. The commission removed beryllium and aluminum from all segments where no standard has been adopted because these parameters have only been adopted on a site-specific basis, rather than basin-wide. This change brings the regulation into alignment with Regulation Nos. 32, 33, 36, 37, and 38; the commission made this change in those regulations during triennial reviews in 2018 through 2020.
- Other minor edits were made to improve clarity and consistency.

**COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT**  
**WATER QUALITY CONTROL COMMISSION**

**5 CCR 1002-34**

**REGULATION NO. 34**  
**CLASSIFICATIONS AND NUMERIC STANDARDS**  
**FOR**  
**SAN JUAN RIVER AND DOLORES RIVER BASINS**

**APPENDIX 34-1**  
**Stream Classifications and Water Quality Standards Tables**

Effective 12/31/2021



## Abbreviations and Acronyms

Aq	=	Aquatic
°C	=	degrees Celsius
CL	=	cold lake temperature tier
CLL	=	cold large lake temperature tier
CS-I	=	cold stream temperature tier one
CS-II	=	cold stream temperature tier two
D.O.	=	dissolved oxygen
DM	=	daily maximum temperature
DUWS	=	direct use water supply
E. coli	=	<i>Escherichia coli</i>
EQ	=	existing quality
mg/L	=	milligrams per liter
mg/m <sup>2</sup>	=	milligrams per square meter
mL	=	milliliter
MWAT	=	maximum weekly average temperature
OW	=	outstanding waters
sc	=	sculpin
SSE	=	site-specific equation
T	=	total recoverable
t	=	total
tr	=	trout
TVS	=	table value standard
µg/L	=	micrograms per liter
UP	=	use-protected
WS	=	water supply
WS-I	=	warm stream temperature tier one
WS-II	=	warm stream temperature tier two
WS-III	=	warm stream temperature tier three
WL	=	warm lake temperature tier

# **REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS** **San Juan River Basin**

1a. Mainstem of the Navajo River including all wetlands and tributaries from the boundary of the South San Juan Wilderness Area to below the confluence with Sheep Creek. Mainstem of the Little Navajo River, including all wetlands and tributaries, from the boundary of the South San Juan Wilderness Area to the San Juan-Chama Diversion.							
COSJSJ01A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
					Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVSWS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

1b. Mainstem of the Navajo River, including all wetlands and tributaries from below the confluence with Sheep Creek to the Colorado/New Mexico border, except for specific listings in Segment 3.							
COSJSJ01B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
					Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVSWS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

1b. Mainstem of the Navajo River, including all wetlands and tributaries from below the confluence with Sheep Creek to the Colorado/New Mexico border, except for specific listings in Segment 3.

COSJSJ01B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
*Uranium(acute) = See 34.5(3) for details.  *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

### San Juan River Basin

2. Mainstem of the Navajo River from the Colorado/New Mexico border to the confluence with the San Juan River.										
COSJSJ02	Classifications		Physical and Biological			Metals (ug/L)				
Designation	Agriculture		DM	MWAT	acute		chronic			
Reviewable	Aq Life Warm 1		Temperature °C	WS-II	WS-II	Arsenic	340	---		
	Recreation E			acute	chronic	Arsenic(T)	---	0.02		
	Water Supply		D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS		
Qualifiers:			D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---		
Other:  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024  *Southern Ute Indian Reservation *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.			pH	6.5 - 9.0	---	Chromium III	---	TVS		
			chlorophyll a (mg/m²)		---	150	Chromium III(T)	50	---	
			E. coli (per 100 mL)		---	126	Chromium VI	TVS	TVS	
						Copper			TVS	TVS
			Inorganic (mg/L)			Iron			---	WS
						acute	chronic	Iron(T)	---	1000
			Ammonia		TVS	TVS	Lead	TVS	TVS	
			Boron		---	0.75	Lead(T)	50	---	
			Chloride		---	250	Manganese	TVS	TVS/WS	
			Chlorine		0.019	0.011	Mercury(T)	---	0.01	
			Cyanide		0.005	---	Molybdenum(T)	---	150	
			Nitrate		10	---	Nickel	TVS	TVS	
			Nitrite		---	0.05	Nickel(T)	---	100	
			Phosphorus		---	0.17	Selenium	TVS	TVS	
			Sulfate		---	WS	Silver	TVS	TVS	
			Sulfide		---	0.002	Uranium	varies*	varies*	
								Zinc	TVS	TVS
3. Mainstem of the Little Navajo River from the San Juan-Chama diversion to the confluence with the Navajo River; all tributaries to the Navajo River and the Little Navajo River, including all wetlands, from the San Juan-Chama diversions to the confluence with the San Juan River.										
COSJSJ03	Classifications		Physical and Biological			Metals (ug/L)				
Designation	Agriculture		DM	MWAT	acute		chronic			
Reviewable	Aq Life Warm 2		Temperature °C	WS-II	WS-II	Arsenic	340	---		
	Recreation N			acute	chronic	Arsenic(T)	---	100		
	Recreation P		11/1 - 4/30	5/1 - 10/31	D.O. (mg/L)	---	5.0	Beryllium(T)	---	100
Qualifiers:			pH	6.5 - 9.0	---	Cadmium	TVS	TVS		
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.			chlorophyll a (mg/m²)		---	150	Chromium III	TVS	TVS	
			E. coli (per 100 mL)		5/1 - 10/31	---	205	Chromium III(T)	---	100
			E. coli (per 100 mL)		11/1 - 4/30	---	630	Chromium VI	TVS	TVS
						Copper			TVS	TVS
			Inorganic (mg/L)			Iron(T)			---	1000
						acute	chronic	Lead	TVS	TVS
			Ammonia		TVS	TVS	Manganese	TVS	TVS	
			Boron		---	0.75	Mercury(T)	---	0.01	
			Chloride		---	---	Molybdenum(T)	---	150	
			Chlorine		0.019	0.011	Nickel	TVS	TVS	
			Cyanide		0.005	---	Selenium	TVS	TVS	
			Nitrate		100	---	Silver	TVS	TVS	
			Nitrite		---	---	Uranium	varies*	varies*	
			Phosphorus		---	0.17	Zinc	TVS	TVS	
			Sulfate		---	---				
			Sulfide		---	0.002				

3. Mainstem of the Little Navajo River from the San Juan-Chama diversion to the confluence with the Navajo River; all tributaries to the Navajo River and the Little Navajo River, including all wetlands, from the San Juan-Chama diversions to the confluence with the San Juan River.								
COSJSJ03	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Arsenic	340	---	
	Recreation N	11/1 - 4/30	acute	chronic	Arsenic(T)	---	100	
	Recreation P	5/1 - 10/31	D.O. (mg/L)	---	5.0	Beryllium(T)	---	100
Qualifiers:		pH	6.5 - 9.0	---	Cadmium	TVS	TVS	
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150	Chromium III	TVS	TVS	
		E. coli (per 100 mL)	5/1 - 10/31	---	205	Chromium III(T)	---	100
		E. coli (per 100 mL)	11/1 - 4/30	---	630	Chromium VI	TVS	TVS
					Copper	TVS	TVS	
		Inorganic (mg/L)			Iron(T)	---	1000	
					Lead	TVS	TVS	
					ammonia	TVS	TVS	
					Boron	---	0.75	
					Chloride	---	---	
					Chlorine	0.019	0.011	
					Cyanide	0.005	---	
					Nitrate	100	---	
					Nitrite	---	---	
					Phosphorus	---	0.17	
					Sulfate	---	---	
					Sulfide	---	0.002	

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# **REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS** **San Juan River Basin**

4. All tributaries to the San Juan River, Rio Blanco, and Navajo River including all wetlands which are within the Weminuche Wilderness area and South San Juan Wilderness Area.						
COSJSJ04	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
OW	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Expiration Date of 12/31/2024		Inorganic (mg/L)		Copper	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		acute	chronic	Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.11	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS
						TVS

  

5. The East and West Forks of the San Juan River, including all tributaries, from the boundary of the Weminuche Wilderness Area (West Fork) and the source (East Fork) to the confluence of the mainstem of the San Juan River. All tributaries to the San Juan River from a point below the confluence with the West Fork to a point below the confluence with Fourmile Creek.						
COSJSJ05	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Chromium III(T)	50
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Expiration Date of 12/31/2024		Inorganic (mg/L)		Copper	TVS	TVS
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 34.5(5).		acute	chronic	Iron	---	WS
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).		Ammonia	TVS	TVS	Iron(T)	---
*Uranium(acute) = See 34.5(3) for details.		Boron	---	0.75	Lead	TVS
*Uranium(chronic) = See 34.5(3) for details.		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.11*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS
						TVS(sc)

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS San Juan River Basin

6a. Mainstem of the San Juan River from a point immediately below the confluence with the West Fork to Highway 160 in Pagosa Springs.							
COSJSJ06A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m²)	---	150*	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024					Copper	TVS	TVS
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5).		Inorganic (mg/L)			Iron	---	WS
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).			acute	chronic	Iron(T)	---	1000
*Uranium(acute) = See 34.5(3) for details.		Ammonia	TVS	TVS	Lead	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS(sc)

6b. Mainstem of the San Juan River from Highway 160 in Pagosa Springs to the Southern Ute Indian Reservation Northern boundary. Mainstem of Mill Creek from the source to the confluence with the San Juan River.								
COSJSJ06B	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	11/1 - 3/31	CS-II	CS-II	Arsenic	340	---
	Recreation E	Temperature °C	4/1 - 10/31	varies*	varies* <sup>C</sup>	Arsenic(T)	---	0.02
	Water Supply					Cadmium	TVS	TVS
Qualifiers:			acute	chronic	Cadmium(T)	5.0	---	
Other:		D.O. (mg/L)	---	6.0	Chromium III	---	TVS	
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5).		D.O. (spawning)	---	7.0	Chromium III(T)	50	---	
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).		pH	6.5 - 9.0	---	Chromium VI	TVS	TVS	
*Uranium(acute) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150*	Copper	TVS	TVS	
*Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL)	---	126	Iron	---	WS	
*Temperature(4/1 - 10/31) = San Juan River MWAT=21.4 and DM=26.2					Iron(T)	---	1000	
Mill Creek MWAT=21.1 and DM=27.8		Inorganic (mg/L)			Lead	TVS	TVS	
See Section 34.6(6) for assessment locations.			acute	chronic	Lead(T)	50	---	
		Ammonia	TVS	TVS	Manganese	TVS	TVS/WS	
		Boron	---	0.75	Mercury(T)	---	0.01	
		Chloride	---	250	Molybdenum(T)	---	150	
		Chlorine	0.019	0.011	Nickel	TVS	TVS	
		Cyanide	0.005	---	Nickel(T)	---	100	
		Nitrate	10	---	Selenium	TVS	TVS	
		Nitrite	---	0.05	Silver	TVS	TVS(tr)	
		Phosphorus	---	0.11*	Uranium	varies*	varies*	
		Sulfate	---	WS	Zinc	TVS	TVS(sc)	
		Sulfide	---	0.002				

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## San Juan River Basin

6c. Mainstem of the San Juan River from the Southern Ute Indian Reservation northern boundary to the confluence with Taylor Canyon.

COSJSJ06C	Classifications	Physical and Biological				Metals (ug/L)		
Designation	Agriculture	DM		MWAT		acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	11/1 - 3/31	CS-II	CS-II	Arsenic	340	---
	Recreation E	Temperature °C	4/1 - 10/31	26.4*	22.1* C	Arsenic(T)	---	0.02
	Water Supply					Cadmium	TVS	TVS
<b>Qualifiers:</b>						Cadmium(T)	5.0	---
<b>Other:</b>						Chromium III	---	TVS
		D.O. (mg/L)		---	6.0	Chromium III(T)	50	---
		D.O. (spawning)		---	7.0	Chromium VI	TVS	TVS
		pH	6.5 - 9.0	---		Copper	TVS	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	---		Iron	---	WS
		E. coli (per 100 mL)	---	126		Iron(T)	---	1000
						Lead	TVS	TVS
		<b>Inorganic (mg/L)</b>				Lead(T)	50	---
						Manganese	TVS	TVS/WS
						Mercury(T)	---	0.01
		Ammonia	TVS	TVS		Molybdenum(T)	---	150
		Boron	---	0.75		Nickel	TVS	TVS
		Chloride	---	250		Nickel(T)	---	100
		Chlorine	0.019	0.011		Selenium	TVS	TVS
		Cyanide	0.005	---		Silver	TVS	TVS(tr)
		Nitrate	10	---		Uranium	varies*	varies*
		Nitrite	---	0.05		Zinc	TVS	TVS
		Phosphorus	---	---				
		Sulfate	---	WS				
		Sulfide	---	0.002				

6d. Mainstem of the San Juan River from the confluence with Taylor Canyon to the confluence with the Rio Blanco.

COSJSJ06D	Classifications	Physical and Biological				Metals (ug/L)		
Designation	Agriculture	DM		MWAT		acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	11/1 - 3/31	CS-II	CS-II	Arsenic	340	---
	Recreation E	Temperature °C	4/1 - 10/31	27.1*	22.5* C	Arsenic(T)	---	0.02
	Water Supply					Cadmium	TVS	TVS
<b>Qualifiers:</b>						Cadmium(T)	5.0	---
<b>Other:</b>						Chromium III	---	TVS
		D.O. (mg/L)		---	6.0	Chromium III(T)	50	---
		D.O. (spawning)		---	7.0	Chromium VI	TVS	TVS
		pH	6.5 - 9.0	---		Copper	TVS	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	---		Iron	---	WS
		E. coli (per 100 mL)	---	126		Iron(T)	---	1000
						Lead	TVS	TVS
		<b>Inorganic (mg/L)</b>				Lead(T)	50	---
						Manganese	TVS	TVS/WS
		Ammonia	TVS	TVS		Mercury(T)	---	0.01
		Boron	---	0.75		Molybdenum(T)	---	150
		Chloride	---	250		Nickel	TVS	TVS
		Chlorine	0.019	0.011		Nickel(T)	---	100
		Cyanide	0.005	---		Selenium	TVS	TVS
		Nitrate	10	---		Silver	TVS	TVS(tr)
		Nitrite	---	0.05		Uranium	varies*	varies*
		Phosphorus	---	---		Zinc	TVS	TVS
		Sulfate	---	WS				
		Sulfide	---	0.002				

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS San Juan River Basin

6e. Mainstem of the San Juan River from the confluence with the Rio Blanco to the confluence with the Navajo River.									
COSJSJ06E	Classifications	Physical and Biological				Metals (ug/L)			
Designation	Agriculture			DM	MWAT	acute		chronic	
Reviewable	Aq Life Cold 1	Temperature °C	11/1 - 3/31	CS-II	CS-II	Arsenic	340	---	
	Recreation E	Temperature °C	4/1 - 10/31	28.7*	23.5* C	Arsenic(T)	---	0.02	
	Water Supply					Cadmium	TVS	TVS	
Qualifiers:				acute	chronic	Cadmium(T)	5.0	---	
Other:  *Southern Ute Indian Reservation *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details. *Temperature(4/1 - 10/31) = See Section 34.6(6) for assessment locations.		D.O. (mg/L)			---	6.0	Chromium III	---	TVS
		D.O. (spawning)			---	7.0	Chromium III(T)	50	---
		pH			6.5 - 9.0	---	Chromium VI	TVS	TVS
		chlorophyll a (mg/m²)			---	---	Copper	TVS	TVS
		E. coli (per 100 mL)			---	126	Iron	---	WS
							Iron(T)	---	1000
		Inorganic (mg/L)					Lead	TVS	TVS
				acute	chronic	Lead(T)	50	---	
		Ammonia			TVS	TVS	Manganese	TVS	TVSWS
		Boron			---	0.75	Mercury(T)	---	0.01
		Chloride			---	250	Molybdenum(T)	---	150
		Chlorine			0.019	0.011	Nickel	TVS	TVS
		Cyanide			0.005	---	Nickel(T)	---	100
		Nitrate			10	---	Selenium	TVS	TVS
		Nitrite			---	0.05	Silver	TVS	TVS(tr)
		Phosphorus			---	---	Uranium	varies*	varies*
		Sulfate			---	WS	Zinc	TVS	TVS
		Sulfide			---	0.002			

6f. Mainstem of the San Juan River from the confluence with the Navajo River to Navajo Reservoir.									
COSJSJ06F	Classifications	Physical and Biological				Metals (ug/L)			
Designation	Agriculture			DM	MWAT	acute		chronic	
Reviewable	Aq Life Cold 1	Temperature °C	11/1 - 3/31	CS-II	CS-II	Arsenic	340	---	
	Recreation E	Temperature °C	4/1 - 10/31	28.8*	24.2* C	Arsenic(T)	---	0.02	
	Water Supply					Cadmium	TVS	TVS	
Qualifiers:				acute	chronic	Cadmium(T)	5.0	---	
Other:  *Southern Ute Indian Reservation *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details. *Temperature(4/1 - 10/31) = See Section 34.6(6) for assessment locations.		D.O. (mg/L)			---	6.0	Chromium III	---	TVS
		D.O. (spawning)			---	7.0	Chromium III(T)	50	---
		pH			6.5 - 9.0	---	Chromium VI	TVS	TVS
		chlorophyll a (mg/m²)			---	---	Copper	TVS	TVS
		E. coli (per 100 mL)			---	126	Iron	---	WS
							Iron(T)	---	1000
		Inorganic (mg/L)					Lead	TVS	TVS
				acute	chronic	Lead(T)	50	---	
		Ammonia			TVS	TVS	Manganese	TVS	TVSWS
		Boron			---	0.75	Mercury(T)	---	0.01
		Chloride			---	250	Molybdenum(T)	---	150
		Chlorine			0.019	0.011	Nickel	TVS	TVS
		Cyanide			0.005	---	Nickel(T)	---	100
		Nitrate			10	---	Selenium	TVS	TVS
		Nitrite			---	0.05	Silver	TVS	TVS(tr)
		Phosphorus			---	---	Uranium	varies*	varies*
		Sulfate			---	WS	Zinc	TVS	TVS
		Sulfide			---	0.002			

6f. Mainstem of the San Juan River from the confluence with the Navajo River to Navajo Reservoir.									
COSJSJ06F	Classifications	Physical and Biological				Metals (ug/L)			
Designation	Agriculture			DM	MWAT			acute	chronic
Reviewable	Aq Life Cold 1	Temperature °C	11/1 - 3/31	CS-II	CS-II	Arsenic		340	---
	Recreation E	Temperature °C	4/1 - 10/31	28.8*	24.2* C	Arsenic(T)		---	0.02
	Water Supply					Cadmium		TVS	TVS
Qualifiers:				acute	chronic	Cadmium(T)		5.0	---
<b>Other:</b>  *Southern Ute Indian Reservation *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details. *Temperature(4/1 - 10/31) = See Section 34.6(6) for assessment locations.		D.O. (mg/L)		---	6.0	Chromium III		---	TVS
		D.O. (spawning)		---	7.0	Chromium III(T)		50	---
		pH		6.5 - 9.0	---	Chromium VI		TVS	TVS
		chlorophyll a (mg/m²)		---	---	Copper		TVS	TVS
		E. coli (per 100 mL)		---	126	Iron		---	WS
						Iron(T)		---	1000
		Inorganic (mg/L)				Lead		TVS	TVS
				acute	chronic	Lead(T)		50	---
		Ammonia		TVS	TVS	Manganese		TVS	TVS/WS
		Boron		---	0.75	Mercury(T)		---	0.01
		Chloride		---	250	Molybdenum(T)		---	150
		Chlorine		0.019	0.011	Nickel		TVS	TVS
		Cyanide		0.005	---	Nickel(T)		---	100
		Nitrate		10	---	Selenium		TVS	TVS
		Nitrite		---	0.05	Silver		TVS	TVS(tr)
		Phosphorus		---	---	Uranium		varies*	varies*
		Sulfate		---	WS	Zinc		TVS	TVS
		Sulfide		---	0.002				

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS San Juan River Basin

7. Mainstem of the Rio Blanco, including all tributaries and wetlands, from the boundary of the South San Juan Wilderness Area to below the confluence with Leche Creek.						
COSJSJ07	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury(T)	---
					Molybdenum(T)	---
					Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	varies*
					Zinc	TVS
						TVS(sc)

8. Navajo Reservoir. Echo Canyon Reservoir.

COSJSJ08	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Warm 1	Temperature °C	WL	WL	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0
Other:		chlorophyll a (ug/L)	---	20*	Chromium III	---
		E. coli (per 100 mL)	---	126	Chromium III(T)	50
					Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury(T)	---
					Molybdenum(T)	---
					Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.



# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS San Juan River Basin

9a. Mainstem of the Rio Blanco, including all tributaries and wetlands, from a point immediately below the confluence with Leche Creek to the Southern Ute Indian Reservation boundary, except for specific listings in Segment 10.						
COSJSJ09A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Expiration Date of 12/31/2024					Copper	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)			Iron	---
*Uranium(chronic) = See 34.5(3) for details.		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS

9b. Mainstem of the Rio Blanco, including all tributaries and wetlands, from the boundary of the Southern Ute Indian Reservation to the confluence with the San Juan River.						
COSJSJ09B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
*Southern Ute Indian Reservation		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
*Uranium(acute) = See 34.5(3) for details.		E. coli (per 100 mL)	---	126	Chromium VI	TVS
*Uranium(chronic) = See 34.5(3) for details.					Copper	TVS
		Inorganic (mg/L)			Iron	---
		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

### San Juan River Basin

10. Mainstem of the Rito Blanco River from Echo Ditch to the confluence with the Rio Blanco River.						
COSJSJ10	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02-10 <sup>A</sup>
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
					Copper	TVS
		Inorganic (mg/L)			Iron	---
		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS

11a. All tributaries to the San Juan River, including wetlands, from a point immediately below the confluence with Fourmile Creek to the Southern Ute Indian Reservation boundary except for the specific listings in Segments 6a, 6b, 9a, 9b and 11c.

COSJSJ11A	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Warm 1	Temperature °C	WS-II	WS-II	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Recreation N	D.O. (mg/L)	---	5.0	Cadmium	TVS
	Water Supply	pH	6.5 - 9.0	---	Cadmium(T)	5.0
Qualifiers:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III	---
Other:		E. coli (per 100 mL)	5/1 - 10/31	---	Chromium III(T)	50
		E. coli (per 100 mL)	11/1 - 4/30	---	Chromium VI	TVS
					Copper	TVS
		Inorganic (mg/L)			Iron	---
		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS San Juan River Basin

11b. All tributaries to the San Juan River, including wetlands, from the Southern Ute Indian Reservation boundary to the Colorado/New Mexico border except for the specific listings in Segments 6a, 6b, 9a and 9b. Sambrito Creek, Scaggs Canyon, Sandoval Canyon and other unnamed tributaries that flow directly into Navajo Reservoir.

