COLORADO
Water Quality
Control Commission
Department of Public Health & Environment

NOTICE OF PUBLIC RULEMAKING HEARING
BEFORE THE
COLORADO WATER QUALITY CONTROL COMMISSION

SUBJECT:

For consideration of the adoption of revised water quality classifications, standards and designations for multiple segments in the Classifications and Numeric Standards for Arkansas River Basins, Regulation #32 (5 CCR 1002-32) and Rio Grande Basins, Regulation #36 (5 CCR 1002-36).

Proposed revisions and proposed statement of basis and purpose language have been submitted by the following:

- Exhibit 1– Regulation #32, Water Quality Control Division (division);
- Exhibit 2– Regulation #36, division;
- Exhibit 3 – Regulation #32, Arkansas Fountain Coalition for Urban River Evaluation (AF CURE):
- Exhibit 4 – Regulation #32, City of Las Animas (Las Animas);
- Exhibit 5 – Regulation #32, Public Service Company of Colorado (Public Service);
- Exhibit 6 – Regulation #32, City of Publo (Pueblo);
- Exhibit 7 – Regulation #32, Pueblo West Metropolitan District (Pueblo West);
- Exhibit 8 – Regulation #32, Resurrection Mining Company (Resurrection); and
- Exhibit 9 – Regulation #36, Rio Grande Silver, Inc.

In these attachments, proposed new language is shown with double-underlining and proposed deletions are shown with ~~strikeouts~~. Any alternative proposals related to the revisions proposed in Exhibits 1 through 9 and developed in response to those proposals will also be considered.

SCHEDULE OF IMPORTANT DATES

Proponent's prehearing statement due	03/14/2018 5 pm	Additional information below.
Party status requests due	03/20/2018 5 pm	Additional information below.
Responsive prehearing statements due	04/18/2018 5 pm	Additional information below.
Rebuttal statements due	05/16/2018 5 pm	Additional information below.
Last date for submittal of motions	05/22/2018 5 pm	Additional information below.

Notify commission office if participating in prehearing conference by phone	05/23/2018 by noon	Send email to cdphe.wqcc@state.co.us with participant(s) name(s)
Prehearing Conference (mandatory for parties)	05/24/2018 1:30 pm	Carson Conference Room Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, CO 80246 Call-In number: 1-857-216-6700 Conference code: 425132
Cutoff of negotiations	05/30/2018	
Division's consolidated proposals	06/06/2018	
Rulemaking Hearing	06/11/2018 10:00 am	Salida SteamPlant Event Center 220 West Sackett Salida, CO 81201

TRIENNIAL REVIEW PROCESS OVERVIEW:

This rulemaking hearing is the third and final step in a three-step process for triennial review of water quality classifications and standards in Colorado. The first step is an issues scoping hearing which provides an opportunity for early identification of potential issues that may need to be addressed in the next major rulemaking hearing, and for identification of any issues that may need to be addressed prior to that time. The issues scoping hearing for this regulation was held in October 2016. The second step in the triennial review process, the issues formulation hearing, results in the identification of specific issues to be addressed in the next major rulemaking. The issues formulation hearing for this regulation was held in November 2017. The third step is the rulemaking hearing where any revisions to the water quality classifications and standards are formally adopted. Information regarding triennial reviews of water quality classifications and standards is provided on the commission's website.

HEARING SUBMITTALS:

For this hearing, the commission will receive all submittals electronically. Submittals must be provided as PDF documents, except for raw data exhibits which may be provided as Excel workbooks. Sumbittals may be emailed to cdphe.wqcc@state.co.us, provided via an FTP site, CD or flash drive, or otherwise conveyed to the commission office so as to be received no later than the specified date.

PARTY STATUS:

Party status requests must be in writing and must provide:

- the organization's name,
- one contact person,
- a mailing address,
- a phone number, and

- email addresses of all individuals associated with the party who wish to be notified when new submittals are available on the commission's website for review.

In accordance with section 25-8-104(2)(d), C.R.S., any person who believes that the actions proposed in this notice have the potential to cause material injury to his or her water rights is requested to so indicate, along with an explanation of the alleged harm, in their party status request.

The commission encourages informal discussions among the parties, the division and other interested persons prior to the hearing in an effort to reach consensus or to develop proposed resolutions of issues and/or narrow the issues potentially in dispute. The commission strongly encourages that any multi-party/division proposals for the resolution of issues (including proposed statement of basis and purpose language whenever feasible) be submitted as part of the administrative record as early as possible, but at least by the prehearing conference.

PREHEARING AND REBUTTAL STATEMENTS:

Each party must submit a prehearing statement: parties that have proposed revisions attached as exhibits to the notice must submit a proponent's prehearing statement; all other parties must submit a responsive prehearing statement. Proponents may also submit responsive prehearing statements when there are multiple proposals attached to the notice.

Each prehearing and rebuttal statement must be provided as a separate PDF document from any accompanying written testimony or exhibits.

Following the rebuttal statement due date, no other written materials will be accepted from parties except for good cause shown.

Oral testimony at the hearing should primarily summarize written material previously submitted. The hearing will emphasize commission questioning of parties and other interested persons about their written prehearing submittals. Introduction of written material at the hearing by those with party status will not be permitted unless authorized by the commission.

PREHEARING CONFERENCE:

Attendance at the prehearing conference is mandatory for all persons requesting party status. Parties needing to participate by telephone are encouraged to notify the commission office prior to the prehearing conference. Remote participants can call 1-857-216-6700 and enter the conference code 425132. Failure to attend the prehearing conference in person or by telephone shall be cause to deny party status.

CUT-OFF DATE FOR MOTIONS:

Following the cut-off date for motions, no motions will be accepted, except for good cause shown.

PUBLIC PARTICIPATION ENCOURAGED:

The commission encourages input from non-parties, either orally at the hearing or in writing prior to the hearing. Written submissions should be emailed to cdphe.wqcc@state.co.us by May 30, 2017.

SPECIFIC STATUTORY AUTHORITY:

The provisions of sections 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 consideration of the regulatory amendments proposed by this notice. Should the commission adopt the regulatory language as proposed in this notice or alternative amendments, it will also adopt, in compliance with section 24-4-103(4) C.R.S., an appropriate Statement of Basis, Specific Statutory Authority, and Purpose.

Dated this 8th day of February, 2018 at Denver, Colorado.

WATER QUALITY CONTROL COMMISSION

Digitally signed by Trisha Oeth
DN: cn=Trisha Oeth, o, ou=Water Quality Control Commission, email=trisha.oeth@state.co.us, c=US
Date: 2018.02.08 09:45:58 -07'00'

Trisha Oeth, Administrator

EXHIBIT 1
WATER QUALITY CONTROL DIVISION

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 32 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR ARKANSAS RIVER BASIN

5 CCR 1002-32

32.1 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.

32.2 PURPOSE

These regulations establish classifications and numeric standards for the Arkansas River, including all tributaries and standing bodies of water as indicated in section 32.6. 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. ~~(See Regulation No. 31, section 31.14).~~ 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.

32.3 INTRODUCTION

These regulations and tables present the classifications and numeric standards assigned to stream segments listed in the attached tables (See ~~section 32.6~~ Appendix 32-1). 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 ~~section 32.6~~ Appendix 32-1. 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 Standards and Methodologies for Surface Water".

32.4 DEFINITIONS

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

32.5 BASIC STANDARDS

(1) ~~TEMPERATURE~~Temperature

All waters of the Arkansas 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~~Qualifiers

See Basic Standards and Methodologies for Surface Water for a listing of organic standards at 31.11 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 Tables 32.6~~ Appendix 32-1. 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 ~~Tables 32.6~~ Appendix 32-1.

(3) ~~URANIUM~~Uranium

(a) All waters of the Arkansas 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 levels 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 ~~ug~~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) ~~NUTRIENTS~~Nutrients

Prior to ~~May~~December 31, 2022 for chlorophyll *a* and prior to December 31, 2027 for total phosphorus, interim nutrient values will be considered for adoption only in the limited circumstances defined at 31.17(e) and (f). These circumstances include headwaters, Direct Use Water Supply (DUWS) Lakes and Reservoirs, and other special circumstances determined by the Commission. Additionally, prior to ~~May~~December 31, 20~~1~~27, only total phosphorus and chlorophyll *a* will be considered for adoption. After ~~May~~ December 31, 20~~1~~27, total nitrogen will be considered for adoption per the circumstances outlined in 31.17(~~e~~g).

Prior to ~~May~~December 31, 202~~2~~7, nutrient criteria will be adopted for headwaters on a segment by segment basis for the Arkansas 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 Arkansas River Basin:

Segment	Permittee	Facility name	Permit No.
COARUA02b	Leadville MHC LLC	Lake Fork MHP	COG588060
COARUA03	Buena Vista Sanitation District	Buena Vista San Dist WWTF	CO0045748
COARUA03	Salida City of	Salida WWTF	CO0040339
COARUA04a	Fremont Sanitation District	Rainbow Park WWTF	CO0039748
COARUA05	Young Life Campaign Inc	Frontier Ranch	CO0034304
COARUA05	Moose Haven Condominiums	Moose Haven Condominums	CO0047279
COARUA05	Mountain View Villages Water & Sanitation District	Mountain View Villages	CO0048372
COARUA06	Leadville Sanitation District	Leadville San Dist WWTF	CO0021164
COARUA12a	Mount Princeton Hot Springs Resort	Mount Princeton Hot Springs Resort WWTF	COG588017
COARUA12a	Christian Mission Concerns	Silver Cliff Ranch	COG588102
~~COARUA12b~~COARUA13	Monarch Mountain Lodge	Garfield WWTF	CO0028444
~~COARUA12b~~COARUA13	PowderMonarch LLC	Monarch Ski Area	CO0031399
COARUA14d	Penrose Sanitation District	Penrose WWTF	CO0046523
COARUA14d	Royal Gorge Company of Colorado	Royal Gorge	CO0029033
COARUA21a	Cripple Creek City of	Cripple Creek WWTF	CO0039900
COARUA23	Victor City of	Victor WWTF	CO0024201
COARMA04a; COARMA04g	Pueblo West Metro District	Pueblo West Metro District WWTF	CO0040789
COARMA04c	Sunset Metropolitan District	Ellicott Springs WWTF	CO0047252
COARMA04c	Woodmen Hills Metropolitan District	Woodmen Hills Metro Dist WWTF	CO0047091
COARMA04d	Avondale Water and Sanitation District	Avondale and Fort Reynolds WWTF	CO0021075
COARMA04f	Cherokee Metropolitan District	Cherokee Metropolitan District WRF	COX048348
COARMA09	Colorado City Metropolitan District	Colorado City Metro Dist WWTF	CO0021121
COARMA13b	Cucharas Sanitation and Water District	Cucharas WWTF	CO0043745
COARMA14	La Veta Town of	La Veta WWTF	CO0032409
COARMA14	City of Walsenburg	Walsenburg City of	CO0020745
COARFO02a	Fountain Sanitation District	Fountain Sanitation District WWTF	CO0020532
COARFO02a	Colorado Springs Utilities	Las Vegas Street WWTF	CO0026735
COARFO02a	Security Sanitation District	Security Sanitation District WWTF	CO0024392
COARFO02a	Widefield Water and Sanitation District	Widefield WSD WWTF	CO0021067
COARFO04	Academy Water and Sanitation District	Academy Water and San Dist WWTF	COG589020
COARFO04	Broadmoor Park Properties	Broadmoor Park Properties	COG589021

Segment	Permittee	Facility name	Permit No.
COARFO04	Academy School Dist 20	Edith Wolford Elem School	CO0048429
COARFO04	Lower Fountain Metropolitan Sewage Disposal District	HDTRWRF	CO0000005
COARFO06	Colorado Springs Utilities	J D Phillips Water Reclamation Facility	CO0046850
COARFO06	Tri-Lakes Wastewater Treatment Facility	Tri-Lakes WWTF	CO0020435
COARFO06	Donala Water and Sanitation District	Upper Monument Crk Reg WWTF	CO0042030
COARLA01a	Pueblo City of	James R DiIorio WRF	CO0026646
COARLA01a	Meadowbrook MHP LLC	Meadowbrook MHP	COG588022
COARLA01b	Crowley County Correctional	Crowley Correctional Facility	CO0046795
COARLA01b	Colorado Dept of Corrections	Fort Lyon Correctional Facility WWTF	CO0046311
COARLA01b	Colorado Dept of Corrections	Fort Lyon Correctional Facility WWTF	CO0048801
COARLA01b	Fowler Town of	Fowler WWTF	CO0021571
COARLA01b	Las Animas City of	Las Animas WWTF	CO0040690
COARLA01b	North La Junta Sanitation District	North La Junta San Dist WWTF	CO0039519
COARLA01b	Rocky Ford City of	Rocky Ford WWTF	CO0023850
COARLA02a	Boone Town of	Boone WWTF	COG589116
COARLA02a	Calhan Town of	Calhan WWTF	COG589018
~~COARLA02a~~COARMA13c	Country Host Motel	Country Host Motel	COG589038
COARLA02a	Crowley Town of	Crowley WWTF	CO0041599
COARLA02a	Eads Town of	Eads WWTF	COG589016
~~COARLA02a~~COARLA02d	Limon, Town of	Limon WWTF	COG589023
COARLA02a	Simla Town of	Simla WWTF	COG589031
COARLA02d~~COARLA02a~~	Springfield Town of	Springfield WWTF	COG589102
COARLA02d~~COARLA02a~~	Colorado Dept of Corrections	Trinidad Correctional Facility	CO0046094
COARLA02b	La Junta City of	La Junta WWTF	CO0021261
COARLA05b	Trinidad City of	Trinidad WWTF	CO0024015
COARLA05b; COARLA06a	Cokedale Town of	Cokedale WWTF	CO0048461
COARLA07	Hoehne School District R-3	Hoehne School	COG588110
COARLA07	Trinidad City of	Trinidad WWTF	CO0031232
Unclassified	Colorado Dept of Natural Resources	Arkansas Point WWTF	COG589008
Unclassified	Manzanola, Town of	Manzanola WWTF	COG589012
Unclassified	Wiley Sanitation District	Wiley San Dist WWTF	COG589007

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 apply only above these facilities*. A ~~foot~~note was added to the total phosphorus and chlorophyll *a*

standards in these segments. The ~~foot~~note references the table of qualified facilities at 32.5(4).

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

A ~~foot~~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.

32.6 TABLES

(1) Introduction

The numeric standards for various parameters in this regulation and in the tables in Appendix 32-1 were assigned by the Commission after a careful analysis of the data presented on actual stream conditions and on actual and potential water uses.

Numeric standards are not assigned for all parameters listed in the tables attached to 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 ~~in~~ the tables in Appendix 32-1:

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
D.O.	=	dissolved oxygen
DM	=	daily maximum temperature
DUWS	=	direct use water supply
E. coli	=	*Escherichia coli*
mg/l	=	milligrams per liter
MWAT	=	maximum weekly average temperature
OW	=	outstanding waters
~~SSE~~	~~=~~	~~site-specific equation~~
s~~S~~p	=	spawning
SSE	=	site-specific equation
T	=	total recoverable
~~T~~t	=	total
tr	=	trout
~~T~~	~~=~~	~~total recoverable~~
TVS	=	table value standard
µ~~u~~g/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

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

Fe(ch) = WS
Mn(ch) = WS
SO_4 = 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 = 50µg/l (dissolved)
SO_4 = 250 mg/l

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 temporary modification and qualifiers column as As(ch)=hybrid.

(ii) For discharges existing on or before 6/1/2013, the temporary modification is: As(ch)=current condition, expiring on 12/31/2021.

(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 (Trec), expiring on 12/31/2021.

(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 32-1, 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[1]	TABLE VALUE STANDARDS[2][3]
Aluminum (T~~rec~~)	Acute = $e^{(1.3695[\ln(\text{hardness})]+1.8308)}$ pH equal to or greater than 7.0 Chronic=$e^{(1.3695[\ln(\text{hardness})]-0.1158)}$ pH less than 7.0 Chronic= $e^{(1.3695[\ln(\text{hardness})]-0.1158)}$ or 87, whichever is more stringent
Ammonia[4]	Cold Water = (mg/l as N) Total $acute = \frac{0.275}{1+10^{7.204-pH}} + \frac{39.0}{1+10^{pH-7.204}}$ $chronic = \left(\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}}\right) * MIN\left(2.85,\ 1.45*10^{0.028(25-T)}\right)$
	Warm Water = (mg/l as N) Total $acute = \frac{0.411}{1+10^{7.204-pH}} + \frac{58.4}{1+10^{pH-7.204}}$ $chronic\ \ (Apr\,1-Aug\,31) = \left(\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}}\right) * MIN\left(2.85,\ 1.45*10^{0.028(25-T)}\right)$ $chronic\ (Sep\,1-Mar\,31) = \left(\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}}\right) * 1.45*10^{0.028*(25-MAX(T,\ 7))}$
Cadmium	Acute = (1.136672-[ln(hardness) x (0.041838)])x $e^{0.9151[\ln(\text{hardness})]-3.1485}$ Acute(Trout) = (1.136672-[ln(hardness)x (0.041838)])x $e^{0.9151[\ln(\text{hardness})]-3.6236}$ Chronic = (1.101672-[ln(hardness) x(0.041838)] x $e^{0.7998[\ln(\text{hardness})]-4.4451}$
Chromium III[5]	Acute = $e^{(0.819[\ln(\text{hardness})]+2.5736)}$ Chronic= $e^{(0.819[\ln(\text{hardness})]+0.5340)}$
Chromium VI[5]	Acute = 16 Chronic = 11
Copper	Acute = $e^{(0.9422[\ln(\text{hardness})]-1.7408)}$ Chronic = $e^{(0.8545[\ln(\text{hardness})]-1.7428)}$
Lead	Acute = (1.46203-[ln(hardness)*(0.145712)])* $e^{(1.273[\ln(\text{hardness})]-1.46)}$ Chronic = (1.46203-[ln(hardness)*(0.145712)])* $e^{(1.273[\ln(\text{hardness})]-4.705)}$
Manganese	Acute = $e^{(0.3331[\ln(\text{hardness})]+6.4676)}$ Chronic = $e^{(0.3331\ [\ln(\text{hardness})]+5.8743)}$
Nickel	Acute = $e^{(0.846[\ln(\text{hardness})]+2.253)}$ Chronic = $e^{(0.846[\ln(\text{hardness})]+0.0554)}$
Selenium[6]	Acute = 18.4 Chronic = 4.6
Silver	Acute = ½$e^{(1.72[\ln(\text{hardness})]-6.52)}$ 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 (^{O}C)**	
					MWAT	**DM**
	Cold Stream Tier 1	CS-I	brook trout, cutthroat trout	June – Sept.	17.0	21.7
				Oct. – May	9.0	13.0
	Cold Stream Tier 2	CS-II	Other cold-water species	April – Oct.	18.3	~~23.9~~ 24.3
				Nov. – March	9.0	13.0
	Cold Lakes~~(7)~~	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)~~(7)~~	CLL	rainbow trout, brown trout, lake trout	April – Dec.	18.3	~~23.8~~ 24.2
				Jan. – March	9.0	13.0
	Warm Stream Tier 1	WS-I	common shiner, Johnny darter, orangethroat darter, stonecat	March – Nov.	24.2	29.0
				Dec. – Feb.	12.1	~~14.5~~ 24.6
	Warm Stream Tier 2	WS-II	brook stickleback, central stoneroller, creek chub, longnose dace, ~~N~~northern redbelly dace, finescale dace, razorback sucker, white sucker, mountain sucker	March – Nov.	27.5	28.6
				Dec. – Feb.	13.8	~~14.3~~ 25.2
	Warm Stream Tier 3	WS-III	all other warm-water species	March – Nov.	28.7	31.8
				Dec. – Feb.	14.3	~~15.9~~ 24.9
	Warm Lakes	WL	black crappie, bluegill, common carp, gizzard shad, golden shiner, largemouth bass, ~~N~~northern pike, pumpkinseed, sauger, smallmouth bass, spottail shiner, stonecat, striped bass, tiger muskellunge, walleye, wiper, white bass, white crappie, yellow perch	April – Dec.	26.~~23~~	29.~~53~~
				Jan. – March	13.~~21~~	~~14.8~~ 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 = $0.986*e^{(0.9094[\ln(\text{hardness})]+0.6235)}$					

TABLE VALUE STANDARDS - FOOTNOTES

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

(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.

(5) Unless the stability of the chromium valence state in receiving waters can be clearly demonstrated, the standard for chromium should be in terms of chromium VI. In no case can the sum of the instream levels of Hexavalent and Trivalent Chromium exceed the water supply standard of 50 ~~u~~µg/l total chromium in those waters classified for domestic water use.

(6) Selenium is a bioaccumulative metal and subject to a range of toxicity values depending upon numerous site-specific variables.

(7) Lake trout-based summer temperature criteria [16.6 (ch), 22.4 (ac)] apply where appropriate and necessary to protect lake trout from thermal impacts.

~~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.~~

~~(8) All phosphorus standards are based upon the concentration of total phosphorus.~~

~~(9) 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.~~

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(4) Assessment Criteria

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

(a) Middle Arkansas Segment 4a, Wildhorse Creek, Se(ac)=2376, Se(ch)=2110: Selenium Assessment Location

- Wildhorse Creek above Pesthouse Gulch: 38.296478, -104.649201

(b) Middle Arkansas Segment 4g, Pesthouse Gulch, Se(ac)=389, Se(ch)=369: Selenium Assessment Location

- Pesthouse above No Name: 38.309568, -104.672244

(c) Middle Arkansas Segment 6b, St. Charles River, Se(ac)=173, Se(ch)=50: Selenium Assessment Locations

Determinations of attainment of the chronic and acute selenium standards will be based on the 85th and 95th percentile, respectively of all available data from the segment. The selenium assessment locations are:

- SC-5: St. Charles River approximately one mile downstream of the confluence with Edson Arroyo.
- SC-6-US: St. Charles River upstream of the confluence with Thomkins Arroyo and the Comanche discharge.
- SC-7: Approximately 2 miles upstream of the Bessemer Canal crossing.
- SC-8: Immediately upstream of the Bessemer Canal crossing.
- SC-9: St. Charles River downstream of where the river flows under U.S. Highway 50, approximately 3 miles upstream of the confluence with the Arkansas River.

(d) Middle Arkansas Segment 20, Pueblo Reservoir: Chlorophyll *a* Assessment Location

- Site 7b (USGS Site 381602104435200): Near the dam and the south outlet works

(5) Stream Classifications and Water Quality Standards Tables

The stream classifications and water quality standards tables in Appendix 32-1 are incorporated herein by reference.

The following is information regarding duration and measured form of standards in Appendix 325-1:

(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.

(6) Discharger Specific Variances

(a) A Discharger Specific Variance (DSV) establishes a temporary water quality standard that represents the highest degree of protection of a classified use that is feasible within 20 years and is granted by the Commission pursuant to criteria contained in Regulation 31.7(4).

(i) In every case, the variance to the standard shall be temporary and must be re-examined not less than once every three years.

(ii) For DSVs that are longer than five years in duration, the Commission will submit the results of its re-evaluation to EPA within 30 days of the date the Commission completes its re-evaluation. Pursuant to 40 CFR 131.14(b)(1)(v)-(vi), the DSV will no longer be the applicable water quality standard for purposes of the Clean Water Act if the Commission does not conduct a re-evaluation consistent with the specified frequency or if the Commission does not submit the results within 30 days of completion of the re-evaluation process.

(b) The first number of the DSV 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 the discharger. 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 discharger.

(c) Lower Arkansas Segment 1b**:**

Discharger Specific Variance, City of La Junta (CO0021261): Adopted 10/11/2016.

Selenium (acute) = TVS: no limit; Selenium (chronic) = TVS: 0.37 lbs/day as a 12-month rolling average. Expiration date: 12/31/2026.

32.7 – 32.9 RESERVED

. . . .

32.61 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 11, 2018 RULEMAKING; FINAL ACTION AUGUST 6, 2018; EFFECTIVE DATE DECEMBER 31, 2018

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:

Upper Arkansas River Segment 5: Segment 5 was divided into segments 5a and 5b as part of changes to temperature standards. The mainstem of Trout Creek from its source to Trout Creek Reservoir, including all tributaries and wetlands, was moved to from Segment 5 to Segment 5b to facilitate adoption of CS-II temperature standards.

Upper Arkansas River segments 14d and 14e: The mainstems and tributaries of Grape Creek, Fernleaf Creek, West Creek, Oak Creek, Adobe Creek, Chandler Creek, Cherry Creek, East Creek and Mineral Creek were moved from Segment 14d to Segment 14e to facilitate adoption of WS-II temperature standards on the remaining streams in Segment 14d and retain CS-II standards on streams in new Segment 14e.

Upper Arkansas River Segment 15: Segment 15 was divided into segments 15a and 15b as part of changes to temperature standards. New Segment 15a includes the mainstem of Badger Creek, including all tributaries and wetlands, and the mainstem of Texas Creek, including all tributaries and wetlands, which are not on forest service land. New Segment 15a was assigned CS-II temperature standards and new Segment 15b retained CS-I temperature standards.

Middle Arkansas River Segment 13c: All tributaries and wetlands to the Cucharas and Huerfano Rivers not on forest service lands, except for specific listings in 13a and 13b, were moved from Lower Arkansas segment 2a to Middle Arkansas Segment 13c to reflect the actual location of these streams. The mainstems of the Cucharas and Huerfano Rivers are located in the Middle Arkansas River basin.

Middle Arkansas River Segment 27: Segment 27 (Teller Reservoir) was moved to new segment Upper Arkansas Segment 41 to reflect Teller Reservoir's location in the Upper Arkansas River Basin.

Lower Arkansas River Segments 2a and 2d/Middle Arkansas Segment 13c: Kiowa Creek, including all tributaries, from its source to the mouth. Bear Creek from the dry tributary at (37.415787, -102.593927) to the confluence with Muddy Creek. Unnamed tributary from the source north of county road 350 (37.307, -104.29) to the confluence with the Purgatoire River. Unnamed tributary to Lake Creek from railroad tracks southwest of Limon (39.261, -103.679) to the confluence with Lake Creek. Lake Creek from the confluence with the unnamed tributary (39.254, -103.66) to the confluence with Big Sandy Creek was moved from Lower Arkansas Segment 2a to new Segment 2d to facilitate removal of the Water Supply use.

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

B. Aquatic Life Use Classifications and Standards

Some segments assigned an Aquatic Life use classification were missing a standard to protect that use. The commission adopted the missing standards for the following segments:

[*List to be completed following preliminary final action by the commission*.]

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 Cold 2 to Cold 1:

[*List to be completed following preliminary final action by the commission*.]

The commission reviewed information regarding the existing aquatic communities. For segments where the existing aquatic communities are not aligned with the Aquatic Life use, the following segments were downgraded from Cold to Warm:

[*List to be completed following preliminary final action by the commission*.]

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:

[*List to be completed following preliminary final action by the commission*.]

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.

Some segments assigned a Recreation use classification were missing a standard to protect that use. The commission adopted the missing standards for the following segments:

[*List to be completed following preliminary final action by the commission*.]

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:

[*List to be completed following preliminary final action by the commission*.]

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 standards. The Water Supply use classification and standards, except for chloride, were removed from the following segments:

[*List to be completed following preliminary final action by the commission*.]

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

The commission reviewed the single segment 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

1. **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. Molybdenum supplementation is assumed to be zero. The table value standard (TVS), which considers total copper and molybdenum intakes, is calculated from the following equation:

$$\text{Mo TVS} = \frac{(Cu_{forage} \times Forage_{intake}) + (Cu_{water} \times Water_{intake}) + Cu_{supp}}{\text{Cu:Mo Safe Ratio}} - (Mo_{forage} \times Forage_{intake})$$

$$\text{Water}_{\text{intake}}$$

The assumed values for these equations are as follows:

Cu_{forage} = 7 mg/kg, $Forage_{intake}$ = 6.7 kg/day, Cu_{water} = 0.008 mg/L, $Water_{intake}$ = 56.8 L/day, $Cu_{supplementation}$ = 0 mg/day, Cu:Mo Safe Ratio = 4:1, Mo_{forage} = 0.5 mg/kg.