COSJSJ11B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 1	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation E 5/1 - 10/31		acute	chronic	Arsenic(T)	---	0.02
	Recreation N 11/1 - 4/30	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
	Water Supply	pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
Qualifiers:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III	TVS	TVS
Other:		E. coli (per 100 mL) 5/1 - 10/31	---	126	Chromium III(T)	---	100
		E. coli (per 100 mL) 11/1 - 4/30	---	630	Chromium VI	TVS	TVS
*Southern Ute Indian Reservation					Copper	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.					Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.					Iron(T)	---	1000
			Inorganic (mg/L)		Lead	TVS	TVS
			acute	chronic	Lead(T)	50	---
		Ammonia	TVS	TVS	Manganese	TVS	TVSWS
		Boron	---	0.75	Mercury(T)	---	0.01
		Chloride	---	250	Molybdenum(T)	---	150
		Chlorine	0.019	0.011	Nickel	TVS	TVS
		Cyanide	0.005	---	Nickel(T)	---	100
		Nitrate	10	---	Selenium	TVS	TVS
		Nitrite	---	0.05	Silver	TVS	TVS
		Phosphorus	---	0.17	Uranium	varies*	varies*
		Sulfate	---	WS	Zinc	TVS	TVS
		Sulfide	---	0.002			

11c. McCabe Creek from the source to the confluence with the San Juan River.

COSJSJ11C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	Temperature °C 11/1 - 3/31	CS-II	CS-II	Arsenic	340	---
	Recreation E	Temperature °C 4/1 - 10/31	25.1*	21.6* <sup>C</sup>	Arsenic(T)	---	0.02
	Water Supply				Cadmium	TVS	TVS
Qualifiers:			acute	chronic	Cadmium(T)	5.0	---
Other:		D.O. (mg/L)	---	5.0	Chromium III	---	TVS
Temporary Modification(s):		pH	6.5 - 9.0	---	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024		E. coli (per 100 mL)	---	126	Copper	TVS	TVS
			Inorganic (mg/L)		Iron	---	WS
			acute	chronic	Iron(T)	---	1000
*Uranium(acute) = See 34.5(3) for details.		Ammonia	TVS	TVS	Lead	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		Boron	---	0.75	Lead(T)	50	---
*Temperature(4/1 - 10/31) = See Section 34.6(6) for assessment locations.		Chloride	---	250	Manganese	TVS	TVSWS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

12. All tributaries to the San Juan River in Archuleta County, including all wetlands, except for specific listings in Segments 1a, 1b, 2, 3, 4, 5, 6a, 6b, 7, 9a, 9b, 10, 11a, 11b and 12b. This segment includes Coyote Creek from its source to the Colorado/New Mexico border.							
<b>COSJSJ12</b>	<b>Classifications</b>	<b>Physical and Biological</b>			<b>Metals (ug/L)</b>		
<b>Designation</b>	Agriculture	<b>DM</b>	<b>MWAT</b>	<b>acute</b>	<b>chronic</b>		
Reviewable	Aq Life Warm 2	Temperature °C	WS-III	WS-III	Arsenic	340 ---	
	Recreation N 11/1 - 4/30	<b>acute</b>	<b>chronic</b>	Arsenic(T)	---	7.6	
	Recreation P 5/1 - 10/31	D.O. (mg/L)	---	5.0	Beryllium(T)	---	100
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Cadmium	TVS TVS	
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III	---	TVS
*Uranium(acute) = See 34.5(3) for details.		E. coli (per 100 mL) 5/1 - 10/31	---	205	Chromium III(T)	---	100
*Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL) 11/1 - 4/30	---	630	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		<b>Inorganic (mg/L)</b>			Iron(T)	---	1000
		<b>acute</b>	<b>chronic</b>	Lead	TVS	TVS	
		Ammonia	TVS	TVS	Manganese	TVS	TVS
		Boron	---	0.75	Mercury(T)	---	0.01
		Chloride	---	---	Molybdenum(T)	---	150
		Chlorine	0.019	0.011	Nickel	TVS	TVS
		Cyanide	0.005	---	Selenium	TVS	TVS
		Nitrate	100	---	Silver	TVS	TVS
		Nitrite	---	---	Uranium	varies*	varies*
		Phosphorus	---	0.17	Zinc	TVS	TVS
		Sulfate	---	---			
		Sulfide	---	0.002			

13. All lakes and reservoirs that are tributary to the mainstem of the Navajo River and the Little Navajo River, from the boundary of the South San Juan Wilderness Area to the Colorado/New Mexico border, except for specific listings in Segment 14. This segment includes Gardner Lake, Fall View Lake, Hidden Lake, Dolomite Lake, Bull Elk Pond, Price Lakes, and Spence Reservoir.

COSJSJ13	Classifications	Physical and Biological			Metals (ug/L)		
<b>Designation</b>	Agriculture		<b>DM</b>	<b>MWAT</b>		<b>acute</b>	<b>chronic</b>
Reviewable	Aq Life Cold 1	Temperature °C	CL	CL	Arsenic	340	---
	Recreation E		<b>acute</b>	<b>chronic</b>	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
<b>Other:</b>  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		<b>Inorganic (mg/L)</b>			Iron	---	WS
			<b>acute</b>	<b>chronic</b>	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.025*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS San Juan River Basin

14. All lakes and reservoirs that are tributary to the Navajo River and the Little Navajo River, from the San Juan-Chama diversions to the confluence with the San Juan River.												
COSJSJ14	Classifications		Physical and Biological			Metals (ug/L)						
Designation	Agriculture			DM	MWAT		acute	chronic				
Reviewable	Aq Life Warm 2		Temperature °C	WL	WL	Arsenic	340	---				
	Recreation N            11/1 - 4/30			acute	chronic	Arsenic(T)	---	100				
	Recreation P            5/1 - 10/31		D.O. (mg/L)	---	5.0	Beryllium(T)	---	100				
Qualifiers:			pH	6.5 - 9.0	---	Cadmium	TVS	TVS				
Other:  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.			chlorophyll a (ug/L)	---	20*	Chromium III	TVS	TVS				
			E. coli (per 100 mL)	5/1 - 10/31	---	205	Chromium III(T)	---	100			
			E. coli (per 100 mL)	11/1 - 4/30	---	630	Chromium VI	TVS	TVS			
						Copper			TVS	TVS		
						Lead			TVS	TVS		
			Inorganic (mg/L)						Manganese	TVS	TVS	
						acute	chronic	Mercury(T)			---	0.01
			Ammonia			TVS	TVS	Molybdenum(T)			---	150
			Boron			---	0.75	Nickel			TVS	TVS
			Chloride			---	---	Selenium			TVS	TVS
			Chlorine			0.019	0.011	Silver			TVS	TVS
			Cyanide			0.005	---	Uranium			varies*	varies*
			Nitrate			100	---	Zinc			TVS	TVS
			Nitrite			---	---					
			Phosphorus			---	0.083*					
			Sulfate			---	---					
Sulfide			---	0.002								
15a. All lakes and reservoirs which are tributary to the Rio Blanco, from the boundary of South San Juan Wilderness Area to the Southern Ute Indian Reservation boundary. This segment includes Harris Lake, Buckles Lake, and Crescent Lake.												
COSJSJ15A	Classifications		Physical and Biological			Metals (ug/L)						
Designation	Agriculture			DM	MWAT		acute	chronic				
Reviewable	Aq Life Cold 1		Temperature °C	CL	CL	Arsenic	340	---				
	Recreation E			acute	chronic	Arsenic(T)	---	0.02				
	Water Supply		D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS				
Qualifiers:			D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---				
Other:  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.			pH	6.5 - 9.0	---	Chromium III	---	TVS				
			chlorophyll a (ug/L)	---	8*	Chromium III(T)	50	---				
			E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS				
						Copper			TVS	TVS		
						Iron			---	WS		
			Inorganic (mg/L)						Iron(T)	---	1000	
						acute	chronic	Lead			TVS	TVS
			Ammonia			TVS	TVS	Lead(T)			50	---
			Boron			---	0.75	Manganese			TVS	TVS/WS
			Chloride			---	250	Mercury(T)			---	0.01
			Chlorine			0.019	0.011	Molybdenum(T)			---	150
			Cyanide			0.005	---	Nickel			TVS	TVS
			Nitrate			10	---	Nickel(T)			---	100
			Nitrite			---	0.05	Selenium			TVS	TVS
			Phosphorus			---	0.025*	Silver			TVS	TVS(tr)
			Sulfate			---	WS	Uranium			varies*	varies*
Sulfide			---	0.002	Zinc			TVS	TVS			

15a. All lakes and reservoirs which are tributary to the Rio Blanco, from the boundary of South San Juan Wilderness Area to the Southern Ute Indian Reservation boundary. This segment includes Harris Lake, Buckles Lake, and Crescent Lake.						
COSJSJ15A	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CL CL	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	---
Other:		pH	6.5 - 9.0	---	Chromium III	TVS
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
		Inorganic (mg/L)		Copper	TVS	TVS
		acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	---
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.025*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS

\*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.  
\*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.  
\*Uranium(acute) = See 34.5(3) for details.  
\*Uranium(chronic) = See 34.5(3) for details.

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS San Juan River Basin

15b. All lakes and reservoirs which are tributary to the Rio Blanco, from the boundary of the Southern Ute Indian Reservation to the confluence with the San Juan River.							
COSJSJ15B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CL	CL	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Southern Ute Indian Reservation *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVSWS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.025*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

16. All lakes and reservoirs which are tributary to the San Juan River, Rio Blanco, and Navajo River and located within the Weminuche Wilderness Area and South San Juan Wilderness Area. This segment includes Archuleta Lake, Spruce Lakes, Turkey Creek Lake, Fourmile Lake, Upper Fourmile Lake, Crater Lake, Quartz Lake, Fish Lake, and Opal Lake.							
COSJSJ16	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
OW	Aq Life Cold 1	Temperature °C	CL	CL	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVSWS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.025*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS San Juan River Basin

17. All lakes and reservoirs that are tributary to the San Juan River and the East Fork and West Fork of the San Juan River, from the boundary of the Weminuche Wilderness Area (West Fork) and the source (East Fork) to the confluence with Fourmile Creek. This segment includes Born Lake, Hatcher Lakes, T Lazy T Reservoir, and Lost Lake.							
COSJSJ17	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CL	CL	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVSWS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.025*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS San Juan River Basin

18b. All lakes and reservoirs which are tributary to the San Juan River from the Southern Ute Indian Reservation boundary to the Colorado/New Mexico border, except for the specific listing in Segment 8.										
COSJSJ18B	Classifications	Physical and Biological			Metals (ug/L)					
Designation	Agriculture		DM	MWAT	acute	chronic				
Reviewable	Aq Life Warm 1	Temperature °C	WL	WL	Arsenic	340	---			
	Recreation E	5/1 - 10/31	acute	chronic	Arsenic(T)	---	7.6			
	Recreation N	11/1 - 4/30	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS		
			pH	6.5 - 9.0	---	Chromium III	TVS	TVS		
Qualifiers:					chlorophyll a (ug/L)	---	20*	Chromium III(T)	---	100
Other:  *Southern Ute Indian Reservation *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL)	5/1 - 10/31	---	126	Chromium VI	TVS	TVS		
		E. coli (per 100 mL)	11/1 - 4/30	---	630	Copper	TVS	TVS		
						Lead	TVS	TVS		
		Inorganic (mg/L)				Manganese	TVS	TVS		
			acute	chronic		Mercury(T)	---	0.01		
		Ammonia	TVS	TVS		Molybdenum(T)	---	150		
		Boron	---	0.75		Nickel	TVS	TVS		
		Chloride	---	---		Selenium	TVS	TVS		
		Chlorine	0.019	0.011		Silver	TVS	TVS(tr)		
		Cyanide	0.005	---		Uranium	varies*	varies*		
		Nitrate	100	---		Zinc	TVS	TVS		
		Nitrite	---	0.05						
		Phosphorus	---	0.083*						
		Sulfate	---	---						
Sulfide	---	0.002								
19. All lakes and reservoirs in Archuleta County which are tributary to the San Juan River, except for specific listings in Segment 18b. All lakes and reservoirs which are tributary to Coyote Creek from its source to the Colorado/New Mexico border.										
COSJSJ19	Classifications	Physical and Biological			Metals (ug/L)					
Designation	Agriculture		DM	MWAT	acute	chronic				
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	Arsenic	340	---			
	Recreation N	11/1 - 4/30	acute	chronic	Arsenic(T)	---	7.6			
	Recreation P	5/1 - 10/31	D.O. (mg/L)	---	5.0	Beryllium(T)	---	100		
			pH	6.5 - 9.0	---	Cadmium	TVS	TVS		
Qualifiers:					chlorophyll a (ug/L)	---	20*	Chromium III	---	TVS
Fish Ingestion  Other:  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL)	5/1 - 10/31	---	205	Chromium III(T)	100	---		
		E. coli (per 100 mL)	11/1 - 4/30	---	630	Chromium VI	TVS	TVS		
						Copper	TVS	TVS		
		Inorganic (mg/L)				Iron(T)	---	1000		
			acute	chronic		Lead	TVS	TVS		
		Ammonia	TVS	TVS		Manganese	TVS	TVS		
		Boron	---	0.75		Mercury(T)	---	0.01		
		Chloride	---	---		Molybdenum(T)	---	150		
		Chlorine	0.019	0.011		Nickel	TVS	TVS		
		Cyanide	0.005	---		Selenium	TVS	TVS		
		Nitrate	100	---		Silver	TVS	TVS		
		Nitrite	---	---		Uranium	varies*	varies*		
		Phosphorus	---	0.083*		Zinc	TVS	TVS		
		Sulfate	---	---						
Sulfide	---	0.002								

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.



## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

### Piedra River Basin

1. All tributaries to the Piedra River, including all wetlands, which are within the Weminuche Wilderness Area.						
COSJPI01	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
OW	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Expiration Date of 12/31/2024				Copper	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)		Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
				Zinc	TVS	TVS

  

2a. East Fork Piedra River and Middle Fork Piedra River, including all tributaries and wetlands, from the boundary of the Weminuche Wilderness Area to the confluence with the mainstem of the Piedra River, except for the specific listing in Segment 3.						
COSJPI02A	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Recreation N	D.O. (mg/L)	---	6.0	Cadmium	TVS
	Water Supply	D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Qualifiers:		pH	6.5 - 9.0	---	Chromium III	---
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Temporary Modification(s):		E. coli (per 100 mL)	4/1 - 10/31	---	Chromium VI	TVS
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	11/1 - 3/31	---	Copper	TVS
Expiration Date of 12/31/2024		Inorganic (mg/L)		Iron	---	WS
*Uranium(acute) = See 34.5(3) for details.		acute	chronic	Iron(T)	---	1000
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
				Zinc	TVS	TVS(sc)

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Piedra River Basin

2b. Mainstem of the Piedra River from the confluence with the East and Middle Forks to the confluence with Indian Creek.						
COSJPI02B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	CS-II	CS-II	Arsenic	340	---
	Recreation E 4/1 - 10/31	acute	chronic	Arsenic(T)	---	0.02
	Recreation N 11/1 - 3/31	---	6.0	Cadmium	TVS	TVS
	Water Supply	---	7.0	Cadmium(T)	5.0	---
Qualifiers:		pH	6.5 - 9.0	Chromium III	---	TVS
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	Chromium III(T)	50	---
		E. coli (per 100 mL) 4/1 - 10/31	---	Chromium VI	TVS	TVS
		E. coli (per 100 mL) 11/1 - 3/31	---	Copper	TVS	TVS
		Inorganic (mg/L)		Iron	---	WS
		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	Lead	TVS	TVS
		Boron	---	Lead(T)	50	---
		Chloride	---	Manganese	TVS	TVS/WS
		Chlorine	0.019	Mercury(T)	---	0.01
		Cyanide	0.005	Molybdenum(T)	---	150
		Nitrate	10	Nickel	TVS	TVS
		Nitrite	---	Nickel(T)	---	100
		Phosphorus	---	Selenium	TVS	TVS
		Sulfate	---	Silver	TVS	TVS(tr)
		Sulfide	---	Uranium	varies*	varies*
				Zinc	TVS	TVS(sc)

  

3. Mainstem of the East Fork of the Piedra River from the Piedra Falls Ditch to the confluence with Pagosa Creek.						
COSJPI03	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	CS-I	CS-I	Arsenic	340	---
	Recreation E 4/1 - 10/31	acute	chronic	Arsenic(T)	---	0.02
	Recreation N 11/1 - 3/31	---	6.0	Cadmium	TVS	TVS
	Water Supply	---	7.0	Cadmium(T)	5.0	---
Qualifiers:		pH	6.5 - 9.0	Chromium III	---	TVS
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	Chromium III(T)	50	---
		E. coli (per 100 mL) 4/1 - 10/31	---	Chromium VI	TVS	TVS
		E. coli (per 100 mL) 11/1 - 3/31	---	Copper	TVS	TVS
		Inorganic (mg/L)		Iron	---	WS
		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	Lead	TVS	TVS
		Boron	---	Lead(T)	50	---
		Chloride	---	Manganese	TVS	TVS/WS
		Chlorine	0.019	Mercury(T)	---	0.01
		Cyanide	0.005	Molybdenum(T)	---	150
		Nitrate	10	Nickel	TVS	TVS
		Nitrite	---	Nickel(T)	---	100
		Phosphorus	---	Selenium	TVS	TVS
		Sulfate	---	Silver	TVS	TVS(tr)
		Sulfide	---	Uranium	varies*	varies*
				Zinc	TVS	TVS(sc)

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Piedra River Basin

4a. Mainstem of the Piedra River from a point immediately below the confluence with Indian Creek to the Southern Ute Indian Reservation boundary. Devil Creek from Dunagan Canyon to the confluence with the Piedra River.

COSJPI04A	Classifications	Physical and Biological				Metals (ug/L)		
Designation	Agriculture	DM		MWAT		acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	11/1 - 3/31	CS-II	CS-II	Arsenic	340	---
	Recreation E	Temperature °C	4/1 - 10/31	varies*	varies* <sup>C</sup>	Arsenic(T)	---	0.02
	Water Supply					Cadmium	TVS	TVS
<b>Qualifiers:</b>				<b>acute</b>	<b>chronic</b>	Cadmium(T)	5.0	---
<b>Other:</b>		D.O. (mg/L)	---	6.0		Chromium III	---	TVS
		D.O. (spawning)	---	7.0		Chromium III(T)	50	---
		pH	6.5 - 9.0	---		Chromium VI	TVS	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150		Copper	TVS	TVS
		E. coli (per 100 mL)	---	126		Iron	---	WS
						Iron(T)	---	1000
		<b>Inorganic (mg/L)</b>				Lead	TVS	TVS
				<b>acute</b>	<b>chronic</b>	Lead(T)	50	---
		Ammonia	TVS	TVS		Manganese	TVS	TVSWS
		Boron	---	0.75		Mercury(T)	---	0.01
		Chloride	---	250		Molybdenum(T)	---	150
		Chlorine	0.019	0.011		Nickel	TVS	TVS
		Cyanide	0.005	---		Nickel(T)	---	100
		Nitrate	10	---		Selenium	TVS	TVS
		Nitrite	---	0.05		Silver	TVS	TVS(tr)
		Phosphorus	---	0.11		Uranium	varies*	varies*
		Sulfate	---	WS		Zinc	TVS	TVS(sc)
		Sulfide	---	0.002				

4b. Mainstem of the Piedra River from the Southern Ute Indian Reservation boundary to a point above the confluence with Stollsteimer Creek.

COSJPI04B	Classifications	Physical and Biological				Metals (ug/L)		
Designation	Agriculture	DM		MWAT		acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	11/1 - 3/31	CS-II	CS-II	Arsenic	340	---
	Recreation E	Temperature °C	4/1 - 10/31	28.8*	22.8* <sup>C</sup>	Arsenic(T)	---	0.02
	Water Supply					Cadmium	TVS	TVS
<b>Qualifiers:</b>				<b>acute</b>	<b>chronic</b>	Cadmium(T)	5.0	---
<b>Other:</b>		D.O. (mg/L)	---	6.0		Chromium III	---	TVS
Temporary Modification(s):		D.O. (spawning)	---	7.0		Chromium III(T)	50	---
Arsenic(chronic) = hybrid		pH	6.5 - 9.0	---		Chromium VI	TVS	TVS
Expiration Date of 12/31/2024		chlorophyll a (mg/m <sup>2</sup> )	---	---		Copper	TVS	TVS
		E. coli (per 100 mL)	---	126		Iron	---	WS
						Iron(T)	---	1000
		<b>Inorganic (mg/L)</b>				Lead	TVS	TVS
				<b>acute</b>	<b>chronic</b>	Lead(T)	50	---
		Ammonia	TVS	TVS		Manganese	TVS	TVSWS
		Boron	---	0.75		Mercury(T)	---	0.01
		Chloride	---	250		Molybdenum(T)	---	150
		Chlorine	0.019	0.011		Nickel	TVS	TVS
		Cyanide	0.005	---		Nickel(T)	---	100
		Nitrate	10	---		Selenium	TVS	TVS
		Nitrite	---	0.05		Silver	TVS	TVS(tr)
		Phosphorus	---	---		Uranium	varies*	varies*
		Sulfate	---	WS		Zinc	TVS	TVS
		Sulfide	---	0.002				

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Piedra River Basin

4c. Mainstem of the Piedra River from a point above the confluence with Stollsteimer Creek to Navajo Reservoir.															
COSJPI04C		Classifications		Physical and Biological				Metals (ug/L)							
Designation		Agriculture		DM		MWAT		acute		chronic					
Reviewable		Aq Life Cold 1		Temperature °C	11/1 - 3/31	CS-II	CS-II	Arsenic	340	---					
		Recreation E		Temperature °C	4/1 - 10/31	28.8*	22.8* C	Arsenic(T)	---	0.02					
		Water Supply						Cadmium	TVS	TVS					
Qualifiers:				acute		chronic		Cadmium(T)			5.0	---			
Other:				D.O. (mg/L)		---		6.0		Chromium III		---	TVS		
Temporary Modification(s):				D.O. (spawning)		---		7.0		Chromium III(T)		50	---		
Arsenic(chronic) = hybrid				pH		6.5 - 9.0		---		Chromium VI		TVS	TVS		
Expiration Date of 12/31/2024				chlorophyll a (mg/m²)		---		---		Copper		TVS	TVS		
*Southern Ute Indian Reservation				E. coli (per 100 mL)		---		126		Iron		---	WS		
*Uranium(acute) = See 34.5(3) for details.								Iron(T)		---		1000			
*Uranium(chronic) = See 34.5(3) for details.								Lead		TVS		TVS			
*Temperature(4/1 - 10/31) = See Section 34.6(6) for assessment locations.				Inorganic (mg/L)				Lead(T)		50		---			
				Ammonia		TVS		TVS		Manganese		TVS	TVSWS		
				Boron		---		0.75		Mercury(T)		---	0.01		
				Chloride		---		250		Molybdenum(T)		---	150		
				Chlorine		0.019		0.011		Nickel		TVS	TVS		
				Cyanide		0.005		---		Nickel(T)		---	100		
				Nitrate		10		---		Selenium		TVS	TVS		
				Nitrite		---		0.05		Silver		TVS	TVS(tr)		
				Phosphorus		---		---		Uranium		varies*	varies*		
				Sulfate		---		WS		Zinc		TVS	TVS		
				Sulfide		---		0.002							
5a. All tributaries to the Piedra River, including all wetlands, from the boundary of the Weminuche Wilderness Area to a point immediately below the confluence with the First Fork of the Piedra River. Devil Creek, including all tributaries, from the source to a point below the confluence with Dunagan Canyon.															
COSJPI05A		Classifications		Physical and Biological				Metals (ug/L)							
Designation		Agriculture		DM		MWAT		acute		chronic					
Reviewable		Aq Life Cold 1		Temperature °C	CS-I	CS-I	Arsenic	340	---						
		Recreation E		5/1 - 10/31	acute		chronic		Arsenic(T)		---	0.02			
		Recreation N		11/1 - 4/30	D.O. (mg/L)		---		6.0		Cadmium		TVS	TVS	
		Water Supply		D.O. (spawning)		---		7.0		Cadmium(T)		5.0	---		
Qualifiers:				pH		6.5 - 9.0		---		Chromium III		---	TVS		
Other:				chlorophyll a (mg/m²)		---		150		Chromium III(T)		50	---		
Temporary Modification(s):				E. coli (per 100 mL)		5/1 - 10/31		---		126		Chromium VI		TVS	TVS
Arsenic(chronic) = hybrid				E. coli (per 100 mL)		11/1 - 4/30		---		630		Copper		TVS	TVS
Expiration Date of 12/31/2024				Inorganic (mg/L)				Iron		---		WS			
*Uranium(acute) = See 34.5(3) for details.				acute		chronic		Iron(T)		---		1000			
*Uranium(chronic) = See 34.5(3) for details.				Ammonia		TVS		TVS		Lead		TVS		TVS	
				Boron		---		0.75		Lead(T)		50		---	
				Chloride		---		250		Manganese		TVS		TVSWS	
				Chlorine		0.019		0.011		Mercury(T)		---		0.01	
				Cyanide		0.005		---		Molybdenum(T)		---		150	
				Nitrate		10		---		Nickel		TVS		TVS	
				Nitrite		---		0.05		Nickel(T)		---		100	
				Phosphorus		---		0.11		Selenium		TVS		TVS	
				Sulfate		---		WS		Silver		TVS		TVS(tr)	
				Sulfide		---		0.002		Uranium		varies*		varies*	
								Zinc		TVS		TVS(sc)			

5a. All tributaries to the Piedra River, including all wetlands, from the boundary of the Weminuche Wilderness Area to a point immediately below the confluence with the First Fork of the Piedra River. Devil Creek, including all tributaries, from the source to a point below the confluence with Dunagan Canyon.