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. 32 that have an Agriculture use classification, and where livestock or irrigated forage are present or expected to be present.

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:

   $$\text{Acute} = e^{(0.9789*\ln(\text{hardness}) - 3.866)}*(1.136672-(\ln(\text{hardness})*0.041838))$$

   $$\text{Chronic} = e^{(0.7977*\ln(\text{hardness}) - 3.909)}*(1.101672-(\ln(\text{hardness})*0.041838))$$

   EPA's updated cadmium criteria are less stringent than Colorado's current cadmium standards when water hardness is greater than 45 mg/L $CaCO_3$. 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:

[*List to be completed following preliminary final action by the commission*.]

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. 32 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:

[*List to be completed following preliminary final action by the commission*.]

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 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 not removed from any segments.

The commission reviewed all Reviewable segments to determine if this Antidegradation designation was still warranted. Based upon available water quality data that fails to meet the criteria of 31.8(2)b, the Reviewable designation was not removed from any segments.

H. Ambient Quality-Based and Site-Specific Criteria-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.

All existing ambient-based standards were reviewed and where appropriate were revised based on new information. Ambient-based standards were revised for the following segments:

[*List to be completed following preliminary final action by the commission*.]

Ambient-based standards were deleted from the following segments:

[*List to be completed following preliminary final action by the commission*.]

The commission reviewed all other existing site-specific standards. Based on an evaluation of the available data and information, no additional 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 allowed to expire on 12/31/2018 temporary modifications on the following segments:

[*List to be completed following preliminary final action by the commission*.]

To remain consistent with the commission's decisions regarding arsenic in section 32.51, all existing temporary modifications for arsenic of "As(ch)=hybrid" (expiration date of 12/31/21) were retained.

J. Discharger Specific Variances

There is currently one segment in the Arkansas River Basin (Lower Arkansas Segment 1b) that has a discharger specific variance (DSV) for selenium. 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 2013, the new temperature standards were adopted for all segments with an Aquatic Life use classification in Regulation No. 32. 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 32.6(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 32.6(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. Lake trout occur in only a small number of lakes and reservoirs, and thermally-sensitive spawning and early life stages of mountain whitefish are known to occur only in certain cold water tributaries. In this hearing, the commission adopted standards to protect lake trout on a site-specific basis where information provided by Colorado Parks and Wildlife biologists indicated that this species occurs and protection from thermal impacts is necessary and appropriate. In Regulation No. 32, there are no water bodies where thermally-sensitive spawning and early life stages of mountain whitefish are known to occur, based upon information provided by Colorado Parks and Wildlife.

   Temperature standards to protect lake trout were added to the following segments:

[*List to be completed following preliminary final action by the commission*.]

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 2013 Regulation No. 32 Rulemaking Hearing at 32.52.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:

[*List to be completed following preliminary final action by the commission*.]

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

[*List to be completed following preliminary final action by the commission*.]

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:

[*List to be completed following preliminary final action by the commission*.]

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. 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 began to apply this sub-classification in 2013 and anticipated that it would 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:

[*List to be completed following preliminary final action by the commission*.]

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.

M. Other/Site-Specific Revisions

[*To be completed following preliminary final action by the commission*.]

N. Standards Corrections and Clarifications

1. **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.

2. **Uranium:** To improve the clarity of the regulation, the commission included references to the basin-wide uranium standards at 32.5(3) in the Appendix 32-1 tables. The commission included the chronic uranium Water Supply standard of 16.8-30 µg/L in the tables for all segments with a Water Supply use to clearly define the underlying standard necessary to protect the use. In addition, for all segments (with or without a Water Supply use), the commission included a reference to 32.5(3) to clarify that the basic standard at 32.5(3) applies to all waters in Regulation No. 32. Because these standards already applied basin-wide, there is no practical effect of this change.

3. **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.

O. Correction of Typographical and Other Errors and Segmentation Clarification

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

- The formatting of the tables in Appendix 32-1 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.
- Upper Arkansas segments 2a and 13: The nutrient note was added to correct a previous omission.
- Upper Arkansas Segment 20b: Total phosphorus and chlorophyll standards and a nutrient note was added to correct a previous omission.
- The qualified discharger table at 32.5(4) was updated to accurately reflect the location of Monarch Mtn Lodge and Powder Monarch LLC on Upper Arkansas Segment 13.
- Existing site-specific temperature standards for Upper Arkansas segments 4, 14c, 20a, 20b, 30 and 35, Middle Arkansas segments 20 and 26, and Lower Arkansas Segment 1a were reformatted in the tables to provide clarity and consistency.
- Existing silver standards were updated to remove the trout qualifier on Lower Arkansas segments 10, 12 and 19, and Middle Arkansas segments 3, 9, 18a, 18b, 21 and 28.
- Fountain Creek Segment 5: Coordinates were added to the segment description.
- Lower Arkansas Segment 15: Commas were modified for clarity.
- Middle Arkansas Segment 5b and 6a: Coordinates were added to the diversion for clarity.
- Middle Arkansas Segment 18a: Punctuation was modified for clarity.
- Middle Arkansas Segment 26: Punctuation was modified for clarity.
- Upper Arkansas Segment 4a: Coordinates were added to the Highway 115 bridge.
- Upper Arkansas Segment 14a: Rush Creek was removed from the segment description, as this stream (source at 38.185078, -104.976083) is located in Middle Arkansas Segment 18b.
- Upper Arkansas Segment 15b: Coordinates were added to County Road 92.
- Upper Arkansas Segment 27 and 39: Coordinates were added to the mouth of Phantom Canyon.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

WATER QUALITY CONTROL COMMISSION

5 CCR 1002-32

REGULATION NO. 32
CLASSIFICATIONS AND NUMERIC STANDARDS
FOR
ARKANSAS RIVER BASIN

APPENDIX 32-1
Stream Classifications and Water Quality Standards Tables

Effective ~~06/30/2017~~12/31/2018

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

1a. All streams and wetlands within Mount Massive and Collegiate Peaks Wilderness areas.

COARUA01A	Classifications
Designation	Agriculture
OW	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.
*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	SSE*	
Cadmium	~~TVS(tr)~~	~~TVS~~SSE*
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

1b. Mainstem of the East Fork of the Arkansas River from its source to a point immediately above the confluence with Birdseye Gulch.

COARUA01B	Classifications
Designation	Aq Life Cold 1
Reviewable	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	---
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	210
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

2a. Mainstem of the East Fork of the Arkansas River and the Arkansas River from a point immediately above the confluence with Birdseye Gulch to a point immediately above the confluence with the California Gulch.

COARUA02A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

2b. Mainstem of the Arkansas River from a point immediately above California Gulch to a point immediately above the confluence with Lake Fork.

COARUA02B	Classifications
Designation	Agriculture
Reviewable*	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*Designation: 9/30/00 Base-line does not apply
*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838)~~*e^(0.9151*ln(hardness)-3.6236)~~))
*Cadmium(chronic) = (1.101672-[ln(hardness)*0.041838])*e^(0.7998[ln hardness]-3.1725)
*Uranium(acute) = See 32.5(3) for details.
*Zinc(acute) = 0.978*e^(0.8537[ln(hardness)]+2.2178)
*Zinc(chronic) = 0.986*e^(0.8537[ln(hardness)]+2.0469)

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	---	SSE*
Cadmium	SSE*	---
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	~~---~~SSE*	~~SSE*~~---
Zinc	~~SSE*~~---	~~---~~SSE*

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

2c. Mainstem of the Arkansas River from a point immediately above the confluence with the Lake Fork to a point immediately above the confluence with Lake Creek.

COARUA02C	Classifications
Designation	Agriculture
Reviewable*	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Designation: 9/30/00 Base-line does not apply

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838)~~*e^(0.9151*ln(hardness)-3.6236)~~))

*Cadmium(chronic) = (1.101672-[ln(hardness)*0.041838])*e^(0.7998[ln hardness]-3.1725)

*Uranium(acute) = See 32.5(3) for details.

*Zinc(acute) = 0.978*e^(0.8537[ln(hardness)]+2.2178)

*Zinc(chronic) = 0.986*e^(0.8537[ln(hardness)]+2.0469)

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	---	SSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	---	SSE*
Zinc	SSE*	---

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

3. Mainstem of the Arkansas River from a point immediately above the confluence with the Lake Creek to the Chaffee/Fremont County line.

COARUA03	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

4a. Mainstem of the Arkansas River from the Chaffee/Fremont County Line to a point immediately above Highway 115 bridge~~,~~ (lat/long), due east of Florence.

COARUA04A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 32.5(3) for details.
*Temperature =
DM=CSII and MWAT=CSII from 11/1-3/31
DM= 24.8 and MWAT=22.1 from 4/1-10/31

Physical and Biological

		DM	MWAT
Temperature °C	11/1 - 3/31	CS-Ilvarioc*	CS-Ilvarioc*
Temperature °C	4/1 - 10/31	24.8	22.1

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---0.05	0.05---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
Beryllium	---	---
Cadmium	TVS(tr)---	TVSSSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01(t)
Molybdenum(T)	---	160150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

4b. Mainstem of the Arkansas River from a point immediately above Highway 115 bridge, due east of Florence, to the inlet of Pueblo Reservoir.

COARUA04B	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

~~5~~5a. All tributaries to the Arkansas River, including wetlands, from the source to immediately below the confluence with Brown's Creek, except for specific listings in segments ~~6~~5b~~a~~ through 12b.

~~COARUA05~~COARUA05A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

5b. Mainstem of Trout Creek from its source to Trout Creek Reservoir, including all tributaries and wetlands.

COARUA05B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

~~*chlorophyll a (~~mg/m^2~~)(chronic) = applies only above the facilities listed at 32.5(4).~~

~~*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).~~

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))

*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	--- =
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	--- =	0.75
Chloride	--- =	250
Chlorine	0.019	0.011
Cyanide	0.005	--- =
Nitrate	10	--- =
Nitrite	0.05	--- =
Phosphorus	--- =	0.11*
Sulfate	--- =	WS
Sulfide	--- =	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	---	---
Cadmium	---	SSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
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*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

6. Mainstem of California Gulch, including all tributaries, from the source to the confluence with the Arkansas River. Mainstem of St. Kevin's Gulch from the source to the confluence with Tennessee Creek.

COARUA06	Classifications
Designation	Agriculture
Reviewable	Recreation N

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
	acute	chronic
D.O. (mg/L)	---	---
pH	---	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	630

Inorganic (mg/L)	acute	chronic
Ammonia	---	---
Boron	---	---
Chloride	---	---
Chlorine	---	---
Cyanide	---	---
Nitrate	---	---
Nitrite	---	---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	---	---
~~Beryllium~~	~~---~~	~~---~~
Cadmium	---	---
Chromium III	---	---
Chromium VI	---	---
Copper	---	---
Iron	---	---
Lead	---	---
Manganese	---	---
Mercury(T)	---	---
Molybdenum(T)	---	---
Nickel	---	---
Selenium	---	---
Silver	---	---
Uranium	varies*	---
Zinc	---	---

7. Mainstem of Evans Gulch from the source to the confluence with the Arkansas River.

COARUA07	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

8a. Mainstem of Iowa Gulch from the source to the historic upper ASARCO water supply intake at 39.224327, -106.223432.

COARUA08A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II

Inorganic (mg/L)

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

8b. Mainstem of Iowa Gulch from a point immediately below the historic upper ASARCO water supply intake at 39.224327, -106.223432 to a point immediately below the headgate of the Paddock #1 Ditch (Iowa Ditch).

COARUA08B	Classifications
Designation	Agriculture
UP	Aq Life Cold 2
	Recreation E

Qualifiers:

Fish Ingestion Standards Apply

Other:

Temporary Modification(s):

Cadmium(chronic) = 1.6

Zinc(acute) = 754

Zinc(chronic) = 505

~~Zinc(acute) = 754~~

Expiration Date of 12/31/2018

*Cadmium(acute) = (1.136672-[ln(hardness)*0.041838]*e^(0.9789*ln(hardness)-3.5146)

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II

Inorganic (mg/L)

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	---	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~100~~7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	SSE*	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

9. Mainstem of Iowa Gulch from a point immediately below the headgate of the Paddock #1 Ditch (Iowa Ditch) to the confluence with the Arkansas River.

COARUA09	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*Cadmium(acute) = (1.136672-[ln(hardness)*0.041838]*e^(0.9789*ln(hardness)-3.5146)

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	SSE*	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

10. Mainstem of Lake Creek, including all tributaries and wetlands, from the source to the confluence with the Arkansas River, except for the specific listing in segment 11.

COARUA10	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	14.6	10.6
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

11. Mainstem of South Fork of Lake Creek, including all tributaries and wetlands, from the source to the confluence with Lake Creek.

COARUA11	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	5.0-9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	750	---
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

12a. Mainstem of Chalk Creek from the source to the confluence with the Arkansas River.

COARUA12A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

12b. Mainstem of Cottonwood Creek (Chaffee County), from the source to the confluence with the Arkansas River; South Fork of the Arkansas, including all tributaries and wetlands, from the National Forest boundary to the confluence with the Arkansas River.

COARUA12B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

13. All tributaries to the Arkansas River, including wetlands, which are on National Forest lands, from the confluence with Brown's Creek to the inlet to Pueblo Reservoir, except for specific listings in segments 12b, 14a, 14c and 15-27.

COARUA13	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

14a. Mainstem of Big Red Creek, Little Red Creek, and ~~Rush Creek and~~ Hardscrabble Creek from their sources to their confluence with the Arkansas River.

COARUA14A	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 2
	Recreation E

Qualifiers:

Fish Ingestion Standards Apply

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~100~~7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

14b. All tributaries to the Arkansas River, including wetlands, which are not on National Forest lands, from the confluence with Brown's Creek to the Chaffee/Fremont County line, except for the specific listing in segment 12b.

COARUA14B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E
	Water Supply

Qualifiers:

Water + Fish Standards Apply

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

14c. Mainstems of North and South Hardscrabble Creeks, including all tributaries and wetlands, from their sources to their confluences.

COARUA14C	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.
*Temperature =
DM=CSI and MWAT=CSI from 11/1-5/31
DM= 22.1 and MWAT=17 from 6/1-10/31

Physical and Biological

		DM	MWAT
Temperature °C	~~10/31 - 5/31~~	~~CS-Ivaries*~~	~~CS-Ivaries*~~
~~Temperature °C~~	~~6/30 - 9/30~~	~~22.1~~	~~17~~

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

14d. All tributaries to the Arkansas River, including wetlands, which are not on National Forest lands, from the Chaffee/Fremont County line to the inlet to Pueblo Reservoir, except for specific listings in segments 14a, 14c, 14e and 15-27.

COARUA14D	Classifications
Designation	Agriculture
Reviewable	Aq Life ~~Cold~~ Warm 2
	Recreation E

Qualifiers:

Fish Ingestion Standards Apply

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	~~CS~~WS-II	~~CS~~WS-II

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	---	---
Boron	---	0.75
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	~~---~~10	~~10~~---
Phosphorus	---	0.11*
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	~~100~~7.6
Beryllium(T)	---	100
Cadmium(T)	---	10
Chromium III(T)	---	100
Chromium VI(T)	---	100
Copper(T)	---	200
Iron	---	---
Lead(T)	---	100
Manganese	---	---
Mercury(T)	---	---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	200
Selenium(T)	---	20
Silver	---	---
Uranium	varies*	---
Zinc(T)	---	2000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

14e. Mainstems of Grape Creek, Fernleaf Creek, West Creek, Adobe Creek, Chandler Creek, Cherry Creek, East Gulch, Mineral and Oak Creek including all tributaries and wetlands.

COARUA14E	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	5.0- 9.0	--- =
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS =	TVS =
Boron	--- =	0.75
Chloride	--- =	--- =
Chlorine	0.019 =	0.019 =
Cyanide	0.005	--- =
Nitrate	100	--- =
Nitrite	0.05	--- =
Phosphorus	--- =	0.11*
Sulfate	--- =	--- =
Sulfide	--- =	0.002 =

Metals (ug/L)

	acute	chronic
Arsenic	340	---
Arsenic(T)	---	7.6
Cadmium	TVS(tr)	TVS
Cadmium(T)	---	10
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI(T)	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

15a. Mainstem of Badger Creek including all tributaries and wetlands. Mainstem of Texas Creek including all tributaries and wetlands which are not on forest service land.

COARUA15A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	--- =
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	--- =	0.75
Chloride	--- =	250
Chlorine	0.019	0.011
Cyanide	0.005	--- =
Nitrate	10	--- =
Nitrite	0.05	--- =
Phosphorus	--- =	0.11
Sulfate	--- =	WS
Sulfide	--- =	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	---	---
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
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*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

~~15~~15b. Mainstem of Grape Creek, including all tributaries and wetlands, from the source to the outlet of De Weese Reservoir, except for specific listings in segment 25. Mainstems of ~~Texas, Badger,~~ Hayden, Hamilton, Stout, and Big Cottonwood Creeks, including all tributaries and wetlands, from their sources to their confluences with the Arkansas River. Tributaries and wetlands to Texas Creek which are on Forest Service Land. Mainstem of Newlin Creek from the National Forest boundary to ~~the City of Florence water diversion.~~County Road 92 (38.300765, -105.140927).

~~COARUA15~~COARUA15B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

16a. Mainstem of Middle Tallahassee Creek, including all tributaries and wetlands, from the source to the intersection with Road 23.

COARUA16A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 Δ
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

16b. Mainstem of North Tallahassee Creek, South Tallahassee Creek, Middle Tallahassee Creek, and Tallahassee Creek from their sources to a point immediately below their confluence with South Tallahassee Creek, except for the specific listing in segment 16a.

COARUA16B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

16c. Mainstem of Tallahassee Creek from a point immediately below the confluence with South Tallahassee Creek to the confluence with the Arkansas River.

COARUA16C	Classifications
Designation	Agriculture
Reviewable	Aq Life ~~Cold~~ Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	~~CS~~WS-II	~~CS~~WS-II

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

17a. Mainstem of Cottonwood Creek (Fremont County), including all tributaries and wetlands, from the source to a point immediately below the confluence with North Waugh Creek.

COARUA17A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

17b. Mainstem of Cottonwood Creek (Fremont county), including all tributaries and wetlands, from a point immediately below the confluence with North Waugh Creek to the intersection with F6 Road.

COARUA17B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

17c. Mainstem of Cottonwood Creek from F6 Road to the confluence with Currant Creek.

COARUA17C	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

18. Mainstem of Currant Creek (Park County), including all tributaries and wetlands, from the source to the confluence with Tallahassee Creek, except for the specific listings in 17a, 17b, and 17c.

COARUA18	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

19. Mainstem of Fourmile Creek, including all tributaries and wetlands, from the source to immediately below the confluence with High Creek.

COARUA19	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

20a. Mainstem of Fourmile Creek, including all tributaries and wetlands, from immediately below the confluence with High Creek to a point immediately above the confluence with Long Gulch, except for the specific listing to segment 23.

COARUA20A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.
*Temperature =
DM=14.2 and MWAT=9.7 from 11/1-2/29
DM= 27.1 and MWAT=21 from 3/1-10/31

Physical and Biological

		DM	MWAT
Temperature °C	~~11/1 - 2/29~~	~~14.2~~varies*	~~9.7~~varies*
~~Temperature °C~~	~~3/1 - 10/31~~	~~27.1~~	~~21~~

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

20b. Mainstem of Fourmile Creek, including all tributaries and wetlands, from the confluence with Long Gulch to the confluence with the Arkansas River.

COARUA20B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Sulfate(chronic) = Dissolved standards applicable at the point of withdraw.
*Manganese(chronic) = Dissolved standards applicable at the point of withdraw.
*Uranium(acute) = See 32.5(3) for details.
*Temperature =
DM=13 and MWAT=9.4 from 11/1-2/29
DM= 28.1 and MWAT=22 from 3/1-10/31

Physical and Biological

		DM	MWAT
Temperature °C	~~11/1 - 2/29~~	~~13~~varies*	~~9.4~~varies*
~~Temperature °C~~	~~3/1 - 10/31~~	~~28.1~~	~~22~~

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	~~---~~150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	~~---~~ 0.11*
Sulfate	---	WS*
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS*
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

21a. Mainstem of Cripple Creek from the source to a point 1.5 miles upstream of the confluence with Fourmile Creek.

COARUA21A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS(sa)	TVS(ela)
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	~~---~~ varies*	---
Zinc	TVS	TVS

21b. Mainstem of Cripple Creek from a point 1.5 miles upstream to the confluence with Fourmile Creek.

COARUA21B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS(sp)	TVS(elp)
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

22a. Mainstem of Arequa Gulch from the source to the confluence with Cripple Creek.

COARUA22A	Classifications
Designation	Agriculture
UP	Aq Life Cold 2
	Recreation N

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.0 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	630

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	11000	11000
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	5903	3674
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	3500	600

22b. Squaw Gulch from the source to the confluence with Cripple Creek.

COARUA22B	Classifications
Designation	Agriculture
UP	Aq Life Cold 2
	Recreation N

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	630

Inorganic (mg/L)

	acute	chronic
Ammonia	---	---
Boron	---	5.0
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	~~---~~10	~~10~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	200
~~Beryllium~~	~~---~~	~~---~~
Cadmium(T)	---	50
Chromium III(T)	---	1000
Chromium VI(T)	---	1000
Copper(T)	---	500
Iron	---	---
Lead(T)	---	100
Manganese	---	---
Mercury(T)	---	10
Molybdenum(T)	---	~~160~~150
Nickel	---	---
Selenium(T)	---	50
Silver	---	---
Uranium	varies*	---
Zinc(T)	---	25000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

23. Mainstem of Wilson Creek (Teller County), including all tributaries and wetlands, from the source to the confluence with Fourmile Creek.

COARUA23	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	~~---~~ 0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

24. Mainstem of East and West Beaver Creeks, including all tributaries and wetlands, from the source to the confluence with Beaver Creek; mainstem of Beaver Creek from the source to the point of diversion to Brush Hollow Reservoir.

COARUA24	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

25. Mainstem of Cottonwood Creek (Custer County) from the headwaters to ~~Section 23, T20S, R65W.~~(lat/long).

COARUA25	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

26. Mainstem of Beaver Creek from the point of diversion for Brush Hollow Reservoir to the confluence with the Arkansas River.

COARUA26	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

27. Mainstem of Eightmile Creek, including all tributaries and wetlands, from the source to the mouth of Phantom Canyon~~.~~ (lat/long).

COARUA27	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

28. All lakes and reservoirs within the Mount Massive and Collegiate Peaks Wilderness areas.

COARUA28	Classifications
Designation	Agriculture
OW	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

29. All lakes and reservoirs tributary to the Arkansas River from the source to immediately below the confluence with Brown's Creek, except for specific listings in segments 28 and 30.

COARUA29	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

30. Turquoise Reservoir, Clear Creek Reservoir, Twin Lakes and Mt. Elbert Forebay.

COARUA30	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
	DUWS*

Qualifiers:

Other:

*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Classification: DUWS to Twin Lakes and Mt. Elbert Forebay
*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Uranium(acute) = See 32.5(3) for details.
*Temperature =
DM and MWAT=CLL from 1/1-3/31
Turquoise Reservoir, Twin Lakes (Upper and Lower), Mt. Elbert Forebay
DM=22.4 and MWAT=16.6 from 4/1-12/31
Clear Creek Reservoir
DM and MWAT=CLL from 4/1-12/31

Physical and Biological

	DM	MWAT
Temperature °C	~~CLL~~varies*	~~CLL~~ varies*
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	~~0.02~~---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

31. All lakes and reservoirs tributary to the Arkansas River which are on National Forest lands, from the confluence with Brown's Creek to the inlet to Pueblo Reservoir, except for specific listings in segments 32 and 34-40.

COARUA31	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

32. All lakes and reservoirs tributary to the South Fork of the Arkansas from the source to the confluence with the Arkansas River.

COARUA32	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

33. All lakes and reservoirs tributary to the Arkansas River which are not on National Forest lands, from the confluence with Brown's Creek to the inlet to Pueblo Reservoir, except for specific listings in segments 32 and 34-40.

COARUA33	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL,CLL	CL,CLL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

34. All lakes and reservoirs tributary to the mainstems of Texas, Badger, Hayden, Hamilton, Stout, and Big Cottonwood Creeks from their sources to their confluences with the Arkansas River. All lakes and reservoirs tributary to the mainstem of Grape Creek from the source to the outlet of DeWeese Reservoir, except for the specific listing in segment 35.

COARUA34	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

35. DeWeese Reservoir.

COARUA35	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.
*Temperature =
DM=CLL and MWAT=CLL from 1/1-3/31
DM= CLL and MWAT=21.3 from 4/1-12/31

Physical and Biological

		DM	MWAT
Temperature °C	~~1/1 - 3/31~~	~~CLL~~varies*	~~CLL~~ varies*
~~Temperature °C~~	~~4/1 - 12/31~~	~~CLL~~	~~21.3~~

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

36. All lakes and reservoirs tributary to the mainstem of Currant Creek (Park County) from the source to the confluence with Tallahassee Creek, except lakes and reservoirs tributary to Cottonwood Creek (Fremont County) from a point immediately below the confluence with North Waugh Creek to the intersection with F6 Road. All lakes and reservoirs tributary to the mainstem of Middle Tallahassee Creek from the source to the intersection with Road 23.

COARUA36	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

37. All lakes and reservoirs tributary to the mainstem of Fourmile Creek from the source to the confluence with the Arkansas River. This segment includes Wrights Reservoir.

COARUA37	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
	DUWS*

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.

*Classification: DUWS applies to Ott Reservoir

*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL,CLL	CL,CLL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

38. All lakes and reservoirs tributary to the mainstem of East and West Beaver Creeks from the source to the confluence with Beaver Creek. This segment includes Skagway and Bison Reservoirs.

COARUA38	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
	DUWS*

Qualifiers:

Other:

*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.

*Classification: Bison Reservoir = DUWS

*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL,CLL	CL,CLL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

39. All lakes and reservoirs tributary to the mainstem of Eightmile Creek from the source to the mouth of Phantom Canyon~~.~~ (lat/long).

COARUA39	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

40. Brush Hollow Reservoir.

COARUA40	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	20*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.083*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

41. Teller Reservoir

COARUA41	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CLL	CLL
	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	--- =
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	--- =	0.75
Chloride	--- =	250
Chlorine	0.019	0.011
Cyanide	0.005	--- =
Nitrate	10	--- =
Nitrite	0.05	--- =
Phosphorus	--- =	0.025*
Sulfate	--- =	WS
Sulfide	--- =	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	---	---
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
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*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

1. All tributaries, including wetlands, to the Arkansas River within the Sangre de Cristo, Greenhorn, and Spanish Peaks Wilderness Areas.

COARMA01	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
Qualifiers:	
Other:	
*Uranium(acute) = See 32.5(3) for details.	

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

2. Mainstem of the Arkansas River from the outlet of Pueblo Reservoir to a point immediately above the confluence with Wildhorse/Dry Creek Arroyo.

COARMA02	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
Qualifiers:	
Other:	
Temporary Modification(s):	
Arsenic(chronic) = hybrid	
Expiration Date of 12/31/2021	
temperature(ac/ch) = current conditions	
Expiration Date of 7/1/2021	
*Uranium(acute) = See 32.5(3) for details.	

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

3. Mainstem of the Arkansas River from a point immediately above the confluence with Wildhorse/Dry Creek Arroyo to a point immediately above the confluence with Fountain Creek.

COARMA03	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	26.3	17.1
Silver	TVS	TVS~~(tr)~~
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

4a. Mainstem of Wildhorse Creek from the source to the confluence with the Arkansas River.

COARMA04A	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Water Supply
	Recreation E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Selenium(acute) = See selenium assessment location at 32.6(4).
*Selenium(chronic) = See selenium assessment location at 32.6(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	~~---~~250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.17*
Sulfate	---	~~---~~WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~100~~0.02-10 [A]
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	2376*	2110*
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

4b. Mainstem of Rock Creek, Salt Creek and Peck Creek from their sources to the confluence with the Arkansas River.