COSJPI05A	Classifications		Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT	acute		chronic		
Reviewable	Aq Life Cold 1		Temperature °C	CS-I	CS-I	Arsenic	340	---	
	Recreation E	5/1 - 10/31	acute	chronic	Arsenic(T)	---	0.02		
	Recreation N	11/1 - 4/30	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS	
	Water Supply		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---	
Qualifiers:			pH	6.5 - 9.0	---	Chromium III	---	TVS	
Other:  Temporary Modification(s):  Arsenic(chronic) = hybrid  Expiration Date of 12/31/2024  *Uranium(acute) = See 34.5(3) for details.  *Uranium(chronic) = See 34.5(3) for details.			chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---	
			E. coli (per 100 mL)	5/1 - 10/31	---	126	Chromium VI	TVS	TVS
			E. coli (per 100 mL)	11/1 - 4/30	---	630	Copper	TVS	TVS
			Inorganic (mg/L)			Iron	---	WS	
			acute	chronic	Iron(T)	---	1000		
			Ammonia	TVS	TVS	Lead	TVS	TVS	
			Boron	---	0.75	Lead(T)	50	---	
			Chloride	---	250	Manganese	TVS	TVS/WS	
			Chlorine	0.019	0.011	Mercury(T)	---	0.01	
			Cyanide	0.005	---	Molybdenum(T)	---	150	
			Nitrate	10	---	Nickel	TVS	TVS	
			Nitrite	---	0.05	Nickel(T)	---	100	
			Phosphorus	---	0.11	Selenium	TVS	TVS	
			Sulfate	---	WS	Silver	TVS	TVS(tr)	
			Sulfide	---	0.002	Uranium	varies*	varies*	
			Zinc	TVS	TVS(sc)				

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Piedra River Basin

5b. All tributaries to the Piedra River, from a point immediately below the confluence with the First Fork of the Piedra River to a point immediately below the confluence with Devil Creek, except for the specific listings in Segment 5a.

COSJPI05B	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Expiration Date of 12/31/2024					Copper	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)		Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS

6a. All tributaries to the Piedra River, including all wetlands, from a point immediately below the confluence with Devil Creek to Southern Ute Indian Reservation boundary, except the specific listing in Segment 6d.

COSJPI06A	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Arsenic	340
	Recreation P	acute	chronic	Arsenic(T)	---	0.02-10 <sup>A</sup>
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Chromium III	---
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 34.5(5).		E. coli (per 100 mL)	---	205	Chromium III(T)	50
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).		Inorganic (mg/L)		Chromium VI	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		acute	chronic	Copper	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	100	---	Molybdenum(T)	---
		Nitrite	---	0.5	Nickel	TVS
		Phosphorus	---	0.17*	Nickel(T)	---
		Sulfate	---	250	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Piedra River Basin

6b. All tributaries including wetlands to the Piedra River from the Southern Ute Indian Reservation boundary to Navajo Reservoir, except for the specific listing in Segment 6c.								
COSJPI06B	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture	DM	MWAT	acute	chronic			
UP	Aq Life Warm 2	Temperature °C	WS-III	WS-III	Arsenic	340	---	
	Recreation P	acute	chronic	Arsenic(T)	---	0.02-10	A	
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS	
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---	
Other:  *Southern Ute Indian Reservation *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150	Chromium III	---	TVS	
		E. coli (per 100 mL)	---	205	Chromium III(T)	50	---	
		Inorganic (mg/L)			Chromium VI	TVS	TVS	
			acute	chronic	Copper	TVS	TVS	
		Ammonia	TVS	TVS	Iron	---	WS	
		Boron	---	0.25	Iron(T)	---	1000	
		Chloride	---	250	Lead	TVS	TVS	
		Chlorine	0.019	0.011	Lead(T)	50	---	
		Cyanide	0.005	---	Manganese	TVS	TVS/WS	
		Nitrate	10	---	Mercury(T)	---	0.01	
		Nitrite	---	0.5	Molybdenum(T)	---	150	
		Phosphorus	---	0.17	Nickel	TVS	TVS	
		Sulfate	---	WS	Nickel(T)	---	100	
		Sulfide	---	0.002	Selenium	TVS	TVS	
					Silver	TVS	TVS	
					Uranium	varies*	varies*	
					Zinc	TVS	TVS	

6c. Stollsteimer Creek, including all tributaries, from the Southern Ute Indian Reservation boundary to the confluence with the Piedra River.								
COSJPI06C	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture	DM	MWAT	acute	chronic			
UP	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Arsenic	340	---	
	Recreation P	acute	chronic	Arsenic(T)	---	0.02-10	A	
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS	
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---	
Other:  *Southern Ute Indian Reservation *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150	Chromium III	---	TVS	
		E. coli (per 100 mL)	---	205	Chromium III(T)	50	---	
		Inorganic (mg/L)			Chromium VI	TVS	TVS	
			acute	chronic	Copper	TVS	TVS	
		Ammonia	TVS	TVS	Iron	---	WS	
		Boron	---	0.25	Iron(T)	---	1000	
		Chloride	---	250	Lead	TVS	TVS	
		Chlorine	0.019	0.011	Lead(T)	50	---	
		Cyanide	0.005	---	Manganese	TVS	TVS/WS	
		Nitrate	10	---	Mercury(T)	---	0.01	
		Nitrite	---	0.5	Molybdenum(T)	---	150	
		Phosphorus	---	0.17	Nickel	TVS	TVS	
		Sulfate	---	WS	Nickel(T)	---	100	
		Sulfide	---	0.002	Selenium	TVS	TVS	
					Silver	TVS	TVS	
					Uranium	varies*	varies*	
					Zinc	TVS	TVS	

6c. Stollsteimer Creek, including all tributaries, from the Southern Ute Indian Reservation boundary to the confluence with the Piedra River.

COSJPI06C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM		MWAT	acute		chronic
UP	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation P	acute		chronic	Arsenic(T)	---	0.02-10 <sup>A</sup>
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
Other:  *Southern Ute Indian Reservation *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150	Chromium III	---	TVS
		E. coli (per 100 mL)	---	205	Chromium III(T)	50	---
		Inorganic (mg/L)			Chromium VI	TVS	TVS
		acute		chronic	Copper	TVS	TVS
		Ammonia	TVS	TVS	Iron	---	WS
		Boron	---	0.25	Iron(T)	---	1000
		Chloride	---	250	Lead	TVS	TVS
		Chlorine	0.019	0.011	Lead(T)	50	---
		Cyanide	0.005	---	Manganese	TVS	TVS/WS
		Nitrate	10	---	Mercury(T)	---	0.01
		Nitrite	---	0.5	Molybdenum(T)	---	150
		Phosphorus	---	0.17	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Piedra River Basin

6d. Steven's draw from the outlet of Lake Forest Reservoir to the confluence with Martinez Creek.									
COSJPI06D	Classifications		Physical and Biological			Metals (ug/L)			
Designation	Agriculture			DM	MWAT		acute	chronic	
UP	Aq Life Warm 2		Temperature °C	WS-II	WS-II	Arsenic	340	---	
	Recreation P			acute	chronic	Arsenic(T)	---	100	
Qualifiers:			D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS	
Other:  *chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5). *Phosphorus(chronic) = applies only above the facilities listed at 34.5(5). *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.			pH	6.5 - 9.0	---	Chromium III	TVS	TVS	
			chlorophyll a (mg/m²)	---	150*	Chromium VI	TVS	TVS	
			E. coli (per 100 mL)	---	205	Copper	TVS	TVS	
			Inorganic (mg/L)			Iron(T)	---	1000	
				acute	chronic	Lead	TVS	TVS	
			Ammonia	TVS	TVS	Manganese	TVS	TVS	
			Boron	---	0.75	Mercury(T)	---	0.01	
			Chloride	---	250	Molybdenum(T)	---	150	
			Chlorine	0.019	0.011	Nickel	TVS	TVS	
			Cyanide	0.005	---	Selenium	TVS	TVS	
			Nitrate	100	---	Silver	TVS	TVS	
			Nitrite	---	0.5	Uranium	varies*	varies*	
			Phosphorus	---	0.17*	Zinc	TVS	TVS	
			Sulfate	---	---				
			Sulfide	---	0.002				
			7. Hatcher Reservoir, Stevens Reservoir, Sullenbuger Reservoir, Village Lake and Forest Lake.						
COSJPI07	Classifications		Physical and Biological			Metals (ug/L)			
Designation	Agriculture			DM	MWAT		acute	chronic	
Reviewable	Aq Life Warm 1		Temperature °C	WL	WL	Arsenic	340	---	
	Recreation E	2/2 - 11/30		acute	chronic	Arsenic(T)	---	0.02	
	Recreation N	12/1 - 3/1	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS	
	Water Supply		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---	
	DUWS*		chlorophyll a (mg/m²)	---	---	Chromium III	---	TVS	
Qualifiers:			E. coli (per 100 mL)	3/2 - 11/30	---	126	Chromium III(T)	50	---
Other:  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024  *Classification: DUWS applies to Hatcher and Stevens Reservoirs only. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.			E. coli (per 100 mL)	12/1 - 3/1	---	630	Chromium VI	TVS	TVS
						Copper	TVS	TVS	
			Inorganic (mg/L)			Iron	---	WS	
				acute	chronic	Iron(T)	---	1000	
			Ammonia	TVS	TVS	Lead	TVS	TVS	
			Boron	---	0.25	Lead(T)	50	---	
			Chloride	---	250	Manganese	TVS	TVSWS	
			Chlorine	0.019	0.011	Mercury(T)	---	0.01	
			Cyanide	0.005	---	Molybdenum(T)	---	150	
			Nitrate	10	---	Nickel	TVS	TVS	
			Nitrite	---	0.5	Nickel(T)	---	100	
			Phosphorus	---	---	Selenium	TVS	TVS	
			Sulfate	---	WS	Silver	TVS	TVS	
			Sulfide	---	0.002	Uranium	varies*	varies*	
						Zinc	TVS	TVS	

All metals are dissolved unless otherwise noted.		D.O. = dissolved oxygen
T = total recoverable		DM = daily maximum
t = total		MWAT = maximum weekly average temperature
tr=trout		See 34.6 for further details on applied standards.
sc=sculpin		

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Piedra River Basin

8. Williams Creek Reservoir.									
COSJPI08	Classifications		Physical and Biological			Metals (ug/L)			
Designation	Agriculture			DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 1		Temperature °C	CLL	CLL	Arsenic	340	---	
	Recreation E	5/1 - 10/31		acute	chronic	Arsenic(T)	---	0.02	
	Recreation N	11/1 - 4/30	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS	
	Water Supply		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---	
Qualifiers:			pH	6.5 - 9.0	---	Chromium III	---	TVS	
<b>Other:</b>  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.			chlorophyll a (ug/L)	---	8*	Chromium III(T)	50	---	
			E. coli (per 100 mL)	5/1 - 10/31	---	126	Chromium VI	TVS	TVS
			E. coli (per 100 mL)	11/1 - 4/30	---	630	Copper	TVS	TVS
			Inorganic (mg/L)				Iron	---	WS
				acute	chronic		Iron(T)	---	1000
			Ammonia	TVS	TVS	Lead	TVS	TVS	
			Boron	---	0.75	Lead(T)	50	---	
			Chloride	---	250	Manganese	TVS	TVS/WS	
			Chlorine	0.019	0.011	Mercury(T)	---	0.01	
			Cyanide	0.005	---	Molybdenum(T)	---	150	
			Nitrate	10	---	Nickel	TVS	TVS	
			Nitrite	---	0.05	Nickel(T)	---	100	
			Phosphorus	---	0.025*	Selenium	TVS	TVS	
			Sulfate	---	WS	Silver	TVS	TVS(tr)	
			Sulfide	---	0.002	Uranium	varies*	varies*	
						Zinc	TVS	TVS	
9. All lakes and reservoirs tributary to the Piedra River which are within the Weminuche Wilderness Area. This segment includes Window Lake, Monument Lake, Hossick Lake, and Williams Lakes.									
COSJPI09	Classifications		Physical and Biological			Metals (ug/L)			
Designation	Agriculture			DM	MWAT		acute	chronic	
OW	Aq Life Cold 1		Temperature °C	CL	CL	Arsenic	340	---	
	Recreation E			acute	chronic	Arsenic(T)	---	0.02	
	Water Supply		D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS	
Qualifiers:			D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---	
<b>Other:</b>  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.			pH	6.5 - 9.0	---	Chromium III	---	TVS	
			chlorophyll a (ug/L)	---	8*	Chromium III(T)	50	---	
			E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS	
			Inorganic (mg/L)				Copper	TVS	TVS
				acute	chronic		Iron	---	WS
			Ammonia	TVS	TVS	Iron(T)	---	1000	
			Boron	---	0.75	Lead	TVS	TVS	
			Chloride	---	250	Lead(T)	50	---	
			Chlorine	0.019	0.011	Manganese	TVS	TVS/WS	
			Cyanide	0.005	---	Mercury(T)	---	0.01	
			Nitrate	10	---	Molybdenum(T)	---	150	
			Nitrite	---	0.05	Nickel	TVS	TVS	
			Phosphorus	---	0.025*	Nickel(T)	---	100	
			Sulfate	---	WS	Selenium	TVS	TVS	
			Sulfide	---	0.002	Silver	TVS	TVS(tr)	
						Uranium	varies*	varies*	
			Zinc	TVS	TVS				

9. All lakes and reservoirs tributary to the Piedra River which are within the Weminuche Wilderness Area. This segment includes Window Lake, Monument Lake, Hossick Lake, and Williams Lakes.

COSJPI09	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
OW	Aq Life Cold 1	Temperature °C	CL	CL	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
<b>Other:</b>  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.025*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.



10. All lakes and reservoirs which are tributary to the Piedra River, from the boundary of the Weminuche Wilderness Area to a point immediately below the confluence with Devil Creek, except the specific listing in Segment 8. This segment includes Palisade Lake, Martin Lake, and O'Connell Lake.								
COSJPI10	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CL	CL	Arsenic	340	---	
	Recreation E	5/1 - 10/31	acute	chronic	Arsenic(T)	---	0.02	
	Recreation N	11/1 - 4/30	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
	Water Supply		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Qualifiers:		pH	6.5 - 9.0	---	Chromium III	---	TVS	
Other:  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50	---	
		E. coli (per 100 mL)	5/1 - 10/31	---	126	Chromium VI	TVS	TVS
		E. coli (per 100 mL)	11/1 - 4/30	---	630	Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS	
			acute	chronic	Iron(T)	---	1000	
		Ammonia	TVS	TVS	Lead	TVS	TVS	
		Boron	---	0.75	Lead(T)	50	---	
		Chloride	---	250	Manganese	TVS	TVS/WS	
		Chlorine	0.019	0.011	Mercury(T)	---	0.01	
		Cyanide	0.005	---	Molybdenum(T)	---	150	
		Nitrate	10	---	Nickel	TVS	TVS	
		Nitrite	---	0.05	Nickel(T)	---	100	
		Phosphorus	---	0.025*	Selenium	TVS	TVS	
		Sulfate	---	WS	Silver	TVS	TVS(tr)	
		Sulfide	---	0.002	Uranium	varies*	varies*	
					Zinc	TVS	TVS	
		11a. All lakes and reservoirs which are tributary to the Piedra River, from a point immediately below the confluence with Devil Creek to the Southern Ute Indian Reservation boundary. This segment includes Capote Lake.						
COSJPI11A	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT	acute	chronic		
UP	Aq Life Warm 2	Temperature °C	WL	WL	Arsenic	340	---	
	Recreation E		acute	chronic	Arsenic(T)	---	0.02	
	Water Supply		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---	
Water + Fish Standards		chlorophyll a (ug/L)	---	20*	Chromium III	---	TVS	
Other:  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL)	---	126	Chromium III(T)	50	---	
		Inorganic (mg/L)			Chromium VI	TVS	TVS	
			acute	chronic	Copper	TVS	TVS	
		Ammonia	TVS	TVS	Iron	---	WS	
		Boron	---	0.75	Iron(T)	---	1000	
		Chloride	---	250	Lead	TVS	TVS	
		Chlorine	0.019	0.011	Lead(T)	50	---	
		Cyanide	0.005	---	Manganese	TVS	TVS/WS	
		Nitrate	10	---	Mercury(T)	---	0.01	
		Nitrite	---	0.5	Molybdenum(T)	---	150	
		Phosphorus	---	0.083*	Nickel	TVS	TVS	
		Sulfate	---	WS	Nickel(T)	---	100	
		Sulfide	---	0.002	Selenium	TVS	TVS	
					Silver	TVS	TVS	
					Uranium	varies*	varies*	
					Zinc	TVS	TVS	

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Piedra River Basin

11b. All lakes and reservoirs which are tributary to the Piedra River from the Southern Ute Indian Reservation boundary to Navajo Reservoir.						
COSJPI11B	Classifications	Physical and Biological			Metals (ug/L)	
Designation		DM	MWAT		acute	chronic
UP	Agriculture					
	Aq Life Warm 2	Temperature °C	WL	WL	Arsenic	340
	Recreation P					
	Water Supply					
Qualifiers:						
Other:	*Southern Ute Indian Reservation *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.	D.O. (mg/L)	---	5.0	Arsenic(T)	---
		pH	6.5 - 9.0	---	Cadmium	TVS
		chlorophyll a (ug/L)	---	20*	Cadmium(T)	5.0
		E. coli (per 100 mL)	---	205	Chromium III	---
					Chromium III(T)	50
					Chromium VI	---
					Copper	TVS
					Iron	---
					Iron(T)	1000
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury(T)	---
					Molybdenum(T)	150
					Nickel	TVS
					Nickel(T)	100
					Selenium	TVS
					Silver	TVS
					Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Los Pinos River Basin

1. All tributaries to the Los Pinos River, including all wetlands, which are within the Weminuche Wilderness Area.							
COSJPN01	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
OW	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024					Copper	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)			Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.		acute	chronic	Iron(T)	---	1000	
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

2a. Mainstem of the Los Pinos River from the boundary of the Weminuche Wilderness Area to the boundary of the Southern Ute Indian Reservation except for the specific listing in Segment 3.							
COSJPN02A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m²)	---	150*	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024					Copper	TVS	TVS
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5).		Inorganic (mg/L)			Iron	---	WS
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).		acute	chronic	Iron(T)	---	1000	
*Uranium(acute) = See 34.5(3) for details.		Ammonia	TVS	TVS	Lead	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS(sc)

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Los Pinos River Basin

2b. Mainstem of the Los Pinos River from the boundary of the Southern Ute Indian Reservation to the Pine Ditch Diversion (37.1906, -107.58778).							
COSJPN02B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m²)	---	---	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024					Copper	TVS	TVS
*Southern Ute Indian Reservation		Inorganic (mg/L)			Iron	---	WS
*Uranium(acute) = See 34.5(3) for details.			acute	chronic	Iron(T)	---	1000
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

2c. Mainstem of the Los Pinos River from the Pine Ditch Diversion (37.1906, -107.58778) to above the confluence with Dry Creek. Mainstem of Beaver Creek from the boundaries of the Southern Ute Indian Reservation to their confluences with the Los Pinos River.							
COSJPN02C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m²)	---	---	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024					Copper	TVS	TVS
*Southern Ute Indian Reservation		Inorganic (mg/L)			Iron	---	WS
*Uranium(acute) = See 34.5(3) for details.			acute	chronic	Iron(T)	---	1000
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Los Pinos River Basin

2d. Mainstem of the Los Pinos River from above the confluence with Dry Creek to New Mexico state line. Mainstems of Dry Creek, Ute Creek, Spring Creek and Rock Creek from the boundaries of the Southern Ute Indian Reservation to their confluences with the Los Pinos River.							
COSJPN02D	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Southern Ute Indian Reservation *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m²)	---	---	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVSWS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS
		3. Vallecito Reservoir.					
COSJPN03	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CLL	CLL	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (ug/L)	---	---	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVSWS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

3. Vallecito Reservoir.

COSJPN03	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute		chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CLL	CLL	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Uranium(acute) = See 34.5(3) for details.  *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (ug/L)	---	---	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
					Iron(T)	---	1000
					Lead	TVS	TVS
					Lead(T)	50	---
					Manganese	TVS	TVS/WS
					Mercury(T)	---	0.01
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Los Pinos River Basin

4. All tributaries to the Los Pinos River and Vallecito Reservoir, including all wetlands, from the boundary of the Weminuche Wilderness Area to a point immediately below the confluence with Bear Creek , except for the specific listing in Segment 5; mainstems of Beaver Creek, Ute Creek, and Spring Creek from their sources to the boundary of the Southern Ute Indian Reservation.							
COSJPN04	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024					Copper	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)			Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS(sc)
5. Mainstem of Vallecito Creek from the boundary of the Weminuche Wilderness Area to Vallecito Reservoir.							
COSJPN05	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m²)	---	150*	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024					Copper	TVS	TVS
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5).		Inorganic (mg/L)			Iron	---	WS
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).			acute	chronic	Iron(T)	---	1000
*Uranium(acute) = See 34.5(3) for details.		Ammonia	TVS	TVS	Lead	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVSWS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Los Pinos River Basin

6. All tributaries to the Los Pinos River, including all wetlands, from a point immediately below the confluence with Bear Creek to the boundary of the Southern Ute Indian Reservation except for specific listings in Segment 4.

COSJPN06	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E	acute	chronic		Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Beryllium(T)	---	100
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Cadmium	TVS	TVS
<b>Fish Ingestion</b>		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III	TVS	TVS
Temporary Modification(s):		E. coli (per 100 mL)	---	126	Chromium III(T)	---	100
Arsenic(chronic) = hybrid					Chromium VI	TVS	TVS
Expiration Date of 12/31/2024					Copper	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)			Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.		acute	chronic		Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVSWS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	---	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

7a. All tributaries to the Los Pinos River from the Southern Ute Indian Reservation boundary to the Colorado/New Mexico border, except for the specific listing in Segments 2b, 2c and 2d.

COSJPN07A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	WS-III	WS-III	Arsenic	340	---
	Recreation E	acute	chronic		Arsenic(T)	---	7.6
	Water Supply	D.O. (mg/L)	---	6.0	Beryllium(T)	---	100
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Cadmium	TVS	TVS
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
*Uranium(acute) = See 34.5(3) for details.		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL)	---	126	Chromium III(T)	---	100
					Chromium VI	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
		acute	chronic		Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---	1000
		Boron	---	0.75	Lead	TVS	TVS
		Chloride	---	250	Lead(T)	50	---
		Chlorine	0.019	0.011	Manganese	TVS	TVS/WS
		Cyanide	0.005	---	Mercury(T)	---	0.01
		Nitrate	10	---	Molybdenum(T)	---	150
		Nitrite	---	---	Nickel	TVS	TVS
		Phosphorus	---	0.17	Nickel(T)	---	100
		Sulfate	---	WS	Selenium	TVS	TVS
		Sulfide	---	0.002	Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Los Pinos River Basin

7b. Trail Canyon, including all tributaries, from their source to the New Mexico border.						
COSJPN07B	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2 Recreation E	Temperature °C	CS-II	CS-II	Arsenic	340
Qualifiers:		acute	chronic	Arsenic(T)	---	100
Other:		D.O. (mg/L)	---	6.0	Cadmium	TVS
		D.O. (spawning)	---	7.0	Chromium III	TVS
		pH	6.5 - 9.0	---	Chromium III(T)	---
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium VI	TVS
		E. coli (per 100 mL)	---	126	Copper	TVS
		Inorganic (mg/L)		Iron(T)	---	1000
		acute	chronic	Lead	TVS	TVS
		Ammonia	TVS	TVS	Manganese	TVS
		Boron	---	0.75	Mercury(T)	---
		Chloride	---	---	Molybdenum(T)	---
		Chlorine	0.019	0.011	Nickel	TVS
		Cyanide	0.005	---	Selenium	TVS
		Nitrate	100	---	Silver	TVS
		Nitrite	---	0.05	Uranium	varies*
		Phosphorus	---	0.17	Zinc	TVS
		Sulfate	---	---		
		Sulfide	---	0.002		

  

8. All lakes and reservoirs tributary to the Los Pinos River which are within the Weminuche Wilderness Area, except for the specific listing in Segment 9. This includes Granite Lake, Divide Lakes, Elk Lake, Flint Lakes, Moon Lake, Rock Lake, Betty Lake, Lost Lake, Hidden Lake, Vallecito Lake, Eldorado Lake, Trinity Lake, Leviathan Lake, Sunlight Lake, Hazel Lake, and Columbine Lake.						
COSJPN08	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
OW	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	CL	CL	Arsenic	340
Qualifiers:		acute	chronic	Arsenic(T)	---	0.02
Other:		D.O. (mg/L)	---	6.0	Cadmium	TVS
		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
		pH	6.5 - 9.0	---	Chromium III	TVS
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
		Inorganic (mg/L)		Copper	TVS	TVS
		acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.025*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.



# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Los Pinos River Basin

9. Emerald Lake.						
COSJPN09	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
OW	Aq Life Cold 1	Temperature °C	CLL	CLL	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
<b>Other:</b>  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
		Inorganic (mg/L)		Copper	TVS	TVS
		acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.025*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS
						TVS
10. All lakes and reservoirs tributary to the Los Pinos River and Vallecito Reservoir from the boundary of the Weminuche Wilderness Area to a point immediately below the confluence with Bear Creek (T35N, R7W), except for the specific listing in Segment 3. This segment includes Lake Simpatico.						
COSJPN10	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CL	CL	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
<b>Other:</b>  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
		Inorganic (mg/L)		Copper	TVS	TVS
		acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.025*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS
						TVS

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Los Pinos River Basin

11a. All lakes and reservoirs tributary to the Los Pinos River, from a point immediately below the confluence with Bear Creek (T35N, R7W) to the boundary of the Southern Ute Indian Reservation.							
COSJPN11A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CL	CL	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	100
Qualifiers:		D.O. (mg/L)	---	6.0	Beryllium(T)	---	100
Other:  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		D.O. (spawning)	---	7.0	Cadmium	TVS	TVS
		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	---	100
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron(T)	---	1000
			acute	chronic	Lead	TVS	TVS
		Ammonia	TVS	TVS	Manganese	TVS	TVS
		Boron	---	0.75	Mercury(T)	---	0.01
		Chloride	---	---	Molybdenum(T)	---	150
		Chlorine	0.019	0.011	Nickel	TVS	TVS
		Cyanide	0.005	---	Selenium	TVS	TVS
		Nitrate	100	---	Silver	TVS	TVS
		Nitrite	---	0.05	Uranium	varies*	varies*
		Phosphorus	---	0.025*	Zinc	TVS	TVS
Sulfate	---	---					
Sulfide	---	0.002					

11b. All lakes and reservoirs tributary to the Los Pinos River, from the Southern Ute Indian Reservation boundary to the Colorado/New Mexico border. This segment includes Harper Pond.							
COSJPN11B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CL	CL	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	100
Qualifiers:		D.O. (mg/L)	---	6.0	Beryllium(T)	---	100
Other:  *Southern Ute Indian Reservation *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		D.O. (spawning)	---	7.0	Cadmium	TVS	TVS
		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
		chlorophyll a (ug/L)	---	20*	Chromium III(T)	---	100
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron(T)	---	1000
			acute	chronic	Lead	TVS	TVS
		Ammonia	TVS	TVS	Manganese	TVS	TVS
		Boron	---	0.75	Mercury(T)	---	0.01
		Chloride	---	---	Molybdenum(T)	---	150
		Chlorine	0.019	0.011	Nickel	TVS	TVS
		Cyanide	0.005	---	Selenium	TVS	TVS
		Nitrate	100	---	Silver	TVS	TVS
		Nitrite	---	0.05	Uranium	varies*	varies*
		Phosphorus	---	0.083*	Zinc	TVS	TVS
Sulfate	---	---					
Sulfide	---	0.002					

11b. All lakes and reservoirs tributary to the Los Pinos River, from the Southern Ute Indian Reservation boundary to the Colorado/New Mexico border. This segment includes Harper Pond.

COSJPN11B	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CL	CL	Arsenic	340	---	
	Recreation E		acute	chronic	Arsenic(T)	---	100	
Qualifiers:		D.O. (mg/L)	---	6.0	Beryllium(T)	---	100	
Other:		D.O. (spawning)	---	7.0	Cadmium	TVS	TVS	
		pH	6.5 - 9.0	---	Chromium III	TVS	TVS	
	*Southern Ute Indian Reservation	chlorophyll a (ug/L)	---	20*	Chromium III(T)	---	100	
	*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.	E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS	
	*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.				Copper	TVS	TVS	
	*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)		Iron(T)	---	1000	
	*Uranium(chronic) = See 34.5(3) for details.			acute	chronic	Lead	TVS	TVS
		Ammonia	TVS	TVS	Manganese	TVS	TVS	
		Boron	---	0.75	Mercury(T)	---	0.01	
		Chloride	---	---	Molybdenum(T)	---	150	
		Chlorine	0.019	0.011	Nickel	TVS	TVS	
		Cyanide	0.005	---	Selenium	TVS	TVS	
		Nitrate	100	---	Silver	TVS	TVS	
		Nitrite	---	0.05	Uranium	varies*	varies*	
		Phosphorus	---	0.083*	Zinc	TVS	TVS	
	Sulfate	---	---					
	Sulfide	---	0.002					

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

### Animas and Florida River Basins

1. All tributaries to the Animas River and Florida River, including all wetlands, which are within the Weminuche Wilderness Area.						
COSJAF01	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
OW	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
*Uranium(acute) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50
*Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL)	---	126	Chromium VI	TVS
					Copper	TVS
		Inorganic (mg/L)		Iron	---	WS
		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS
2. Mainstem of the Animas River, including all tributaries and wetlands, from the outlet of Denver Lake to a point immediately above the confluence with Minnie Gulch, except for specific listings in Segment 6.						
COSJAF02	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
UP	Recreation E			Arsenic(T)	---	100
Qualifiers:		acute	chronic	Beryllium(T)	---	100
Other:		D.O. (mg/L)	---	3.0	Cadmium(T)	---
*The concentration of dissolved aluminum, cadmium, copper, iron, lead, manganese, and zinc that is directed toward maintaining and achieving standards established for segments 3a, 4a and 4b.		pH	5.8-9.0	---	Chromium III(T)	---
*Uranium(acute) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150	Chromium VI(T)	---
*Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL)	---	126	Copper(T)	---
		Inorganic (mg/L)		Iron	---	---
		acute	chronic	Lead(T)	---	100
		Ammonia	---	---	Manganese	---
		Boron	---	0.75	Mercury(T)	---
		Chloride	---	---	Molybdenum(T)	---
		Chlorine	---	---	Nickel(T)	---
		Cyanide	0.2	---	Selenium(T)	---
		Nitrate	---	100	Silver	---
		Nitrite	10	---	Uranium	varies*
		Phosphorus	---	---	Zinc(T)	---
		Sulfate	---	---		2000
		Sulfide	---	---		

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

3a. Mainstem of the Animas River, including wetlands, from a point immediately below the confluence with Minnie Gulch to immediately above the confluence with Cement Creek.									
COSJAF03A		Classifications		Physical and Biological			Metals (ug/L)		
Designation	Agriculture			DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 1*		Temperature °C	CS-I	CS-I	Aluminum(T)	750	750	
	Recreation E			acute	chronic	Arsenic	340	---	
Qualifiers:			D.O. (mg/L)	---	6.0	Arsenic(T)	---	100	
Other:			D.O. (spawning)	---	7.0	Cadmium	TVS	varies*	
*Classification: Aquatic life indicator goal: Brook Trout			pH	6.5 - 9.0	---	Chromium III	TVS	TVS	
*Cadmium(chronic) = 3.5 ug/L from 4/1-4/30			chlorophyll a (mg/m²)	---	150	Chromium III(T)	---	100	
2.2 ug/L from 5/1-5/31			E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS	
TVS from 6/1-3/31						Copper	TVS	TVS	
*Manganese(chronic) = Standards are listed on Table 1.						Iron(T)	---	1000	
*Uranium(acute) = See 34.5(3) for details.						Lead	TVS	TVS	
*Uranium(chronic) = See 34.5(3) for details.			Ammonia	TVS	TVS	Manganese	---	varies*	
*Zinc(acute) = Standards are listed on Table 1.			Boron	---	0.75	Mercury(T)	---	0.01	
*Zinc(chronic) = Standards are listed on Table 1.			Chloride	---	---	Molybdenum(T)	---	150	
			Chlorine	0.019	0.011	Nickel	TVS	TVS	
			Cyanide	0.005	---	Selenium	TVS	TVS	
			Nitrate	100	---	Silver	TVS	TVS(tr)	
			Nitrite	---	---	Uranium	varies*	varies*	
			Phosphorus	---	0.11	Zinc	varies*	varies*	
			Sulfate	---	---				
			Sulfide	---	0.002				
3b. Mainstem of the Animas River, including wetlands, from a point immediately above the confluence with Cement Creek to a point immediately above the confluence with Mineral Creek.									
COSJAF03B		Classifications		Physical and Biological			Metals (ug/L)		
Designation	Recreation E	5/15 - 9/10		DM	MWAT		acute	chronic	
UP	Recreation N	9/11 - 5/14				Arsenic	---	---	
Qualifiers:				acute	chronic	Cadmium	---	---	
Other:			D.O. (mg/L)	---	3.0	Chromium III	---	---	
Temporary Modification(s):			pH	6.0-9.0	---	Chromium VI	---	---	
Copper(ac/ch) = current condition*			chlorophyll a (mg/m²)	---	150*	Copper	---	---	
Expiration Date of 12/31/2022			E. coli (per 100 mL)	5/15 - 9/10	---	Iron	---	---	
*The concentration of dissolved aluminum, cadmium, copper, iron, lead, manganese, and zinc that is directed toward maintaining and achieving water quality standards established for segments 4a and 4b.			E. coli (per 100 mL)	9/11 - 5/14	---	Lead	---	---	
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5).						Manganese	---	---	
*Uranium(acute) = See 34.5(3) for details.						Mercury(T)	---	---	
*Uranium(chronic) = See 34.5(3) for details.						Molybdenum(T)	---	---	
*TempMod: Copper = Adopted 6/12/2006			Ammonia	---	---	Nickel	---	---	
			Boron	---	---	Selenium	---	---	
			Chloride	---	---	Silver	---	---	
			Chlorine	---	---	Uranium	varies*	varies*	
			Cyanide	---	---	Zinc	---	---	
			Nitrate	---	---				
			Nitrite	---	---				
			Phosphorus	---	---				
			Sulfate	---	---				
			Sulfide	---	---				

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Animas and Florida River Basins

3c. Arrastra Gulch including all tributaries and wetlands from the source to the confluence with the Animas River.							
COSJAF03C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT				
UP	Aq Life Cold 2	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	100	
Qualifiers:		D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		D.O. (spawning)	---	7.0	Chromium III	TVS	TVS
		pH	6.5 - 9.0	---	Chromium III(T)	---	100
		chlorophyll a (mg/m²)	---	150	Chromium VI	TVS	TVS
		E. coli (per 100 mL)	---	126	Copper	TVS	TVS
					Iron(T)	---	1000
		Inorganic (mg/L)			Lead	TVS	TVS
					Manganese	TVS	TVS
		Ammonia	TVS	TVS	Mercury(T)	---	0.01
		Boron	---	0.75	Molybdenum(T)	---	150
		Chloride	---	---	Nickel	TVS	TVS
		Chlorine	0.019	0.011	Selenium	TVS	TVS
		Cyanide	0.005	---	Silver	TVS	TVS(tr)
		Nitrate	100	---	Uranium	varies*	varies*
		Nitrite	---	0.05	Zinc	TVS	TVS
		Phosphorus	---	0.11			
		Sulfate	---	---			
Sulfide	---	0.002					
4a. Mainstem of the Animas River, including wetlands, from a point immediately above the confluence with Mineral Creek to a point immediately above the confluence with Deer Park Creek.							
COSJAF04A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT				
UP	Aq Life Cold 2*	Temperature °C	CS-I	CS-I	Aluminum	varies*	varies*
	Recreation E	acute	chronic	Arsenic	340	---	
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic(T)	---	100
Other:  Temporary Modification(s): Copper(ac/ch) = current condition* Expiration Date of 12/31/2022  *Classification: Aquatic life indicator goal: Brook Trout *Aluminum(acute) = Standards are listed on Table 1. *Aluminum(chronic) = Standards are listed on Table 1. *Iron(chronic) = Standards are listed on Table 1. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details. *Zinc(acute) = Standards are listed on Table 1. *Zinc(chronic) = Standards are listed on Table 1. *pH(acute) = Standards are listed on Table 1. *TempMod: Copper = Adopted 6/12/2017		D.O. (spawning)	---	7.0	Cadmium	TVS	TVS
		pH	varies*	---	Chromium III	TVS	TVS
		chlorophyll a (mg/m²)	---	---	Chromium III(T)	---	100
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	varies*
					Lead	TVS	TVS
		Ammonia	TVS	TVS	Manganese	TVS	TVS
		Boron	---	0.75	Mercury(T)	---	0.01
		Chloride	---	---	Molybdenum(T)	---	150
		Chlorine	0.019	0.011	Nickel	TVS	TVS
		Cyanide	0.005	---	Selenium	TVS	TVS
		Nitrate	100	---	Silver	TVS	TVS(tr)
		Nitrite	---	---	Uranium	varies*	varies*
		Phosphorus	---	---	Zinc	varies*	varies*
		Sulfate	---	---			
Sulfide	---	0.002					

4a. Mainstem of the Animas River, including wetlands, from a point immediately above the confluence with Mineral Creek to a point immediately above the confluence with Deer Park Creek.

Creek:

COSJAF04A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
UP	Aq Life Cold 2*	Temperature °C	CS-I	CS-I	Aluminum	varies*	varies*
	Recreation E		acute	chronic	Arsenic	340	---
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic(T)	---	100
Other:  Temporary Modification(s): Copper(ac/ch) = current condition* Expiration Date of 12/31/2022  *Classification: Aquatic life indicator goal: Brook Trout *Aluminum(acute) = Standards are listed on Table 1. *Aluminum(chronic) = Standards are listed on Table 1. *Iron(chronic) = Standards are listed on Table 1. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details. *Zinc(acute) = Standards are listed on Table 1. *Zinc(chronic) = Standards are listed on Table 1. *pH(acute) = Standards are listed on Table 1. *TempMod: Copper = Adopted 6/12/2017		D.O. (spawning)	---	7.0	Cadmium	TVS	TVS
		pH	varies*	---	Chromium III	TVS	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	---	Chromium III(T)	---	100
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	varies*
			acute	chronic	Lead	TVS	TVS
		Ammonia	TVS	TVS	Manganese	TVS	TVS
		Boron	---	0.75	Mercury(T)	---	0.01
		Chloride	---	---	Molybdenum(T)	---	150
		Chlorine	0.019	0.011	Nickel	TVS	TVS
		Cyanide	0.005	---	Selenium	TVS	TVS
Nitrate	100	---	Silver	TVS	TVS(tr)		
Nitrite	---	---	Uranium	varies*	varies*		
Phosphorus	---	---	Zinc	varies*	varies*		
Sulfate	---	---					
Sulfide	---	0.002					

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

4b. Mainstem of the Animas River, including wetlands, from a point immediately above the confluence with Deer Park Creek to Bakers Bridge (37.458620, -107.799194).						
COSJAF04B	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Aluminum(T)	TVS
	Recreation E	acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	0.02
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium	TVS
Other:		pH	6.5 - 9.0	---	Cadmium(T)	5.0
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	---	Chromium III	TVS
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium III(T)	50
Expiration Date of 12/31/2024				Chromium VI	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)		Copper	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	1000
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	0.01
		Nitrate	10	---	Molybdenum(T)	150
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	---	Nickel(T)	100
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
				Uranium	varies*	varies*
				Zinc	TVS	TVS

5a. Mainstem of the Animas River, including wetlands, from Bakers Bridge (37.458620, -107.799194) to the Southern Ute Indian Reservation boundary.						
COSJAF05A	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum	TVS
	Recreation E	acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	0.02
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium	TVS
Other:		pH	6.5 - 9.0	---	Cadmium(T)	5.0
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	---	Chromium III	TVS
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium III(T)	50
Expiration Date of 12/31/2024				Chromium VI	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)		Copper	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	1000
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	0.01
		Nitrate	10	---	Molybdenum(T)	150
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	---	Nickel(T)	100
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
				Uranium	varies*	varies*
				Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# **REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS** **Animas and Florida River Basins**

5b. Mainstem of the Animas River, including wetlands, from the Southern Ute Indian Reservation boundary (37.214880 -107.855102) to Basin Creek.						
COSJAF05B	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum	TVS
	Recreation E	acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	0.02
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium	TVS
Other:		pH	6.5 - 9.0	---	Cadmium(T)	5.0
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	---	Chromium III	TVS
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium III(T)	50
Expiration Date of 12/31/2024					Chromium VI	TVS
*Southern Ute Indian Reservation		Inorganic (mg/L)			Copper	TVS
*Uranium(acute) = See 34.5(3) for details.		acute	chronic		Iron	---
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Iron(T)	1000
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	150
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	---	Nickel(T)	100
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS

5c. Mainstem of the Animas River, including wetlands, from Basin Creek to above the confluence with the Florida River.

COSJAF05C	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum	TVS
	Recreation E	acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	0.02
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium	TVS
Other:		pH	6.5 - 9.0	---	Cadmium(T)	5.0
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	---	Chromium III	TVS
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium III(T)	50
Expiration Date of 12/31/2024					Chromium VI	TVS
*Southern Ute Indian Reservation		Inorganic (mg/L)			Copper	TVS
*Uranium(acute) = See 34.5(3) for details.		acute	chronic		Iron	---
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Iron(T)	1000
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	0.01
		Nitrate	10	---	Molybdenum(T)	150
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	---	Nickel(T)	100
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

5d. Mainstem of the Animas River, including wetlands from above the confluence with the Florida River to New Mexico state line.						
COSJAF05D	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum	TVS
	Recreation E	acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	0.02
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium	TVS
Other:		pH	6.5 - 9.0	---	Cadmium(T)	5.0
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	---	Chromium III	TVS
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium III(T)	50
Expiration Date of 12/31/2024					Chromium VI	TVS
*Southern Ute Indian Reservation		Inorganic (mg/L)			Copper	TVS
*Uranium(acute) = See 34.5(3) for details.		acute	chronic		Iron	---
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Iron(T)	1000
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	150
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	---	Nickel(T)	100
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS

  

6. Mainstem of the Animas River from the source to the outlet of Denver Lake. Mainstem, including all tributaries and wetlands of Cinnamon Creek, Grouse Gulch, Picayne Gulch, and Minnie Gulch. All tributaries and wetlands to the Animas River from immediately above Maggie Gulch to to a point immediately above Elk Creek except for those listed under segments 3c, 7, 8 and 9. South Mineral Creek and all other tributaries and wetlands to Mineral Creek, except for those specifically listed in segments 8 and 9.						
COSJAF06	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	TVS
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Expiration Date of 12/31/2024					Copper	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)			Iron	---
*Uranium(chronic) = See 34.5(3) for details.		acute	chronic		Iron(T)	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	150
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	100
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.



# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Animas and Florida River Basins

7. Mainstem of Cement Creek, including all tributaries, and wetlands, from the source to the confluence with the Animas River.						
COSJAF07	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
UP	Recreation E					Arsenic(T) --- 100
Qualifiers:		acute	chronic	Beryllium(T)	---	100
Other:	D.O. (mg/L)	---	3.0	Cadmium(T)	---	10
	pH	3.7-9.0	---	Chromium III(T)	---	100
	chlorophyll a (mg/m²)	---	150	Chromium VI(T)	---	100
	E. coli (per 100 mL)	---	126	Copper(T)	---	200
	Inorganic (mg/L)			Iron	---	---
	acute	chronic	Lead(T)	---	100	
	Ammonia	---	---	Manganese	---	---
	Boron	---	0.75	Mercury(T)	---	---
	Chloride	---	---	Molybdenum(T)	---	150
	Chlorine	---	---	Nickel(T)	---	200
	Cyanide	0.2	---	Selenium(T)	---	20
	Nitrate	100	---	Silver	---	---
	Nitrite	10	---	Uranium	varies*	varies*
	Phosphorus	---	---	Zinc(T)	---	2000
	Sulfate	---	---			
	Sulfide	---	---			

8. Mainstem of Mineral Creek, including wetlands, from the source to a point immediately above the confluence with South Mineral Creek. All tributaries on the east side of this segment of Mineral Creek including wetlands, except for Big Horn Creek. Mainstem of the Middle Fork of Mineral Creek including all tributaries and wetlands from the source to the confluence with Mineral Creek except for Crystal Lake and its exiting tributary to confluence with Middle Fork of Mineral Creek.						
COSJAF08	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
UP	Recreation E					Arsenic(T) --- 100
Qualifiers:		acute	chronic	Beryllium(T)	---	100
Other:	D.O. (mg/L)	---	3.0	Cadmium(T)	---	10
	pH	4.5-9.0	---	Chromium III(T)	---	100
	chlorophyll a (mg/m²)	---	150	Chromium VI(T)	---	100
	E. coli (per 100 mL)	---	126	Copper(T)	---	200
	Inorganic (mg/L)			Iron	---	---
	acute	chronic	Lead(T)	---	100	
	Ammonia	---	---	Manganese	---	---
	Boron	---	0.75	Mercury(T)	---	---
	Chloride	---	---	Molybdenum(T)	---	150
	Chlorine	---	---	Nickel(T)	---	200
	Cyanide	0.2	---	Selenium(T)	---	20
	Nitrate	100	---	Silver	---	---
	Nitrite	10	---	Uranium	varies*	varies*
	Phosphorus	---	---	Zinc(T)	---	2000
	Sulfate	---	---			
	Sulfide	---	---			

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

9. Mainstem of Mineral Creek, including wetlands, from immediately above the confluence with South Mineral Creek to the confluence with the Animas River.						
COSJAF09	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
UP	Aq Life Cold 2*	Temperature °C	CS-I	CS-I	Aluminum	---
	Recreation E	acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	0.02-10 <sup>A</sup>
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium	TVS
Other:  *Classification: Aquatic Life indicator goal: Macroinvertebrates; Brook Trout corridor *Aluminum(chronic) = Standards are listed on Table 1. *Copper(chronic) = Standards are listed on Table 1. *Iron(chronic) = Standards are listed on Table 1. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details. *Zinc(chronic) = Standards are listed on Table 1. *pH(acute) = Standards are listed on Table 1.		pH	varies*	---	Cadmium(T)	5.0
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III	TVS
		E. coli (per 100 mL)	---	126	Chromium III(T)	50
		Inorganic (mg/L)		---	Chromium VI	TVS
		acute	chronic	Copper	TVS	varies*
		Ammonia	TVS	TVS	Iron	---
		Boron	---	0.75	Iron	WS
		Chloride	---	250	Lead	TVS
		Chlorine	0.019	0.011	Lead(T)	50
		Cyanide	0.005	---	Manganese	TVS
		Nitrate	10	---	Mercury(T)	---
		Nitrite	---	0.05	Molybdenum(T)	---
		Phosphorus	---	0.11	Nickel	TVS
		Sulfate	---	WS	Nickel(T)	---
		Sulfide	---	0.002	Selenium	TVS
					Silver	TVS
					Uranium	varies*
					Zinc	TVS
10a. Mainstem of the Florida River from the boundary of the Weminuche Wilderness Area to the inlet of Lemon Reservoir.						
COSJAF10A	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
		Inorganic (mg/L)		---	Copper	TVS
		acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.11	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# **REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS** **Animas and Florida River Basins**

10b. Mainstem of the Florida River from the outlet of Lemon Reservoir to the Florida Farmers Canal Headgate (37.295157, -107.791794).							
COSJAF10B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m²)	---	150*	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024					Copper	TVS	TVS
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5).		Inorganic (mg/L)			Iron	---	WS
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).		acute	chronic	Iron(T)	---	1000	
*Uranium(acute) = See 34.5(3) for details.		Ammonia	TVS	TVS	Lead	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS/TVS(sc)

11a. Mainstem of the Florida River from the Florida Farmers Canal Headgate (37.295157, -107.791794) to the Southern Ute Indian Reservation boundary (37.214724, -107.746734).							
COSJAF11A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m²)	---	---	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024					Copper	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)			Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.		acute	chronic	Iron(T)	---	1000	
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

11a. Mainstem of the Florida River from the Florida Farmers Canal Headgate (37.295157, -107.791794) to the Southern Ute Indian Reservation boundary (37.214724, -107.746734).

COSJAF11A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Qualifiers:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Other:  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	---	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
		acute	chronic	Iron(T)	---	1000	
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

11b. Mainstem of the Florida River from the Southern Ute Indian Reservation boundary (37.214724, -107.746734) to the confluence with the Animas River.							
COSJAF11B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m²)	---	---	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024					Copper	TVS	TVS
*Southern Ute Indian Reservation		Inorganic (mg/L)			Iron	---	WS
*Uranium(acute) = See 34.5(3) for details.		acute	chronic	Iron(T)	---	1000	
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

11c. All tributaries to the Florida River from the Southern Ute Indian Reservation boundary to the confluence with the Animas River.							
COSJAF11C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Water + Fish Standards		pH	6.5 - 9.0	---	Chromium III	---	TVS
Other:		chlorophyll a (mg/m²)	---	150*	Chromium III(T)	50	---
Temporary Modification(s):		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Arsenic(chronic) = hybrid					Copper	TVS	TVS
Expiration Date of 12/31/2024		Inorganic (mg/L)			Iron	---	WS
*Southern Ute Indian Reservation		acute	chronic	Iron(T)	---	1000	
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5).		Ammonia	TVS	TVS	Lead	TVS	TVS
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).		Boron	---	0.75	Lead(T)	50	---
*Uranium(acute) = See 34.5(3) for details.		Chloride	---	250	Manganese	TVS	TVS/WS
*Uranium(chronic) = See 34.5(3) for details.		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

11c. All tributaries to the Florida River from the Southern Ute Indian Reservation boundary to the confluence with the Animas River.							
COSJAF11C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Water + Fish Standards		pH	6.5 - 9.0	---	Chromium III	---	TVS
Other:		chlorophyll a (mg/m²)	---	150*	Chromium III(T)	50	---
Temporary Modification(s):		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Arsenic(chronic) = hybrid					Copper	TVS	TVS
Expiration Date of 12/31/2024		Inorganic (mg/L)			Iron	---	WS
*Southern Ute Indian Reservation			acute	chronic	Iron(T)	---	1000
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5).		Ammonia	TVS	TVS	Lead	TVS	TVS
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).		Boron	---	0.75	Lead(T)	50	---
*Uranium(acute) = See 34.5(3) for details.		Chloride	---	250	Manganese	TVS	TVS/WS
*Uranium(chronic) = See 34.5(3) for details.		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

12a. All tributaries to the Animas River from a point immediately above the confluence with Elk Creek to a point immediately below the confluence with Hermosa Creek except for specific listings in Segments 12b, 12c and 15. All tributaries to the Florida River from the source to below the confluence with Mud Spring Creek, except the specific listing in Segment 1.						
COSJAF12A	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Chromium III(T)	50
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Expiration Date of 12/31/2024					Copper	TVS
		Inorganic (mg/L)		Iron	---	WS
		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11*	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS

12b. Lemon Reservoir.						
COSJAF12B	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CLL	CLL	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
					Copper	TVS
		Inorganic (mg/L)		Iron	---	WS
		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.025*	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

### Animas and Florida River Basins

12c. Hermosa Creek, including all tributaries, from the source to immediately below the confluence with Long Hollow, except for the East Fork of Hermosa Creek.							
COSJAF12C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
OW	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
						Zinc	TVS

12d. Mainstem of Junction Creek, including all tributaries, from the source to the U.S. Forest Boundary. Mainstem of Falls Creek, including all tributaries, from the source to the confluence with the Animas River.							
COSJAF12D	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
						Zinc	TVS

12d. Mainstem of Junction Creek, including all tributaries, from the source to the U.S. Forest Boundary. Mainstem of Falls Creek, including all tributaries, from the source to the confluence with the Animas River.							
COSJAF12D	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

13a. Mainstem of Junction Creek including all tributaries, from the U.S. Forest Boundary to the confluence with Animas River.						
COSJAF13A	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Water + Fish Standards		pH	6.5 - 9.0	---	Chromium III	---
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Temporary Modification(s):		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Arsenic(chronic) = hybrid					Copper	TVS
Expiration Date of 12/31/2024					Iron	---
		Inorganic (mg/L)			Iron(T)	---
		acute	chronic	Lead	TVS	TVS
		Ammonia	TVS	TVS	Lead(T)	50
		Boron	---	0.75	Manganese	TVS
		Chloride	---	250	Mercury(T)	---
		Chlorine	0.019	0.011	Molybdenum(T)	---
		Cyanide	0.005	---	Nickel	TVS
		Nitrate	10	---	Nickel(T)	---
		Nitrite	---	0.05	Selenium	TVS
		Phosphorus	---	0.11	Silver	TVS
		Sulfate	---	WS	Uranium	varies*
		Sulfide	---	0.002	Zinc	TVS

13b. All tributaries to the Animas River from a point immediately below the confluence with Hermosa Creek to the Southern Ute Indian Reservation boundary except for the specific listings in Segments 12d, 13a, 13c, 14a and 14b; all tributaries to the Florida River, from a point immediately below the confluence with Mud Creek to the Southern Ute Indian Reservation boundary, except for specific listings in Segment 13d.

COSJAF13B	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Water + Fish Standards		pH	6.5 - 9.0	---	Chromium III	---
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Temporary Modification(s):		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Arsenic(chronic) = hybrid					Copper	TVS
Expiration Date of 12/31/2024					Iron	---
		Inorganic (mg/L)			Iron(T)	---
		acute	chronic	Lead	TVS	TVS
		Ammonia	TVS	TVS	Lead(T)	50
		Boron	---	0.75	Manganese	TVS
		Chloride	---	250	Mercury(T)	---
		Chlorine	0.019	0.011	Molybdenum(T)	---
		Cyanide	0.005	---	Nickel	TVS
		Nitrate	10	---	Nickel(T)	---
		Nitrite	---	0.05	Selenium	TVS
		Phosphorus	---	0.11	Silver	TVS
		Sulfate	---	WS	Uranium	varies*
		Sulfide	---	0.002	Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

13c. Mainstem of the unnamed tributary to Coal Gulch which crosses Highway 160 at (37.267877, -107.961598) from the source to the confluence with Coal Gulch.							
COSJAF13C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	7.6
Qualifiers:		D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Fish Ingestion		D.O. (spawning)	---	7.0	Chromium III	---	TVS
Other:		pH	6.5 - 9.0	---	Chromium III(T)	50	---
Discharger Specific Variance(s):		chlorophyll a (mg/m²)	---	150*	Chromium VI	TVS	TVS
Ammonia(ac/ch) = TVS:15 mg/L		E. coli (per 100 mL)	---	126	Copper	TVS	TVS
Expiration Date of 12/31/2024					Iron(T)	---	1000
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5).		Inorganic (mg/L)			Lead	TVS	TVS
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).			acute	chronic	Manganese	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		Ammonia	TVS	TVS	Mercury(T)	---	0.01
*Uranium(chronic) = See 34.5(3) for details.		Boron	---	0.75	Molybdenum(T)	---	150
*Variance: Ammonia = see 34.6(4) for details.		Chloride	---	250	Nickel	TVS	TVS
		Chlorine	0.019	0.011	Selenium	TVS	TVS
		Cyanide	0.005	---	Silver	TVS	TVS(tr)
		Nitrate	100	---	Uranium	varies*	varies*
		Nitrite	---	0.05	Zinc	TVS	TVS
		Phosphorus	---	0.11*			
		Sulfate	---	---			
		Sulfide	---	0.002			

13d. Brice Draw, including all tributaries, from its source to the Southern Ute Indian Reservation Boundary.							
COSJAF13D	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Recreation E				Arsenic(T)	---	100
Qualifiers:			acute	chronic	Beryllium(T)	---	100
Other:		D.O. (mg/L)	---	3.0	Cadmium(T)	---	10
Discharger Specific Variance(s):		pH	6.5 - 9.0	---	Chromium III(T)	---	100
Ammonia(ac/ch) = TVS:15 mg/L		chlorophyll a (mg/m²)	---	150*	Chromium VI(T)	---	100
Expiration Date of 12/31/2024		E. coli (per 100 mL)	---	126	Copper(T)	---	200
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5).		Inorganic (mg/L)			Iron	---	---
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).			acute	chronic	Lead(T)	---	100
*Uranium(acute) = See 34.5(3) for details.		Ammonia	---	---	Manganese	---	---
*Uranium(chronic) = See 34.5(3) for details.		Boron	---	0.75	Mercury(T)	---	---
		Chloride	---	---	Molybdenum(T)	---	150
		Chlorine	---	---	Nickel(T)	---	200
		Cyanide	0.2	---	Selenium(T)	---	20
		Nitrate	100	---	Silver	---	---
		Nitrite	10	---	Uranium	varies*	varies*
		Phosphorus	---	---	Zinc(T)	---	2000
		Sulfate	---	---			
		Sulfide	---	---			

13d. Brice Draw, including all tributaries, from its source to the Southern Ute Indian Reservation Boundary.

COSJAF13D	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture			DM	MWAT			
Reviewable	Recreation E					acute	chronic	
Qualifiers:				acute	chronic	Arsenic(T)	---	100
Other:  *chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 34.5(5). *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		D.O. (mg/L)		---	3.0	Beryllium(T)	---	100
		pH		6.5 - 9.0	---	Cadmium(T)	---	10
		chlorophyll a (mg/m <sup>2</sup> )		---	150*	Chromium III(T)	---	100
		chlorophyll a (mg/m <sup>2</sup> )		---	150*	Chromium VI(T)	---	100
		E. coli (per 100 mL)		---	126	Copper(T)	---	200
		Inorganic (mg/L)				Iron	---	---
				acute	chronic	Lead(T)	---	100
		Ammonia		---	---	Manganese	---	---
		Boron		---	0.75	Mercury(T)	---	---
		Chloride		---	---	Molybdenum(T)	---	150
		Chlorine		---	---	Nickel(T)	---	200
		Cyanide		0.2	---	Selenium(T)	---	20
		Nitrate		100	---	Silver	---	---
		Nitrite		10	---	Uranium	varies*	varies*
		Phosphorus		---	---	Zinc(T)	---	2000
Sulfate		---	---					
Sulfide		---	---					

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.



# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

13e. All tributaries to the Animas River from the Southern Ute Indian Reservation boundary to below the confluence with Basin Creek.						
COSJAF13E	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Water + Fish Standards		pH	6.5 - 9.0	---	Chromium III	---
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Temporary Modification(s):		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Arsenic(chronic) = hybrid					Copper	TVS
Expiration Date of 12/31/2024					Iron	---
		Inorganic (mg/L)			Iron(T)	---
		acute	chronic	Lead	TVS	TVS
*Southern Ute Indian Reservation		Ammonia	TVS	TVS	Lead(T)	50
*Uranium(acute) = See 34.5(3) for details.		Boron	---	0.75	Manganese	TVS
*Uranium(chronic) = See 34.5(3) for details.		Chloride	---	250	Mercury(T)	---
		Chlorine	0.019	0.011	Molybdenum(T)	---
		Cyanide	0.005	---	Nickel	TVS
		Nitrate	10	---	Nickel(T)	---
		Nitrite	---	0.05	Selenium	TVS
		Phosphorus	---	0.11	Silver	TVS
		Sulfate	---	WS	Uranium	varies*
		Sulfide	---	0.002	Zinc	TVS

13f. All tributaries to the Animas River from below the confluence with Basin Creek to the Colorado/New Mexico border, except for Segments 11b and 11c.						
COSJAF13F	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Water + Fish Standards		pH	6.5 - 9.0	---	Chromium III	---
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Temporary Modification(s):		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Arsenic(chronic) = hybrid					Copper	TVS
Expiration Date of 12/31/2024					Iron	---
		Inorganic (mg/L)			Iron(T)	---
		acute	chronic	Lead	TVS	TVS
*Southern Ute Indian Reservation		Ammonia	TVS	TVS	Lead(T)	50
*Uranium(acute) = See 34.5(3) for details.		Boron	---	0.75	Manganese	TVS
*Uranium(chronic) = See 34.5(3) for details.		Chloride	---	250	Mercury(T)	---
		Chlorine	0.019	0.011	Molybdenum(T)	---
		Cyanide	0.005	---	Nickel	TVS
		Nitrate	10	---	Nickel(T)	---
		Nitrite	---	0.05	Selenium	TVS
		Phosphorus	---	0.11	Silver	TVS
		Sulfate	---	WS	Uranium	varies*
		Sulfide	---	0.002	Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

14a. Mainstem of Lightner Creek, including all tributaries, from the source to below the confluence with Deep Creek.						
COSJAF14A	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Expiration Date of 12/31/2024		Inorganic (mg/L)		Copper	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		acute	chronic	Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.11	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS

14b. Mainstem of Lightner Creek from below the confluence with Deep Creek to the confluence with the Animas River.						
COSJAF14B	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Chromium III(T)	50
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Expiration Date of 12/31/2024		Inorganic (mg/L)		Copper	TVS	TVS
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 34.5(5).		acute	chronic	Iron	---	WS
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).		Ammonia	TVS	TVS	Iron(T)	---
*Uranium(acute) = See 34.5(3) for details.		Boron	---	0.75	Lead	TVS
*Uranium(chronic) = See 34.5(3) for details.		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.11*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# **REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS** **Animas and Florida River Basins**

15. Mainstem of Purgatory Creek from the source to Cascade Creek; Goulding Creek from the source to Elbert Creek; and Nary Draw from the source to Haviland Lake.							
COSJAF15	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT			
Reviewable	Aq Life Cold 2	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS
16. All lakes and reservoirs tributary to the Animas River and Florida River which are within the Weminuche Wilderness Area. This segment includes Lillie Lake, Castilleja Lake, City Reservoir, Emerald Lake, Ruby Lake, Balsam Lake, Garfield Lake, Vestal Lake, Eldorado Lake, Highland Mary Lakes, Verde Lakes, Lost Lake, and Crater Lake.							
COSJAF16	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT			
OW	Aq Life Cold 1	Temperature °C	CL	CL	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.025*	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

### Animas and Florida River Basins

17. All lakes tributary to Arrastra Gulch from the source to the confluence with the Animas River. This segment includes Silver Lake.								
COSJAF17	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 2	Temperature °C	CL	CL	Arsenic	340	---	
	Recreation E		acute	chronic	Arsenic(T)	---	100	
Qualifiers:		D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS	
Other:	*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.	D.O. (spawning)	---	7.0	Chromium III	TVS	TVS	
		pH	6.5 - 9.0	---	Chromium III(T)	---	100	
		chlorophyll a (ug/L)	---	8*	Chromium VI	TVS	TVS	
		E. coli (per 100 mL)	---	126	Copper	TVS	TVS	
					Iron(T)	---	1000	
			Inorganic (mg/L)		Lead	TVS	TVS	
				acute	chronic	Manganese	TVS	TVS
		Ammonia	TVS	TVS	Mercury(T)	---	0.01	
		Boron	---	0.75	Molybdenum(T)	---	150	
		Chloride	---	---	Nickel	TVS	TVS	
		Chlorine	0.019	0.011	Selenium	TVS	TVS	
		Cyanide	0.005	---	Silver	TVS	TVS(tr)	
		Nitrate	100	---	Uranium	varies*	varies*	
		Nitrite	---	0.05	Zinc	TVS	TVS	
		Phosphorus	---	0.025*				
		Sulfate	---	---				
Sulfide	---	0.002						
18. All lakes and reservoirs tributary to Cinnamon Creek, Grouse Creek, Picayne Gulch, Minnie Gulch and Eureka Gulch. All lakes and reservoirs tributary to the Animas River from immediately above Maggie Gulch to Elk Park except for those listed under Segments 16, 17, 19, and 20. This segment includes Molas Lake, Bullion King Lake, Columbine Lake, Clear Lake, Island Lake, Ice Lake, Fuller Lake and Crystal Lake.								
COSJAF18	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CL	CL	Arsenic	340	---	
	Recreation E		acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS	
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---	
Other:	*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.	pH	6.5 - 9.0	---	Chromium III	---	TVS	
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50	---	
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS	
					Copper	TVS	TVS	
					Iron	---	WS	
					Iron(T)	---	1000	
		Ammonia	TVS	TVS	Lead	TVS	TVS	
		Boron	---	0.75	Lead(T)	50	---	
		Chloride	---	250	Manganese	TVS	TVSWS	
		Chlorine	0.019	0.011	Mercury(T)	---	0.01	
		Cyanide	0.005	---	Molybdenum(T)	---	150	
		Nitrate	10	---	Nickel	TVS	TVS	
		Nitrite	---	0.05	Nickel(T)	---	100	
		Phosphorus	---	0.025*	Selenium	TVS	TVS	
		Sulfate	---	WS	Silver	TVS	TVS(tr)	
		Sulfide	---	0.002	Uranium	varies*	varies*	
			Zinc	TVS	TVS			

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

19. All lakes and reservoirs tributary to Cement Creek from the source to the confluence with the Animas River.						
COSJAF19	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2 Recreation E	Temperature °C	CL	CL	Arsenic	340
Qualifiers:		acute	chronic	Arsenic(T)	---	100
		D.O. (mg/L)	---	6.0	Cadmium	TVS
Other:		D.O. (spawning)	---	7.0	Chromium III	TVS
		pH	6.5 - 9.0	---	Chromium III(T)	---
		chlorophyll a (ug/L)	---	8*	Chromium VI	TVS
		E. coli (per 100 mL)	---	126	Copper	TVS
		Inorganic (mg/L)		Iron(T)	---	1000
		acute	chronic	Lead	TVS	TVS
		Ammonia	TVS	TVS	Manganese	TVS
		Boron	---	0.75	Mercury(T)	---
		Chloride	---	---	Molybdenum(T)	---
		Chlorine	0.019	0.011	Nickel	TVS
		Cyanide	0.005	---	Selenium	TVS
		Nitrate	100	---	Silver	TVS
		Nitrite	---	0.05	Uranium	varies*
		Phosphorus	---	0.025*	Zinc	TVS
		Sulfate	---	---		
		Sulfide	---	0.002		

\*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.  
\*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.  
\*Uranium(acute) = See 34.5(3) for details.  
\*Uranium(chronic) = See 34.5(3) for details.