COARMA04B	Classifications
Designation	Agriculture
UP	Aq Life Warm 1
	Recreation E

Qualifiers:

Other:

Temporary Modification(s):

Ammonia(ac/ch) = current conditions

Arsenic(ac/ch) = current conditions

Boron(chronic) = current conditions

Cadmium(ac/ch) = current conditions

Chlorine(ac/ch) = current conditions

chlorophyll a (mg/m^2)(chronic) = current conditions

Chromium III(ac/ch) = current conditions

Chromium III(chronic) = current conditions

~~Chromium III(ac/ch) = current conditions~~

Chromium VI(ac/ch) = current conditions

Copper(ac/ch) = current conditions

Cyanide(acute) = current conditions

D.O. (mg/L)(chronic) = current conditions

E. Coli (per 100 mL)(chronic) = current conditions

Iron(chronic) = current conditions

Lead(ac/ch) = current conditions

Manganese(ac/ch) = current conditions

Mercury(chronic) = current conditions

Molybdenum(chronic) = current conditions

Nickel(ac/ch) = current conditions

Nitrate(acute) = current conditions

Nitrite(chronic) = current conditions

pH(acute) = current conditions

Phosphorus(chronic) = current conditions

Selenium(ac/ch) = current conditions

Silver(ac/ch) = current conditions

Sulfide(chronic) = current conditions

Zinc(ac/ch) = current conditions

Expiration Date of 12/31/2018

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

4c. Mainstem of Chico Creek, including all tributaries and wetlands, from the source to the confluence with the Arkansas River, except for specific listings in segment 4f.

COARMA04C	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Water Supply
	Recreation E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	~~---~~250 -
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.5 -	~~0.5~~--- =
Phosphorus	---	0.17*
Sulfate	---	~~---~~WS -
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~7.60~~0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

4d. All tributaries, including wetlands, to the Arkansas River and Pueblo Reservoir from the inlet to Pueblo Reservoir to the Colorado Canal headgate, except for specific listings in the Fountain Creek Subbasin and in segments 4a, 4b, 4c and 4e through 18b.

COARMA04D	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Water Supply
	Recreation E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	---	---
Boron	---	0.75
Chloride	---	~~---~~250 -
Chlorine	---	---
Cyanide	0.2	---
Nitrate	~~100~~10	---
Nitrite	~~---~~10 -	~~10~~--- =
Phosphorus	---	0.17*
Sulfate	---	~~---~~WS -
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	~~100~~0.02-10 A
Beryllium(T)	---	100[BB1]
Cadmium(T)	---	10
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI(T)	---	100
Copper(T)	---	200
Iron	---	WS
Iron	---	---
Lead(T)	---	100
Lead(T)	50	---
Manganese	---	~~---~~WS
Mercury(T)	---	---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	200
Nickel(T)	---	100
Selenium(T)	---	20
Silver	---	---
Uranium	varies*	~~---~~16.8-30 A
Zinc(T)	---	2000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

4e. Golf Course Wash

COARMA04E	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	~~---~~10	~~10~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Beryllium(T)	---	100
~~Cadmium~~	~~---~~	~~---~~
Cadmium(T)	---	10
Chromium III	TVS	TVS
Chromium III(T)	---	100
~~Chromium VI~~	~~---~~	~~---~~
Chromium VI(T)	---	100
~~Copper~~	~~---~~	~~---~~
Copper(T)	---	200
Iron	---	---
~~Lead~~	~~---~~	~~---~~
Lead(T)	---	100
Manganese	---	---
Mercury(T)	---	---
Molybdenum(T)	---	~~160~~150
~~Nickel~~	~~---~~	~~---~~
Nickel(T)	---	200
Selenium	1797	1769
Silver	---	---
Uranium	varies*	---
~~Zinc~~	~~---~~	~~---~~
Zinc(T)	---	2000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

4f. Mainstem of Black Squirrel Creek, including all tributaries and wetlands, from just below Highway 94 to Squirrel Creek Road.

COARMA04F	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation P

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-III	WS-III
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	205
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	---	---
Boron	---	0.75
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	~~---~~10	~~10~~---
Phosphorus	---	0.17*
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	100
Beryllium(T)	---	100
Cadmium(T)	---	10
Chromium III(T)	---	100
Chromium VI(T)	---	100
Copper(T)	---	200
Iron	---	---
Lead(T)	---	100
Manganese(T)	---	200
Mercury(T)	---	---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	200
Selenium(T)	---	20
Silver	---	---
Uranium	varies*	---
Zinc(T)	---	2000

4g. Mainstem of Pesthouse Gulch, from the source to the confluence with Wildhorse Creek.

COARMA04G	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Selenium(acute) = See selenium assessment location at 32.6(4).
*Selenium(chronic) = See selenium assessment location at 32.6(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	---	---
Boron	---	0.75
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	~~---~~10	~~10~~---
Phosphorus	---	0.17*
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	100
Beryllium(T)	---	100
Cadmium(T)	---	10
Chromium III(T)	---	100
Chromium VI(T)	---	100
Copper(T)	---	200
Iron	---	---
Lead(T)	---	100
Manganese(T)	---	200
Mercury(T)	---	---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	200
Selenium	389*	369*
Silver	---	---
Uranium	varies*	---
Zinc(T)	---	2000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

5a. Mainstem of the Saint Charles River, including all tributaries and wetlands, from the source to the San Isabel National Forest boundary.

COARMA05A	Classifications
Designation	Agriculture
UP	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	~~---~~ varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

5b. Mainstem of the Saint Charles River, including all tributaries and wetlands, from the San Isabel National Forest boundary to a point immediately above the CF&I diversion canal (lat/long) near Burnt Mill.

COARMA05B	Classifications
Designation	Agriculture
UP	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

6a. Mainstem of the Saint Charles River from a point immediately above the CF&I diversion canal (lat/long) near Burnt Mill to a point immediately upstream of the confluence with Edson Arroyo.

COARMA06A	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.17*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 A
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

6b. Mainstem of the Saint Charles River from the confluence with Edson Arroyo to the confluence with the Arkansas River.

COARMA06B	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Water + Fish Standards Apply

Other:

Temporary Modification(s):
temperature(DM/MWAT) = "current conditions"
Expiration Date of 12/31/2018

*Selenium(acute) = See selenium assessment location at 32.6(4).
*Selenium(chronic) = See selenium assessment location at 32.6(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02~~-10~~ A
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	173*	50*
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

7a. Mainstem of Greenhorn Creek, including all tributaries and wetlands, from the source to the San Isabel National Forest boundary, except for specific listings in segment 1. Mainstem of Graneros Creek, from the source to the San Isabel National Forest boundary, except for specific listings in segment 1. All tributaries to Muddy Creek, including wetlands, from the source to the San Isabel National Forest boundary.

COARMA07A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05 -	~~0.05~~--- =
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

7b. Mainstem of Greenhorn Creek, including all tributaries and wetlands,from the San Isabel National Forest boundary to a point immediately below the Greenhorn Highline (Hayden Supply Ditch) diversion dam. Mainstem of Graneros Creek below the San Isabel National Forest boundary. Muddy Creek, including all tributaries and wetlands, from the San Isabel National Forest boundary to 232/Bondurant Road.

COARMA07B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

8. Deleted.

COARMA08	Classifications
Designation	
Qualifiers:	
Other:	

Physical and Biological	DM	MWAT

	acute	chronic

Inorganic (mg/L)		
	acute	chronic

Metals (ug/L)	acute	chronic

9. Mainstem of Greenhorn Creek, from a point immediately below the Greenhorn Highline (Hayden Supply Ditch) diversion dam, to the confluence with the Saint Charles River.

COARMA09	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Water + Fish Standards Apply

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II

	acute	chronic
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)		
	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5 -	~~0.5~~--- =
Phosphorus	---	0.17*
Sulfate	---	700
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS~~(tr)~~
Uranium	varies*	~~---~~16.8-30 Δ
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

10. Mainstem of Sixmile Creek from the source to the confluence with the Arkansas River.

COARMA10	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological		
	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	chronic
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)		
	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

11a. Mainstem of the Huerfano River including all tributaries and wetlands, from the source to 570 Road near Malachite, except for the specific listings in segment 1. Pass Creek, including all tributaries and wetlands, from the source to 565 Road. Muddy Creek, including all tributaries and wetlands, from the source to a point immediately below the confluence with Bruff Creek, except for the specific listings in segment 1. Mainstem of Turkey Creek (in Huerfano County) from the source to 620 Road, except for the specific listings in segment 1.

COARMA11A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological		
	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)		
	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

11b. Mainstem of the Huerfano River, including all tributaries and wetlands, from 570 Road near Malachite to Highway 69 at Badito, except for the specific listings in segment 1, 11a and 17.

COARMA11B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

12. Mainstem of Huerfano River from Highway 69 at Badito to the confluence with the Arkansas River.

COARMA12	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Water Supply
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	~~---~~250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	~~---~~WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~100~~0.02-10 [A]
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

13a. All tributaries, including wetlands, to the Cucharas River within the San Isabel National Forest boundaries, except for the specific listings in segment 1. Mainstem of the Cucharas River, from the source to a point immediately above the confluence with Middle Creek, except for the specific listings in segment 1. Wahatoya Creek, including all tributaries and wetlands, from the source to the confluence with the Cucharas River, except for the specific listings in segment 1. All tributaries to Middle Creek, including wetlands, from the source to a point immediately below the confluence of North and South Middle Creeks.

COARMA13A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

13b. Mainstem of the Cucharas River, including tributarires and wetlands from a point immediately above the confluence with Middle Creek to the point of diversion for the Walsenburg public water supply.confluence with North Abeyta Creek(lat/long). All tributaries, including wetlands,to the Cucharas River from the San Isabel National Forest boundary to the point of diversion for the Walsenburg public water supply, except for specific listings in Segment 13a. Mainstem of Middle Creek, including all tributaries and wetlands, from a point immediately below the confluence of North and South Middle Creeks to the confluence with the Cucharas River., except for specific listings in 13a.

COARMA13B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---0.05	0.05---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
Beryllium	---	---
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01(t)
Molybdenum(T)	---	160150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

13c. All tributaries and wetlands to the Cucharas and Huerfano Rivers not on forest service lands, except for specific listings in 13a and 13b.

COARMA13C	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation N
	Water Supply

Qualifiers:

Other:

*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-III	WS-III
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	--- =
chlorophyll a (mg/m^2)	---	--- =
E. Coli (per 100 mL)	---	630

Inorganic (mg/L)

	acute	chronic
Ammonia	--- =	--- =
Boron	--- =	0.75
Chloride	--- =	250
Chlorine	--- =	--- =
Cyanide	0.2	--- =
Nitrate	10	--- =
Nitrite	1.0	--- =
Phosphorus	--- =	0.17*
Sulfate	--- =	WS
Sulfide	--- =	0.05

Metals (ug/L)

	acute	chronic
~~Aluminum~~	---	---
Arsenic(T)	---	0.02-10 A
Beryllium(T)	---	4.0
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI(T)	50	100
Copper(T)	---	200
Iron	---	WS
Lead(T)	50	100
Manganese	---	WS
Mercury(T)	2.0	---
Molybdenum(T)	---	150
Nickel(T)	---	100
Nickel(T)	---	100
Selenium(T)	---	20
Silver(T)	---	100
Uranium	varies*	16.8-30 A
Zinc(T)	---	2000

14. Mainstem of the Cucharas River from the point of diversion for the Walsenburg public water supply to the outlet of Cucharas Reservoir.

COARMA14	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Water Supply
	Recreation E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	~~---~~250 -
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.5 -	~~0.5~~--- =
Phosphorus	---	0.17*
Sulfate	---	~~---~~WS -
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~7.6~~0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

15. Mainstem of Cucharas River from the outlet of Cucharas Reservoir to the confluence with the Huerfano River.

COARMA15	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	---	---
Boron	---	0.75
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	~~---~~10	~~10~~---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	100
Beryllium(T)	---	100
Cadmium(T)	---	10
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI(T)	---	100
Copper(T)	---	200
Iron	---	---
Lead(T)	---	100
Manganese	---	---
Mercury(T)	---	---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	200
Selenium(T)	---	20
Silver	---	---
Uranium	varies*	---
Zinc(T)	---	2000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

16. Deleted.

COARMA16	Classifications
Designation	
Qualifiers:	
Other:	

Physical and Biological		
	DM	MWAT
	acute	chronic
Inorganic (mg/L)		
	acute	chronic

Metals (ug/L)		
	acute	chronic

17. All tributaries to Apache Creek, including wetlands, from the source to a point immediately below the confluence of North and South Apache Creeks, except for the specific listings in segment 1. All tributaries, including wetlands, to the Huerfano River above the confluence with the Cucharas River that are within the San Isabel National Forest boundaries, except for the specific listings in segment 1 and 11a.

COARMA17	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
Qualifiers:	
Other:	

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological		
	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05 [-]	~~0.05~~--- [=]
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)		
	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

18a. Mainstem of Boggs Creek from the source to Pueblo Reservoir.

COARMA18A	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

18b. Turkey Creek (Pueblo County) from U.S. Highway 50 to Pueblo Reservoir. Unnamed tributary to Arkansas River, that flows from the south and whose confluence with the Arkansas River is located at 38.267623, -104.668298. Mainstem of Rush Creek (Pueblo County) from the source to the confluence with the Arkansas River.

COARMA18B	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	2498	2344
Silver	TVS	TVS~~(tr)~~
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

19. All lakes and reservoirs tributary to the Arkansas River within the Sangre de Cristo, Greenhorn, and Spanish Peaks Wilderness areas.

COARMA19	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

20. Pueblo Reservoir.

COARMA20	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
	DUWS

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*chlorophyll a (ug/L)(chronic) = See assessment location at 32.6(4).
*Uranium(acute) = See 32.5(3) for details.
*Temperature =
DM=CLL and MWAT=CLL from 1/1-3/31
DM= CLL and MWAT=23.6 from 4/1-12/31

Physical and Biological

		DM	MWAT
Temperature °C	~~1/1 - 3/31~~	~~CLL~~varies*	~~CLL~~ ~~varies*~~
~~Temperature °C~~	~~4/1 - 12/31~~	~~CLL~~	~~23.6~~
		acute	**chronic**
D.O. (mg/L)		---	6.0
D.O. (spawning)		---	7.0
pH		6.5 - 9.0	---
chlorophyll a (ug/L)		---	5*
E. Coli (per 100 mL)		---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

21. All lakes and reservoirs tributary to Chico Creek from the source to the confluence with the Arkansas River.

COARMA21	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	20*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.083*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS~~(tr)~~
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

22. All lakes and reservoirs tributary to the Saint Charles River from the source to a point immediately above the CF&I diversion canal near Burnt Mill.

COARMA22	Classifications
Designation	Agriculture
UP	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

23. All lakes and reservoirs tributary to Greenhorn Creek from the source to a point immediately below the Greenhorn Highline (Hayden Supply Ditch) diversion dam, except for specific listings in segment 19. All lakes and reservoirs tributary to Graneros Creek from the source to the San Isabel National Forest boundary, except for specific listings in segment 19. All lakes and reservoirs tributary to Muddy Creek from the source to 232/Bondurant Road. Beckwith Reservoir.

COARMA23	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
	DUWS*

Qualifiers:

Other:

*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Classification: DUWS Applies only to Beckwith Reservoir
*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

24. All lakes and reservoirs tributary to the Huerfano River from the source to Highway 69 at Badito, except for the specific listings in segment 19. All lakes and reservoirs tributary to the Huerfano River above the confluence with the Cucharas River that are within the San Isabel National Forest boundaries, except for the specific listings in segment 19.

COARMA24	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

25. All lakes and reservoirs tributary to the Cucharas River from the source to the point of diversion for the Walsenburg public water supply, except for the specific listings in segment 19. Huajatolla Reservoirs and Diagre Reservoir

COARMA25	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

26. ~~,~~Horseshoe Lake, Martin Lake (Ohem Lake) and Walsenburg Lower Town Lake~~.~~.

COARMA26	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
	DUWS

Qualifiers:

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 32.5(3) for details.
*Temperature~~(4/1 - 12/31)~~ = Horseshoe ~~(~~DM=CLL and MWAT=CLL from 1/1-3/31, DM= CLL and MWAT=18.8~~)~~ from 4/1-12/31.
Martin DM=CLL and MWAT=CLL from 1/1-3/31, DM= CLL and MWAT=21.7 from 4/1-12/31.
Walsenburg DM=CL and MWAT=CL
~~*Temperature(4/1 - 12/31) = Martin (MWAT=21.7)~~
~~*Temperature = Walsenburg (MWAT=CL)~~

Physical and Biological

		DM	MWAT
Temperature °C	~~1/1 - 3/31~~	~~CLL varies*~~	~~CLL varies*~~
~~Temperature °C~~	~~4/1 - 12/31~~	~~CLL *~~	~~18.8*~~
~~Temperature °C~~	~~4/1 - 12/31~~	~~CLL *~~	~~21.7*~~
~~Temperature °C~~		~~CL*~~	~~CL*~~

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

27. Teller Reservoir

COARMA27	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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.

Physical and Biological	DM	MWAT
Temperature °C	CLL	CLL
	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	--- -
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	--- -	0.75
Chloride	--- -	250
Chlorine	0.019	0.011
Cyanide	0.005	--- -
Nitrate	10	--- -
Nitrite	--- -	0.05
Phosphorus	--- -	0.025*
Sulfate	--- -	WS
Sulfide	--- -	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
Beryllium	---	---
Cadmium	TVS(tr)	TVS
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS/WS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	---	---
Zinc	TVS	TVS

28. Valco Ponds and Runyon/Fountain Lake.

COARMA28	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WL	WL
	acute	chronic
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---0.5 -	0.5--- -
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
Beryllium	---	---
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01(t)
Molybdenum(T)	---	160150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

1a. Mainstem of Fountain Creek, including all tributaries and wetlands, from the source to a point immediately above the confluence with Monument Creek, except for specific listings in segment 1b.

COARFO01A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

1b. Severy Creek and all tributaries from the source to a point just upstream of where US Forest Service Road 330 crosses the stream.

COARFO01B	Classifications
Designation	Agriculture
OW	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

2a. Mainstem of Fountain Creek from a point immediately above the confluence with Monument Creek to a point immediately above the State Highway 47 Bridge.

COARFO02A	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	---
Sulfate	---	~~290~~WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 A
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	~~4.8~~TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

2b. Mainstem of Fountain Creek from a point immediately above the State Highway 47 Bridge to the confluence with the Arkansas River.

COARFO02B	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	---
Sulfate	---	~~485~~362
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 A
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	~~3300~~4350
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	~~42.3~~15.4	~~28.1~~11.5
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

3a. All tributaries to Fountain Creek which are within the boundaries of National Forest or Air Force Academy lands, including all wetlands, from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, except for the mainstem of Monument Creek in the Air Force Academy lands and specific listings in segment 3b.

COARFO03A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

3b. Bear Creek, and all tributaries, from the source to a point immediately upstream of Gold Camp Road.

COARFO03B	Classifications
Designation	Agriculture
OW	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

4. All tributaries to Fountain Creek which are not within the boundaries of National Forest or Air Force Academy lands, including all wetlands, from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, except for specific listings in segments 5 and 6.

COARFO04	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5 [-]	~~0.5~~--- [=]
Phosphorus	---	0.17*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

5. Marshland on Nash Property (60 acres at 13030 Old Pueblo Road, El Paso County) located ~~in Section 28 T16S R65W;~~at (lat/long): Jimmy Camp Creek from the irrigation diversion east of Old Pueblo Road to its confluence with Fountain Creek; unnamed tributary from the boundary of Fort Carson to the confluence with Fountain Creek~~; located in S1/2, SW1/4, Section 6 and N1/2. NW1/4, Section 7, T16S, R65W.~~ (lat/long).

COARFO05	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation N

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	630
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.5 [-]	~~0.5~~--- [=]
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~100~~7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

6. Mainstem of Monument Creek, from the boundary of National Forest lands to the confluence with Fountain Creek.

COARFO06	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Water + Fish Standards Apply

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Copper(acute) = Copper BLM –based Fixed Monitoring Benchmark (FMB)
Copper FMBa = 28.4µg/L for a subsegment of Monument Creek from immediately above the Tri-Lakes Wastewater Treatment Facility to the North Gate Boulevard Bridge.
*Copper(chronic) = Copper BLM –based Fixed Monitoring Benchmark (FMB)
Copper FMBc = 17.8µg/L for a subsegment of Monument Creek from immediately above the Tri-Lakes Wastewater Treatment Facility to the North Gate Boulevard Bridge.
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02~~-10~~ [A]
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	~~---~~TVS*	~~TVS*~~---
Copper	~~TVS*~~---	~~---~~TVS*
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

7a. Pikeview Reservoir, Willow Springs Pond #1, and Willow Springs Pond #2.

COARFO07A	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Water + Fish Standards Apply

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

7b. Prospect Lake, Quail Lake, and Monument Lake.

COARFO07B	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Fish Ingestion Standards Apply

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 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	20*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.083*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

8. All lakes and reservoirs tributary to the mainstem of Fountain Creek from the source to a point immediately above the confluence with Monument Creek, except for specific listings in segment 9.

COARFO08	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
	DUWS*

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Classification: DUWS applies to Big Tooth Reservoir, Lake Moraine, Woodmoor Lake
*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

9. North Catamount Reservoir, South Catamount Reservoir, and Crystal Creek Reservoir.

COARFO09	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
	DUWS*

Qualifiers:

Other:

*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Classification: All reservoirs=DUWS
*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CLL	CLL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

10. All lakes and reservoirs tributary to Fountain Creek which are within the boundaries of National Forest or Air Force Academy lands from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, except for specific listings in Segment 11. This segment includes Rampart Reservoir.

COARFO10	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
	DUWS*

Qualifiers:

Other:

*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Classification: Rampart Reservoir = DUWS
*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL,CLL	CL,CLL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

11. AFA Non Potable Reservoir #1 and all lakes and reservoirs tributary to Fountain Creek from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, excluding lakes and reservoirs within the boundaries of the National Forest and other lakes on Air Force Academy lands and the specific listings in segments 7a and 7b.

COARFO11	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply
	DUWS*

Qualifiers:

Water + Fish Standards Apply

Other:

*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Classification: DUWS applies to Lower Reservoir, Keeton Reservoir, Unknown Reservoir at -104.82928, 38.70939, Gold Camp Reservoir, South Suburban Reservoir
*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	20*
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.083*
Sulfate	---	WS
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02~~10~~ A
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

1a. Mainstem of the Arkansas River from a point immediately above the confluence with Fountain Creek to immediately above the Colorado Canal headgate near Avondale.

COARLA01A	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Selenium(ac/ch) = existing quality

Sulfate(chronic) = existing quality

Expiration Date of 12/31/2018

*Uranium(acute) = See 32.5(3) for details.

*Temperature =
DM=WS-II and MWAT=WS-II from 1/1-11/30
DM= 21.5 and MWAT=20.7 from 12/1-12/31

Physical and Biological

		DM	MWAT
Temperature °C	~~1/1 - 11/30~~	~~WS-II varies*~~	~~WS-II varies*~~
~~Temperature °C~~	~~12/1 - 12/31~~	~~21.5~~	~~20.7~~

	acute	chronic
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	---
Sulfate	---	329
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 A
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	2800
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	19.1	14.1
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

1b. Mainstem of the Arkansas River from the Colorado Canal headgate to the inlet to John Martin Reservoir.

COARLA01B	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Water + Fish Standards Apply

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

Discharger Specific Variance(s):

Selenium(acute) = TVS:no limit

Selenium(chronic) = TVS:0.37 lbs/day

Expiration Date of 12/31/2026

*Uranium(acute) = See 32.5(3) for details.

*Variance: Selenium = 0.37 lbs /day as a 12-month rolling average. See 32.6(6) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	---
Sulfate	---	902
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1950
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

1c. Mainstem of the Arkansas River from the outlet of John Martin Reservoir to the Colorado/Kansas border.

COARLA01C	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Water + Fish Standards Apply

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m²)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5 -	~~0.5~~--- =
Phosphorus	---	---
Sulfate	---	1900
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/190
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

2a. All tributaries to the Arkansas River, including wetlands, from the Colorado Canal headgate to the Colorado/Kansas border except for specific listings in segments 2b, 2c, 2d, 3a through 9b, and Middle Arkansas Basin listings.

COARLA02A	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation N
	Water Supply

Qualifiers:

Other:

*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-III	WS-III
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m²)	---	---
E. Coli (per 100 mL)	---	630

Inorganic (mg/L)

	acute	chronic
Ammonia	~~---~~TVS -	~~---~~TVS -
Boron	---	0.75
Chloride	---	250
Chlorine	~~---~~ - 0.019	~~---~~ - 0.011
Cyanide	0.2~~005~~	---
Nitrate	10	---
Nitrite	~~---~~0.5 -	~~1.0~~--- =
Phosphorus	---	0.17* =
Sulfate	---	WS
Sulfide	---	0.~~05~~002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	0.02-10 A
Beryllium(T)	---	4.0
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI~~(T)~~	~~50~~TVS	~~100~~TVS
Copper~~(T)~~	~~---~~TVS	~~200~~TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	~~100~~---
Manganese	~~---~~TVS	TVS/WS
Mercury(T)	~~2.0(t)~~---	~~---~~0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium~~(T)~~	~~---~~TVS	~~20~~TVS
Silver~~(T)~~	~~---~~TVS	~~100~~TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc~~(T)~~	~~---~~TVS	~~2000~~TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

2b. King Arroyo.

COARLA02B	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Livestock Watering Only

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-III	WS-III
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	---	---
Boron	---	5.0
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	~~---~~10	~~10~~---
Phosphorus	---	0.17*
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	200
~~Beryllium~~	~~---~~	~~---~~
Cadmium(T)	---	50
Chromium III	TVS	TVS
Chromium III(T)	---	1000
Chromium VI(T)	---	1000
Copper(T)	---	500
Iron	---	---
Lead(T)	---	100
Manganese	---	---
Mercury(T)	---	10~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	---	---
Selenium(T)	---	50
Silver	---	---
Uranium	varies*	---
Zinc(T)	---	25000

2c. Mainstem of Wildhorse Creek, including all tributaries, from a point immediately below US Highway 287 in Kit Carson to the confluence with Big Sandy Creek.

COARLA02C	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation N

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-III	WS-III
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	630
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	---	---
Boron	---	0.75
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	~~---~~10	~~10~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	100
Beryllium(T)	---	100
Cadmium(T)	---	50
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI(T)	---	100
Copper(T)	---	200
Iron	---	---
Lead(T)	---	100
Manganese	---	---
Mercury(T)	---	---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	200
Selenium(T)	---	50
Silver	---	---
Uranium	varies*	---
Zinc(T)	---	2000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

2d. Kiowa Creek including all tributaries from its source to the mouth. Bear Creek from the dry tributary at (37.415787, -102.593927) to the confluence with Muddy Creek. Unnamed tributary from the source north of county road 350 (37.307, -104.29) to the confluence with the Purgatoire. Unnamed tributary to Lake Creek from railroad tracks southwest of Limon (39.261, -103.679) to the confluence with Lake Creek. Lake Creek from the confluence with the unnamed tributary (39.254, -103.66) to the confluence with Big Sandy Creek.

COARLA02D	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation N

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).

Physical and Biological	DM	MWAT
Temperature °C	WS-III	WS-III
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	--- =
chlorophyll a (mg/m^2)	---	
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	--- =	0.75
Chloride	--- =	--- =
Chlorine	0.019	0.011
Cyanide	0.005	--- =
Nitrate	100	--- =
Nitrite	0.5	--- =
Phosphorus	--- =	0.17
Sulfate	--- =	--- =
Sulfide	--- =	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	---	---
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

3a. Mainstem of the Apishapa River, including all tributaries and wetlands, from the source to I-25, except for specific listings in Middle Arkansas segment 1 and Lower Arkansas segments 3b and 3c.

COARLA03A	Classifications
Designation	Agriculture
Reviewable	Aq Life ~~Cold 1~~Warm 2
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	~~C~~WS-II	~~C~~WS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~--- =
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	---	---
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

3b. Mainstem of West Torrino Canyon Creek, North Fork, Middle Fork and mainstem of Trujillo Creek, Mitotes Canyon Creek, Luis Canyon Creek, Wheeler Canyon Creek, Mauricio Canyon Creek, Daisy Canyon Creek, Adobe Canyon Creek, Gonzales Canyon Creek, Frio Canyon Creek, Borrego Canyon Creek, Munoz Canyon Creek, William Canyon Creek and Castro Canyon Creek, including all tributaries, from their sources to their confluences with the Apishapa River, except for the specific listings in Middle Arkansas segment 1.

COARLA03B	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation N
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	630
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	---	0.5
Boron	---	0.75
Chloride	---	250
Chlorine	---	---
Cyanide	0.2	---
Nitrate	10	---
Nitrite	1.0	---
Phosphorus	---	0.17
Sulfate	---	WS
Sulfide	---	0.05

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
~~Beryllium~~	~~---~~	~~---~~
~~Cadmium~~	~~---~~	~~---~~
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
~~Chromium VI~~	~~---~~	~~---~~
Chromium VI(T)	50	---
~~Copper~~	~~---~~	~~---~~
Copper(T)	200	---
Iron	---	WS
~~Lead~~	~~---~~	~~---~~
Lead(T)	50	---
Manganese	---	WS
Mercury(T)	2.0	---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	100
~~Selenium~~	~~---~~	~~---~~
Selenium(T)	---	20
~~Silver~~	~~---~~	~~---~~
Silver(T)	100	---
Uranium	varies*	~~---~~16.8-30 [A]
~~Zinc~~	~~---~~	~~---~~
Zinc(T)	---	2000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

3c. The mainstem of Jarosa Canyon Creek including all tributaries from the source to the confluence with the Apishapa River.

COARLA03C	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

4a. Mainstem of the Apishapa River from I-25 to the confluence with the Arkansas River. Mainstem of Timpas Creek from the source to the Arkansas River.

COARLA04A	Classifications
Designation	Agriculture
UP	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1805
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

4b. Mainstem of Lorencito Canyon, from the source to the confluence with the Purgatoire River.

COARLA04B	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	4.0
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

5a.Mainstem of the North Fork of the Purgatoire River, including all tributaries and wetlands, from the source to a point immediately below the confluence with Guajatoyah Creek; mainstem of the Middle Fork of the Purgatoire River, including all tributaries and wetlands, from the source to the Bar Ni Ranch Road at Stonewall Gap; Mainstem of the South Fork of the Purgatoire River, including all tributaries and wetlands, from the source to Tercio.

COARLA05A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	4.0
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 Δ
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

5b.Mainstem of the North Fork of the Purgatoire River, including all tributaries and wetlands, from a point immediately below the confluence with Guajatoyah Creek to the confluence with the Purgatoire River. Mainstem of the Middle Fork of the Purgatoire River from the Bar Ni Ranch Road at Stonewall Gap to the confluence with the North Fork of the Purgatoire River. Mainstem of the South Fork of the Purgatoire River from Tercio to the confluence with the Purgatoire River. Mainstem of the Purgatoire River to Trinidad Lake. Mainstem of Long Canyon Creek from the source to Trinidad Reservoir.

COARLA05B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	4.0
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05 -	~~0.05~~--- =
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 Δ
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

5c. Purgatoire mainstem from Trinidad Lake outlet works to I-25. Mainstem of Raton Creek from the source to the confluence of Purgatoire River.

COARLA05C	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	2.0
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

6a.All tributaries to the Purgatoire River, including all wetlands, from the source to Interstate 25, except for specific listings in segments 4b, 5a, 5b, 5c and 6b.

COARLA06A	Classifications
Designation	Agriculture
UP	Aq Life ~~Cold~~Warm 2
	Recreation E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	~~CS~~WS-II	~~CSWS-~~ II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	~~---~~TVS -	~~---~~TVS -
Boron	---	~~4.~~0
Chloride	---	---
Chlorine	~~---~~ - 0.019	~~---~~ - 0.011
Cyanide	0.2~~00~~5	---
Nitrate	100	---
Nitrite	~~---~~0.5 -	~~10---~~ =
Phosphorus	---	0.~~11~~*17
Sulfate	---	---
Sulfide	---	~~---~~ - 0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium(T)~~	~~---~~	~~100---~~ [BB1]
Cadmium~~(T)~~	~~---~~TVS	~~10~~TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI~~(T)~~	~~---~~TVS	~~100~~TVS
Copper~~(T)~~	~~---~~TVS	~~200~~TVS
Iron~~(T)~~	---	~~---~~1000
Lead~~(T)~~	~~---~~TVS	~~100~~TVS
Manganese	~~---~~TVS	~~---~~TVS
Mercury~~(T)~~	---	~~---~~0.01
Molybdenum(T)	---	~~160~~150
Nickel~~(T)~~	~~---~~TVS	~~200~~TVS
Selenium~~(T)~~	~~---~~TVS	~~20~~TVS
Silver	~~---~~TVS	~~---~~TVS
Uranium	varies*	---
Zinc~~(T)~~	~~---~~TVS	~~2000~~TVS

6b.Wet Canyon and all tributaries, including wetlands, from the source to the confluence with the Purgatoire River.

COARLA06B	Classifications
Designation	Agriculture
UP	Aq Life ~~Cold~~Warm 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	~~CS~~WS-II	~~CSWS-~~ II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	~~150---~~ =
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	~~---~~TVS -	~~---~~TVS -
Boron	---	2.0
Chloride	---	250
Chlorine	~~---~~ - 0.019	~~---~~ - 0.011
Cyanide	0.2~~00~~5	---
Nitrate	10	---
Nitrite	~~---~~0.5 -	~~1.0---~~ =
Phosphorus	---	~~0.11---~~ =
Sulfate	---	WS
Sulfide	---	0.~~05~~002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	0.02-10 A
Beryllium(T)	---	4.0
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI~~(T)~~	~~50~~TVS	~~100~~TVS
Copper~~(T)~~	~~---~~TVS	~~200~~TVS
Iron	---	WS
Iron(T)	~~---~~	1000
Lead	TVS	TVS
Lead(T)	50	~~100---~~
Manganese	~~---~~TVS	TVS/WS
Mercury(T)	~~2.0(t)---~~	~~---~~0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium~~(T)~~	~~---~~TVS	~~20~~TVS
Silver~~(T)~~	~~100~~TVS	~~---~~TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc~~(T)~~	~~---~~TVS	~~2000~~TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

7. Mainstem of the Purgatoire River from Interstate 25 to the confluence with the Arkansas River.

COARLA07	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Water Supply
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	~~---~~250 -
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.5 -	~~0.5~~--- =
Phosphorus	---	---
Sulfate	---	~~---~~WS -
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~7.6~~0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

8. Mainstem of Ricardo Creek, including all tributaries and wetlands, which are within Colorado (Costilla and Las Animas Counties), mainstem of the Canadian River, including all tributaries, wetlands, lakes and reservoirs.

COARLA08	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05 -	~~0.05~~--- =
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

9a. Mainstems of Adobe, Buffalo, Cheyenne, Clay, Gageby, Horse, Two Butte, Wildhorse and Wolf Creeks from their sources to their confluences with the Arkansas River. Mainstems of Chacuacho Creek, San Francisco Creek, Trinchera Creek and Van Bremer Arroyo from their sources to their confluences with the Purgatoire River. Mainstem of Willow Creek from Highway 287 to the confluence with the Arkansas River. Mainstem of Big Sandy Creek from the source to the El Paso/Elbert county line. Mainstem of South Rush Creek from the source to the confluence with Rush Creek. Mainstem of Middle Rush Creek from the source to the confluence with North Rush Creek. North Rush Creek from the source to the confluence with South Rush Creek. Mainstem of Rush Creek to the Lincoln County Line. Mainstem of Antelope Creek from the source to the confluence with Rush Creek; the West May Valley drain from the Fort Lyon Canal to the confluence with the Arkansas River.

COARLA09A	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

9b. Mainstem of Apache Creek from the source to the confluence with the North Rush Creek. Mainstem of Breckenridge Creek from the source to the confluence with Horse Creek. Mainstem of Little Horse Creek from the source to the confluence with Horse Creek. Mainstem of Bob Creek from the source to Meredith Reservoir. Mainstem of Big Sandy Creek within Prowers County. Mainstem of Rule Creek from the Bent/Las Animas county line to John Martin Reservoir. Mainstem of Muddy Creek from the south boundary of the Setchfield State Wildlife Area to the confluence with Rule Creek. Mainstem of Caddoa Creek from CC Road to the confluence with the Arkansas River. Mainstem of Cat Creek from the source to the confluence with Clay Creek. Mainstem of Mustang Creek from the source to the confluence with Apishapa River. Mainstem of Chicosa Creek from the source to the Arkansas River. Mainstem of Smith Canyon from the Otero/Las Animas county line to the confluence with the Purgatoire River. Mainstem of Mud Creek from V Road to the confluence with the Arkansas River. Mainstems of Frijole Creek and Luning Arroyo from their sources to their confluences with the Purgatoire River. Mainstem of Blackwell Arroyo from its source to the confluence with Luning Arroyo. Mainstem of San Isidro Creek from the source to the confluence with San Francisco Creek.

COARLA09B	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Water + Fish Standards Apply

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02~~-10~~
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 Δ
Zinc	TVS	TVS

9c. Deleted.

COARLA9C	Classifications
Designation	

Qualifiers:

Other:

Physical and Biological	DM	MWAT
	acute	**chronic**
Inorganic (mg/L)		
	acute	**chronic**

Metals (ug/L)	acute	chronic

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

10. Two Buttes Reservoir, Two Buttes Pond, Hasty Lake, Holbrook Reservoir, Burchfield Lake, Nee-Skah (Queens) Reservoir, Adobe Creek Reservoir, Neeso Pah Reservoir, Nee Noshe Reservoir; Nee Gronda Reservoir.

COARLA10	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS~~(tr)~~
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

11. John Martin Reservoir.

COARLA11	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

12. Lake Henry, Lake ~~Meridith~~Meredith.

COARLA12	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
Qualifiers:	
Other:	
*Uranium(acute) = See 32.5(3) for details.	

Physical and Biological	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS~~(tr)~~
Uranium	varies*	---
Zinc	TVS	TVS

13. American Crystal Reservoir, Chancellor Ponds, Horse Creek Reservoir, Hugo Ponds, Jim Davis Pond, John Robertson Ponds, Karval Lake, Kinney Lake, Kissel Pond, La Junta Kids Pond, Las Animas Kids Pond, Mayhem Pond, Merit Lake, Olney Springs Pond, Otero Pond, Pursley Ponds, Ranch Reservoir, Reynolds Gravel Pit, Pyan Ponds, Thurston Reservoir, Turks Pond, Ramah Reservoir.

COARLA13	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
Qualifiers:	
Other:	
*Uranium(acute) = See 32.5(3) for details.	

Physical and Biological	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

14. All lakes and reservoirs tributary to the Apishapa River from the source to I-25, except for specific listings in Middle Arkansas segment 19.

COARLA14	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

15. All lakes and reservoirs tributary to the mainstem of the North Fork of the Purgatoire River from the source to a point immediately below the confluence with Guajatoyah Creek. All lakes and reservoirs tributary to the Middle Fork of the Purgatoire River from the source to the USGS gage at Stonewall. ~~mainstem~~ Mainstem of the South Fork of the Purgatoire River, from the source to Tercio. Monument Lake, North Lake, Trinidad Lake, Long Canyon Reservoir and Lake Dorothey.

COARLA15	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
	DUWS*

Qualifiers:

Other:

*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Classification: DUWS Applies only to Monument Lake and North Lake
*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.
*Uranium(acute) = See 32.5(3) for details.

*Temperature = Trinidad Reservoir (CLL)

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
Temperature °C	CLL*	CLL *

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

16. All lakes and reservoirs tributary to the Purgatoire River from the source to I-25, except for the specific listings in segment 15 and 17.

COARLA16	Classifications
Designation	Agriculture
UP	Aq Life Cold 2
	Recreation E

Qualifiers:

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 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	---	---
Boron	---	0.75
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	~~---~~10	~~10~~---
Phosphorus	---	0.025*
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	100
Beryllium(T)	---	100
Cadmium(T)	---	10
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI(T)	---	100
Copper(T)	---	200
Iron	---	---
Lead(T)	---	100
Manganese	---	---
Mercury(T)	---	---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	200
Selenium(T)	---	20
Silver	---	---
Uranium	varies*	---
Zinc(T)	---	2000

17. All lakes and reservoirs tributary to Wet Canyon, from the source to the confluence with the Purgatoire River.

COARLA17	Classifications
Designation	Agriculture
UP	Aq Life Cold 2
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	---	---
Boron	---	0.75
Chloride	---	250
Chlorine	---	---
Cyanide	0.2	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.05

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	0.02-10 [A]
Beryllium(T)	---	4.0
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI(T)	50	100
Copper(T)	---	200
Iron	---	WS
Lead(T)	50	100
Manganese	---	WS
Mercury(T)	2.0~~(t)~~	---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	100
Nickel(T)	---	100
Selenium(T)	---	20
Silver(T)	100	---
Uranium	varies*	~~---~~16.8-30 [A]
Zinc(T)	---	2000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

18. All lakes and reservoirs tributary to Ricardo Creek, which are within Colorado (Costilla and Las Animas Counties). All lakes and reservoirs tributary to the Canadian River.

COARLA18	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

19. All lakes and reservoirs tributary to the Arkansas River, except for specific listings in segments 10-18 and Middle Arkansas Basin segments 19-28.

COARLA19	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*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 32.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	20*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.083*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS~~(tr)~~
Uranium	varies*	~~---~~16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Cimarron River Basin

1. Mainstem of the Cimarron River, including all tributaries and wetlands, in Las Animas, Baca, and Prowers Counties, except for the specific listing in segment 2.

COARCI01	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation N
Qualifiers:	
Other:	
*Uranium(acute) = See 32.5(3) for details.	

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	630
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	---	---
Boron	---	0.75
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	~~---~~10	~~10~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	100
Beryllium(T)	---	100
Cadmium(T)	---	10
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI(T)	---	100
Copper(T)	---	200
Iron	---	---
Lead(T)	---	100
Manganese	---	---
Mercury(T)	---	---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	200
Selenium(T)	---	20
Silver	---	---
Uranium	varies*	---
Zinc(T)	---	2000

2. Mainstem of North Carrizo Creek from the source to the Colorado/Oklahoma state line; mainstems of East and West Carrizo Creek, to the confluence with North Carrizo Creek; mainstems of Cottonwood Creek and Tecolote Creek to the confluence with West Carrizo Creek, Fitzler Pond.

COARCI02	Classifications
Designation	Agriculture
UP	Aq Life Warm 1
	Recreation E
Qualifiers:	
Other:	
*Uranium(acute) = See 32.5(3) for details.	

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Cimarron River Basin

3. All lakes and reservoirs tributary to the Cimarron River.

COARCI03	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Fish Ingestion Standards Apply

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 32.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	20*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.083*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 32.6 for details on TVS, TVS(tr), WS, temperature 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) *Reserved.*

(C) Reserved.

EXIBIT 2
WATER QUALITY CONTROL DIVISION

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 36 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR RIO GRANDE BASIN

5 CCR 1002-36

36.1 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.

36.2 PURPOSE

These regulations establish classifications and numeric standards for the Rio Grande Basin, including all tributaries and standing bodies of water as indicated in section 36.6. 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. ~~(See Regulation No. 31, section 31.14).~~ 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.

36.3 INTRODUCTION

These regulations and tables present the classifications and numeric standards assigned to stream segments listed in the attached tables (See ~~section 36.6(4)~~ Appendix 36-1). 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 36-1~~section 36.6(4)~~. 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”.

36.4 DEFINITIONS

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

36.5 BASIC STANDARDS

(1) ~~TEMPERATURE~~Temperature

All waters of the Rio Grande 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~~Qualifiers

See Basic Standards and Methodologies for Surface Water for a listing of organic standards at 31.11 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 Tables 36.6(4)~~ Appendix 36-1. 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 ~~Tables 36.6(4)~~ Appendix 36-1.

(3) ~~URANIUM~~Uranium

(a) All waters of the Rio Grande 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 ~~ug~~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) ~~NUTRIENTS~~Nutrients

Prior to ~~May~~ December 31, 2022 for chlorophyll *a* and prior to December 31, 2027 for total phosphorus, interim nutrient values will be considered for adoption only in the limited circumstances defined at 31.17(e) and (f). These circumstances include headwaters, Direct Use Water Supply (DUWS) Lakes and Reservoirs, and other special circumstances determined by the Commission. Additionally, prior to ~~May~~ December 31, 20~~1~~2~~7~~, only total phosphorus and chlorophyll *a* will be considered for adoption. After ~~May~~ December 31, 20~~1~~2~~7~~, total nitrogen will be considered for adoption per the circumstances outlined in 31.17(~~e~~g).

Prior to ~~May~~ December 31, 202~~2~~7, nutrient criteria will be adopted for headwaters on a segment by segment basis for the Rio Grande ~~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 Rio Grande ~~River~~ Basin:

Segment	Permittee	Facility name	Permit No.
CORGRG02	Mountain Views at Rivers Edge RV	Mtn Views At Rvrs Edge Rv Rst	COG588069
CORGRG04b	South Fork Water and Sanitation District	South Fork Water and San Dist WWTF	COG588039
CORGRG04c	Monte Vista City of	Veterans Center WWTF	CO0036927
CORGRG04c; CORGRG15	Monte Vista City of	Henderson Lagoon Facility	CO0023132
CORGRG04b; CORGRG18	Del Norte Town of	Del Norte WWTF	CO0020281
CORGRG07	Creede City of	Creede WWTF	CO0040533
CORGRG09b	Fun Valley Resort	Fun Valley Resort	COG588018
CORGRG09a	Wolf Creek Ski Corp	Wolf Creek Ski Corp WWTF	CO0041785
CORGRG12	Alamosa City of	Alamosa Regional WWTF	CO0044458
CORGRG15	San Luis Water and Sanitation District	San Luis Water and San Dist WWTF	COG589082
CORGRG31	Costilla County Water and Sanitation System	Costilla County Water & San Dist WWTF	CO0036528
CORGAL12	La Jara Town of	La Jara WWTF	CO0020150
CORGAL15	Manassa Town of	Manassa WWTF	CO0042935
CORGAL18	Antonito Town of	Antonito WWTF	CO0040975
CORGCB0~~3~~6	Baca Grande Water and Sanitation District	Aspen Institute	CO0046914

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 ~~foot~~note was added to the total phosphorus and chlorophyll *a* standards in these segments. The ~~foot~~note references the table of qualified facilities at 36.5(4).
- For segments located entirely below these facilities, nutrient standards do not apply.

A ~~foot~~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.

36.6 TABLES

(1) Introduction

The numeric standards for various parameters in this regulation and in the tables in Appendix 36-1 were assigned by the Commission after a careful analysis of the data presented on actual stream conditions and on actual and potential water uses.

Numeric standards are not assigned for all parameters listed in the tables attached to 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 ~~in~~ the tables in Appendix 36-1:

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
D.O.	=	dissolved oxygen
DM	=	daily maximum temperature
DUWS	=	direct use water supply
E. coli	=	*Escherichia coli*
mg/l	=	milligrams per liter
MWAT	=	maximum weekly average temperature
OW	=	outstanding waters
sp	=	spawning
SSE	=	site-specific equation
T	=	total recoverable
t	=	total
tr	=	trout
TVS	=	table value standard
µ~~u~~g/l	=	micrograms per liter
UP	=	use-protected
~~WAT~~	~~=~~	~~weekly average temperature~~
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

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

Fe(ch)	=	WS
Mn(ch)	=	WS
SO_4	=	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 31.11(6);

(i)~~.~~ existing quality as of January 1, 2000; or

(ii)~~.~~

Iron	=	300 ~~(~~µg/l (dissolved)
Manganese	=	50 ~~(~~µg/l (dissolved)
SO_4	=	250 mg/l

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 temporary modification and qualifiers column as As(ch)=hybrid.

(ii) For discharges existing on or before 6/1/2013, the temporary modification is: As(ch)=current condition, expiring on 12/31/2021.

(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 (Trec), expiring on 12/31/2021.

(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 36-1, 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 ~~µ~~µg/l unless noted)

PARAMETER(1)	**TABLE VALUE STANDARDS(2)(3)**
Aluminum (T)	Acute = $e^{(1.3695[\ln(\text{hardness})]+1.8308)}$ pH equal to or greater than 7.0 Chronic=$e^{(1.3695[\ln(\text{hardness})]-0.1158)}$ pH less than 7.0 Chronic= $e^{(1.3695[\ln(\text{hardness})]-0.1158)}$ or 87, whichever is more stringent
Ammonia(4)	Cold Water = (mg/l as N) Total $acute = \frac{0.275}{1+10^{7.204-pH}} + \frac{39.0}{1+10^{pH-7.204}}$ $chronic = \left(\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}}\right) * MIN\left(2.85, 1.45 * 10^{0.028(25-T)}\right)$
	Warm Water = (mg/l as N) Total

	$$acute = \frac{0.411}{1+10^{7.204-pH}} + \frac{58.4}{1+10^{pH-7.204}}$$ $$chronic\ \ (Apr1-Aug31) = \left(\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}}\right) * MIN\left(2.85,\ 1.45*10^{0.028(25-T)}\right)$$ $$chronic\ (Sep1-Mar31) = \left(\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}}\right) * 1.45*10^{0.028*(25-MAX(T,\ 7))}$$
Cadmium	Acute = (1.136672-[ln(hardness) x (0.041838)])x $e^{0.9151[ln(hardness)]-3.1485}$ Acute(Trout) = (1.136672-[ln(hardness)x (0.041838)])x $e^{0.9151[ln(hardness)]-3.6236}$ Chronic = (1.101672-[ln(hardness) x(0.041838)] x $e^{0.7998[ln(hardness)]-4.4451}$
Chromium III[5]	Acute = $e^{(0.819[ln(hardness)]+2.5736)}$ Chronic= $e^{(0.819[ln(hardness)]+0.5340)}$
Chromium VI[5]	Acute = 16 Chronic = 11
Copper	Acute = $e^{(0.9422[ln(hardness)]-1.7408)}$ Chronic = $e^{(0.8545[ln(hardness)]-1.7428)}$
Lead	Acute = (1.46203-[ln(hardness)*(0.145712)])* $e^{(1.273[ln(hardness)]-1.46)}$ Chronic = (1.46203-[ln(hardness)*(0.145712)])* $e^{(1.273[ln(hardness)]-4.705)}$
Manganese	Acute = $e^{(0.3331[ln(hardness)]+6.4676)}$ Chronic = $e^{(0.3331\ [ln(hardness)]+5.8743)}$
Nickel	Acute = $e^{(0.846[ln(hardness)]+2.253)}$ Chronic = $e^{(0.846[ln(hardness)]+0.0554)}$
Selenium[6]	Acute = 18.4 Chronic = 4.6
Silver	Acute = ½$e^{(1.72[ln(hardness)]-6.52)}$ Chronic = $e^{(1.72[ln(hardness)]-9.06)}$ Chronic(Trout) = $e^{(1.72[ln(hardness)]-10.51)}$

Temperature

TEMPERATURE TIER	TIER CODE	SPECIES EXPECTED TO BE PRESENT	APPLICABLE MONTHS	TEMPERATURE STANDARD (°C)	
				MWAT	DM
Cold Stream Tier 1	CS-I	brook trout, cutthroat trout	June – Sept.	17.0	21.7
			Oct. – May	9.0	13.0
Cold Stream Tier 2	CS-II	Other cold-water species	April – Oct.	18.3	~~23.9~~ 24.3
			Nov. – March	9.0	13.0
Cold Lake	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	~~23.8~~ 24.2
			Jan. – March	9.0	13.0
Warm Stream	WS-I	common shiner, Johnny darter, orangethroat	March – Nov.	24.2	29.0

	Tier 1		darter, stonecat	Dec. – Feb.	12.1	~~14.5~~24.6
	Warm Stream Tier 2	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	~~14.3~~ 25.2
	Warm Stream Tier 3	WS-III	all other warm-water species	March – Nov.	28.7	31.8
				Dec. – Feb.	14.3	~~15.9~~ 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.~~3~~2	29.~~5~~3
				Jan. – March	13.~~2~~1	~~14.8~~ 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 = $0.986*e^{(0.9094[\ln(\text{hardness})]+0.6235)}$					

TABLE VALUE STANDARDS - FOOTNOTES

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

(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.

(5) Unless the stability of the chromium valence state in receiving waters can be clearly demonstrated, the standard for chromium should be in terms of chromium VI. In no case can the sum of the instream levels of hexavalent and trivalent chromium exceed the water supply standard of 50 ~~u~~µg/l total chromium in those waters classified for domestic water use.

(6) Selenium is a bioaccumulative metal and subject to a range of toxicity values depending upon numerous site-specific variables.