20. All lakes and reservoirs on the east side of Mineral Creek from the source to a point immediately above the confluence with South Mineral Creek. All lakes and reservoirs tributary to the Middle Fork of Mineral Creek from the source to the confluence with Mineral Creek except for the specific listings in Segment 18.

COSJAF20	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2 Recreation E	Temperature °C	CL	CL	Arsenic	340
Qualifiers:		acute	chronic	Arsenic(T)	---	100
		D.O. (mg/L)	---	6.0	Cadmium	TVS
Other:		D.O. (spawning)	---	7.0	Chromium III	TVS
		pH	6.5 - 9.0	---	Chromium III(T)	---
		chlorophyll a (ug/L)	---	8*	Chromium VI	TVS
		E. coli (per 100 mL)	---	126	Copper	TVS
		Inorganic (mg/L)		Iron(T)	---	1000
		acute	chronic	Lead	TVS	TVS
		Ammonia	TVS	TVS	Manganese	TVS
		Boron	---	0.75	Mercury(T)	---
		Chloride	---	---	Molybdenum(T)	---
		Chlorine	0.019	0.011	Nickel	TVS
		Cyanide	0.005	---	Selenium	TVS
		Nitrate	100	---	Silver	TVS
		Nitrite	---	0.05	Uranium	varies*
		Phosphorus	---	0.025*	Zinc	TVS
		Sulfate	---	---		
		Sulfide	---	0.002		

\*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.  
\*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.  
\*Uranium(acute) = See 34.5(3) for details.  
\*Uranium(chronic) = See 34.5(3) for details.

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

21. All lakes and reservoirs tributary to the Animas River from a point immediately above the confluence with Elk Creek to a point immediately below the confluence with Hermosa Creek except for the specific listing in Segment 12b. All lakes and reservoirs tributary to the Florida River from the source to the outlet of Lemon Reservoir, except the specific listing in Segment 16. This segment includes Little Molas Lake, Andrews Lake, Potato Lake, Scout Lake, Boyce Lake, Columbine Lake, Haviland Lake, Henderson Lake, Ruby Lake, Pear Lake, Webb Lake, Shalona Lake, Stratton Lake, and Wallace Lake.

COSJAF21	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 1	CL	CL	Temperature °C	340	---	---
	Recreation E	acute	chronic				
	Water Supply	---	6.0	D.O. (mg/L)	TVS	TVS	
<b>Qualifiers:</b>		---	7.0	D.O. (spawning)	5.0	---	---
<b>Other:</b>		6.5 - 9.0	---	pH	---	TVS	TVS
*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		---	8*	chlorophyll a (ug/L)	50	---	---
		---	126	E. coli (per 100 mL)	TVS	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
		acute	chronic		Iron	---	WS
		TVS	TVS	Ammonia	Iron(T)	---	1000
		---	0.75	Boron	Lead	TVS	TVS
		---	250	Chloride	Lead(T)	50	---
		0.019	0.011	Chlorine	Manganese	TVS	TVS/WS
		0.005	---	Cyanide	Mercury(T)	---	0.01
		10	---	Nitrate	Molybdenum(T)	---	150
		---	0.05	Nitrite	Nickel	TVS	TVS
		---	0.025*	Phosphorus	Nickel(T)	---	100
		---	WS	Sulfate	Selenium	TVS	TVS
		---	0.002	Sulfide	Silver	TVS	TVS(tr)
					Uranium	varies*	varies*
					Zinc	TVS	TVS

22. Electra Lake. Lake Nighthorse.

COSJAF22	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 1	CLL	CLL	Temperature °C	340	---	---
	Recreation E	acute	chronic				
	Water Supply	---	6.0	D.O. (mg/L)	TVS	TVS	TVS
<b>Qualifiers:</b>		---	7.0	D.O. (spawning)	5.0	---	---
<b>Other:</b>		6.5 - 9.0	---	pH	---	TVS	TVS
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		---	8*	chlorophyll a (ug/L)	50	---	---
		---	126	E. coli (per 100 mL)	TVS	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
		acute	chronic		Iron	---	WS
		TVS	TVS	Ammonia	Iron(T)	---	1000
		---	0.75	Boron	Lead	TVS	TVS
		---	250	Chloride	Lead(T)	50	---
		0.019	0.011	Chlorine	Manganese	TVS	TVS/WS
		0.005	---	Cyanide	Mercury(T)	---	0.01
		10	---	Nitrate	Molybdenum(T)	---	150
		---	0.05	Nitrite	Nickel	TVS	TVS
		---	0.025*	Phosphorus	Nickel(T)	---	100
		---	WS	Sulfate	Selenium	TVS	TVS
		---	0.002	Sulfide	Silver	TVS	TVS(tr)
					Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Animas and Florida River Basins

23. All lakes and reservoirs tributary to the Animas River from a point immediately below the confluence with Hermosa Creek to the Southern Ute Indian Reservation boundary except for the specific listings in Segments 13a and 14; all lakes and reservoirs tributary to the Florida River, from the outlet of Lemon Reservoir to the Southern Ute Indian Reservation boundary. This segment includes Chapman Lake and City Res No 1.						
COSJAF23	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CL	CL	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
	DUWS*	D.O. (spawning)	---	7.0	Cadmium(T)	5.0
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Chromium III	---
<b>Water + Fish Standards</b>		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50
<b>Other:</b>		E. coli (per 100 mL)	---	126	Chromium VI	TVS
*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Classification: DUWS applies to City Reservoir #1 and Lake Durango only. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		Inorganic (mg/L)		Copper	TVS	TVS
		acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.025*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS
						TVS
24. All lakes and reservoirs tributary to the Animas River, from the Southern Ute Indian Reservation boundary to the Colorado/New Mexico border. This segment includes Pastorius Reservoir.						
COSJAF24	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CL	CL	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
<b>Water + Fish Standards</b>		pH	6.5 - 9.0	---	Chromium III	---
<b>Other:</b>		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50
*Southern Ute Indian Reservation *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL)	---	126	Chromium VI	TVS
		Inorganic (mg/L)		Copper	TVS	TVS
		acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.025*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS
						TVS

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

**REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS**  
**La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County**

1. Mainstem of the La Plata River, including all wetlands and tributaries from the source to the Hay Gulch diversion south of Hesperus.								
COSJLP01	Classifications		Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1		Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02	
	Water Supply		D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:			D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:			pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):			chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
Arsenic(chronic) = hybrid			E. coli (per 100 mL)	---	205	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024						Copper	TVS	TVS
			Inorganic (mg/L)			Iron	---	WS
*Uranium(acute) = See 34.5(3) for details.			acute	chronic	Iron(T)	---	1000	
*Uranium(chronic) = See 34.5(3) for details.			Ammonia	TVS	TVS	Lead	TVS	TVS
			Boron	---	0.75	Lead(T)	50	---
			Chloride	---	250	Manganese	TVS	TVS/WS
			Chlorine	0.019	0.011	Mercury(T)	---	0.01
			Cyanide	0.005	---	Molybdenum(T)	---	150
			Nitrate	10	---	Nickel	TVS	TVS
			Nitrite	---	0.05	Nickel(T)	---	100
			Phosphorus	---	0.11	Selenium	TVS	TVS
			Sulfate	---	WS	Silver	TVS	TVS(tr)
			Sulfide	---	0.002	Uranium	varies*	varies*
						Zinc	TVS	TVS(sc)

2a. Mainstem of the La Plata River from the Hay Gulch diversion south of Hesperus to the boundary of Southern Ute Indian Reservation.									
COSJLP02A	Classifications		Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT	acute	chronic			
Reviewable	Aq Life Cold 1		Temperature °C	CS-II	CS-II	Arsenic	340	---	
	Recreation E	5/1 - 10/31	acute	chronic	Arsenic(T)	---	0.02		
	Recreation N	11/1 - 4/30	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS	
	Water Supply		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---	
Qualifiers:			pH	6.5 - 9.0	---	Chromium III	---	TVS	
Other:			chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---	
*Uranium(acute) = See 34.5(3) for details.			E. coli (per 100 mL)	5/1 - 10/31	---	Chromium VI	TVS	TVS	
*Uranium(chronic) = See 34.5(3) for details.			E. coli (per 100 mL)	11/1 - 4/30	---	630	Copper	TVS	TVS
			Inorganic (mg/L)			Iron	---	WS	
			acute	chronic	Iron(T)	---	1000		
			Ammonia	TVS	TVS	Lead	TVS	TVS	
			Boron	---	0.75	Lead(T)	50	---	
			Chloride	---	250	Manganese	TVS	TVS/WS	
			Chlorine	0.019	0.011	Mercury(T)	---	0.01	
			Cyanide	0.005	---	Molybdenum(T)	---	150	
			Nitrate	10	---	Nickel	TVS	TVS	
			Nitrite	---	0.05	Nickel(T)	---	100	
			Phosphorus	---	0.11	Selenium	TVS	TVS	
			Sulfate	---	WS	Silver	TVS	TVS(tr)	
			Sulfide	---	0.002	Uranium	varies*	varies*	
						Zinc	TVS	TVS(sc)	

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.



**REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS**  
**La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County**

2b. Mainstem of the La Plata River from the boundary of the Southern Ute Indian Reservation to above the confluence with Cherry Creek.											
COSJLP02B	Classifications		Physical and Biological			Metals (ug/L)					
Designation	Agriculture			DM	MWAT		acute	chronic			
Reviewable	Aq Life Warm 1		Temperature °C	WS-II	WS-II	Arsenic	340	---			
	Recreation E	5/1 - 10/31		acute	chronic	Arsenic(T)	---	0.02			
	Recreation P	11/1 - 4/30	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS			
	Water Supply		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---			
Qualifiers:			chlorophyll a (mg/m²)			---	150	Chromium III	---	TVS	
Other:  Temporary Modification(s):  Arsenic(chronic) = hybrid  Expiration Date of 12/31/2024  *Southern Ute Indian Reservation *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.			E. coli (per 100 mL)			5/1 - 10/31	---	126	Chromium III(T)	50	---
			E. coli (per 100 mL)			11/1 - 4/30	---	205	Chromium VI	TVS	TVS
									Copper	TVS	TVS
						Inorganic (mg/L)			Iron	---	WS
									Iron(T)	---	1000
			Ammonia			TVS	TVS	Lead	TVS	TVS	
			Boron			---	0.75	Lead(T)	50	---	
			Chloride			---	250	Manganese	TVS	TVSWS	
			Chlorine			0.019	0.011	Mercury(T)	---	0.01	
			Cyanide			0.005	---	Molybdenum(T)	---	150	
			Nitrate			10	---	Nickel	TVS	TVS	
			Nitrite			---	0.05	Nickel(T)	---	100	
			Phosphorus			---	0.17	Selenium	TVS	TVS	
			Sulfate			---	WS	Silver	TVS	TVS	
			Sulfide			---	0.002	Uranium	varies*	varies*	
									Zinc	TVS	TVS

2c. Mainstem of the La Plata River from the confluence with Cherry Creek to above the confluence with Long Hollow.											
COSJLP02C	Classifications		Physical and Biological			Metals (ug/L)					
Designation	Agriculture			DM	MWAT		acute	chronic			
Reviewable	Aq Life Warm 1		Temperature °C	WS-II	WS-II	Arsenic	340	---			
	Recreation E			acute	chronic	Arsenic(T)	---	0.02			
	Water Supply		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS			
Qualifiers:			pH	6.5 - 9.0	---	Cadmium(T)	5.0	---			
Other:  Temporary Modification(s):  Arsenic(chronic) = hybrid  Expiration Date of 12/31/2024  *Southern Ute Indian Reservation *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.			chlorophyll a (mg/m²)			---	150	Chromium III	---	TVS	
			E. coli (per 100 mL)			---	126	Chromium III(T)	50	---	
						Inorganic (mg/L)			Chromium VI	TVS	TVS
									Copper	TVS	TVS
			Ammonia			TVS	TVS	Iron	---	WS	
			Boron			---	0.75	Iron(T)	---	1000	
			Chloride			---	250	Lead	TVS	TVS	
			Chlorine			0.019	0.011	Lead(T)	50	---	
			Cyanide			0.005	---	Manganese	TVS	TVSWS	
			Nitrate			10	---	Mercury(T)	---	0.01	
			Nitrite			---	0.05	Molybdenum(T)	---	150	
			Phosphorus			---	0.17	Nickel	TVS	TVS	
			Sulfate			---	WS	Nickel(T)	---	100	
			Sulfide			---	0.002	Selenium	TVS	TVS	
									Silver	TVS	TVS
									Uranium	varies*	varies*
						Zinc	TVS	TVS			

2c. Mainstem of the La Plata River from the confluence with Cherry Creek to above the confluence with Long Hollow.							
COSJLP02C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 1	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
Other:		chlorophyll a (mg/m²)	---	150	Chromium III	---	TVS
Temporary Modification(s):		E. coli (per 100 mL)	---	126	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		Inorganic (mg/L)			Chromium VI	TVS	TVS
Expiration Date of 12/31/2024			acute	chronic	Copper	TVS	TVS
*Southern Ute Indian Reservation		Ammonia	TVS	TVS	Iron	---	WS
*Uranium(acute) = See 34.5(3) for details.		Boron	---	0.75	Iron(T)	---	1000
*Uranium(chronic) = See 34.5(3) for details.		Chloride	---	250	Lead	TVS	TVS
		Chlorine	0.019	0.011	Lead(T)	50	---
		Cyanide	0.005	---	Manganese	TVS	TVSWS
		Nitrate	10	---	Mercury(T)	---	0.01
		Nitrite	---	0.05	Molybdenum(T)	---	150
		Phosphorus	---	0.17	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

**REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS**  
**La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County**

2d. Mainstem of the La Plata River from Long Hollow to the Colorado/New Mexico border.							
COSJLP02D	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 1	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
Other:		chlorophyll a (mg/m²)	---	150	Chromium III	---	TVS
Temporary Modification(s):		E. coli (per 100 mL)	---	126	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		Inorganic (mg/L)			Chromium VI	TVS	TVS
Expiration Date of 12/31/2024		acute	chronic	Copper	TVS	TVS	
*Southern Ute Indian Reservation		Ammonia	TVS	TVS	Iron	---	WS
*Uranium(acute) = See 34.5(3) for details.		Boron	---	0.75	Iron(T)	---	1000
*Uranium(chronic) = See 34.5(3) for details.		Chloride	---	250	Lead	TVS	TVS
		Chlorine	0.019	0.011	Lead(T)	50	---
		Cyanide	0.005	---	Manganese	TVS	TVS/WS
		Nitrate	10	---	Mercury(T)	---	0.01
		Nitrite	---	0.05	Molybdenum(T)	---	150
		Phosphorus	---	0.17	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS
3a. All tributaries to the La Plata River, including all wetlands, from the Hay Gulch diversions south of Hesperus to the Southern Ute Indian Reservation boundary, except for specific listing in Segment 3c, 3d and 3e.							
COSJLP03A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
UP	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation N	acute	chronic	Arsenic(T)	---	100	
Qualifiers:		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Other:		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
		chlorophyll a (mg/m²)	---	150	Chromium III(T)	---	100
*Uranium(acute) = See 34.5(3) for details.		E. coli (per 100 mL)	---	630	Chromium VI	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		Inorganic (mg/L)			Copper	TVS	TVS
		acute	chronic	Iron(T)	---	1000	
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Manganese	TVS	TVS
		Chloride	---	---	Mercury(T)	---	0.01
		Chlorine	0.019	0.011	Molybdenum(T)	---	150
		Cyanide	0.005	---	Nickel	TVS	TVS
		Nitrate	100	---	Selenium	TVS	TVS
		Nitrite	---	0.05	Silver	TVS	TVS
		Phosphorus	---	0.17	Uranium	varies*	varies*
		Sulfate	---	---	Zinc	TVS	TVS
		Sulfide	---	0.002			

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County

3b. All tributaries to the La Plata River, including all wetlands, from the boundary of the Southern Ute Indian Reservation to the Colorado/New Mexico border.							
COSJLP03B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation N		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
Water + Fish Standards		chlorophyll a (mg/m²)	---	150	Chromium III	---	TVS
Other:  *Southern Ute Indian Reservation *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL)	---	630	Chromium III(T)	50	---
		Inorganic (mg/L)			Chromium VI	TVS	TVS
			acute	chronic	Copper	TVS	TVS
		Ammonia	TVS	TVS	Iron	---	WS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	250	Lead	TVS	TVS
		Chlorine	0.019	0.011	Lead(T)	50	---
		Cyanide	0.005	---	Manganese	TVS	TVSWS
		Nitrate	10	---	Mercury(T)	---	0.01
		Nitrite	---	0.05	Molybdenum(T)	---	150
		Phosphorus	---	0.17	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS
		3c. Cherry Creek, including all tributaries and wetlands, from the source to the boundary of the Southern Ute Indian Reservation boundary.					
COSJLP03C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVSWS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS(sc)

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

**REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS**  
**La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County**

3d. East Cherry Creek from the source to the confluence with Cherry Creek.								
COSJLP03D	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	---	
	Recreation E		acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS	
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---	
Other:  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS	
		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---	
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS	
					Copper	TVS	TVS	
		Inorganic (mg/L)			Iron	---	WS	
			acute	chronic	Iron(T)	---	1000	
		Ammonia	TVS	TVS	Lead	TVS	TVS	
		Boron	---	0.75	Lead(T)	50	---	
		Chloride	---	250	Manganese	TVS	TVS/WS	
		Chlorine	0.019	0.011	Mercury(T)	---	0.01	
		Cyanide	0.005	---	Molybdenum(T)	---	150	
		Nitrate	10	---	Nickel	TVS	TVS	
		Nitrite	---	0.05	Nickel(T)	---	100	
		Phosphorus	---	0.11	Selenium	TVS	TVS	
		Sulfate	---	WS	Silver	TVS	TVS(tr)	
		Sulfide	---	0.002	Uranium	varies*	varies*	
					Zinc	TVS	TVS(sc)	
		3e. East Alkali Gulch from the source to the Southern Ute Indian Boundary. Hay Gulch, including all tributaries, from the source to the Southern Ute Indian Boundary.						
		COSJLP03E	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT	acute	chronic		
UP	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340	---	
	Recreation N		acute	chronic	Arsenic(T)	---	0.02-10 <sup>A</sup>	
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS	
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---	
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150	Chromium III	TVS	TVS	
		E. coli (per 100 mL)	---	630	Chromium III(T)	---	100	
		Inorganic (mg/L)			Chromium VI	TVS	TVS	
			acute	chronic	Copper	TVS	TVS	
		Ammonia	TVS	TVS	Iron	---	WS	
		Boron	---	0.75	Iron(T)	---	1000	
		Chloride	---	250	Lead	TVS	TVS	
		Chlorine	0.019	0.011	Lead(T)	50	---	
		Cyanide	0.005	---	Manganese	TVS	TVS/WS	
		Nitrate	10	---	Mercury(T)	---	0.01	
		Nitrite	---	0.05	Molybdenum(T)	---	150	
		Phosphorus	---	0.11	Nickel	TVS	TVS	
		Sulfate	---	WS	Nickel(T)	---	100	
		Sulfide	---	0.002	Selenium	TVS	TVS	
					Silver	TVS	TVS	
					Uranium	varies*	varies*	
					Zinc	TVS	TVS	

3e. East Alkali Gulch from the source to the Southern Ute Indian Boundary. Hay Gulch, including all tributaries, from the source to the Southern Ute Indian Boundary.

COSJLP03E	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture	DM	MWAT	acute	chronic			
UP	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340	---	
	Recreation N	acute	chronic	Arsenic(T)	---	0.02-10	<sup>A</sup>	
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS	
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---	
Other:  *Uranium(acute) = See 34.5(3) for details.  *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150	Chromium III	TVS	TVS	
		E. coli (per 100 mL)	---	630	Chromium III(T)	---	100	
		Inorganic (mg/L)			Chromium VI	TVS	TVS	
			acute	chronic	Copper	TVS	TVS	
		Ammonia	TVS	TVS	Iron	---	WS	
		Boron	---	0.75	Iron(T)	---	1000	
		Chloride	---	250	Lead	TVS	TVS	
		Chlorine	0.019	0.011	Lead(T)	50	---	
		Cyanide	0.005	---	Manganese	TVS	TVS/WS	
		Nitrate	10	---	Mercury(T)	---	0.01	
		Nitrite	---	0.05	Molybdenum(T)	---	150	
		Phosphorus	---	0.11	Nickel	TVS	TVS	
		Sulfate	---	WS	Nickel(T)	---	100	
		Sulfide	---	0.002	Selenium	TVS	TVS	
					Silver	TVS	TVS	
					Uranium	varies*	varies*	
					Zinc	TVS	TVS	

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

**REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS**  
**La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County**

4a. Mainstem of the Mancos River, including all wetlands and tributaries, from the source of the East, West and Middle Forks to the San Juan National Forest Boundary.						
COSJLP04A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	CS-I	CS-I	Temperature °C	340	---
	Recreation E 5/1 - 10/31	acute	chronic	Arsenic(T)	---	0.02
	Recreation N 11/1 - 4/30	---	6.0	Cadmium	TVS	TVS
	Water Supply	---	7.0	Cadmium(T)	5.0	---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Chromium III	TVS
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Temporary Modification(s):		E. coli (per 100 mL) 5/1 - 10/31	---	126	Chromium VI	TVS
Arsenic(chronic) = hybrid		E. coli (per 100 mL) 11/1 - 4/30	---	630	Copper	TVS
Expiration Date of 12/31/2024		<b>Inorganic (mg/L)</b>		Iron	---	WS
*Uranium(acute) = See 34.5(3) for details.		acute	chronic	Iron(T)	---	1000
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
				Zinc	TVS	TVS

4b. Mancos Reservoir (Jackson Gulch Reservoir).						
COSJLP04B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	CLL	CLL	Temperature °C	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	---	6.0	Cadmium	TVS	TVS
	DUWS*	---	7.0	Cadmium(T)	5.0	---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Chromium III	TVS
<b>Other:</b>		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50
*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.		E. coli (per 100 mL)	---	126	Chromium VI	TVS
*Classification: DUWS applies to Jackson Gulch Reservoir only.		<b>Inorganic (mg/L)</b>		Copper	TVS	TVS
*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.		acute	chronic	Iron	---	WS
*Uranium(acute) = See 34.5(3) for details.		Ammonia	TVS	TVS	Iron(T)	---
*Uranium(chronic) = See 34.5(3) for details.		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.025*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
				Uranium	varies*	TVS(tr)
				Zinc	varies*	varies*
					TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin  
D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County

4c. Mainstem of the Mancos River, including all wetlands, tributaries, from below the San Juan National Forest Boundary to Hwy 160. Chicken Creek, including all tributaries, from its source to the confluence with the Mancos River.

COSJLP04C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E 5/1 - 10/31	acute	chronic		Arsenic(T)	---	0.02
	Recreation N 11/1 - 4/30	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
	Water Supply	D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Qualifiers:		pH	6.5 - 9.0	---	Chromium III	---	TVS
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50	---
*Uranium(acute) = See 34.5(3) for details.		E. coli (per 100 mL) 5/1 - 10/31	---	126	Chromium VI	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL) 11/1 - 4/30	---	630	Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
		acute	chronic		Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

5. Mainstem of the Mancos River from Hwy 160 to the boundary of the Ute Mountain Indian Reservation and mainstem of Weber Canyon from source to boundary of the Ute Mountain Ute Indian Reservation.

COSJLP05	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Warm 1	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation E 5/1 - 10/31	acute	chronic		Arsenic(T)	---	0.02
	Recreation N 11/1 - 4/30	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
	Water Supply	pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
Qualifiers:		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Chromium III	---	TVS
Other:		E. coli (per 100 mL) 5/1 - 10/31	---	126	Chromium III(T)	50	---
Temporary Modification(s):		E. coli (per 100 mL) 11/1 - 4/30	---	630	Chromium VI	TVS	TVS
Arsenic(chronic) = hybrid		Inorganic (mg/L)			Copper	TVS	TVS
Expiration Date of 12/31/2024		acute	chronic		Iron	---	WS
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 34.5(5).		Ammonia	TVS	TVS	Iron(T)	---	1000
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).		Boron	---	0.75	Lead	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		Chloride	---	250	Lead(T)	50	---
*Uranium(chronic) = See 34.5(3) for details.		Chlorine	0.019	0.011	Manganese	TVS	TVS/WS
		Cyanide	0.005	---	Mercury(T)	---	0.01
		Nitrate	10	---	Molybdenum(T)	---	150
		Nitrite	---	0.05	Nickel	TVS	TVS
		Phosphorus	---	0.17*	Nickel(T)	---	100
		Sulfate	---	WS	Selenium	TVS	TVS
		Sulfide	---	0.002	Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County

6a. All tributaries to the Mancos River, including all wetlands, from Hwy 160 to the boundary of the Ute Mountain Indian Reservation, except for specific listings in segment 4c, 5, 6b and 6c. Navajo Wash, including all tributaries, from the source to the Ute Mountain Indian Reservation Boundary.

COSJLP06A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation N 11/1 - 4/30	acute	chronic		Arsenic(T)	---	100
	Recreation P 5/1 - 10/31	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Qualifiers:		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	---	100
*Uranium(acute) = See 34.5(3) for details.		E. coli (per 100 mL) 5/1 - 10/31	---	205	Chromium VI	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL) 11/1 - 4/30	---	630	Copper	TVS	TVS
		Inorganic (mg/L)			Iron(T)	---	1000
			acute	chronic	Lead	TVS	TVS
		Ammonia	TVS	TVS	Manganese	TVS	TVS
		Boron	---	0.75	Mercury(T)	---	0.01
		Chloride	---	---	Molybdenum(T)	---	150
		Chlorine	0.019	0.011	Nickel	TVS	TVS
		Cyanide	0.005	---	Selenium	TVS	TVS
		Nitrate	100	---	Silver	TVS	TVS
		Nitrite	---	0.05	Uranium	varies*	varies*
		Phosphorus	---	0.17	Zinc	TVS	TVS
		Sulfate	---	---			
		Sulfide	---	0.002			

6b. East Fork of Mud Creek, including all tributaries, from the source to the confluence with the West Fork of Mud Creek. East Canyon from the source to the confluence with Joes Canyon.

COSJLP06B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation N 11/1 - 4/30	acute	chronic		Arsenic(T)	---	0.02-10 <sup>A</sup>
	Recreation P 5/1 - 10/31	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
	Water Supply	pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
Qualifiers:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III	TVS	TVS
Other:		E. coli (per 100 mL) 5/1 - 10/31	---	205	Chromium III(T)	---	100
*Uranium(acute) = See 34.5(3) for details.		E. coli (per 100 mL) 11/1 - 4/30	---	630	Chromium VI	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		Inorganic (mg/L)			Copper	TVS	TVS
			acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---	1000
		Boron	---	0.75	Lead	TVS	TVS
		Chloride	---	250	Lead(T)	50	---
		Chlorine	0.019	0.011	Manganese	TVS	TVS/WS
		Cyanide	0.005	---	Mercury(T)	---	0.01
		Nitrate	10	---	Molybdenum(T)	---	150
		Nitrite	---	0.05	Nickel	TVS	TVS
		Phosphorus	---	0.17	Nickel(T)	---	100
		Sulfate	---	WS	Selenium	TVS	TVS
		Sulfide	---	0.002	Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

**REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS**  
**La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County**

6c. All tributaries to the Mancos River located in Mesa Verde National Park.							
COSJLP06C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
OW	Aq Life Warm 1	Temperature °C	WS-III	WS-III	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	7.6
Qualifiers:		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
		chlorophyll a (mg/m²)	---	150	Chromium III(T)	---	100
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Manganese	TVS	TVS
		Chloride	---	---	Mercury(T)	---	0.01
		Chlorine	0.019	0.011	Molybdenum(T)	---	---
		Cyanide	0.005	---	Nickel	TVS	TVS
		Nitrate	100	---	Selenium	TVS	TVS
		Nitrite	---	0.05	Silver	TVS	TVS
		Phosphorus	---	0.17	Uranium	varies*	varies*
		Sulfate	---	---	Zinc	TVS	TVS
		Sulfide	---	0.002			
		7a. Mainstem of McElmo Creek from the source to the confluence with Alkali Canyon. Mainstem of Yellow Jacket Creek, including all tributaries and wetlands, from the source to the confluence with McElmo Creek.					
COSJLP07A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 1	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	7.6
Qualifiers:		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Other:  Discharger Specific Variance(s): Ammonia(ac/ch) = See Section 34.6(d) for details on variance for Vista Verde Village Mobile Home Park. Expiration Date of 6/30/2031  *chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5). *Phosphorus(chronic) = applies only above the facilities listed at 34.5(5). *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
		chlorophyll a (mg/m²)	---	150*	Chromium III(T)	---	100
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
			acute	chronic	Iron(T)	---	2200
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Manganese	TVS	TVS
		Chloride	---	---	Mercury(T)	---	0.01
		Chlorine	0.019	0.011	Molybdenum(T)	---	150
		Cyanide	0.005	---	Nickel	TVS	TVS
		Nitrate	100	---	Selenium	TVS	TVS
		Nitrite	---	0.05	Silver	TVS	TVS
		Phosphorus	---	0.17*	Uranium	varies*	varies*
		Sulfate	---	---	Zinc	TVS	TVS
		Sulfide	---	0.002			

7a. Mainstem of McElmo Creek from the source to the confluence with Alkali Canyon. Mainstem of Yellow Jacket Creek, including all tributaries and wetlands, from the source to the confluence with McElmo Creek.

COSJLP07A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute chronic			
Reviewable	Aq Life Warm 1	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	7.6	
Qualifiers:		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Other:  Discharger Specific Variance(s): Ammonia(ac/ch) = See Section 34.6(d) for details on variance for Vista Verde Village Mobile Home Park. Expiration Date of 6/30/2031  *chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5). *Phosphorus(chronic) = applies only above the facilities listed at 34.5(5). *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
		chlorophyll a (mg/m²)	---	150*	Chromium III(T)	---	100
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
		acute	chronic	Iron(T)	---	2200	
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Manganese	TVS	TVS
		Chloride	---	---	Mercury(T)	---	0.01
		Chlorine	0.019	0.011	Molybdenum(T)	---	150
		Cyanide	0.005	---	Nickel	TVS	TVS
		Nitrate	100	---	Selenium	TVS	TVS
		Nitrite	---	0.05	Silver	TVS	TVS
		Phosphorus	---	0.17*	Uranium	varies*	varies*
		Sulfate	---	---	Zinc	TVS	TVS
		Sulfide	---	0.002			

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.



**REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS**  
**La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County**

7b. Mainstem of McElmo Creek from the confluence with Alkali Canyon to the Colorado/Utah border, except portion within the Ute Mountain Indian Reservation.							
COSJLP07B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 1	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02	
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
Other:		chlorophyll a (mg/m²)	---	---	Chromium III	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		E. coli (per 100 mL)	---	126	Chromium III(T)	---	100
*Uranium(chronic) = See 34.5(3) for details.		Inorganic (mg/L)			Chromium VI	TVS	TVS
		acute	chronic	Copper	TVS	TVS	
		Ammonia	TVS	TVS	Iron	---	WS
		Boron	---	0.75	Iron(T)	---	2200
		Chloride	---	250	Lead	TVS	TVS
		Chlorine	0.019	0.011	Lead(T)	50	---
		Cyanide	0.005	---	Manganese	TVS	TVS/WS
		Nitrate	10	---	Mercury(T)	---	0.01
		Nitrite	---	0.05	Molybdenum(T)	---	150
		Phosphorus	---	---	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS
8. All tributaries to McElmo Creek, including all wetlands, from the source to the Colorado/Utah border, except for the portions within the Ute Mountain Indian Reservation and except for specific listings in Segments 7a, 7b and 11.							
COSJLP08	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
UP	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02-10	<sup>A</sup>
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
Other:		chlorophyll a (mg/m²)	---	150*	Chromium III	TVS	TVS
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5).		E. coli (per 100 mL)	---	126	Chromium III(T)	50	---
*Phosphorus(chronic) = applies only above the facilities listed at 34.5(5).		Inorganic (mg/L)			Chromium VI	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		acute	chronic	Copper	TVS	TVS	
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Iron	---	WS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	250	Lead	TVS	TVS
		Chlorine	0.019	0.011	Lead(T)	50	---
		Cyanide	0.005	---	Manganese	TVS	TVS/WS
		Nitrate	10	---	Mercury(T)	---	0.01
		Nitrite	---	0.05	Molybdenum(T)	---	150
		Phosphorus	---	0.17*	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS

8. All tributaries to McElmo Creek, including all wetlands, from the source to the Colorado/Utah border, except for the portions within the Ute Mountain Indian Reservation and except for specific listings in Segments 7a, 7b and 11.

COSJLP08	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
UP	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	0.02-10 <sup>A</sup>	
	Water Supply	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Qualifiers:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
<b>Other:</b>  *chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 34.5(5). *Phosphorus(chronic) = applies only above the facilities listed at 34.5(5). *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150*	Chromium III	TVS	TVS
		E. coli (per 100 mL)	---	126	Chromium III(T)	50	---
		Inorganic (mg/L)			Chromium VI	TVS	TVS
			acute	chronic	Copper	TVS	TVS
		Ammonia	TVS	TVS	Iron	---	WS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	250	Lead	TVS	TVS
		Chlorine	0.019	0.011	Lead(T)	50	---
		Cyanide	0.005	---	Manganese	TVS	TVS/WS
		Nitrate	10	---	Mercury(T)	---	0.01
		Nitrite	---	0.05	Molybdenum(T)	---	150
		Phosphorus	---	0.17*	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

**REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS**  
**La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County**

9. Unnamed tributary to Ritter Draw (confluence at 37.4059, -108.5325).

COSJLP09	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM		MWAT	acute	chronic	
UP	Aq Life Warm 2	Temperature °C	WS-III	WS-III	Arsenic	340	---
	Recreation E	acute	chronic		Arsenic(T)	---	100
Qualifiers:		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Other:		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Chromium III(T)	---	100
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
		acute	chronic		Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Manganese	TVS	TVS
		Chloride	---	250	Mercury(T)	---	0.01
		Chlorine	0.019	0.011	Molybdenum(T)	---	150
		Cyanide	0.005	---	Nickel	TVS	TVS
		Nitrate	100	---	Selenium	TVS	TVS
		Nitrite	---	0.05	Silver	TVS	TVS
		Phosphorus	---	0.17*	Uranium	varies*	varies*
		Sulfate	---	250	Zinc	TVS	TVS
		Sulfide	---	0.002			

10. All tributaries to the San Juan River in Montezuma Dolores and San Miguel Counties, including all wetlands, except for the specific listings in Segments 2 through 8c and Segments 10b and 11.

COSJLP10	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM		MWAT	acute	chronic	
UP	Aq Life Warm 2	Temperature °C	WS-III	WS-III	Arsenic	340	---
	Recreation E	acute	chronic		Arsenic(T)	---	7.6
Qualifiers:		D.O. (mg/L)	---	5.0	Beryllium(T)	---	100
Other:		pH	6.5 - 9.0	---	Cadmium	TVS	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Chromium III	TVS	TVS
		E. coli (per 100 mL)	---	126	Chromium III(T)	---	100
		Inorganic (mg/L)			Chromium VI	TVS	TVS
		acute	chronic		Copper	TVS	TVS
		Ammonia	TVS	TVS	Iron(T)	---	1000
		Boron	---	0.75	Lead	TVS	TVS
		Chloride	---	---	Manganese	TVS	TVS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	100	---	Nickel	TVS	TVS
		Nitrite	---	---	Selenium	TVS	TVS
		Phosphorus	---	0.17*	Silver	TVS	TVS
		Sulfate	---	---	Uranium	varies*	varies*
		Sulfide	---	0.002	Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

**REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS**  
**La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County**

11. Narraguinnep, Puett and Totten Reservoirs.						
COSJLP11	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Warm 1	WL	WL	340	---	Arsenic
	Recreation E	acute	chronic	---	0.02	Arsenic(T)
	Water Supply	---	5.0	TVS	TVS	Cadmium
Qualifiers:		pH	6.5 - 9.0	---	---	Cadmium(T)
Other:  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (ug/L)	---	20*	---	Chromium III
		E. coli (per 100 mL)	---	126	---	Chromium III(T)
		Inorganic (mg/L)		---	---	Chromium VI
		acute	chronic	TVS	TVS	Copper
		Ammonia	TVS	TVS	---	Iron
		Boron	---	0.75	---	Iron(T)
		Chloride	---	250	TVS	Lead
		Chlorine	0.019	0.011	50	---
		Cyanide	0.005	---	TVS	TVS/WS
		Nitrate	10	---	---	Mercury(T)
		Nitrite	---	0.5	---	Molybdenum(T)
		Phosphorus	---	0.083*	TVS	Nickel
		Sulfate	---	WS	---	Nickel(T)
		Sulfide	---	0.002	TVS	Selenium
				TVS	TVS	Silver
				varies*	varies*	Uranium
				TVS	TVS	Zinc
12. All lakes and reservoirs tributary to the La Plata River from the source to the Hay Gulch diversion south of Hesperus.						
COSJLP12	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	CL	CL	340	---	Arsenic
	Recreation E	acute	chronic	---	0.02	Arsenic(T)
	Water Supply	---	6.0	TVS	TVS	Cadmium
Qualifiers:		D.O. (spawning)	---	7.0	---	Cadmium(T)
Other:  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	---	Chromium III
		chlorophyll a (ug/L)	---	8*	50	---
		E. coli (per 100 mL)	---	126	TVS	TVS
				TVS	TVS	Chromium VI
		Inorganic (mg/L)		---	---	Copper
		acute	chronic	---	WS	Iron
		Ammonia	TVS	TVS	---	Iron(T)
		Boron	---	0.75	TVS	Lead
		Chloride	---	250	TVS	Lead(T)
		Chlorine	0.019	0.011	---	Manganese
		Cyanide	0.005	---	---	Mercury(T)
		Nitrate	10	---	---	Molybdenum(T)
		Nitrite	---	0.05	TVS	Nickel
		Phosphorus	---	0.025*	---	Nickel(T)
		Sulfate	---	WS	TVS	Selenium
		Sulfide	---	0.002	TVS	Silver
				varies*	varies*	Uranium
				TVS	TVS	Zinc

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County

13. All lakes and reservoirs tributary to the La Plata River from the Hay Gulch diversions south of Hesperus to the Southern Ute Indian Reservation boundary.						
COSJLP13	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT		acute	chronic
UP	Aq Life Warm 2	WL	WL	Arsenic	340	---
	Recreation P	acute	chronic	Arsenic(T)	---	100
Qualifiers:		D.O. (mg/L)	---	5.0	Cadmium	TVS
<b>Other:</b>  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	TVS
		chlorophyll a (ug/L)	---	20*	Chromium III(T)	---
		E. coli (per 100 mL)	---	205	Chromium VI	TVS
		Inorganic (mg/L)		Copper	TVS	TVS
		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Manganese	TVS
		Chloride	---	---	Mercury(T)	---
		Chlorine	0.019	0.011	Molybdenum(T)	---
		Cyanide	0.005	---	Nickel	TVS
		Nitrate	100	---	Selenium	TVS
		Nitrite	---	0.05	Silver	TVS
		Phosphorus	---	0.083*	Uranium	varies*
		Sulfate	---	---	Zinc	TVS
		Sulfide	---	0.002		
14. All lakes and reservoirs tributary to the La Plata River from the boundary of the Southern Ute Indian Reservation to the Colorado/New Mexico border. The segment includes Mormon Reservoir (a.k.a. Red Mesa Ward Reservoir) and Long Hollow Reservoir (a.k.a. Bobby K. Taylor Reservoir).						
COSJLP14	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT		acute	chronic
UP	Aq Life Warm 2	WL	WL	Arsenic	340	---
	Recreation E	acute	chronic	Arsenic(T)	---	7.6
Qualifiers:		D.O. (mg/L)	---	5.0	Cadmium	TVS
Fish Ingestion		pH	6.5 - 9.0	---	Chromium III	TVS
<b>Other:</b>  *Southern Ute Indian Reservation *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (ug/L)	---	20*	Chromium III(T)	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
		Inorganic (mg/L)		Copper	TVS	TVS
		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Manganese	TVS
		Chloride	---	---	Mercury(T)	---
		Chlorine	0.019	0.011	Molybdenum(T)	---
		Cyanide	0.005	---	Nickel	TVS
		Nitrate	100	---	Selenium	TVS
		Nitrite	---	0.05	Silver	TVS
		Phosphorus	---	0.083*	Uranium	varies*
		Sulfate	---	---	Zinc	TVS
		Sulfide	---	0.002		

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County

15. All lakes and reservoirs tributary to the Mancos River from the source of the East, West and Middle Forks to Hwy 160, except for the specific listing in Segment 4b. This segment includes Weber Reservoir, Bauer Lake, Little Bauer Reservoir, Hackley Reservoir, Joe Moore Reservoir, and Coppinger Reservoir.

COSJLP15	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 1	CL	CL	Temperature °C	340	---	---
	Recreation E 5/1 - 10/31	acute	chronic		---	0.02	
	Recreation N 11/1 - 4/30	---	6.0	D.O. (mg/L)	TVS	TVS	
	Water Supply	---	7.0	D.O. (spawning)	5.0	---	
Qualifiers:		6.5 - 9.0	---	pH	---	TVS	
Other:		---	8*	chlorophyll a (ug/L)	50	---	
		5/1 - 10/31	126	E. coli (per 100 mL)	TVS	TVS	
		11/1 - 4/30	630	E. coli (per 100 mL)	TVS	TVS	
		Inorganic (mg/L)			---	WS	
		acute	chronic		---	1000	
		TVS	TVS	Ammonia	TVS	TVS	
		---	0.75	Boron	50	---	
		---	250	Chloride	TVS	TVS/WS	
		0.019	0.011	Chlorine	---	0.01	
		0.005	---	Cyanide	---	150	
		10	---	Nitrate	TVS	TVS	
		---	0.05	Nitrite	---	100	
		---	0.025*	Phosphorus	TVS	TVS	
		---	WS	Sulfate	TVS	TVS(tr)	
		---	0.002	Sulfide	varies*	varies*	
				Zinc	TVS	TVS	

16. All lakes and reservoirs tributary to the Mancos River, from Hwy 160 to the boundary of the Ute Mountain Indian Reservation.

COSJLP16	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Warm 2	WL	WL	Temperature °C	340	---	---
	Recreation N 11/1 - 4/30	acute	chronic		---	100	
	Recreation P 5/1 - 10/31	---	5.0	D.O. (mg/L)	TVS	TVS	
Qualifiers:		6.5 - 9.0	---	pH	TVS	TVS	
Other:		---	20*	chlorophyll a (ug/L)	---	100	
		5/1 - 10/31	205	E. coli (per 100 mL)	TVS	TVS	
		11/1 - 4/30	630	E. coli (per 100 mL)	TVS	TVS	
		Inorganic (mg/L)			---	1000	
		acute	chronic		TVS	TVS	
		TVS	TVS	Ammonia	TVS	TVS	
		---	0.75	Boron	---	0.01	
		---	---	Chloride	---	150	
		0.019	0.011	Chlorine	TVS	TVS	
		0.005	---	Cyanide	TVS	TVS	
		100	---	Nitrate	varies*	varies*	
		---	0.05	Nitrite	TVS	TVS	
		---	0.083*	Phosphorus			
		---	---	Sulfate			
		---	0.002	Sulfide			

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County

17. All lakes and reservoirs tributary to the San Juan River in Montezuma Dolores and San Miguel Counties except for the specific listings in Segments 4b, 11 through 16, 18 and 19.