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(4) Additional Site-Specific Criteria

(a) Seasonal Aluminum Standards for Alamosa River/La Jara Creek/Conejos River Segment 8, Terrace Reservoir:

5/1-6/30 Near Surface:
Aluminum(chronic)=873(T) µg/L
Aluminum(acute)=TVS(T) µg/L
Aluminum(chronic)=59 µg/L
Aluminum(acute)=159 µg/L

7/1-4/30 Near Surface:
Aluminum(chronic)=102(T) µg/L
Aluminum(acute)=TVS(T) µg/L
Aluminum(chronic)=9 µg/L
Aluminum(acute)=15 µg/L

5/1-6/30 Near Bottom:
Aluminum(chronic)=1,542(T) µg/L
Aluminum(acute)=5,583(T) µg/L
Aluminum(chronic)=41 µg/L
Aluminum(acute)=65 µg/L

7/1-4/30 Near Bottom:
Aluminum(chronic)=227(T) µg/L
Aluminum(acute)= TVS(T) µg/L
Aluminum(chronic)=9 µg/L
Aluminum(acute)=12 µg/L

~~5/1-6/30 Near Surface:~~
~~Aluminum(chronic)=873(T) ug/L~~
~~Aluminum(acute)=TVS(T) ug/L~~
~~Aluminum(chronic)=59 ug/L~~
~~Aluminum(acute)=159 ug/L~~

~~5/1-6/30 Near Bottom:~~
~~Aluminum(chronic)=1,542(T) ug/L~~
~~Aluminum(acute)=5,583(T) ug/L~~
~~Aluminum(chronic)=41 ug/L~~
~~Aluminum(acute)=65 ug/L~~

~~7/1-4/30 Near Surface:~~
~~Aluminum(chronic)=102(T) ug/L~~
~~Aluminum(acute)=TVS(T) ug/L~~
~~Aluminum(chronic)=9 ug/L~~
~~Aluminum(acute)=15 ug/L~~

~~7/1-4/30 Near Bottom:~~
~~Aluminum(chronic)=227(T) ug/L~~
~~Aluminum(acute)= TVS(T) ug/L~~
~~Aluminum(chronic)=9 ug/L~~
~~Aluminum(acute)=12 ug/L~~

(b) Site-Specific Standards for Rio Grande Segment 4a:

Standards effective through 12/31/2018

Cadmium(acute)=TVS(tr)

Cadmium(chronic)=TVS
Lead(chronic)=TVS
Manganese(chronic)=TVS and WS
Zinc(acute/chronic)=TVS

Tier 1 standards effective 1/1/2019 through 12/31/2020

Low flow (August-March):
Cadmium(acute/chronic)=2.6 / 1.5 µg/L
Lead(chronic)=3.0 µg/L
Manganese(chronic)=165 µg/L
Zinc(acute/chronic)=548 / 393 µg/L

High flow (April-July):
Cadmium(acute/chronic)=1.0 / 0.63 µg/L
Lead(chronic)=1.3 µg/L
Manganese(chronic)=WS
Zinc(acute/chronic)=272 / 183 µg/L

~~Low flow (August-March):~~
~~Cadmium(acute/chronic)=2.6 / 1.5 ug/L~~
~~Lead(chronic)=3.0 ug/L~~
~~Manganese(chronic)=165 ug/L~~
~~Zinc(acute/chronic)=548 / 393 ug/L~~

~~High flow (April-July):~~
~~Cadmium(acute/chronic)=1.0 / 0.63 ug/L~~
~~Lead(chronic)=1.3 ug/L~~
~~Manganese(chronic)=WS~~
~~Zinc(acute/chronic)=272 / 183 ug/L~~

Tier 2 standards effective from 1/1/2021

Low flow (August-March):
Cadmium(acute/chronic)=2.0 / 0.88 µg/L
Lead(chronic)=1.5 µg/L
Manganese(chronic)=92 µg/L
Zinc(acute/chronic)=306 / 148 µg/L

High flow (April-July):
Cadmium(acute/chronic)=0.83 / 0.51 µg/L
Lead(chronic)=0.75 µg/L
Manganese(chronic)=WS
Zinc(acute/chronic)=225 / 136 µg/L

~~Low flow (August-March):~~
~~Cadmium(acute/chronic)=2.0 / 0.88 ug/L~~
~~Lead(chronic)=1.5 ug/L~~
~~Manganese(chronic)=92 ug/L~~
~~Zinc(acute/chronic)=306 / 148 ug/L~~

~~High flow (April-July):~~
~~Cadmium(acute/chronic)=0.83 / 0.51 ug/L~~
~~Lead(chronic)=0.75 ug/L~~
~~Manganese(chronic)=WS~~
~~Zinc(acute/chronic)=225 / 136 ug/L~~

(c) Site-specific standards and temporary modifications for Rio Grande Segment 7:

Standards effective through 12/31/2018

Cadmium(acute/chronic)=TVS
Copper(acute/chronic)=TVS
Lead(acute/chronic)=TVS
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=TVS

Tier 1 standards effective 1/1/2019 through 12/31/2020

West Willow
Cadmium(acute/chronic)=163 / 21 ~~u~~µg/L
Copper(acute/chronic)=227 / 8.9 ~~u~~µg/L
Lead(acute/chronic)=1,014 / 104 ~~u~~µg/L
Manganese(acute/chronic)=TVS
Silver(acute)=1.3 ~~u~~µg/L
Zinc(acute/chronic)=24,000 / 5,977 ~~u~~µg/L

Windy Gulch
Cadmium(acute/chronic)=9.1 / 6.3 ~~u~~µg/L
Copper(acute/chronic)=TVS / 5.8 ~~u~~µg/L
Lead(acute/chronic)=TVS
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=2,804 / 1,914 ~~u~~µg/L

Willow mainstem
Low flow (August-March):
Cadmium(acute/chronic)=17.5 / 15.4 µg/L
Copper(acute/chronic)=TVS
Lead(acute/chronic)=TVS / 30 µg/L
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=4,541 / 3,917 µg/L

High flow (April-July):
Cadmium(acute/chronic)=15.6 / 10.3 µg/L
Copper(acute/chronic)=TVS
Lead(acute/chronic)=TVS / 22 µg/L
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=4,190 / 3,009 µg/L

~~Low flow (August-March):~~
~~Cadmium(acute/chronic)=17.5 / 15.4 ug/L~~
~~Copper(acute/chronic)=TVS~~
~~Lead(acute/chronic)=TVS / 30 ug/L~~
~~Manganese(acute/chronic)=TVS~~
~~Silver(acute)=TVS~~
~~Zinc(acute/chronic)=4,541 / 3,917 ug/L~~

~~High flow (April-July):~~
~~Cadmium(acute/chronic)=15.6 / 10.3 ug/L~~
~~Copper(acute/chronic)=TVS~~
~~Lead(acute/chronic)=TVS / 22 ug/L~~
~~Manganese(acute/chronic)=TVS~~
~~Silver(acute)=TVS~~
~~Zinc(acute/chronic)=4,190 / 3,009 ug/L~~

Tier 2 standards effective from 1/1/2021

West Willow
Low flow (August-March):
Cadmium(acute/chronic)=67 / 50 µg/L
Copper(acute/chronic)=17.6 / 15.0 µg/L
Lead(acute/chronic)=268 / 183 µg/L
Manganese(acute/chronic)=TVS / 1,779 µg/L
Silver(acute)=TVS
Zinc(acute/chronic)=11,873 / 11,022 µg/L

High flow (April-July):
Cadmium(acute/chronic)=32 / 19.2 µg/L
Copper(acute/chronic)=15.0 / 9.4 µg/L
Lead(acute/chronic)=103 / 47 µg/L
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=8,772 / 5,611 µg/L

~~Low flow (August-March):~~
~~Cadmium(acute/chronic)=67 / 50 ug/L~~
~~Copper(acute/chronic)=17.6 / 15.0 ug/L~~

~~Lead(acute/chronic)=268 / 183 ug/L~~
~~Manganese(acute/chronic)=TVS / 1,779 ug/L~~
~~Silver(acute)=TVS~~
~~Zinc(acute/chronic)=11,873 / 11,022 ug/L~~

~~High flow (April-July):~~
~~Cadmium(acute/chronic)=32 / 19.2 ug/L~~
~~Copper(acute/chronic)=15.0 / 9.4 ug/L~~
~~Lead(acute/chronic)=103 / 47 ug/L~~
~~Manganese(acute/chronic)=TVS~~
~~Silver(acute)=TVS~~
~~Zinc(acute/chronic)=8,772 / 5,611 ug/L~~

Windy Gulch
Cadmium(acute/chronic)=9.1 / 6.3 ~~u~~µg/L
Copper(acute/chronic)=TVS / 5.8 ~~u~~µg/L
Lead(acute/chronic)=TVS
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=2,804 / 1,914 ~~u~~µg/L

Willow mainstem
Low flow (August-March):
Cadmium(acute/chronic)=13.9 / 11.2 µg/L
Copper(acute/chronic)=TVS
Lead(acute/chronic)=TVS / 18.6 µg/L
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=2,521 / 1,733 µg/L

High flow (April-July):
Cadmium(acute/chronic)=14.5 / 8.9 µg/L
Copper(acute/chronic)=TVS
Lead(acute/chronic)=TVS / 13.1 µg/L
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=3,635 / 2,373 µg/L

~~Low flow (August-March):~~
~~Cadmium(acute/chronic)=13.9 / 11.2 ug/L~~
~~Copper(acute/chronic)=TVS~~
~~Lead(acute/chronic)=TVS / 18.6 ug/L~~
~~Manganese(acute/chronic)=TVS~~
~~Silver(acute)=TVS~~
~~Zinc(acute/chronic)=2,521 / 1,733 ug/L~~

~~High flow (April-July):~~
~~Cadmium(acute/chronic)=14.5 / 8.9 ug/L~~
~~Copper(acute/chronic)=TVS~~
~~Lead(acute/chronic)=TVS / 13.1 ug/L~~
~~Manganese(acute/chronic)=TVS~~
~~Silver(acute)=TVS~~
~~Zinc(acute/chronic)=3,635 / 2,373 ug/L~~

The following temporary modifications apply (Expiration Date 12/31/2018):

West Willow
Cadmium(acute)=163 ~~u~~µg/L
Cadmium(chronic)=21.2 ~~u~~µg/L
Copper(acute)=227 ~~u~~µg/L
Copper(chronic)=8.9 ~~u~~µg/L
Lead(acute)=1,014 ~~u~~µg/L
Lead(chronic)=104 ~~u~~µg/L
Silver(acute)=1.32 ~~u~~µg/L

Zinc(acute)=24,000 ~~u~~µg/L
Zinc(chronic)=5,977 ~~u~~µg/L

Windy Gulch
Cadmium(acute)=9.1 ~~u~~µg/L
Cadmium(chronic)=6.3 ~~u~~µg/L
Copper(chronic)=5.8 ~~u~~µg/L
Zinc(acute)=2,804 ~~u~~µg/L
Zinc(chronic)=1,914 ~~u~~µg/L

Willow
Cadmium(acute)=30.8 ~~u~~µg/L
Cadmium(chronic)=17.9 ~~u~~µg/L
Copper(acute)=6.4 ~~u~~µg/L
Copper(chronic)=5.6 ~~u~~µg/L
Lead(acute)=38.0 ~~u~~µg/L
Lead(chronic)=31.3 ~~u~~µg/L
Zinc(acute)=6,763 ~~u~~µg/L
Zinc(chronic)=4,660 ~~u~~µg/L

(5) Stream Classifications and Water Quality Standards Tables

The stream classifications and water quality standards tables in Appendix 36-1 are incorporated herein by reference.

The following is information regarding duration and measured form of standards in Appendix 36-1:

(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.

36.7 – 36.9 RESERVED

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36.42 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 11, 2018 RULEMAKING; FINAL ACTION AUGUST 6, 2018; EFFECTIVE DATE DECEMBER 31, 2018

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:

Rio Grande segments 5a and 5b: Segment 5 was divided into segments 5a and 5b as part of changes to temperature standards. The following streams were moved to new Segment 5b: the mainstem of Alder Creek; mainstem of East Alder Creek, including all tributaries and wetlands, from the souce to the confluence with Alder Creek; mainstem of Agua Ramon Creek, including all tributaries and wetlands, from the source to the confluence with the Rio Grande; and the mainstem of Embargo Creek, including all tributaries and wetlands, from immediately above the confluence with Dyers Creek to the confluence with the Rio Grande. The remaining Segment 5 streams were included in Segment 5a. Segment 5a retained CS-I temperature standards and new Segment 5b was assigned CS-II temperature standards.

Rio Grande segments 9a and 9b: Segment 9 was divided into segments 9a and 9b as part of changes to temperature standards. The following streams were moved to new Segment 9b: the mainstem of the South Fork Rio Grande, including all tributaries and wetlands, below Decker Creek. Beaver Creek and its tributaries from the source to Beaver Creek Reservoir remained in Segment 5a, as did the mainstem of the South Fork Rio Grande, including all tributaries and wetlands, from just below Decker Creek. Segment 9a retained CS-I temperature standards and new Segment 9b was assigned CS-II temperature standards.

Rio Grande segments 11a and 11b: Segment 11 was divided into segments 11a and 11b as part of changes to temperature standards. The following streams were moved to new Segment 11b: the mainstem of West Fork San Francisco Creek, mainstem of East Fork San Francisco Creek, and mainstem of Spring Branch and its unnamed tributary, from the source to the confluence with San Francisco Creek (Rio Grande County). The mainstem of San Francisco Creek and Middle San Francisco Creek remained in Segment 11a. The portion of San Francisco Creek below Spring Branch, previously included in Segment 15, was added to Segment 11a. Segment 11a retained CS-I temperature standards and new Segment 11b was assigned CS-II temperature standards.

Alamosa River/La Jara Creek/Conejos River segments 2 and 20: Tributaries of the Alamosa River entering from the south, from a point immediately below the confluence of Bitter Creek to the inlet of Terrace Reservoir, were moved from Segment 20 to Segment 2 to facilitate a change in temperature standards and the Aquatic Life use. Segment 2 retained a Cold 1 Aquatic Life use classification with CS-I temperature standards. Segment 20 was reclassified as Cold 2 Aquatic Life use with CS-II temperature standards.

Closed Basin – San Luis Valley River Basin segments 3 and 6: The mainstem of South Crestone Creek from a point just below the Spanish Creek Trail road crossing (37.981612, -105.713237) to

its confluence with Crestone Creek, as well as the mainstem of Crestone Creek from its source at the confluence of North Crestone Creek and South Crestone Creek to the mouth, were moved from Segment 3 to Segment 6 to facilitate removal of the Water Supply use from Segment 6.

Closed Basin – San Luis Valley River Basin segments 12a, 12b, and 12c: Existing Segment 12b was moved to new Segment 12c and retained a Cold 1 Aquatic Life use classification with CS-II temperature standards. The mainstem of Saguache Creek from a point just below the confluence of Fourmile Creek to a point just below the confluence with Ford Creek was moved from Segment 12a to Segment 12b to facilitate a change in temperature standards. Segment 12a retained CS-I temperature standard. Segment 12b was assigned CS-II standards with an ambient-based summer MWAT.

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

B. Aquatic Life Use Classifications and Standards

Some segments assigned an Aquatic Life use classification were missing a standard to protect that use. The commission adopted the missing standards for the following segments:

[*List to be completed following preliminary final action by the Commission*.]

The commission reviewed information regarding the existing aquatic communities. For segments where the existing aquatic communities are not aligned with the Aquatic Life use, the following segments were downgraded from Cold 1 to Cold 2:

[*List to be completed following preliminary final action by the Commission*.]

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:

[*List to be completed following preliminary final action by the Commission*.]

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:

[*List to be completed following preliminary final action by the Commission*.]

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 standards. The Water Supply use classification and standards, except for chloride, were removed from the following segments:

[*List to be completed following preliminary final action by the Commission*.]

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

The commission reviewed the single segment 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

1. **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. Molybdenum supplementation is assumed to be zero. The table value standard (TVS), which considers total copper and molybdenum intakes, is calculated from the following equation:

$$\text{Mo TVS} = \frac{\dfrac{(Cu_{forage} \times Forage_{intake}) + (Cu_{water} \times Water_{intake}) + Cu_{supp}}{\text{Cu:Mo Safe Ratio}} - (Mo_{forage} \times Forage_{intake})}{Water_{intake}}$$

The assumed values for these equations are as follows:

Cu_{forage} = 7 mg/kg, $Forage_{intake}$ = 6.7 kg/day, Cu_{water} = 0.008 mg/L, $Water_{intake}$ = 56.8 L/day, $Cu_{supplementation}$ = 0 mg/day, Cu:Mo Safe Ratio = 4:1, Mo_{forage} = 0.5 mg/kg.

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. 36 that have an Agriculture use classification, and where livestock or irrigated forage are present or expected to be present.

The following segments (or portions of segments) have an Agriculture use classification and a Water Supply use, but livestock watering does not occur. A molybdenum standard of 210 µg/L was retained on these segments to protect the Water Supply use:

[*List to be completed following preliminary final action by the Commission*.]

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:

   $$\text{Acute} = e^{(0.9789*\ln(\text{hardness}) - 3.866)}*(1.136672-(\ln(\text{hardness})*0.041838))$$

   $$\text{Chronic} = e^{(0.7977*\ln(\text{hardness}) - 3.909)}*(1.101672-(\ln(\text{hardness})*0.041838))$$

   EPA's updated cadmium criteria are less stringent than Colorado's current cadmium standards when water hardness is greater than 45 mg/L $CaCO_3$. 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:

[*List to be completed following preliminary final action by the Commission*.]

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. 36 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:

[*List to be completed following preliminary final action by the Commission*.]

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 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:

[*List to be completed following preliminary final action by the Commission*.]

The commission reviewed all Reviewable segments to determine if this Antidegradation designation was still warranted. Based upon available water quality data that fails to meet the criteria of 31.8(2)b, the Reviewable designation was not removed from any segments.

H. Site-Specific Ambient Quality-Based and Criteria-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.

All existing site-specific standards were reviewed, and where appropriate were revised or deleted based on new information. Site-specific standards were deleted from the following segments:

[*List to be completed following preliminary final action by the Commission*.]

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 allowed to expire on 12/31/2018 temporary modifications on the following segments:

[*List to be completed following preliminary final action by the Commission*.]

To remain consistent with the commission's decisions regarding arsenic in 36.33, all existing temporary modifications for arsenic of "As(ch)=hybrid" (expiration date of 12/31/21) were retained.

J. 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 2013, the new temperature standards were adopted for all segments with an Aquatic Life use classification in

Regulation No. 36. 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 36.6(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 36.6(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. Lake trout occur in only a small number of lakes and reservoirs, and thermally-sensitive spawning and early life stages of mountain whitefish are known to occur only in certain cold water tributaries. In Regulation No. 36, 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 2013 Regulation No. 36 Rulemaking Hearing at 36.34.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:

[*List to be completed following preliminary final action by the Commission*.]

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. New ambient temperature standards were adopted for the following segments:

[*List to be completed following preliminary final action by the Commission*.]

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:

[*List to be completed following preliminary final action by the Commission*.]

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.

K. Other/Site-Specific Revisions

[*To be completed following preliminary final action by the Commission*.]

L. Standards Corrections and Clarifications

1. **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.

2. **Uranium:** To improve the clarity of the regulation, the commission included references to the basin-wide uranium standards at 36.5(3) in the Appendix 36-1 tables. The commission included the chronic uranium Water Supply standard of 16.8-30 µg/L in the tables for all segments with a Water Supply use to clearly define the underlying standard necessary to protect the use. In addition, for all segments (with or without a Water Supply use), the commission included a reference to 36.5(3) to clarify that the basic standard at 36.5(3) applies to all waters in Regulation No. 36. Because these standards already applied basin-wide, there is no practical effect of this change.

3. **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.

M. Correction of Typographical and Other Errors and Segmentation Clarification

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

- The formatting of the tables in Appendix 36-1 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.
- Existing site-specific temperature standards for segments Rio Grande 20a, 21b, and 23b, and Closed Basin 2c and 19 were reformatted in the tables to provide clarity and consistency.
- Existing site-specific metals standards for segments Rio Grande 4a and 7 and Alamosa River/La Jara Creek/Conejos River Segment 8 were reformatted in 36.6(4) to improve readability.

- Rio Grande Segment 3: The reference to Seepage Creek was removed from the segment description, as this stream is not located at the outlet of Santa Maria Reservoir, but rather on the south side of Santa Maria Pass. As a result of this change, Seepage Creek will reside in Rio Grande Segment 2.
- Rio Grande Segment 5a: The word "the" was added before "Hwy 122 bridge" to improve clarity.
- Rio Grande segments 6 and 7: Coordinates for the Park Regent Mine Dump were added.
- Rio Grande Segment 7: Commas were modified for clarity.
- Rio Grande segments 12 and 13: Coordinates for the county road crossing were added. Reference to the "Old State Bridge east of Lobatos" was removed.
- Rio Grande 15: Commas and spacing were modified for clarity. The duration of the cadmium and mercury standards were corrected from chronic to acute.
- Rio Grande 17: Wetlands were included in the description twice, so one was removed.
- Rio Grande Segment 18: The Fish Ingestion qualifier was removed from this segment, as it was originally added in error in a past rulemaking.
- Rio Grande segment 19 and 34: Coordinates for the Monte Vista Canal were added.
- Rio Grande Segment 20a: The dates for the site-specific temperature standards were corrected to include the month of October.
- Rio Grande Segment 20b: This segment does not have a Water Supply use, so the manganese Water Supply standard was deleted.
- Rio Grande segments 21a and 21b: Replaced the latitude line with coordinates.
- Rio Grande Segment 21b: The dates for the site-specific temperature standards were corrected to include the months of October and June.
- Rio Grande Segment 23b: The dates for the site-specific temperature standards were corrected to include the month of October.
- Rio Grande Segment 25: Commas were modified for clarity.
- Rio Grande segments 28 and 29: Replaced the segment boundary of "the outlet of Salzar Reservoir" with coordinates for a road crossing next to the reservoir. Salzar Reservoir does not appear to have an outlet to Rito Seco.
- Rio Grande Segment 31: Corrected typos to improve consistency and clarity.
- Rio Grande Segment 36: Commas were modified for clarity.
- Rio Grande Segment 38: Replaced the comma at the end of the description with a period.
- Alamosa River/La Jara Creek/Conejos River Segment 3b: Deleted the word "the" from before "Wightman Fork" to improve clarity.
- Alamosa River/La Jara Creek/Conejos River segments 4b and 5: Moved tributaries and wetlands language to improve consistency and clarity.
- Alamosa River/La Jara Creek/Conejos River segments 5 and 6: Coordinates for the township description were added.
- Alamosa River/La Jara Creek/Conejos River Segment 7: Unused standards were deleted from the table.
- Alamosa River/La Jara Creek/Conejos River Segment 11a: Rephrased to improve clarity.
- Alamosa River/La Jara Creek/Conejos River Segment 11b: Corrected typos and rephrased to improve clarity.
- Alamosa River/La Jara Creek/Conejos River segments 15 and 16: Changed "San Antonio River" to "Rio San Antonio".
- Alamosa River/La Jara Creek/Conejos River Segment 16: Replaced the mercury standard of "TVS" with "0.01".
- Alamosa River/La Jara Creek/Conejos River Segment 20: Commas and spacing were modified for clarity.

- Alamosa River/La Jara Creek/Conejos River Segment 21: Added Segment 20 as an exception to this segment. The duration of the cadmium and mercury standards were corrected from chronic to acute.
- Closed Basin – San Luis Valley River Basin Segment 4: Corrected a typo and added a comma for clarity.
- Closed Basin – San Luis Valley River Basin Segment 8: Added a comma and clarified the segment description.
- Closed Basin – San Luis Valley River Basin Segment 9a: The duration of the mercury standard was corrected from chronic to acute. Unused standards were deleted from the table.
- Closed Basin – San Luis Valley River Basin Segment 11: Rephrased language regarding exceptions to improve consistency and clarity.
- Closed Basin – San Luis Valley River Basin Segment 12a: Added “with” before “Ford Creek”.
- Closed Basin – San Luis Valley River Basin Segment 13: Corrected a typo and clarified the segment description.
- Closed Basin – San Luis Valley River Basin Segment 18: Added a space between “16” and “17”.
- Closed Basin – San Luis Valley River Basin Segment 19: The temperature standards for this segment were corrected. CLL temperature standards were applied to replace the missing DM values. The site-specific summer MWAT of 21.2°C was inadvertently deleted during a previous rulemaking, and was replaced. In addition, the dates for the summer temperature standards were corrected from “1/1-3/31” to “4/1-12/31”.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

WATER QUALITY CONTROL COMMISSION

5 CCR 1002-36

REGULATION NO. 36
CLASSIFICATIONS AND NUMERIC STANDARDS
FOR
RIO GRANDE BASIN

APPENDIX 36-1
Stream Classifications and Water Quality Standards Tables

Effective ~~06/30/2017~~12/31/2018

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

1. All tributaries to the Rio Grande, including all wetlands, within the Weminuche Wilderness Area.

CORGRG01	Classifications
Designation	Agriculture
OW	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

2. Mainstem of the Rio Grande, including all tributaries and wetlands, from the source to a point immediately above the confluence with Willow Creek, excluding the listings in segments 1 and 3.

CORGRG02	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

~~3. Mainstem of Seepage Creek from the outlet of Santa Maria Reservoir to a point one mile below the outlet of Santa Maria Reservoir.~~3. Mainstem of North Clear Creek from the outlet of Continental Reservoir to a point immediately above the confluence with Rito Hondo Creek.

CORGRG03	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E

Qualifiers:

Fish Ingestion Standards Apply

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

4a. Mainstem of the Rio Grande from a point immediately above the confluence with Willow Creek to a point immediately above the confluence with the South Fork Rio Grande.

CORGRG04A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Ammonia(ac/ch) = current conditions

Cadmium(chronic) = current ~~condition~~conditions

Lead(chronic) = current ~~condition~~conditions

Zinc(chronic) = current ~~condition~~conditions

Expiration Date of 12/31/2018

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Cadmium(acute) = See 36.6(4) for site-specific standards and assessment locations.
*Cadmium(chronic) = See 36.6(4) for site-specific standards and assessment locations.
*Lead(chronic) = See 36.6(4) for site-specific standards and assessment locations.
*Manganese(chronic) = See 36.6(4) for site-specific standards and assessment locations.
*Uranium(acute) = See 36.5(3) for details.
*Zinc(acute) = See 36.6(4) for site-specific standards and assessment locations.
*Zinc(chronic) = See 36.6(4) for site-specific standards and assessment locations.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	varies*	varies*
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	varies*
Lead(T)	50	---
Manganese	TVS	varies*
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	varies*	varies*

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

4b. Mainstem of the Rio Grande from a point immediately above the confluence with South Fork Rio Grande to the Hwy 285 crossing.

CORGRG04B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

4c. Mainstem of the Rio Grande from the Hwy 285 crossing to the Rio Grande/Alamosa County line.

CORGRG04C	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

~~5~~5a. All tributaries to the Rio Grande, including all wetlands, from immediately above the confluence with Willow Creek to the Hwy 112 bridge near Del Norte, excluding the listings in segments ~~6~~5b through 10.

~~CORGRG05~~CORGRG05A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

5b. Mainstem of Alder Creek. Mainstem of East Alder Creek, including all tributaries and wetlands, from the souce to the confluence with Alder Creek. Mainstem of Agua Ramon Creek, including all tributaries and wetlands, from the source to the confluence with the Rio Grande. Mainstem of Embargo Creek, including all tributaries and wetlands, from immediately above the confluence with Dyers Creek to the confluence with the Rio Grande.

CORGRG05B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	--- =
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	--- =	0.75
Chloride	--- =	250
Chlorine	0.019	0.011
Cyanide	0.005	--- =
Nitrate	10	--- =
Nitrite	0.05	--- =
Phosphorus	--- =	0.11
Sulfate	--- =	WS
Sulfide	--- =	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	---	---
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
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*	16.8-30 A
Zinc	TVS	TVS

6. Mainstem of West Willow Creek from immediately above Deerhorn Creek to the Park Regent Mine dump~~.~~ (37.890445, -106.936868). East Willow Creek from the confluence with Whited Creek to the confluence with West Willow Creek.

CORGRG06	Classifications
Designation	Aq Life Cold 1
Reviewable	Recreation E

Qualifiers:

Other:

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	---
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	---	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	---	---
Cadmium	~~TVS~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Chromium III	TVS	TVS
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	---
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

7. Mainstem of West Willow Creek from the Park Regent Mine dump (37.890445, -106.936868) to the confluence with East Willow Creek. Mainstem of Willow Creek, including all tributaries, from the confluence of East and West Willow Creeks, to the confluence with the Rio Grande.

CORGRG07	Classifications
Designation	Agriculture
UP	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

Temporary Modification(s):

Ammonia(ac/ch) = current conditions*

Cadmium(ac/ch) = varies*

Copper(ac/ch) = varies*

Lead(ac/ch) = varies*

Silver(acute) = varies*

Zinc(ac/ch) = varies*

Expiration Date of 12/31/2018

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Cadmium(acute) = See 36.6(4) for temporary modifications, site-specific standards and assessment locations.
*Cadmium(chronic) = See 36.6(4) for temporary modifications, site-specific standards and assessment locations.
*Copper(acute) = See 36.6(4) for temporary modifications, site-specific standards and assessment locations.
*Copper(chronic) = See 36.6(4) for temporary modifications, site-specific standards and assessment locations.
*Lead(acute) = See 36.6(4) for temporary modifications, site-specific standards and assessment locations.
*Lead(chronic) = See 36.6(4) for temporary modifications, site-specific standards and assessment locations.
*Manganese(acute) = See 36.6(4) for site-specific standards and assessment locations.
*Manganese(chronic) = See 36.6(4) for site-specific standards and assessment locations.
*Silver(acute) = See 36.6(4) for temporary modifications, site-specific standards and assessment locations.
*Uranium(acute) = See 36.5(3) for details.
*Zinc(acute) = See 36.6(4) for temporary modifications, site-specific standards and assessment locations.
*Zinc(chronic) = See 36.6(4) for temporary modifications, site-specific standards and assessment locations.
*TempMod: Ammonia = Willow below Creede WWTF.
*TempMod: Cadmium = See 36.6(4) for temporary modifications and assessment locations.
*TempMod: Copper = See 36.6(4) for temporary modifications and assessment locations.
*TempMod: Lead = See 36.6(4) for temporary modifications and assessment locations.
*TempMod: Silver = See 36.6(4) for temporary modifications and assessment locations.
*TempMod: Zinc = See 36.6(4) for temporary modifications and assessment locations.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~10	~~10.--~~
Phosphorus	---	0.11*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	varies*	varies*
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	varies*	varies*
Iron(T)	---	1000
Lead	varies*	varies*
Manganese	varies*	varies*
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	varies*	TVS
Uranium	varies*	---
Zinc	varies*	varies*

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

8. Mainstem of Goose Creek, including all tributaries and wetlands, from the source to the confluence with the Rio Grande, excluding the specific listings in segment 1.

CORGRG08	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

~~9~~9a. Mainstem of the South Fork Rio Grande, including all tributaries and wetlands, from the source to ~~the confluence with the Rio Grande~~a point just below the confluence with Decker Creek, excluding the specific listings in segment 1. Mainstem of Beaver Creek, including all tributaries and wetlands, from the source to the inlet of Beaver Creek Reservoir.