COSJLP17	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	7.6
Qualifiers:		D.O. (mg/L)	---	5.0	Beryllium(T)	---	100
Other:		pH	6.5 - 9.0	---	Cadmium	TVS	TVS
*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only above the facilities listed at 34.5(5), applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (ug/L)	---	20*	Chromium III	TVS	TVS
		E. coli (per 100 mL)	---	126	Chromium III(T)	---	100
		Inorganic (mg/L)			Chromium VI	TVS	TVS
			acute	chronic	Copper	TVS	TVS
		Ammonia	TVS	TVS	Iron(T)	---	1000
		Boron	---	0.75	Lead	TVS	TVS
		Chloride	---	---	Manganese	TVS	TVS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	100	---	Nickel	TVS	TVS
		Nitrite	---	---	Selenium	TVS	TVS
		Phosphorus	---	0.083*	Silver	TVS	TVS
		Sulfate	---	---	Uranium	varies*	varies*
		Sulfide	---	0.002	Zinc	TVS	TVS

18. All lakes and reservoirs tributary to Yellow Jacket Creek, from the source to the confluence with McElmo Creek.

COSJLP18	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 1	Temperature °C	WL	WL	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	7.6
Qualifiers:		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Other:		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (ug/L)	---	20*	Chromium III(T)	---	100
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
			acute	chronic	Iron(T)	---	2200
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Manganese	TVS	TVS
		Chloride	---	---	Mercury(T)	---	0.01
		Chlorine	0.019	0.011	Molybdenum(T)	---	150
		Cyanide	0.005	---	Nickel	TVS	TVS
		Nitrate	100	---	Selenium	TVS	TVS
		Nitrite	---	0.05	Silver	TVS	TVS
		Phosphorus	---	0.083*	Uranium	varies*	varies*
		Sulfate	---	---	Zinc	TVS	TVS
		Sulfide	---	0.002			

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## La Plata River, Mancos River, McElmo Creek and San Juan River in Montezuma County and Dolores County

19. All lakes and reservoirs tributary to McElmo Creek from the source to the Colorado/Utah border, except for those within the Ute Mountain Indian Reservation. This segment includes Denny Lake.							
COSJLP19	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
UP	Aq Life Warm 2	Temperature °C	WL	WL	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	7.6
Qualifiers:		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Fish Ingestion		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
Other:  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (ug/L)	---	20*	Chromium III(T)	---	100
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Manganese	TVS	TVS
		Chloride	---	---	Mercury(T)	---	0.01
		Chlorine	0.019	0.011	Molybdenum(T)	---	150
		Cyanide	0.005	---	Nickel	TVS	TVS
		Nitrate	100	---	Selenium	TVS	TVS
		Nitrite	---	0.05	Silver	TVS	TVS
		Phosphorus	---	0.083*	Uranium	varies*	varies*
		Sulfate	---	---	Zinc	TVS	TVS
		Sulfide	---	0.002			

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Dolores River Basin

1. All tributaries to the Dolores River and West Dolores River, including all wetlands, tributaries, which are within the Lizard Head Wilderness area.						
COSJDO01	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
OW	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Expiration Date of 12/31/2024					Copper	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)		Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS
2. Mainstem of the Dolores River from the source to a point immediately above the confluence with Horse Creek.						
COSJDO02	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS
Expiration Date of 12/31/2024					Copper	TVS
*Uranium(acute) = See 34.5(3) for details.		Inorganic (mg/L)		Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.		acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.



## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

### Dolores River Basin

3. Mainstem of the Dolores River from a point immediately above the confluence with Horse Creek to a point immediately above the confluence with Bear Creek.						
COSJDO03	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E		acute	chronic	Arsenic(T)	---
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
<b>Other:</b>  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
					Copper	TVS
		Inorganic (mg/L)			Iron	---
			acute	chronic	Iron(T)	---
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS

4a. Mainstem of the Dolores River from a point immediately above the confluence with Bear Creek to the bridge at Bradfield Ranch (Forest Route 505, near Montezuma/Dolores County Line).						
COSJDO04A	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340
	Recreation E		acute	chronic	Arsenic(T)	---
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
<b>Other:</b>  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024  *chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 34.5(5). *Phosphorus(chronic) = applies only above the facilities listed at 34.5(5). *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
					Copper	TVS
		Inorganic (mg/L)			Iron	---
			acute	chronic	Iron(T)	---
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11*	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

4b. McPhee Reservoir and Summit Reservoir.								
COSJDO04B	Classifications	Physical and Biological				Metals (ug/L)		
Designation	Agriculture			DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	1/1 - 4/30	CLL	CLL	Arsenic	340	---
	Recreation E	Temperature °C	4/1 - 12/31	CLL*	varies* B	Arsenic(T)	---	0.02
	Water Supply					Cadmium	TVS	TVS
	DUWS*					Cadmium(T)	5.0	---
Qualifiers:		D.O. (mg/L)		---	6.0	Chromium III	---	TVS
Other:		D.O. (spawning)		---	7.0	Chromium III(T)	50	---
Temporary Modification(s):		pH		6.5 - 9.0	---	Chromium VI	TVS	TVS
Arsenic(chronic) = hybrid		chlorophyll a (ug/L)		---	8*	Copper	TVS	TVS
Expiration Date of 12/31/2024		E. coli (per 100 mL)		---	126	Iron	---	WS
						Iron(T)	---	1000
						Lead	TVS	TVS
		Inorganic (mg/L)				Lead(T)	50	---
				acute	chronic	Manganese	TVS	TVS/WS
		Ammonia		TVS	TVS	Mercury(T)	---	0.01
		Boron		---	0.75	Molybdenum(T)	---	150
		Chloride		---	250	Nickel	TVS	TVS
		Chlorine		0.019	0.011	Nickel(T)	---	100
		Cyanide		0.005	---	Selenium	TVS	TVS
		Nitrate		10	---	Silver	TVS	TVS(tr)
		Nitrite		---	0.05	Uranium	varies*	varies*
		Phosphorus		---	0.025*	Zinc	TVS	TVS
		Sulfate		---	WS			
		Sulfide		---	0.002			
5a. All tributaries to the Dolores River and West Dolores River, including all wetlands, from the source to a point immediately below the confluence with the West Dolores River except for specific listings in Segments 1 and 5b through 10.								
COSJDO05A	Classifications	Physical and Biological				Metals (ug/L)		
Designation	Agriculture			DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C		CS-I	CS-I	Arsenic	340	---
	Recreation E			acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)		---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)		---	7.0	Cadmium(T)	5.0	---
Other:		pH		6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m²)		---	150	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)		---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024						Copper	TVS	TVS
						Iron	---	WS
						Iron(T)	---	1000
				acute	chronic	Lead	TVS	TVS
		Ammonia		TVS	TVS	Lead(T)	50	---
		Boron		---	0.75	Manganese	TVS	TVS/WS
		Chloride		---	250	Mercury(T)	---	0.01
		Chlorine		0.019	0.011	Molybdenum(T)	---	150
		Cyanide		0.005	---	Nickel	TVS	TVS
		Nitrate		10	---	Nickel(T)	---	100
		Nitrite		---	0.05	Selenium	TVS	TVS
		Phosphorus		---	0.11	Silver	TVS	TVS(tr)
		Sulfate		---	WS	Uranium	varies*	varies*
		Sulfide		---	0.002	Zinc	TVS	TVS(sc)*

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Dolores River Basin

5b. Mainstem of Rio Lado from the source to the confluence with the Dolores River. Mainstem of Spring Creek from the source to the confluence with Stoner Creek. Mainstem of Little Taylor Creek from the source to the confluence with Taylor Creek.

COSJDO05B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
OW	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
<b>Other:</b>  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
					Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS(sc)

6. Mainstem of the Slate Creek and Coke Oven Creek, from the Lizard Head Wilderness Area boundary to their confluences with the Dolores River.

COSJDO06	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
<b>Other:</b>  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
					Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.

## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

### Dolores River Basin

7. Mainstem of Coal Creek from the boundary of the Lizard Head Wilderness Area to the confluence with the Dolores River.						
COSJDO07	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E		acute	chronic	Arsenic(T)	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
					Copper	TVS
		Inorganic (mg/L)			Iron	---
					Iron(T)	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS
						TVS(sc)

8. Mainstem of Horse Creek from the source to the confluence with the Dolores River.

COSJDO08	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340
	Recreation E		acute	chronic	Arsenic(T)	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024  *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
					Copper	TVS
		Inorganic (mg/L)			Iron	---
					Iron(T)	1000
		Ammonia	TVS	TVS	Lead	TVS
		Boron	---	0.75	Lead(T)	50
		Chloride	---	250	Manganese	TVS
		Chlorine	0.019	0.011	Mercury(T)	---
		Cyanide	0.005	---	Molybdenum(T)	---
		Nitrate	10	---	Nickel	TVS
		Nitrite	---	0.05	Nickel(T)	---
		Phosphorus	---	0.11	Selenium	TVS
		Sulfate	---	WS	Silver	TVS
		Sulfide	---	0.002	Uranium	varies*
					Zinc	TVS
						TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

## REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Dolores River Basin

9. Mainstem of Silver Creek from a point immediately below the Town of Rico's water supply diversion to the confluence with the Dolores River.								
COSJDO09	Classifications		Physical and Biological			Metals (ug/L)		
Designation	Agriculture			DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1		Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E                      5/1 - 10/31			acute	chronic	Arsenic(T)	---	7.6
	Recreation N                      11/1 - 4/30		D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:			D.O. (spawning)	---	7.0	Chromium III	TVS	TVS
Fish Ingestion			pH	6.5 - 9.0	---	Chromium III(T)	---	100
Other:			chlorophyll a (mg/m²)	---	150	Chromium VI	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.			E. coli (per 100 mL)                      5/1 - 10/31	---	126	Copper	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.			E. coli (per 100 mL)                      11/1 - 4/30	---	630	Iron	---	---
			Inorganic (mg/L)			Lead	TVS	TVS
				acute	chronic	Manganese	TVS	TVS
			Ammonia	TVS	TVS	Mercury(T)	---	0.01
			Boron	---	0.75	Molybdenum(T)	---	150
			Chloride	---	---	Nickel	TVS	TVS
			Chlorine	0.019	0.011	Selenium	TVS	TVS
			Cyanide	0.005	---	Silver	TVS	TVS(tr)
			Nitrate	100	---	Uranium	varies*	varies*
			Nitrite	---	0.05	Zinc	TVS	TVS
			Phosphorus	---	0.11			
			Sulfate	---	---			
			Sulfide	---	0.002			

10a. Mainstem of the West Dolores River from the Lizard Head Wilderness Area boundary to above the confluence with Fish Creek.								
COSJDO10A	Classifications		Physical and Biological			Metals (ug/L)		
Designation	Agriculture			DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1		Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E			acute	chronic	Arsenic(T)	---	0.02
	Water Supply		D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:			D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:			pH	6.5 - 9.0	---	Chromium III	---	TVS
*Manganese(chronic) = WS, TVS and 50 ug/L			chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
*Uranium(acute) = See 34.5(3) for details.			E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.						Copper	TVS	TVS
			Inorganic (mg/L)			Iron	---	WS
				acute	chronic	Iron(T)	---	1000
			Ammonia	TVS	TVS	Lead	TVS	TVS
			Boron	---	0.75	Lead(T)	50	---
			Chloride	---	250	Manganese	TVS	varies*
			Chlorine	0.019	0.011	Mercury(T)	---	0.01
			Cyanide	0.005	---	Molybdenum(T)	---	150
			Nitrate	10	---	Nickel	TVS	TVS
			Nitrite	---	0.05	Nickel(T)	---	100
			Phosphorus	---	0.11	Selenium	TVS	TVS
			Sulfate	---	WS	Silver	TVS	TVS(tr)
			Sulfide	---	0.002	Uranium	varies*	varies*
						Zinc	TVS	TVS

10a. Mainstem of the West Dolores River from the Lizard Head Wilderness Area boundary to above the confluence with Fish Creek.							
COSJDO10A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:  *Manganese(chronic) = WS, TVS and 50 ug/L *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	varies*
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Dolores River Basin

10b. Mainstem of the West Dolores River from above the confluence with Fish Creek to the confluence with the Dolores River.							
COSJDO10B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Other:		pH	6.5 - 9.0	---	Chromium III	---	TVS
*Manganese(chronic) = WS, TVS and 50 ug/L *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	varies*
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS(tr)
		Sulfide	---	0.002	Uranium	varies*	varies*
			Zinc	TVS	TVS		

11a. Lost Canyon, including all tributaries, from the source to the Forest Service Boundary.							
COSJDO11A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CS-I	CS-I	Arsenic	340	---
	Recreation E		acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
Water + Fish Standards		pH	6.5 - 9.0	---	Chromium III	---	TVS
Other:		chlorophyll a (mg/m²)	---	150	Chromium III(T)	50	---
*Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
					Copper	TVS	TVS
		Inorganic (mg/L)			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury(T)	---	0.01
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Nickel(T)	---	100
		Phosphorus	---	0.11	Selenium	TVS	TVS
		Sulfate	---	WS	Silver	TVS	TVS
		Sulfide	---	0.002	Uranium	varies*	varies*
					Zinc	TVS	TVS(sc)

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Dolores River Basin

11b. All tributaries to the Dolores River, including all wetlands, from a point immediately below the confluence of the West Dolores River to the inlet of McPhee Reservoir, except for the specific listing in Segments 4a and 11a.

COSJDO11B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340	---
	Recreation E	acute	chronic		Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
<b>Water + Fish Standards</b>		pH	6.5 - 9.0	---	Chromium III	---	TVS
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50	---
*Uranium(acute) = See 34.5(3) for details.		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
*Uranium(chronic) = See 34.5(3) for details.		<b>Inorganic (mg/L)</b>			Copper	TVS	TVS
		acute	chronic		Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---	1000
		Boron	---	0.75	Lead	TVS	TVS
		Chloride	---	250	Lead(T)	50	---
		Chlorine	0.019	0.011	Manganese	TVS	TVSWS
		Cyanide	0.005	---	Mercury(T)	---	0.01
		Nitrate	10	---	Molybdenum(T)	---	150
		Nitrite	---	0.05	Nickel	TVS	TVS
		Phosphorus	---	0.11	Nickel(T)	---	100
		Sulfate	---	WS	Selenium	TVS	TVS
		Sulfide	---	0.002	Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS(sc)

11c. All tributaries to McPhee Reservoir, except for the specific listings in Segments 4a and 11b. All tributaries to the Dolores River from the outlet of McPhee Reservoir to the bridge at Bradfield Ranch (Forest Route 505, near Montezuma/Dolores County Line). Beaver Creek and Plateau Creek, including all tributaries, from the source to the confluence with the Dolores River.

COSJDO11C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Warm 1	Temperature °C	WS-II	WS-II	Arsenic	340	---
	Recreation E	acute	chronic		Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
<b>Other:</b>		pH	6.5 - 9.0	---	Chromium III	---	TVS
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III(T)	50	---
Arsenic(chronic) = hybrid		E. coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2024		<b>Inorganic (mg/L)</b>			Copper	TVS	TVS
*Uranium(acute) = See 34.5(3) for details.		acute	chronic		Iron	---	WS
*Uranium(chronic) = See 34.5(3) for details.		Ammonia	TVS	TVS	Iron(T)	---	1000
		Boron	---	0.75	Lead	TVS	TVS
		Chloride	---	250	Lead(T)	50	---
		Chlorine	0.019	0.011	Manganese	TVS	TVSWS
		Cyanide	0.005	---	Mercury(T)	---	0.01
		Nitrate	10	---	Molybdenum(T)	---	150
		Nitrite	---	0.05	Nickel	TVS	TVS
		Phosphorus	---	0.11	Nickel(T)	---	100
		Sulfate	---	WS	Selenium	TVS	TVS
		Sulfide	---	0.002	Silver	TVS	TVS
					Uranium	varies*	varies*
					Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Dolores River Basin

12. All lakes, and reservoirs tributary to the Dolores River and West Dolores River, which are within the Lizard Head Wilderness area. This segment includes Navajo Lake.						
COSJDO12	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
OW	Aq Life Cold 1	Temperature °C	CL	CL	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Qualifiers:		pH	6.5 - 9.0	---	Chromium III	---
<b>Other:</b>  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
		Inorganic (mg/L)		Copper	TVS	TVS
		acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.025*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS
						TVS

13. Groundhog Reservoir.						
COSJDO13	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CLL	CLL	Arsenic	340
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Qualifiers:		pH	6.5 - 9.0	---	Chromium III	---
<b>Other:</b>  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Uranium(acute) = See 34.5(3) for details. *Uranium(chronic) = See 34.5(3) for details.		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
		Inorganic (mg/L)		Copper	TVS	TVS
		acute	chronic	Iron	---	WS
		Ammonia	TVS	TVS	Iron(T)	---
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.025*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS
						TVS

All metals are dissolved unless otherwise noted.  
 T = total recoverable  
 t = total  
 tr=trout  
 sc=sculpin

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 34.6 for further details on applied standards.



# REGULATION #34 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Dolores River Basin

14. All lakes and reservoirs tributary to the Dolores River and West Dolores River, from the source to a point immediately below the confluence with the West Dolores River except for specific listings in Segments 12 and 13.						
COSJDO14	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	CL	CL	340	---	
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Other:		pH	6.5 - 9.0	---	Chromium III	---
		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
		Inorganic (mg/L)			Copper	TVS
		acute	chronic	Iron	---	WS
		Ammonia	TVS	Iron(T)	---	1000
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.025*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS

  

15. All lakes and reservoirs which are tributary to the Dolores River from a point immediately below the confluence of the West Dolores River, to the bridge at Bradfield Ranch (Forest Route 505, near Montezuma/Dolores County Line), except for the specific listing in Segment 4b. This segment includes Campbell Reservoir, Summers Reservoir, Red Lake, and Long Draw Reservoir.						
COSJDO15	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	CL	CL	340	---	
	Recreation E	acute	chronic	Arsenic(T)	---	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Cadmium	TVS
Qualifiers:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
Water + Fish Standards		pH	6.5 - 9.0	---	Chromium III	---
Other:		chlorophyll a (ug/L)	---	8*	Chromium III(T)	50
		E. coli (per 100 mL)	---	126	Chromium VI	TVS
		Inorganic (mg/L)			Copper	TVS
		acute	chronic	Iron	---	WS
		Ammonia	TVS	Iron(T)	---	1000
		Boron	---	0.75	Lead	TVS
		Chloride	---	250	Lead(T)	50
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury(T)	---
		Nitrate	10	---	Molybdenum(T)	---
		Nitrite	---	0.05	Nickel	TVS
		Phosphorus	---	0.025*	Nickel(T)	---
		Sulfate	---	WS	Selenium	TVS
		Sulfide	---	0.002	Silver	TVS
					Uranium	varies*
					Zinc	TVS

All metals are dissolved unless otherwise noted.  
T = total recoverable  
t = total  
tr=trout  
sc=sculpin

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 34.6 for further details on applied standards.

#### **STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS – FOOTNOTES**

- (A) Whenever a range of standards is listed and referenced to this footnote, the first number in the range is a strictly health-based value, based on the Commission's established methodology for human health-based standards. The second number in the range is a maximum contaminant level, established under the federal Safe Drinking Water Act that has been determined to be an acceptable level of this chemical in public water supplies, taking treatability and laboratory detection limits into account. Control requirements, such as discharge permit effluent limitations, shall be established using the first number in the range as the ambient water quality target, provided that no effluent limitation shall require an "end-of-pipe" discharge level more restrictive than the second number in the range. Water bodies will be considered in attainment of this standard, and not included on the Section 303(d) List, so long as the existing ambient quality does not exceed the second number in the range.
- (B) Assessment of adequate refuge shall rely on the Cold Large Lake table value temperature criterion and applicable dissolved oxygen standard rather than the site-specific temperature standard.
- (C) For certain site-specific temperature standards, the temperature excursions listed in Table I - Footnote 5(c) of 31.16 do not apply. Assessment of ambient-based temperature standards should be conducted in a way that represents similar conditions to those under which the criteria were developed (i.e., air, low flow, and warming event excursions should not apply). Similarly, where site-specific adjustments to the winter shoulder season have been adopted, the winter shoulder season excursion does not apply.

TABLE 1  
ANIMAS RIVER BASIN  
AQUATIC LIFE INDICATOR GOAL: BROOK TROUT

Segment 3a  
Acute Standards

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Zn	720	780	1060	1200	760	410	280	340	380	440	510	590

Chronic Standards

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Mn	TVS	TVS	2571	2179	TVS	TVS	TVS	TVS	TVS	TVS	TVS	TVS
Zn	720	780	1060	1200	760	410	280	340	380	440	510	590

Segment 4a

Acute Standards

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Al(Trec)	3100	3550	2800	2020	1010	740	700	1360	1490	1610	2280	2570
Zn	460	520	620	570	430	250	170	240	290	340	380	420

Chronic Standards

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
pH	5.9-9.0	5.7-9.0	6.2-9.0	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0	5.9-9.0
Al(Trec)	3100	3550	2800	2020	1010	740	700	1360	1490	1610	2280	2570
Fe	3473	2961	3776	3404	2015	1220	1286	1830	1623	2258	2631	3511
Zn	460	520	620	570	430	250	170	240	290	340	380	420

## Segment 9

### Acute Standards

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Al(Trec)	4680	4950	4560	3800	1390	1350	1290	2040	2570	2680	3450	4050

### Chronic Standards

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
pH	4.9-9.0	4.8-9.0	4.9-9.0	5.9-9.0	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0	6.5-9.0	6.2-9.0	5.4-9.0
Al(Trec)	4680	4950	4560	3800	1390	1350	1290	2040	2570	2680	3450	4050
Cu	TVS	TVS	TVS	18	20	TVS	TVS	TVS	TVS	TVS	TVS	TVS
Fe	3420	3800	4370	3370	3150	2210	2275	2280	3020	3580	3620	3490
Zn	TVS	TVS	TVS	TVS	230	TVS	TVS	TVS	TVS	TVS	TVS	TVS

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**Editor's Notes**

**History**

Rules 34.5, 34.32 eff. 07/01/2007.

Rules 34.6 (Tables 1-18), 34.33, 34.34 eff. 06/30/2010.

Rules 34.6 (Tables 1-18), 34.35 eff. 06/30/2011.

Rules 34.6 (Table pp. 2, 7, 8, 12), 34.36 eff. 01/01/2012.

Rules 34.5(1), 34.5(3)-34.5(4), 34.6(2)-34.6(3), 34.38 eff. 03/30/2013.

Rules 34.6(3), 34.39 emer. rules eff. 05/13/2013.

Rules 34.6(2)(d), 34.6(3), (Tables pgs. 1, 5, 7, 9-12, 15, 21), 34.40-34.41 eff. 09/30/2013.

Rules 34.6 Animas and Florida River segment 13b, La Plata River, McElmo Creek, and San Juan River segments 7a, 8c, 34.42 eff. 06/30/2014.

Rules 34.6 Animas and Florida River segment 13b, 34.43 eff. 03/01/2015.

Rules 34.6 La Plata River, Mancos River, McElmo Creek, and San Juan River segments 7a, 8c, 34.44 eff. 06/30/2015.

Rules 34.6, Appendix 34-1, 34.45 eff. 03/01/2016.

Rule 34.46, Appendix 34-1 eff. 06/30/2016.

Rule 34.47, Appendix 34-1 eff. 06/30/2017.

Rules 34.2-34.6, 34.48, Appendix 34-1 eff. 12/31/2017.

Rule 34.49, Appendix 34-1 eff. 06/30/2019.

Rules 34.6, 34.50, 34.51, Appendix 34-1 eff. 06/30/2020.

Rules 34.6(4), 34.52, 34.53, Appendix 34-1 eff. 06/30/2021.

Rules 34.5-34.6, 34.54, Appendix 34-1 eff. 12/31/2021.