~~CORGRG09~~CORGRG09A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

9b. Mainstem of the South Fork Rio Grande, including all tributaries and wetlands, from a point just below the confluence with Decker Creek to the confluence with the Rio Grande, excluding the specific listings in segment 9a.

CORGRG09B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	--- =
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	--- =	0.75
Chloride	--- =	250
Chlorine	0.019	0.011
Cyanide	0.005	--- =
Nitrate	10	--- =
Nitrite	0.05	--- =
Phosphorus	--- =	0.11*
Sulfate	--- =	WS
Sulfide	--- =	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	---	---
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
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*	16.8-30 A
Zinc	TVS	TVS

10. Mainstem of Pinos Creek, including all tributaries and wetlands, from the source to the confluence with the Rio Grande.

CORGRG10	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	---	---
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

~~11~~11a. Mainstem of San Francisco Creek (Rio Grande County) and Middle Fork San Francisco Creek, ~~including all tributaries and wetlands,~~ from the source to the confluence with the Rio Grande~~a point immediately below the confluence with Spring Branch~~.

~~CORGRG11~~CORGRG11A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

11b. Mainstem of West Fork San Francisco Creek, mainstem of East Fork San Francisco Creek, and mainstem of Spring Branch and its unnamed tributary, from the source to the confluence with San Francisco Creek (Rio Grande County).

CORGRG11B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	--- =
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	--- =	0.75
Chloride	--- =	250
Chlorine	0.019	0.011
Cyanide	0.005	--- =
Nitrate	10	--- =
Nitrite	0.05	--- =
Phosphorus	--- =	0.11
Sulfate	--- =	WS
Sulfide	--- =	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	---	---
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
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*	16.8-30 A
Zinc	TVS	TVS

12. Mainstem of the Rio Grande from the Rio Grande/Alamosa County line to ~~the Old State Bridge east of Lobatos~~ (Conejos County Road G (37.07831, -105.75665).

CORGRG12	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Water Supply
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	chronic
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	~~---~~250 -
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~10~~10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	---
Sulfate	---	~~---~~WS -
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~7.6~~0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

13. Mainstem of the Rio Grande from ~~Old State Bridge east of Lobotos~~ (Conejos County Road G (37.07831, -105.75665) to the Colorado/New Mexico border.

CORGRG13	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
Qualifiers:	
Other:	

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

14. Mainstems of Dry Pole Creek, Limekiln Creek, Nicomodes Gulch, Raton Creek, and Dry Creek, including all tributaries and wetlands, within the boundaries of the Rio Grande National Forest.

CORGRG14	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

15. All tributaries to the Rio Grande from the Hwy 112 bridge near Del Norte to the Colorado/New Mexico border, excluding the listings in segments 11a, 11b, 14, and 16 through 31.

CORGRG15	Classifications
Designation	Agriculture
UP	Recreation N
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
	acute	**chronic**
D.O. (mg/L)	---	3.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	630

Inorganic (mg/L)	acute	chronic
Ammonia	---	---
Boron	---	0.75
Chloride	---	250
Chlorine	---	---
Cyanide	0.2	---
Nitrate	10	---
Nitrite	~~---~~1.0	~~1.0~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.05

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	0.02-10 [A]
Beryllium(T)	---	4.0
Cadmium(T)	~~---~~5.0	~~5.0~~---
Chromium III(T)	50	---
Chromium VI	---	---
Chromium VI(T)	50	---
Copper(T)	---	200
Iron	---	WS
Lead(T)	50	---
Manganese	---	WS
Mercury(T)	~~---~~2.0	~~2.0~~---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	100
Selenium(T)	---	20
Silver(T)	100	---
Uranium	varies*	16.8-30 [A]
Zinc(T)	---	2000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

16. All tributaries to the Rio Grande, including wetlands, within the Alamosa National Wildlife Refuge, excluding the specific listing in segment 12.

CORGRG16	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
Qualifiers:	
Other:	
*Uranium(acute) = See 36.5(3) for details.	

Physical and Biological		
	DM	**MWAT**
Temperature °C	WS-III	WS-III
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)		
	acute	**chronic**
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

17. All tributaries ~~and wetlands~~ to the Rio Grande, including wetlands, within the Monte Vista National Wildlife Refuge.

CORGRG17	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
Qualifiers:	
Other:	
*Uranium(acute) = See 36.5(3) for details.	

Physical and Biological		
	DM	**MWAT**
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)		
	acute	**chronic**
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

18. All wetlands tributary to the Rio Grande from the Hwy 112 bridge near Del Norte to the Colorado/New Mexico border, excluding the specific listings in segments 16, 17, 19, 20a, 21a, 21b, 23a, 25, 28, 30 and 31.

CORGRG18	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

~~**Fish Ingestion**~~

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~7.6~~100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

19. Mainstem of Rock Creek, including all tributaries and wetlands, from the source to the Monte Vista Canal~~.~~ (37.52773, -106.16826).

CORGRG19	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

20a. Mainstem of Cat Creek, including all tributaries and wetlands, from the source to the Rio Grande National Forest boundary.

CORGRG20A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Water Supply
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.
*Temperature =
DM and MWAT=CS-I from 10/1-4/30
DM and MWAT=CS-I from 5/1-9/30

Physical and Biological

		DM	MWAT
Temperature °C	~~10/31 - 4/30~~	~~13~~varies*	~~9~~varies*
~~Temperature °C~~	~~5/1 - 9/30~~	~~21.7~~	~~17~~

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	~~---~~250 -
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	~~---~~WS -
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	~~7.6~~---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Beryllium(T)	---	100
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

20b. Mainstem of Cat Creek from the Rio Grande National Forest boundary to the Terrace Main Canal.

CORGRG20B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Beryllium(T)	---	100
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	~~---~~TVS	~~WS~~TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

21a. Mainstem of Ute Creek, including all tributaries and wetlands, from the source to the crossing at 37.~~50 oN latitude (WGS84).~~5000, -105.39643.

CORGRG21A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

21b. Mainstem of Ute Creek, including all tributaries and wetlands, from the crossing at 37.~~50 oN latitude (WGS84)~~5000, -105.39643 to Hwy 160.

CORGRG21B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.
*Temperature =
DM=CS-I from 10/1-5/31
DM=22.3 from 6/1-9/30

Physical and Biological

		DM	MWAT
Temperature °C	~~10/31 - 5/31~~	~~CS-I~~varies*	CS-I
~~Temperature °C~~	~~6/30 - 9/30~~	~~22.3~~	~~17~~
		acute	**chronic**
D.O. (mg/L)		---	6.0
D.O. (spawning)		---	7.0
pH		6.5 - 9.0	---
chlorophyll a (mg/m^2)		---	150
E. Coli (per 100 mL)		---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

22. Mainstem of Ute Creek from Hwy 160 to the confluence with Sangre de Cristo Creek.

CORGRG22	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

23a. Mainstem of Sangre de Cristo Creek, including all tributaries and wetlands, from the source to Hwy 159, excluding the specific listings in segment 23b.

CORGRG23A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

23b. Mainstem of Sangre de Cristo Creek from a point immediately below the confluence with Placer Creek to Hwy 159.

CORGRG23B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Water Supply
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.
*Temperature =
DM=14.7 and MWAT=9 from 10/1-4/30
DM=25.3 and MWAT=19 from 5/1-9/30

Physical and Biological

		DM	MWAT
Temperature °C	~~10/31 - 4/30~~	~~14.7~~varies*	~~9~~varies*
~~Temperature °C~~	~~5/1 - 9/30~~	~~25.3~~	~~19~~

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	~~---~~250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	~~---~~WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~7.6~~0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

24. Mainstem of Sangre de Cristo Creek from Hwy 159 to the inlet of Smith Reservoir.

CORGRG24	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

25. Mainstem of Trinchera Creek, including all tributaries and wetlands, from the source to the inlet of Mountain Home Reservoir.

CORGRG25	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

26. Mainstem of Trinchera Creek from the outlet of Mountain Home Reservoir to the Rio Grande.

CORGRG26	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Water Supply
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	~~---~~250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	~~---~~WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~100~~0.02-10 A
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

27. Deleted.

CORGRG27	Classifications
Designation	
Qualifiers:	
Other:	

Physical and Biological		
	DM	MWAT
	acute	chronic
Inorganic (mg/L)		
	acute	chronic

Metals (ug/L)		
	acute	chronic

28. Mainstem of Rito Seco, including all tributaries and wetlands, from the source to the ~~outlet of Salzar Reservoir~~road crossing at 37.218809, -105.411762.

CORGRG28	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply
Qualifiers:	
Other:	

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological		
	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)		
	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

29. Mainstem of Rito Seco from the ~~outlet of Salzar Reservoir~~road crossing at 37.218809, -105.411762 to the confluence with Culebra Creek.

CORGRG29	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

30. Mainstem of Culebra Creek, including all tributaries and wetlands, from the source to the Culebra Sanchez Canal diversion, excluding the specific listings in segment 31. East Fork and West Fork of Costilla Creek, including all tributaries and wetlands, within Colorado.

CORGRG30	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

31. Mainstem of Culebra Creek from the Sanchez Canal ~~Diversion~~diversion to Hwy 159. Mainstem of Ventero Creek from the Colorado/New Mexico border to the confluence with Culebra Creek. Mainstem of Costilla Creek, including all tributaries and wetlands within Colorado, excluding the ~~spefic~~ listings for the East and West Forks in segment 30.

CORGRG31	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

32. All lakes and reservoirs tributary to the Rio Grande, and within the Weminuche Wilderness Area.

CORGRG32	Classifications
Designation	Agriculture
OW	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

33. All lakes and reservoirs tributary to the Rio Grande from the source to the Hwy 112 bridge near Del Norte, excluding the specific listings in segments 32 and 38. All lakes and reservoirs tributary to San Francisco Creek from the source to a point immediately below the confluence with Spring Branch.

CORGRG33	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

34. All lakes and reservoirs tributary to Dry Pole Creek, Limekiln Creek, Nicomodes Gulch, Raton Creek, or Dry Creek, and within the boundaries of the Rio Grande National Forest. All lakes and reservoirs tributary to Rock Creek from the source to the Monte Vista Canal~~.~~ (37.52773, -106.16826).

CORGRG34	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

35. All lakes and reservoirs tributary to the Rio Grande from the Hwy 112 bridge near Del Norte to the Colorado/New Mexico border, excluding the specific listings in segments 34, 36, 37, 38 and 39.

CORGRG35	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Fish Ingestion ~~Standards Apply~~

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	20*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.083*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

36. All lakes and reservoirs tributary to Ute Creek, from the source to Hwy 160. All lakes and reservoirs tributary to Sangre de Cristo Creek, from the source to Hwy 159. All lakes and reservoirs tributary to Trinchera Creek, from the source to the inlet of Mountain Home Reservoir. All lakes and reservoirs tributary to Rito Seco, from the source to Salzar Reservoir. All lakes and reservoirs tributary to Culebra Creek, from the source to Hwy 159, excluding the specific listing in segment 37. All lakes and reservoirs tributary to Costilla Creek, and within Colorado.

CORGRG36	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande ~~River~~ Basin

37. Sanchez Reservoir.

CORGRG37	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	20*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.083*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

38. Continental Reservoir, Upper Brown Lake, Santa Maria Reservoir, Road Canyon Reservoir, Rio Grande Reservoir, Big Meadows Reservoir, Beaver Creek Reservoir, Smith Reservoir, Mountain Home Reservoir~~.~~

CORGRG38	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CLL	CLL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

1. All tributaries to the Alamosa River or Conejos River, including all wetlands, within the South San Juan Wilderness area.

CORGAL01	Classifications
Designation	Agriculture
OW	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

2. Mainstem of the Alamosa River, including all tributaries and wetlands, from the source to immediately above the confluence with Alum Creek, except for specific listings in segments 1, 4a, and 4b. Tributaries of the Alamosa River entering from the south, from a point immediately below the confluence of Bitter Creek to the inlet of Terrace Reservoir.

CORGAL02	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	~~---~~ varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

3a. Mainstem of the Alamosa River from immediately above the confluence with Alum Creek to immediately above the confluence of Wightman Fork.

CORGAL03A	Classifications
Designation	Agriculture
UP	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

*Aluminum(acute) =
280 ug/L and 3,886(T) from 5/1-6/30
5,666 ug/L and 21,036(T) from 7/1-4/30
*Aluminum(chronic) =
95 ug/L and 1,157(T) from 5/1-6/30
4,073 ug/L and 3,026(T) from 7/1-4/30
*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 36.5(3) for details.
*pH(acute) = 4.0-9.0 from 3/1-5/31
4.73-9.0 from 6/1 - 8/31
3.94-9.0 from 9/1-11/31
3.52 - 9.0 from 12/1-2/29

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	varies*	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	varies*
Aluminum	varies*	---
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	---
Iron(T)	---	12000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

3b. Mainstem of the Alamosa River from immediately above the confluence with ~~the~~ Wightman Fork to immediately above the confluence with Fern Creek.

CORGAL03B	Classifications
Designation	Agriculture
UP	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*Aluminum(acute) =
59 ug/L and 4,556(T) from 5/1-6/30
741 ug/L and TVS(T) from 7/1-4/30
*Aluminum(chronic) =
41 ug/L and 1,246(T) from 5/1-6/30
382 ug/L and 2,661(T) from 7/1-4/30
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	varies*
Aluminum	varies*	---
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	30
Iron(T)	---	12000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

3c. Mainstem of the Alamosa River from immediately above the confluence with Fern Creek to immediately below the confluence with Ranger Creek.

CORGAL03C	Classifications
Designation	Agriculture
UP	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*Aluminum(acute) =
365 ug/L and 6,729(T) from 5/1-6/30
558 ug/L and TVS(T) from 7/1-4/30
*Aluminum(chronic) =
63 ug/L and 1,973(T) from 5/1-6/30
296 ug/L and 2,232(T) from 7/1-4/30
*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	---	varies*
Aluminum	varies*	---
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	12000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

3d. Mainstem of the Alamosa River from immediately below the confluence with Ranger Creek to the inlet of Terrace Reservoir.

CORGAL03D	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*Aluminum(acute) =
77 ug/L and 6,907(T) from 5/1-6/30
84 ug/L and TVS(T) from 7/1-4/30
*Aluminum(chronic) =
74 ug/L and 1,721(T) from 5/1-6/30
60 ug/L and 1,554(T) from 7/1-4/30
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	---	varies*
Aluminum	varies*	---
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	12000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

4a. Mainstems of Iron Creek, Alum Creek, Bitter Creek, and Burnt Creek, including all tributaries and wetlands, from their sources to their confluences with the Alamosa River, excluding the listings in segment 4b.

CORGAL04A	Classifications
Designation	Agriculture
UP	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
	acute	**chronic**
D.O. (mg/L)	---	---
pH	2.5-9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	---	---
Boron	---	---
Chloride	---	---
Chlorine	---	---
Cyanide	---	---
Nitrate	---	---
Nitrite	---	---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	---	---
~~Beryllium~~	~~---~~	~~---~~
Cadmium	---	---
Chromium III	---	---
Chromium VI	---	---
Copper	---	---
Iron	---	---
Lead	---	---
Manganese	---	---
Mercury(T)	---	---
Molybdenum(T)	---	---
Nickel	---	---
Selenium	---	---
Silver	---	---
Uranium	varies*	---
Zinc	---	---

4b. Mainstem of Iron Creek, including all tributaries and wetlands, from the source to immediately above the confluence with South Mountain Creek, ~~including all tributaries and wetlands~~.

CORGAL04B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

5. Mainstem of Wightman Fork, including all tributaries and wetlands, from the source to the west line of S30, T37N, R4E, ~~including all tributaries and wetlands.~~ (37.43127, -106.60325).

CORGAL05	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
Qualifiers:	
Other:	
*Uranium(acute) = See 36.5(3) for details.	

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

6. Mainstem of Wightman Fork from the west line of S30, T37N, R4E (37.43127, -106.60325) to the confluence with the Alamosa River.

CORGAL06	Classifications
Designation	Agriculture
UP	Recreation E
Qualifiers:	
Other:	
*Uranium(acute) = See 36.5(3) for details.	

Physical and Biological	DM	MWAT
	acute	**chronic**
D.O. (mg/L)	---	---
pH	---	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	---	---
Boron	---	---
Chloride	---	---
Chlorine	---	---
Cyanide	---	---
Nitrate	---	---
Nitrite	---	---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	---	---
~~Beryllium~~	~~---~~	~~---~~
Cadmium	---	---
Chromium III	---	---
Chromium VI	---	---
Copper	---	---
Iron	---	---
Lead	---	---
Manganese	---	---
Mercury(T)	---	---
Molybdenum(T)	---	---
Nickel	---	---
Selenium	---	---
Silver	---	---
Uranium	varies*	---
Zinc	---	---

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

7. Jasper Creek, including all tributaries and wetlands, from the source to the confluence with the Alamosa River.

CORGAL07	Classifications
Designation	Agriculture
UP	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	5.5-9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
~~Cadmium~~	~~---~~	~~---~~
Cadmium(T)	---	1
~~Chromium III~~	~~---~~	~~---~~
Chromium III(T)	---	100
~~Chromium VI~~	~~---~~	~~---~~
Chromium VI(T)	---	25
~~Copper~~	~~---~~	~~---~~
Copper(T)	---	90
Iron(T)	---	3400
~~Lead~~	~~---~~	~~---~~
Lead(T)	---	4
~~Manganese~~	~~---~~	~~---~~
Manganese(T)	---	1000
~~Mercury~~	~~---~~	~~---~~
Mercury(T)	---	0.05
Molybdenum(T)	---	~~160~~150
~~Nickel~~	~~---~~	~~---~~
Nickel(T)	---	5
~~Selenium~~	~~---~~	~~---~~
Selenium(T)	---	20
~~Silver~~	~~---~~	~~---~~
Silver(T)	---	0.1
Uranium	varies*	---
~~Zinc~~	~~---~~	~~---~~
Zinc(T)	---	170

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

8. Terrace Reservoir.

CORGAL08	Classifications
Designation	Agriculture
UP	Aq Life Cold 2
	Recreation E

Qualifiers:

Fish Ingestion **Standards Apply**

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.
*Aluminum(acute) = See 36.6(4) for site-specific standards and assessment locations.
*Aluminum(chronic) = See 36.6(4) for site-specific standards and assessment locations.
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CLL	CLL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	varies*	varies*
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Manganese(T)	---	200
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

9. Mainstem of Alamosa River from the outlet of Terrace Reservoir to Hwy 15 (Gunbarrel Road).

CORGAL09	Classifications
Designation	Agriculture
~~UP~~Reviewable	Aq Life Cold 1
	Water Supply
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	~~---~~	~~---~~250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	~~---~~WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum(T)	TVS	TVS
Arsenic	340	---
Arsenic(T)	---	~~7.6~~0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Manganese(T)	---	200
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

10. Mainstem of the Alamosa River from Hwy 15 (Gunbarrel Road) to its point of final diversion.

CORGAL10	Classifications
Designation	Agriculture
~~UP~~Reviewable	Aq Life Cold 2
	Water Supply
	Recreation E
Qualifiers:	
Other:	
*Uranium(acute) = See 36.5(3) for details.	

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	~~---~~250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	~~---~~WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum(T)	TVS	TVS
Arsenic	340	---
Arsenic(T)	---	~~100~~0.02-10 A
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Manganese(T)	---	200
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

11a. All tributaries~~, including~~ and wetlands~~,~~ to La Jara Reservoir. ~~La Jara Creek~~ All tributaries and wetlands to La Jara Creek from the outlet of La Jara Reservoir to a point immediately below the confluence with Jarosa Creek, excluding the listings in segment 11b.

CORGAL11A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Manganese(T)	---	200
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

11b. Mainstem of La Jara Creek from the outlet of La Jara Reservoir to a point immediately above the confluence with Hot Creek. All ~~tributaires, including~~tributaries and wetlands~~,~~ to La Jara Creek from a point immediately below the confluence with Jarosa Creek to a point immediately above the confluence with Hot Creek.

CORGAL11B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	300
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS
Manganese(T)	---	200
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

12. Mainstem of La Jara Creek from immediately above the confluence with Hot Creek to the confluence with the Rio Grande.

CORGAL12	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 2
	Water Supply
	Recreation E

Qualifiers:

Water + Fish ~~Ingestion~~Standards Apply

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	~~---~~	~~---~~250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.17*
Sulfate	---	~~---~~WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~7.6~~0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Manganese(T)	---	200
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

13. Mainstem of Hot Creek from the source to the confluence with La Jara Creek.

CORGAL13	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

14a. Mainstem of the Conejos River, including all tributaries and wetlands, from the source to immediately below the confluence with Elk Creek, excluding the specific listings in segment 1.

CORGAL14A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

14b. Mainstem of the Conejos River, including all tributaries and wetlands, from a point immediately below the confluence with Elk Creek to a point immediately above the confluence with Fox Creek.

CORGAL14B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

15. Mainstem of the Conejos River from a point immediately above the confluence with Fox Creek to the confluence with the Rio San Antonio ~~River~~.

CORGAL15	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

16. Mainstem of the Conejos River from the confluence with the Rio San Antonio ~~River~~ to the confluence with the Rio Grande.

CORGAL16	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	~~---~~TVS	~~1000~~TVS
Mercury(T)	---	~~TVS~~0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

17a. Mainstem of Rio de Los Pinos, including all tributaries and wetlands within Colorado, excluding the specific listings in segment 1.

CORGAL17A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

17b. Mainstem of the Rio San Antonio from the Colorado/New Mexico border to Hwy 285.

CORGAL17B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

18. Mainstem of the Rio San Antonio from Hwy 285 to the confluence with the Conejos River.

CORGAL18	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 2
	Water Supply
	Recreation E

Qualifiers:

Water + Fish ~~Ingestion~~ Standards Apply

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	~~---~~250	~~---~~
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	~~100~~10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.17*
Sulfate	---	~~---~~WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	~~7.6~~0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	~~TVS~~---	TVS
Chromium III(T)	~~---~~50	~~100~~---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	~~---~~TVS	~~1000~~TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

19. Mainstem of the Rio Chama, including all tributaries and wetlands within Colorado, excluding the specific listings in segment 1.

CORGAL19	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

20. All tributaries and wetlands to the Alamosa River, La Jara Creek, or the Conejos River within the boundaries of the Rio Grande National Forest, excluding the specific listings in segments 1 through 7, 11a, 11b, 13, 14a, 14b, 17a, 17b ~~and 18~~, and 18.

CORGAL20	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold ~~1~~2
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-~~I~~II	CS-~~I~~II

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

21. All tributaries to the Conejos River from a point immediately above the confluence with Fox Creek to the Rio Grande, excluding the listings in Segment 20.

CORGAL21	Classifications
Designation	Agriculture
UP	Recreation N
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT

	acute	chronic
D.O. (mg/L)	---	3.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	630

Inorganic (mg/L)

	acute	chronic
Ammonia	---	---
Boron	---	0.75
Chloride	---	250
Chlorine	---	---
Cyanide	0.2	---
Nitrate	10	---
Nitrite	~~---~~1.0	~~1.0~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.05

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic(T)	---	0.02-10 [A]
Beryllium(T)	---	4.0
Cadmium(T)	~~---~~5.0	~~5.0~~---
Chromium III(T)	50	---
Chromium VI(T)	50	---
Copper(T)	---	200
Iron	---	WS
Lead(T)	50	---
Manganese	---	WS
Manganese(T)	---	200
Mercury(T)	~~---~~2.0	~~2.0~~---
Molybdenum(T)	---	~~160~~150
Nickel(T)	---	100
Selenium(T)	---	20
Silver(T)	100	---
Uranium	varies*	16.8-30 [A]
Zinc(T)	---	2000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

22. All tributaries, including wetlands, to the Alamosa River or La Jara Creek, excluding the specific listings in segments 1 through 21.

CORGAL22	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-III	WS-III

Inorganic (mg/L)

	acute	chronic
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

23. All lakes and reservoirs tributary to the Alamosa River or the Conejos River, and within the South San Juan Wilderness area.

CORGAL23	Classifications
Designation	Agriculture
OW	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL

Inorganic (mg/L)

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

24. All lakes and reservoirs tributary to the Alamosa River from the source to a point immediately above the confluence with Alum Creek, excluding the specific listings in segment 23.

CORGAL24	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

25. All lakes and reservoirs tributary to La Jara Creek from the source to a point immediately above the confluence with Hot Creek.

CORGAL25	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	---
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Manganese(T)	---	200
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

26. All lakes and reservoirs tributary to the Conejos River from the source to a point immediately above the confluence with Fox Creek, excluding the specific listings in segments 23 and 30.

CORGAL26	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CL	CL

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

27. All lakes and reservoirs tributary to the Rio de Los Pinos and within Colorado, excluding the specific listings in segment 23. All lakes and reservoirs tributary to the Rio Chama and within Colorado, excluding the specific listings in segment 23.

CORGAL27	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

28. All lakes and reservoir tributary to the Alamosa River, La Jara Creek, or Conejos River, and within the boundaries of the Rio Grande National Forest, excluding the specific listings in segments 23 through 27, and 30.

CORGAL28	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

29. All lakes and reservoirs tributary to the Alamosa River, La Jara Creek, or Conejos River, excluding the specific listings in segments 8, 23 through 28, and 30.

CORGAL29	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	20*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.083*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Alamosa River/La Jara Creek/Conejos River Basins

30. Platoro Reservoir.

CORGAL30	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CLL	CLL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

1. All tributaries to the Closed Basin, including all wetlands, within the La Garita Wilderness Area.

CORGCB01	Classifications
Designation	Agriculture
OW	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

2a. Mainstem of La Garita Creek, including all tributaries and wetlands, from the source to a point immediately below the confluence with Geronimo Creek. The North, Middle, and South Forks of Carnero Creek, including all tributaries and wetlands, from their sources to their confluences at the inception of the mainstem of Carnero Creek.

CORGCB02A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

2b. Mainstem of La Garita Creek, including all tributaries and wetlands, from a point immediately below the confluence with Geronimo Creek to 38 Road. All tributaries to the mainstem of Carnero Creek from its inception at the confluence of the North, Middle, and South Forks to 42 Road, excluding the specific listings in segment 2a.

CORGCB02B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

2c. Mainstem of Carnero Creek from its inception at the confluence of the North, Middle, and South Forks to 42 Road.

CORGCB02C	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.
*Temperature =
DM and MWAT=CS-II from 11/1-3/31
DM=26.5 and MWAT=20 from 4/1-10/31

Physical and Biological

		DM	MWAT
Temperature °C	~~11/1 - 3/31~~	~~13~~varies*	~~9~~varies*
~~Temperature °C~~	~~4/1 - 10/31~~	~~26.5~~	~~20~~

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

3. All tributaries to the Closed Basin excluding the listings in segments 1, 2a, 2b, 2c, and 4 through 13.

CORGCB03	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

~~*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).~~

~~*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).~~

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.17*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

4. Mainstem of San Luis Creek, including all tributaries and wetlands, from the source to a point immediately below the confluence with Piney Creek, excluding the specific listings in segments 8, 9a, and 9b. Garner Creek, including all tributaries and wetlands, from the Rio Grande Forest Boundary to ~~it~~the mouth.

CORGCB04	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

5. Mainstem of San Luis Creek from a point immediately below the confluence with Piney Creek to the inlet to San Luis Lake.

CORGCB05	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

~~6. Deleted.~~

~~CORGCB06~~	~~Classifications~~
~~Designation~~	

~~Qualifiers:~~

~~Other:~~

~~Physical and Biological~~

~~DM~~	~~MWAT~~
~~acute~~	~~chronic~~

~~Inorganic (mg/L)~~

~~acute~~	~~chronic~~

~~Metals (ug/L)~~

~~acute~~	~~chronic~~

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

6. Mainstem of South Crestone from a point just below the Spanish Creek Trail road crossing (37.981612, -105.713237) to its confluence with Crestone Creek. Mainstem of Crestone Creek from its source at the confluence of North Crestone Creek and South Crestone Creek to the mouth.

CORGCB06	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	--- =
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	--- =	0.75
Chloride	--- =	--- =
Chlorine	0.019	0.011
Cyanide	0.005	--- =
Nitrate	100	--- =
Nitrite	0.05	--- =
Phosphorus	--- =	0.17*
Sulfate	--- =	--- =
Sulfide	--- =	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	---	---
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01
Molybdenum(T)	---	150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

7. Deleted.

CORGCB07	Classifications
Designation	

Qualifiers:

Other:

Physical and Biological

	DM	MWAT
	acute	**chronic**

Inorganic (mg/L)

	acute	chronic

Metals (ug/L)

	acute	chronic

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

8. Mainstem of Kerber Creek, including all tributaries and wetlands, from the source to a point immediately above the Cocomongo Mill site. Mainstem of Squirrel Creek from the source to immediately above Bear Creek, Brewery Creek from the source to Kerber Creek, and ~~the mainstem of~~ Elkhorn Gulch from the source to Kerber Creek.

CORGCB08	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

9a. Mainstem of Kerber Creek, including all tributaries and wetlands, from a point immediately above the Cocomongo Mill site ~~-~~to immediately above the confluence of Brewery Creek, excluding the specific listings in segment 8.

CORGCB09A	Classifications
Designation	Agriculture
UP	Recreation E
	Water Supply

Qualifiers:

Goal Qualifier for Agriculture and Water Supply

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
	acute	**chronic**
D.O. (mg/L)	---	3.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	---	---
Boron	---	0.75
Chloride	---	250
Chlorine	---	---
Cyanide	---	---
Nitrate	10	---
Nitrite	~~---~~1.0	~~1.0~~---
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
	acute	**chronic**
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
~~Beryllium~~	~~---~~	~~---~~
~~Cadmium~~	~~---~~	~~---~~
Cadmium(T)	5.0	---
~~Chromium III~~	~~---~~	~~---~~
Chromium III(T)	50	---
~~Chromium VI~~	~~---~~	~~---~~
Chromium VI(T)	50	---
~~Copper~~	~~---~~	~~---~~
Copper(T)	---	1000
Iron	---	WS
~~Lead~~	~~---~~	~~---~~
Lead(T)	50	---
Manganese	---	WS
Mercury(T)	~~---~~2.0	~~2.0(t)~~---
Molybdenum(T)	---	~~160~~150
Nickel	---	---
~~Selenium~~Nickel(T)	---	~~---~~100
Selenium(T)	---	20
~~Silver~~	~~---~~	~~---~~
Silver(T)	---	50
Uranium	varies*	16.8-30 [A]
~~Zinc~~	~~---~~	~~---~~
Zinc(T)	---	5000

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

9b. Mainstem of Kerber Creek from a point immediately above the confluence with Brewery Creek to the confluence with San Luis Creek.

CORGCB09B	Classifications
Designation	Agriculture
UP	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Goal Qualifier for Agriculture and Water Supply

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Cadmium(acute) = e^(0.7852ln[hard]-1.545)
*Cadmium(chronic) = e^(0.7852ln[hard]-2.906)
*Copper(acute) = e^(0.8889ln[hard]+0.53)
*Copper(chronic) = e^(0.8889ln[hard]-1.519)
*Uranium(acute) = See 36.5(3) for details.
*Zinc(acute) = e^(0.8179ln[hard]+3.757)
*Zinc(chronic) = e^(0.8179ln[hard]+2.907)

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	---	SSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
~~Copper~~	~~---~~	~~SSE*~~
Copper	SSE*	TVS
Copper	---	SSE*
Copper	TVS	---
Iron	---	300
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
~~Zinc~~	~~---~~	~~SSE*~~
Zinc	SSE*	TVS
Zinc	---	SSE*
Zinc	TVS	---

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

10. Mainstem of Sand Creek, including all tributaries and wetlands, from the source to the mouth. Mainstem of Medano Creek, including all tributaries and wetlands, from the source to the mouth.

CORGCB10	Classifications
Designation	Agriculture
OW	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	210
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

11. All tributaries to the Closed Basin within the Rio Grande National Forest boundaries ~~except~~excluding the listings in segments 1, 2a, 2b, 2c, 4, 9a, 9b, 10, 12a, ~~and~~ 12b and 12c.

CORGCB11	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

12a. Mainstem of Saguache Creek, including all tributaries and wetlands, from the boundary of the La Garita Wilderness Area to a point just below the confluence with Ford Creek, excluding the specific listings in ~~segment~~segments 1 and 12b.

CORGCB12A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Cadmium(acute) = e^(0.9789*ln(hardness)-3.866)*(1.136672-(ln(hardness)*0.041838))
*Cadmium(chronic) = e^(0.7977*ln(hardness)-3.909)*(1.101672-(ln(hardness)*0.041838))
*Uranium(acute) = See 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	~~TVS(tr)~~---	~~TVS~~SSE*
Cadmium	SSE*	---
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

12b. Mainstem of Saguache Creek from a point just below the confluence of Fourmile Creek to a point just below the confluence with Ford Creek.

CORGCB12B	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

*Temperature =
MWAT=CS-II from 11/1-3/31
MWAT=18.6 from 4/1-10/31
See temperature assessment locations at 36.6(4).

Physical and Biological	DM	MWAT
Temperature °C	CS-II	varies* C
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	--- =
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	--- =	0.75
Chloride	--- =	250
Chlorine	0.019	0.011
Cyanide	0.005	--- =
Nitrate	10	--- =
Nitrite	0.05	--- =
Phosphorus	--- =	0.11
Sulfate	--- =	WS
Sulfide	--- =	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	---	---
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
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*	16.8-30 A
Zinc	TVS	TVS

~~12b~~12c. Mainstem of Saguache Creek, including all tributaries and wetlands, from a point just below the confluence with Ford Creek to Hwy 285.

~~CORGCB12B~~CORGCB12C	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

13. Mainstem of Saguache Creek from Hwy 285 to the confluence with San Luis Creek. Mainstem of ~~Russel~~Russell Creek~~.~~ from its source at Russell Springs to the confluence with La Garita Creek. Mainstem of Cottonwood Creek downstream of the Rio Grande National Forest Boundary.

CORGCB13	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Water + Fish Standards Apply

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.5	~~0.5~~---
Phosphorus	---	0.17
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02~~10~~ ~~A~~
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

14. All wetlands tributary to the Closed Basin, excluding the specific listings in segments 1 through 13.

CORGCB14	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Other:

*Uranium(acute) = See 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	---
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

15. All lakes and reservoirs tributary to the Closed Basin, and within the La Garita Wilderness Area.

CORGCB15	Classifications
Designation	Agriculture
OW	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

16. All lakes and reservoirs tributary to La Garita Creek from the source to 38 Road. All lakes and reservoirs tributary to Carnero Creek from the source to 42 Road. All lakes and reservoirs tributary to Kerber Creek from the source to a point immediately above the Cocomongo Mill site. All lakes and reservoirs tributary to San Luis Creek, from the source to a point immediately below the confluence with Piney Creek. All lakes and reservoirs tributary to Saguache Creek from the boundary of the La Garita Wilderness Area to Hwy 285.

CORGCB16	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 A
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

17. All lakes and reservoirs within the Closed Basin and within the Rio Grande National Forest boundaries, excluding the specific listings in segments 15 and 16.

CORGCB17	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CL	CL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS(tr)	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

18. All lakes and reservoirs within the Closed Basin, excluding the specific listings in segments 16, 17, 19 and 20.

CORGCB18	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Water + Fish Standards Apply

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	WL	WL
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	20*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.083*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	0.02~~-10~~ [A]
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Cadmium(T)	5.0	---
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Lead(T)	50	---
Manganese	TVS	TVS/WS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Nickel(T)	---	100
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	16.8-30 [A]
Zinc	TVS	TVS

19. San Luis Lake.

CORGCB19	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

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 36.5(3) for details.
*Temperature =
MWAT=CLL from 1/31-3/31
MWAT=21.2 from 4/1-12/31

Physical and Biological

		DM	MWAT
Temperature °C	~~1/1 - 3/31~~	CLL	~~CLL~~varies*
~~Temperature °C~~	~~4/1 - 12/31~~		~~21.2~~
	acute		**chronic**
D.O. (mg/L)	---		6.0
D.O. (spawning)	---		7.0
pH	6.5 - 9.0		---
chlorophyll a (ug/L)	---		8*
E. Coli (per 100 mL)	---		126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	7.6
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Closed Basin-San Luis Valley River Basin

20. Head Lake.

CORGCB20	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E

Qualifiers:

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 36.5(3) for details.

Physical and Biological

	DM	MWAT
Temperature °C	CLL	CLL
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (ug/L)	---	8*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	~~---~~0.05	~~0.05~~---
Phosphorus	---	0.025*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
~~Aluminum~~	~~---~~	~~---~~
Arsenic	340	---
Arsenic(T)	---	100
~~Beryllium~~	~~---~~	~~---~~
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury(T)	---	0.01~~(t)~~
Molybdenum(T)	---	~~160~~150
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	varies*	---
Zinc	TVS	TVS

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature 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) *Reserved.*

(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.

EXHIBIT 3
ARKANSAS FOUNTAIN COALITION FOR URBAN RIVER EVALUATION (AF CURE)

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 32 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR ARKANSAS RIVER BASIN

5 CCR 1002-32

. . . .

32.61 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 11, 2018 RULEMAKING; FINAL ACTION AUGUST 6, 2018; EFFECTIVE DATE DECEMBER 31, 2018

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

Resegmentation of Fountain Creek Segment 04

The Commission adopted a proposal for the resegmentation of Segment 04 of the Fountain Creek subbasin. Segment 04 previously included all tributaries to the mainstem of Monument Creek and Fountain Creek, outside of National Forest or Air Force Academy lands, covering approximately 100 tributaries. These tributaries drain significantly different land uses ranging from mountainous to industrial areas, and have different water quality. Segment 04 was designated for agriculture, recreation E, aquatic life warm 2, and water supply, and had a use protected classification. After extensive data collection, evaluation and field observations the tributaries were subdivided into Segments 04a, 04b, 04c and 05a or moved to existing Segment 03a.

The resegmentation of Segment 04 was based on the aquatic life and water supply uses while assuming all tributaries would retain the existing agriculture and recreation E uses. Colorado Parks and Wildlife (CPW) provided aquatic life information that had been collected on the various tributaries. If no aquatic life data had been collected for a tributary, CPW provided their professional opinion on what species would be expected to be found. Most of the tributaries continue to support an aquatic life warm 2 designation (Segment 04a, 04b and 04c). Segment 05a was created as an Aquatic Life Warm 1 segment. Tributaries that support cold water species were moved to Segment 03a (existing) which has an aquatic life cold 1 designation.

Water supply information for existing wells and surface water intakes was obtained from the Colorado Decision Support System website and from information provided by AF CURE for planned future water supplies. Alluvial wells were evaluated in accordance with the Division's Alluvial Well Guidance for potential hydrologic connection to a tributary as the tributaries are all small streams with alluvial properties that would match the assumptions of the guidance. Wells that were greater than 200 feet from a stream or are screened at a depth greater than 60 feet were determined to be outside of the alluvium

and therefore not connected to a tributary. Additionally, wells that were within a water provider's service area boundary were also excluded, if that water provider has requirements for those within the service area to connect to the water system. Any tributaries with a surface intake or had wells that were outside of a service area and within the alluvium were designated as a water supply. Future water supply uses are unlikely on these tributaries as most of the area between the upper reaches of Monument Creek down to Pueblo County is within a service area. Fort Carson and the Air Force Academy also own a significant amount of this land area where development is unlikely. Any development along tributaries, or portions of tributaries, that are outside of service areas would likely be incorporated into a service area. The tributaries from the Pueblo County line to Pueblo West or Pueblo are dry tributaries that have not had documented flowing water for several years.

The majority of the tributaries were determined to be both aquatic life warm 2 and to not have a water supply use. These were further divided as tributaries to Monument Creek (Segment 04a) and tributaries to Fountain Creek (Segment 04b). Tributaries that were aquatic life warm 2 and have a water supply use were designated as Segment 04c. The tributaries in these three segments continue to be classified as use protected based on Regulation 31.8(2)(b)(iii)(B) where the segments do, or would, qualify for 303(d) Listing of two or more parameters (typically *E. coli* and selenium).

The aquatic life cold 1 tributaries that were moved to Segment 03a either have a water supply use and/or have water quality that would require a reviewable classification. Except for adding these new streams to this segment, no other changes have been made.

Segment 05 has been divided into two segments, Segment 05b (the current Segment 05) and Segment 05a. Segment 05a is similar to Segment 05 (05b) in that an aquatic life warm 1 designation and a reviewable classification are appropriate. Segment 05a has been designated as Recreation E as opposed to Segment 05b (current Segment 05) which is Recreation N. No other changes have been made to these segments.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

WATER QUALITY CONTROL COMMISSION

5 CCR 1002-32

REGULATION NO. 32
CLASSIFICATIONS AND NUMERIC STANDARDS
FOR
ARKANSAS RIVER BASIN

APPENDIX 32-1
Stream Classifications and Water Quality Standards Tables

Effective ~~06/30/2017~~12/31/2018

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

3a. All tributaries to Fountain Creek which are within the boundaries of National Forest or Air Force Academy lands, including all wetlands, from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, except for the mainstem of Monument Creek in the Air Force Academy lands and specific listings in segment 3b. Additionally, this includes Cheyenne Creek from its source to the confluence with Fountain Creek, Bear Creek below Gold Camp Road to the confluence with Fountain Creek, Little Fountain Creek above Highway 115, Rock Creek above Highway 115, all of North Monument Creek from source to confluence with Monument Creek, and all of Beaver Creek from source to confluence with Monument Creek.

COARFO03A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

Physical and Biological	DM	MWAT
Temperature °C	CS-I	CS-I
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---	0.05
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
Beryllium	---	---
Cadmium	TVS(tr)	TVS
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS/WS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	---	---
Zinc	TVS	TVS

4a. All tributaries to Monument ~~Fountain~~ Creek which are not within the boundaries of National Forest or Air Force Academy lands, including all wetlands, from the confluence with North Monument Creek to the confluence with Fountain Creek, ~~a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River,~~ except for specific listings in segments 3a, 4c, ~~5~~ and 6.

COARFO04	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	W~~ater Supply~~

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10~~0~~	---
Nitrite	---	0.5
Phosphorus	---	0.17*
Sulfate	---	WS~~---~~
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0~~.02 10~~100 [A]
Beryllium	---	---
Cadmium	TVS	TVS
Chromium III	~~---~~TVS	TVS
Chromium III(T)	5~~0~~	100~~---~~
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	W~~S~~
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS~~/WS~~
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	---	---
Zinc	TVS	TVS

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

4b. All tributaries to Fountain Creek which are not within the boundaries of National Forest or Air Force Academy lands, including all wetlands, from a point immediately ~~above~~ below the confluence with Monument Creek to the confluence with the Arkansas River, except for specific listings in segments in 3a, 5a, and 5b ~~and 6~~.

COARFO04	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	W~~ater Supply~~

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---	0.5
Phosphorus	---	0.17*
Sulfate	---	WS~~---~~
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	~~100~~0.02~~-10~~ A
Beryllium	---	---
Cadmium	TVS	TVS
Chromium III	~~---~~TVS	TVS
Chromium III(T)	5~~0~~	~~---~~100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS~~---~~
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS~~/WS~~
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	---	---
Zinc	TVS	TVS

~~4c. All tributaries to Fountain Creek which are not within the boundaries of National Forest or Air Force Academy lands, including all wetlands, from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, except for specific listings in segments 5 and 6.~~Smith Creek (tributary to Monument Creek), Sand Creek (tributary to Fountain Creek near Colorado Springs), Williams Creek (tributary to Fountain Creek near Fountain), and 2 unnamed tributaries with water supply uses near the City of Pueblo.

COARFO04	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---	0.5
Phosphorus	---	0.17*
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02-10 A
Beryllium	---	---
Cadmium	TVS	TVS
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS/WS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	---	---
Zinc	TVS	TVS

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Fountain Creek Basin

5a. ~~Marshland on Nash Property (60 acres at 13030 Old Pueblo Road, El Paso County) located in Section 28 T16S R65W;~~ Jimmy Camp Creek from its source to the irrigation diversion east of Old Pueblo Road in Section 28, T16S, R65W. ~~to its confluence with Fountain Creek; unnamed tributary from the boundary of Fort Carson to the confluence with Fountain Creek; located in S1/2, SW1/4, Section 6 and N1/2. NW1/4, Section 7, T16S, R65W.~~

COARFO05	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation ~~N~~E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	~~---~~150*
E. Coli (per 100 mL)	---	6~~30~~126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	---	0.5
Phosphorus	---	0.17 *
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	100
Beryllium	---	---
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	---	---
Zinc	TVS	TVS

5b. Marshland on Nash Property (60 acres at 13030 Old Pueblo Road, El Paso County) located in Section 28 T16S R65W; Jimmy Camp Creek from the irrigation diversion east of Old Pueblo Road to its confluence with Fountain Creek; unnamed tributary from the boundary of Fort Carson to the confluence with Fountain Creek; located in S1/2, SW1/4, Section 6 and N1/2. NW1/4, Section 7, T16S, R65W.

COARFO05	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation N

Qualifiers:

Other:

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	630
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	---	0.5
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	100
Beryllium	---	---
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	---	---
Zinc	TVS	TVS

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.

EXHIBIT 4
CITY OF LAS ANIMAS

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 32 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR ARKANSAS RIVER BASIN

5 CCR 1002-32

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32.6 TABLES

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(6) Discharger Specific Variances

(a) A Discharger Specific Variance (DSV) establishes a temporary water quality standard that represents the highest degree of protection of a classified use that is feasible within 20 years and is granted by the Commission pursuant to criteria contained in Regulation 31.7(4).

(i) In every case, the variance to the standard shall be temporary and must be re-examined not less than once every three years.

(ii) For DSVs that are longer than five years in duration, the Commission will submit the results of its re-evaluation to EPA within 30 days of the date the Commission completes its re-evaluation. Pursuant to 40 CFR 131.14(b)(1)(v)-(vi), the DSV will no longer be the applicable water quality standard for purposes of the Clean Water Act if the Commission does not conduct a re-evaluation consistent with the specified frequency or if the Commission does not submit the results within 30 days of completion of the re-evaluation process.

(b) The first number of the DSV 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 the discharger. 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 discharger.

(c) Lower Arkansas Segment 1b**:**

Discharger Specific Variance, City of La Junta (CO0021261): Adopted 10/11/2016.

Selenium (acute) = TVS: no limit; Selenium (chronic) = TVS: 0.37 lbs/day as a 12-month rolling average. Expiration date: 12/31/2026.

Discharger Specific Variance, City of Las Animas (CO0040690): Adopted 06/11/2018

Selenium (acute) = no limit; Selenium (chronic) = 0.086 pounds per day as a 12-month rolling average; Effective Date: 12/30/18; Expiration Date: 12/31/28.

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32.59 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 11, 2018 RULEMAKING; FINAL ACTION AUGUST 6, 2018; EFFECTIVE DATE DECEMBER 31, 2018

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 a DSV for Lower Arkansas River Segment 1b for selenium that represents the highest degree of protection of the classified use that is feasible for the City of Las Animas. For selenium, effluent limits for the City of Las Animas shall not be more restrictive than a load-based effluent limit of 0.086 pounds per day as a 12-month rolling average prior to 12/31/2028. The Commission determined that in Las Animas' site-specific circumstances, a 12-month rolling average loading limit would be the most effective way to measure progress in feasible selenium reduction. The Commission determined not to adopt a daily maximum alternative effluent limit at this time, because the feasible improvements are expected to reduce average loading. Daily fluctuations in selenium levels may be outside of the discharger's control at this time, therefore, an acute limit would not be an appropriate regulatory mechanism to determine whether implementation of the selected alternatives were successful.

In developing the request for the discharger-specific variance and attaining compliance with the City's discharge permit, it has been determined that the source of selenium discharged to the Arkansas River is from native groundwater within the City and the source water used by the City for its water supply. The City has expended significant effort and financial commitments to minimizing the extraneous groundwater entering the wastewater collection system and being discharged through the City's wastewater treatment facility and controlling potable water losses in the distribution system. The City provides its citizens domestic water supply with reverse osmosis treatment of the total supply delivered to its customers. It has been determined that the reject water from the reverse osmosis treatment is the major source of selenium discharged to the Arkansas River in accordance with the applicable discharge permits. The City has evaluated and will continue to evaluate in more detail alternatives to limit selenium in the water discharged to the wastewater management system, optimize the use of source water with the lowest selenium content and pilot means to remove selenium in the City's wastewater discharge. In addition, the long planned Arkansas Valley Conduit may provide an alternative water supply source which does not require treatment of local groundwater. Although that water resource development project has been in the planning for more than 40 years, there is no date certain as to when the alternative water supply could be available to the City.

Las Animas submitted evidence that meeting the selenium WQBEL would cause substantial and widespread adverse social and economic impacts in the area where the discharge is located. Alternatives that would allow Las Animas to meet the selenium WQBEL, such as disposal of water treatment residual process water by injection well, or evaporation, would result in user fees that exceed the community's ability to pay. The Commission determined that the threshold for substantial and widespread social and economic impacts would be user fees exceeding 4% of median household income for Las Animas' residents. Las Animas' users currently pay user charges exceeding 1% of the median household income to support current wastewater management services. The American Community Survey estimate of the median household income is 48.3% of the statewide average. Since wastewater user fees currently exceed 1.0% of median household income, no additional capital investment in selenium treatment is economically feasible at this time.

The Commission determined that some reduction in selenium loading may currently be feasible through additional conservation and continued commitment to rehabilitation of the City's wastewater collection system. However, since it is difficult to predict or quantify how much improvement is feasible, at this time, the Commission is adopting an alternative effluent limit at the current condition. Also, there is uncertainty in characterizing the current condition, because Las Animas' selenium loading is largely related to the City's water demand, which varies annually due to climate variability. The last 10 years of effluent data may not represent the longer-term current condition regarding water demand or selenium loading. Furthermore, the concentration of selenium in Las Animas' source water is outside of Las Animas' control and could improve or worsen over time. These uncertainties may be addressed during future re-evaluations.

The City of Las Animas is committed to minimizing discharge of selenium from the water treatment facilities of the City. In addition, it is committed to continued rehabilitation of its wastewater collection system to further reduce extraneous flow and interception of groundwater which contains selenium at concentrations exceeding the Arkansas River water quality standard and the City's WQBEL. Because the basis of 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 selenium feasible. In addition, future re-evaluations of the DSV may be supplemented with a date certain or time certain development of alternative water supplies for the City which will not result in discharges of selenium to the Arkansas River.

The Commission will conduct a re-evaluation of the DSV during the triennial review process for this regulation. At the time of the issues scoping hearing and the issues formulation hearing for this regulation, the Division will review all existing and readily available information and provide comments to the Commission regarding whether the DSV continues to be the highest attainable condition. The Commission also expects that Las Animas will submit a progress report for the Commission's review of the DSV and the AEL during the June 2023 Arkansas River Basin rulemaking hearing. The Commission will obtain public input on the re-evaluation through the triennial review process. For purposes of EPA's notice requirement, the Commission's re-examination of this DSV will be completed at the effective date of the 2023 and 2028 Arkansas River Basin rulemaking hearings, and the Commission will submit the results of the re-evaluation to EPA no later than 30 days after the effective date of the rulemaking. The requirements of the DSV will either remain at the AEL identified at the time of the adoption of the variance, or be modified to the highest attainable condition identified during any re-evaluation rulemaking hearing held by the Commission.

Due to the remaining uncertainty in the underlying standard on Lower Arkansas River Segment 1b, the Commission directs the Water Quality Control Division to work with interested parties to collect selenium fish tissue data and further investigate the selenium criteria necessary to protect aquatic life.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

WATER QUALITY CONTROL COMMISSION

5 CCR 1002-32

REGULATION NO. 32
CLASSIFICATIONS AND NUMERIC STANDARDS
FOR
ARKANSAS RIVER BASIN

APPENDIX 32-1
Stream Classifications and Water Quality Standards Tables

Effective ~~06/30/2017~~12/31/2018

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

1b. Mainstem of the Arkansas River from the Colorado Canal headgate to the inlet to John Martin Reservoir.

COARLA01B	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Water + Fish Standards Apply

Other:

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

Discharger Specific Variance(s):

Selenium(ac/ch~~chronic~~) = See Section 32.6(6) for details on variance for La Junta.~~TVS:0.37 lbs/day~~

Expiration Date of 12/31/2026

Selenium(ac/ch) = See Section 32.6(6) For details on variance for the City of Las Animas

Expiration Date of 12/31/2028

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m2)	---	---
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---	0.5
Phosphorus	---	---
Sulfate	---	902
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
Beryllium	---	---
Cadmium	TVS	TVS
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1950
Lead	TVS	TVS
Manganese	TVS	TVS/WS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS
Uranium	---	---
Zinc	TVS	TVS

EXHIBIT 5
PUBLIC SERVICE COMPANY OF COLORADO

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 32 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR ARKANSAS RIVER BASIN

5 CCR 1002-32

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32.61 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 11, 2018 RULEMAKING; FINAL ACTION AUGUST 6, 2018; EFFECTIVE DATE DECEMBER 31, 2018

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

Middle Arkansas Segment 6b: site-specific standards for temperature. Based upon information submitted by Public Service Company of Colorado (PSCo), the Commission adopted site-specific temperature standards for Middle Arkansas Segment 6b for the daily maximum (DM) and maximum weekly average temperature (MWAT) standards for certain months.

Summer DM Standards

The Commission adopted an ambient-based site-specific temperature standard of 32.6°C (DM) for March – November for Segment 6b, with the TVS of WS-II applying during the winter months. The Commission determined that the highest attainable uses for Segment 6b are the existing classifications of Agriculture, Aquatic Life Warm 2, Recreation E, and Water Supply, and that the ambient temperatures are adequate to protect these uses. To accurately represent spatial and temporal variability in natural temperature conditions, PSCo submitted water quality data from locations throughout the segment, including upstream and downstream of PSCo's Comanche Station discharge. These data demonstrate that natural conditions within the St. Charles River are solely driving elevated daily maximum instream concentrations of temperature during the summer months. Finally, in accordance with Section 31.3 of the Basic Standards of Methodologies for Surface Waters, the Commission found that the ambient-based summer DM standards adopted in Segment 6b will not jeopardize downstream waters and the water quality classifications and standards of downstream waters will be attained and maintained.

Shoulder Season MWAT Standards

PSCo submitted sufficient data and justification to support adoption of site-specific temperature MWAT standards during the shoulder season months. Based on the evidence submitted, the Commission adopted site-specific MWAT standards for February and December of 17.4°C, and for March and November of 20.7°C. The Commission retained the TVS for January and April-October. PSCo supported the site-specific MWAT standards with a Use Attainability Analysis, examining fish populations, land use

information, and aquatic life sampling. The site-specific standards are “seasonally stepped,” recognizing natural warming and cooling patterns in Segment 6b. *See* Reg. 31, Section 31.16, Table 1, Footnote 5. The two “steps” extend the cooler months, and shorten the summer months to April to October, with the decrease in the summer temperatures larger than the increase in the winter months. The site-specific shoulder season standards adopted by the Commission are appropriate to protect the classified uses of Segment 6b and maintain the normal seasonal pattern of temperatures.

Temperature Temporary Modification

The Commission removed the temporary modification for temperature of “current condition” that had previously been in place year-round for Middle Arkansas Segment 6b.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

WATER QUALITY CONTROL COMMISSION

5 CCR 1002-32

REGULATION NO. 32
CLASSIFICATIONS AND NUMERIC STANDARDS
FOR
ARKANSAS RIVER BASIN

APPENDIX 32-1
Stream Classifications and Water Quality Standards Tables

Effective ~~06/30/2017~~12/31/2018

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

6b. Mainstem of the Saint Charles River from the confluence with Edson Arroyo to the confluence with the Arkansas River.

COARMA06B	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Other:

~~Temporary Modification(s):~~
~~temperature(DM/MWAT) = "current conditions"~~
~~Expiration Date of 12/31/2018~~

*Selenium(acute) = See selenium assessment location at 32.6(4).
*Selenium(chronic) = See selenium assessment location at 32.6(4).

Physical and Biological

		DM	MWAT
Temperature °C	1/1-1/31	WS-II	WS-II
Temperature °C	2/1-2/29	WS-II	17.4
Temperature °C	3/1-3/31	32.6	20.7
Temperature °C	4/1-10/31	32.6	WS-II
Temperature °C	11/1-11/30	32.6	20.7
Temperature °C	12/1-12/31	WS-II	17.4

	acute	chronic
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	---	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---	0.05
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
Beryllium	---	---
Cadmium	TVS	TVS
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS/WS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	173*	50*
Silver	TVS	TVS
Uranium	---	---
Zinc	TVS	TVS

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.

EXHIBIT 6
CITY OF PUEBLO

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 32 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR ARKANSAS RIVER BASIN

5 CCR 1002-32

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32.6 TABLES

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(6) Discharger Specific Variances

(a) A Discharger Specific Variance (DSV) establishes a temporary water quality standard that represents the highest degree of protection of a classified use that is feasible within 20 years and is granted by the Commission pursuant to criteria contained in Regulation 31.7(4).

(i) In every case, the variance to the standard shall be temporary and must be re-examined not less than once every three years.

(ii) For DSVs that are longer than five years in duration, the Commission will submit the results of its re-evaluation to EPA within 30 days of the date the Commission completes its re-evaluation. Pursuant to 40 CFR 131.14(b)(1)(v)-(vi), the DSV will no longer be the applicable water quality standard for purposes of the Clean Water Act if the Commission does not conduct a re-evaluation consistent with the specified frequency or if the Commission does not submit the results within 30 days of completion of the re-evaluation process.

(b) The first number of the DSV 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 (or narrative condition) is the Commission's determination of the effluent ~~concentration~~condition with the highest degree of protection of the classified use that is feasible for the discharger. 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 or condition shall ~~require an "end-of-pipe" discharge level~~be more restrictive than the second number (or narrative condition) during the term of the DSV for the named discharger.

(**c**) Lower Arkansas Segment 1b**:**

Discharger Specific Variance, City of La Junta (CO0021261): Adopted 10/11/2016.

Selenium (acute) = TVS: no limit; Selenium (chronic) = TVS: 0.37 lbs/day as a 12-month rolling average. Expiration date: 12/31/2026.

(d) Lower Arkansas Segment 1a:

Discharger Specific Variance, City of Pueblo James R. DiIorio Water Reclamation Facility (CO0026646): Adopted 6/12/2018.

Selenium(acute) = 19.1 µg/L: no limit; Selenium (chronic) = 14.1 µg/L: narrative; Sulfate (chronic) = 329 mg/L: narrative. Expiration date: 12/31/2028

Narrative variance conditions: During the DSV term, Pueblo will implement source control and optimization measures including:

- Lining up to 175,000 ft^2 in the sewer collection system in Basins 2 and 3.
- Sealing up to 400 manholes in Basins 2 and 3.
- The amount of sewer lining and manhole sealing may be reduced by:
    - Repair of service taps in poor condition;
    - Repair of service lines in poor condition; or
    - Additional effort where epoxy sealing of manholes is insufficient to control I & I.
- A comprehensive long-term sampling and analysis program to identify source control projects and evaluate the effectiveness of implemented controls.
- Pilot testing to determine the feasibility of chemical addition to reduce selenium.

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32.61 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 11, 2018 RULEMAKING; FINAL ACTION AUGUST 6, 2018; EFFECTIVE DATE DECEMBER 31, 2018

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

Lower Arkansas Segment 1a (City of Pueblo)

The Commission adopted a DSV for Lower Arkansas Segment 1a for selenium and sulfate that represents the highest degree of protection of the classified uses that is feasible for the City of Pueblo James R. DiIorio Water Reclamation Facility. Selenium and sulfate are naturally present in the Pierre Shale underlying the City of Pueblo. Groundwater with high selenium and sulfate concentrations as a result of contact with the Pierre Shale enters the Pueblo sewer collection system through inflow and infiltration. Even though the Pueblo WRF removes some selenium, there are elevated selenium and sulfate concentrations in the effluent. Based on the alternatives analysis and other evidence submitted by Pueblo, the Commission concluded that the highest degree of protection of the classified uses would be achieved through source control measures. The measures are targeted to reduce inflow and infiltration ("I

& I") from Basins 2 and 3 within the Pueblo sewer collection system, where elevated selenium and sulfate concentrations have been observed. The Commission concluded that the resulting effluent concentration could not be estimated numerically, and therefore in Section 32.6(6)(d) the Commission adopted a description of control measures that constitute a quantifiable expression of the highest attainable conditions for selenium and sulfate expressed as the number of manholes sealed and the amount of sewer lining measured in terms of the surface area of pipe lined instead of linear feet, to account for the higher cost of lining larger-diameter pipe. The Commission also recognized that the conditions need to be flexible enough for Pueblo to target efforts where they will have the greatest impact, and so the number of manholes sealed or the amount of pipe lined may be reduced to allow for other efforts including repair of service lines or taps. The variance conditions adopted by the Commission in this hearing are:

- Lining up to 175,000 ft^2 in the sewer collection system in Basins 2 and 3.
- Sealing up to 400 manholes in Basins 2 and 3.
- The amount of sewer lining and manhole sealing may be reduced by:
    - Repair of service taps in poor condition;
    - Repair of service lines in poor condition; or
    - Additional effort where epoxy sealing of manholes is insufficient to control I & I.
- A comprehensive long-term sampling and analysis program to identify source control projects and evaluate the effectiveness of implemented controls.
- Pilot testing to determine the feasibility of chemical addition to reduce selenium.

During the duration of the DSV, Pueblo will continue to study selenium and sulfate treatment optimization and technologies to inform future Commission review of the DSV. This effort will include a long-term comprehensive sampling and analysis program, in order to better understand the seasonal and climatic controls on sulfate and selenium and to better evaluate the effectiveness of controls under a variety of climatic conditions. The Commission will conduct a re-evaluation of the DSV during the triennial review process for this regulation. At the time of the issues scoping hearing and the issues formulation hearing for this regulation, the Division will review all existing and readily available information and provide comments to the Commission regarding whether the DSV continues to be the highest attainable condition. The Commission also expects that Pueblo will submit a progress report for the Commission's review of the DSV and the AEL during the June 2023 Arkansas River Basin rulemaking hearing. The Commission will obtain public input on the re-evaluation through the triennial review process. For purposes of EPA's notice requirement, the Commission's re-examination of the City of Pueblo DSV will be completed at the effective date of the June 2023 Arkansas River Basin rulemaking hearing, and the Commission will submit the results of the re-evaluation to EPA no later than 30 days after the effective date of the Arkansas Basin rulemaking.

The requirements of the DSV will be either the AEL identified at the time of the adoption of the variance, or the highest attainable condition identified during any re-evaluation rulemaking hearing held by the Commission.

The Commission removed the temporary modifications for selenium and sulfate of "existing quality" that had previously been in place for Lower Arkansas Segment 1a.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

WATER QUALITY CONTROL COMMISSION

(5) 5 CCR 1002-32

REGULATION NO. 32
CLASSIFICATIONS AND NUMERIC STANDARDS
FOR
ARKANSAS RIVER BASIN

APPENDIX 32-1
Stream Classifications and Water Quality Standards Tables

Effective ~~06/30/2017~~12/31/2018

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Lower Arkansas River Basin

1a. Mainstem of the Arkansas River from a point immediately above the confluence with Fountain Creek to immediately above the Colorado Canal headgate near Avondale.

COARLA01A	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
	Water Supply

Qualifiers:

Other:

~~Temporary Modification(s):~~

~~Selenium(ac/ch) = existing quality~~

~~Sulfate(chronic) = existing quality~~

~~Expiration Date of 12/31/2018~~

Discharger Specific Variance(s):

Selenium(acute) = 19.1 µg/L: no limit

Selenium(chronic) = 14.1 µg/L: narrative

Sulfate(chronic) = 329 mg/L: narrative

Expiration Date: 12/31/2028

*Variance: Selenium = see 32.6(6) for details.

*Variance: Sulfate = see 32.6(6) for details.

Physical and Biological

		DM	MWAT
Temperature °C	1/1 - 11/30	WS-II	WS-II
Temperature °C	12/1 - 12/31	21.5	20.7

	acute	chronic
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---	0.5
Phosphorus	---	---
Sulfate	---	329
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
Beryllium	---	---
Cadmium	TVS	TVS
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	2800
Lead	TVS	TVS
Manganese	TVS	TVS/WS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	19.1	14.1
Silver	TVS	TVS
Uranium	---	---
Zinc	TVS	TVS

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.

EXHIBIT 7
PUEBLO WEST METROPOLITAN DISTRICT

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 32 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR ARKANSAS RIVER BASIN

5 CCR 1002-32

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32.6 TABLES

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(4) Assessment Criteria

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

(a) Middle Arkansas Segment 4a, Wildhorse Creek, Se(ac)=2221~~2376~~, Se(ch)=1952~~2110~~: Selenium Assessment Location

- Wildhorse Creek above Pesthouse Gulch: 38.296478, -104.649201

(b) Middle Arkansas Segment 4g, Pesthouse Gulch, Se(ac)=523~~389~~, Se(ch)=446~~369~~: Selenium Assessment Location

- Pesthouse above No Name: 38.309568, -104.672244

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32.61 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 11, 2018 RULEMAKING; FINAL ACTION AUGUST 6, 2018; EFFECTIVE DATE DECEMBER 31, 2018

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

Wildhorse Creek and Pesthouse Gulch (Middle Arkansas Segments 4a and 4g)

During the June 2013 hearing, the commission adopted ambient quality-based selenium standards for Wildhorse Creek (Segment 4a) and Pesthouse Gulch (Segment 4g) based upon a combination of dissolved and total recoverable selenium data collected by the Pueblo West Metropolitan District and the

division, and a regional conversion factor developed by Pueblo West from data sets collected by the City of Pueblo. The commission asked Pueblo West to collect dissolved selenium data in order to confirm the conversion factor-derived standards for these segments, or replace the standards with a dissolved fraction based standard in the next review cycle.

From 2014 to 2017 Pueblo West collected quarterly samples at the assessment locations for Middle Arkansas Segments 4a and 4g defined at 32.6(4) that were analyzed for dissolved and total recoverable selenium to generate data which confirmed the regional conversion factor used by Pueblo West in the June 2013 hearing.

In this hearing, based upon the dissolved selenium data collected by Pueblo West from 2014 to 2017 at the assessment locations for these segments, Pueblo West proposed, and the commission adopted, updated ambient quality-based selenium standards for these segments.

Golf Course Wash and Turkey Creek (Middle Arkansas Segments 4e and 18b)

For Golf Course Wash (Segment 4e) and Turkey Creek (Segment 18b), the commission deleted the site-specific selenium standards and reinstated the underlying table value standards. The site-specific standards, adopted by the commission in 2013, had not been approved by EPA due to the need for additional analyses to support the site-specific standards. While evidence exists which demonstrates the occurrence of naturally-elevated selenium concentrations in these segments, adequate supporting information was not available to determine the extent of anthropogenic impacts, the feasibility to reverse such impacts, and the highest attainable water quality condition and use for these waterbodies. Due to resource limitations and the lack of compliance concerns on these segments, Pueblo West Metropolitan District opted not to pursue completion of a comprehensive alternatives analysis to fill the information gaps identified at this time. Until such information becomes available, it is appropriate to reapply the underlying table value standards for selenium.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

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Stream Classifications and Water Quality Standards Tables

Effective ~~06/30/2017~~12/31/2018

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

4a. Mainstem of Wildhorse Creek from the source to the confluence with the Arkansas River.

COARMA04A	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
Qualifiers:	

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Selenium(acute) = See selenium assessment location at 32.6(4).
*Selenium(chronic) = See selenium assessment location at 32.6(4).

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	---	0.05
Phosphorus	---	0.17*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	100
Beryllium	---	---
Cadmium	TVS	TVS
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	2221~~2376~~*	1952~~2110~~*
Silver	TVS	TVS
Uranium	---	---
Zinc	TVS	TVS

4e. Golf Course Wash

COARMA04E	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E
Qualifiers:	

Other:

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	---	10
Phosphorus	---	0.17
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	100
Beryllium	---	---
Beryllium(T)	---	100
Cadmium	---	---
Cadmium(T)	---	10
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	---	---
Chromium VI(T)	---	100
Copper	---	---
Copper(T)	---	200
Iron	---	---
Lead	---	---
Lead(T)	---	100
Manganese	---	---
Mercury	---	---
Molybdenum(T)	---	160
Nickel	---	---
Nickel(T)	---	200
Selenium	TVS~~1797~~	TVS~~1769~~
Silver	---	---
Uranium	---	---
Zinc	---	---
Zinc(T)	---	2000

4g. Mainstem of Pesthouse Gulch, from the source to the confluence with Wildhorse Creek.

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Middle Arkansas River Basin

COARMA04G	Classifications
Designation	Agriculture
UP	Aq Life Warm 2
	Recreation E

Qualifiers:

Other:

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 32.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 32.5(4).
*Selenium(acute) = See selenium assessment location at 32.6(4).
*Selenium(chronic) = See selenium assessment location at 32.6(4).

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	---	---
Boron	---	0.75
Chloride	---	---
Chlorine	---	---
Cyanide	0.2	---
Nitrate	100	---
Nitrite	---	10
Phosphorus	---	0.17*
Sulfate	---	---
Sulfide	---	---

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic(T)	---	100
Beryllium(T)	---	100
Cadmium(T)	---	10
Chromium III(T)	---	100
Chromium VI(T)	---	100
Copper(T)	---	200
Iron	---	---
Lead(T)	---	100
Manganese(T)	---	200
Mercury	---	---
Molybdenum(T)	---	160
Nickel(T)	---	200
Selenium	523~~389~~*	446~~369~~*
Silver	---	---
Uranium	---	---
Zinc(T)	---	2000

18b. Turkey Creek (Pueblo County) from U.S. Highway 50 to Pueblo Reservoir. Unnamed tributary to Arkansas River, that flows from the south and whose confluence with the Arkansas River is located at 38.267623, -104.668298. Mainstem of Rush Creek (Pueblo County) from the source to the confluence with the Arkansas River.

COARMA18B	Classifications
Designation	Agriculture
Reviewable	Aq Life Warm 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):
Arsenic(chronic) = hybrid
Expiration Date of 12/31/2021

Physical and Biological	DM	MWAT
Temperature °C	WS-II	WS-II
	acute	**chronic**
D.O. (mg/L)	---	5.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126
Inorganic (mg/L)		
	acute	**chronic**
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---	0.5
Phosphorus	---	0.17
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
Beryllium	---	---
Cadmium	TVS	TVS
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS/WS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS~~2498~~	TVS~~2344~~
Silver	TVS	TVS(tr)
Uranium	---	---
Zinc	TVS	TVS

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.

EXHIBIT 8
RESURRECTION MINING COMPANY

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 32 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR ARKANSAS RIVER BASIN

5 CCR 1002-32

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32.61 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 11, 2018 RULEMAKING; FINAL ACTION AUGUST 6, 2018; EFFECTIVE DATE DECEMBER 31, 2018

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

Iowa Gulch, Segment 8a, 8b, and Segment 9: The Commission adopted site-specific standards using hardness-based equations for cadmium and zinc based on the EPA recalculation procedure. The recalculation methodology provides revised equations for chronic cadmium and acute and chronic zinc which are intended to protect the resident, attainable aquatic macroinvertebrate and planktonic communities, and limited fish populations in Iowa Gulch. These site-specific standards resolve the uncertainty which resulted in the Commission adopting temporary modifications for cadmium and zinc in Segment 8b in the June 2007 Rulemaking, which were extended at the June 2013 Rulemaking, revised at the December 2015 Rulemaking and extended again at the December 2016 Rulemaking.

The Use Attainability Analysis submitted by Resurrection Mining demonstrated that aquatic macroinvertebrate populations are currently categorized as “very good” to “good” in Iowa Gulch under the existing conditions. Fish populations are limited by the small stream size and elevation, with the majority of the fish appearing to have originated in the Arkansas River. Planktonic organisms are present, although primarily limited to the ponded areas in these segments. Cadmium and zinc standards resulting from the recalculation procedure result in values that are more protective of aquatic life than the current temporary modification values that have been in place on 8b since 2007, and are consistent with the site-specific standards on the downstream receiving waters, Upper Arkansas Segment 2c.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

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ARKANSAS RIVER BASIN

APPENDIX 32-1
Stream Classifications and Water Quality Standards Tables

Effective ~~06/30/2017~~12/31/2018

REGULATION #32 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Upper Arkansas River Basin

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8a. Mainstem of Iowa Gulch from the source to the historic upper ASARCO water supply intake at 39.224327, -106.223432.

COARUA08A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 2
	Recreation E
	Water Supply

Qualifiers:

Other:

*Cadmium(acute) = (1.136672-[ln(hardness)*0.041838]*e^(0.9789*ln(hardness)-3.5146)

*Cadmium(chronic) = (1.101672-[ln(hardness)*0.041838*e^(0.7977*ln(hardness)-3.5338)

*Zinc(acute) = 0.978*e^(0.8582*ln(hardness)+1.3610)

*Zinc(chronic) = 0.986*e^(0.8582*ln(hardness)+1.1648)

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---	0.05
Phosphorus	---	0.11
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02-10 [A]
Beryllium	---	---
Cadmium	T~~VS(tr)~~SSE*	T~~VS~~SSE*
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS/WS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	---	---
Zinc	T~~VS~~SSE*	T~~VS~~SSE*

8b. Mainstem of Iowa Gulch from a point immediately below the historic upper ASARCO water supply intake at 39.224327, -106.223432 to a point immediately below the headgate of the Paddock #1 Ditch (Iowa Ditch).

COARUA08B	Classifications
Designation	Agriculture
UP	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

~~Temporary Modification(s):~~

~~Cadmium(chronic) = 1.6~~

~~Zinc(acute) = 754~~

~~Zinc(chronic) = 505~~

~~Expiration Date of 12/31/2018~~

~~temperature(DM) = No acute standard~~ 11/1 - 3/31

~~temperature(MWAT) = 14~~ 11/1 - 3/31

~~Expiration Date of 12/31/2017~~

*Cadmium(acute) = (1.136672-[ln(hardness)*0.041838]*e^(0.9789*ln(hardness)-3.5146)

*Cadmium(chronic) = (1.101672-[ln(hardness)*0.041838*e^(0.7977*ln(hardness)-3.5338)

*Zinc(acute) = 0.978*e^(0.8582*ln(hardness)+1.3610)

*Zinc(chronic) = 0.986*e^(0.8582*ln(hardness)+1.1648)

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	---	---
Nitrate	100	---
Nitrite	---	0.05
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	100
Beryllium	---	---
Cadmium	SSE*	TVSSSE*
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	---	---
Zinc	TVSSSE*	TVSSSE*

9. Mainstem of Iowa Gulch from a point immediately below the headgate of the Paddock #1 Ditch (Iowa Ditch) to the confluence with the Arkansas River.

COARUA09	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E

Qualifiers:

Other:

*Cadmium(acute) = (1.136672-[ln(hardness)*0.041838]*e^(0.9789*ln(hardness)-3.5146)

*Cadmium(chronic) = (1.101672-[ln(hardness)*0.041838*e^(0.7977*ln(hardness)-3.5338)

*Zinc(acute) = 0.978*e^(0.8582*ln(hardness)+1.3610)

*Zinc(chronic) = 0.986*e^(0.8582*ln(hardness)+1.1648)

Physical and Biological

	DM	MWAT
Temperature °C	CS-I	CS-I

	acute	chronic
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	---	0.05
Phosphorus	---	0.11
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	7.6
Beryllium	---	---
Cadmium	SSE*	TVSSSE*
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron(T)	---	1000
Lead	TVS	TVS
Manganese	TVS	TVS
Mercury	---	0.01(t)
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	---	---
Zinc	TVSSSE*	TVSSSE*

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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.

EXHIBIT 9
RIO GRANDE SILVER, INC.

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 36 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR RIO GRANDE BASIN

5 CCR 1002-36

36.6 TABLES

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(4) Additional Site-Specific Criteria

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(b) Site-Specific Standards for Rio Grande Segment 4a:

~~**Standards effective through 12/31/2018**~~

~~Cadmium(acute)=TVS(tr)~~
~~Cadmium(chronic)=TVS~~
~~Lead(chronic)=TVS~~
~~Manganese(chronic)=TVS and WS~~
~~Zinc(acute/chronic)=TVS~~

Tier 1 standards effective 1/1/2019 through 12/31/202~~0~~3

Low flow (August-March):
Cadmium(acute/chronic)=2.6 / 1.5 ug/L
Lead(chronic)=3.0 ug/L
Manganese(chronic)=165 ug/L
Zinc(acute/chronic)=548 / 393 ug/L

High flow (April-July):
Cadmium(acute/chronic)=1.0 / 0.63 ug/L
Lead(chronic)=1.3 ug/L
Manganese(chronic)=WS
Zinc(acute/chronic)=272 / 183 ug/L

Tier 2 standards effective from 1/1/202~~1~~4

Low flow (August-March):
Cadmium(acute/chronic)=2.0 / 0.88 ug/L
Lead(chronic)=1.5 ug/L
Manganese(chronic)=92 ug/L

Zinc(acute/chronic)=306 / 148 ug/L

High flow (April-July):
Cadmium(acute/chronic)=0.83 / 0.51 ug/L
Lead(chronic)=0.75 ug/L
Manganese(chronic)=WS
Zinc(acute/chronic)=225 / 136 ug/L

(c) Site-specific standards ~~and temporary modifications~~ for Rio Grande Segment 7:

~~**Standards effective through 12/31/2018**~~

~~Cadmium(acute/chronic)=TVS~~
~~Copper(acute/chronic)=TVS~~
~~Lead(acute/chronic)=TVS~~
~~Manganese(acute/chronic)=TVS~~
~~Silver(acute)=TVS~~
~~Zinc(acute/chronic)=TVS~~

Tier 1 standards effective 1/1/2019 through 12/31/202~~0~~3

West Willow
Cadmium(acute/chronic)=163 / 21 ug/L
Copper(acute/chronic)=227 / 8.9 ug/L
Lead(acute/chronic)=1,014 / 104 ug/L
Manganese(acute/chronic)=TVS
Silver(acute)=1.3 ug/L
Zinc(acute/chronic)=24,000 / 5,977 ug/L

Windy Gulch
Cadmium(acute/chronic)=9.1 / 6.3 ug/L
Copper(acute/chronic)=TVS / 5.8 ug/L
Lead(acute/chronic)=TVS
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=2,804 / 1,914 ug/L

Willow mainstem

Low flow (August-March):
Cadmium(acute/chronic)=17.5 / 15.4 ug/L
Copper(acute/chronic)=TVS
Lead(acute/chronic)=TVS / 30 ug/L
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=4,541 / 3,917 ug/L

High flow (April-July):
Cadmium(acute/chronic)=15.6 / 10.3 ug/L
Copper(acute/chronic)=TVS
Lead(acute/chronic)=TVS / 22 ug/L
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=4,190 / 3,009 ug/L

Tier 2 standards effective from 1/1/2024~~1~~

West Willow

Low flow (August-March):
Cadmium(acute/chronic)=67 / 50 ug/L
Copper(acute/chronic)=17.6 / 15.0 ug/L
Lead(acute/chronic)=268 / 183 ug/L
Manganese(acute/chronic)=TVS / 1,779 ug/L
Silver(acute)=TVS
Zinc(acute/chronic)=11,873 / 11,022 ug/L

High flow (April-July):
Cadmium(acute/chronic)=32 / 19.2 ug/L
Copper(acute/chronic)=15.0 / 9.4 ug/L
Lead(acute/chronic)=103 / 47 ug/L
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=8,772 / 5,611 ug/L

Windy Gulch
Cadmium(acute/chronic)=9.1 / 6.3 ug/L
Copper(acute/chronic)=TVS / 5.8 ug/L
Lead(acute/chronic)=TVS
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=2,804 / 1,914 ug/L

Willow mainstem

Low flow (August-March):
Cadmium(acute/chronic)=13.9 / 11.2 ug/L
Copper(acute/chronic)=TVS
Lead(acute/chronic)=TVS / 18.6 ug/L
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=2,521 / 1,733 ug/L

High flow (April-July):
Cadmium(acute/chronic)=14.5 / 8.9 ug/L
Copper(acute/chronic)=TVS
Lead(acute/chronic)=TVS / 13.1 ug/L
Manganese(acute/chronic)=TVS
Silver(acute)=TVS
Zinc(acute/chronic)=3,635 / 2,373 ug/L

~~The following temporary modifications apply (Expiration Date 12/31/2018):~~

~~**West Willow**~~
~~Cadmium(acute)=163 ug/L~~
~~Cadmium(chronic)=21.2 ug/L~~
~~Copper(acute)=227 ug/L~~
~~Copper(chronic)=8.9 ug/L~~
~~Lead(acute)=1,014 ug/L~~
~~Lead(chronic)=104 ug/L~~

~~Silver(acute)=1.32 ug/L~~
~~Zinc(acute)=24,000 ug/L~~
~~Zinc(chronic)=5,977 ug/L~~

~~**Windy Gulch**~~
~~Cadmium(acute)=9.1 ug/L~~
~~Cadmium(chronic)=6.3 ug/L~~
~~Copper(chronic)=5.8 ug/L~~
~~Zinc(acute)=2,804 ug/L~~
~~Zinc(chronic)=1,914 ug/L~~

~~**Willow**~~
~~Cadmium(acute)=30.8 ug/L~~
~~Cadmium(chronic)=17.9 ug/L~~
~~Copper(acute)=6.4 ug/L~~
~~Copper(chronic)=5.6 ug/L~~
~~Lead(acute)=38.0 ug/L~~
~~Lead(chronic)=31.3 ug/L~~
~~Zinc(acute)=6,763 ug/L~~
~~Zinc(chronic)=4,660 ug/L~~

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36.42 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 11, 2018 RULEMAKING; FINAL ACTION AUGUST 6, 2018; EFFECTIVE DATE DECEMBER 31, 2018

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

Rio Grande Segment 4a and 7, temporary modifications and site-specific standards for certain metals. The Commission made changes to the Segment 4a and Segment 7 temporary modifications and site specific feasibility based standards that it adopted in December 2013. See, Regulation 36.35.

The Segment 4a temporary modifications for chronic cadmium, chronic lead, and chronic zinc, and the Segment 7 temporary modifications for acute and chronic cadmium, acute and chronic copper, acute and chronic lead, acute silver, and acute and chronic zinc, were set to expire on 12/31/2018. The Commission allowed these temporary modifications to expire.

Site-specific feasibility based standards for Segment 4a for acute and chronic cadmium, chronic lead, chronic manganese, and acute and chronic zinc, and for Segment 7 for acute and chronic cadmium, acute and chronic copper, acute and chronic lead, acute and chronic manganese, acute silver, and acute and chronic zinc were adopted in December 2013 with two tiers. *See* Section 36.6(4)(b). Tier 1 was to be effective 1/1/2019 – 12/31/20. Tier 2 was to be effective 1/1/2021. The Commission retained the Tier 1 and Tier 2 standards but changed the effective dates of Tier 1 to 1/1/2019 – 12/31/23 and Tier 2 to 1/1/2024 in order to allow time for the activities described at Regulation 36.35 to take place.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

WATER QUALITY CONTROL COMMISSION

5 CCR 1002-36

REGULATION NO. 36
CLASSIFICATIONS AND NUMERIC STANDARDS
FOR
RIO GRANDE BASIN

APPENDIX 36-1
Stream Classifications and Water Quality Standards Tables

Effective ~~06/30/2017~~12/31/2018

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande River Basin

4a. Mainstem of the Rio Grande from a point immediately above the confluence with Willow Creek to a point immediately above the confluence with the South Fork Rio Grande.

CORGRG04A	Classifications
Designation	Agriculture
Reviewable	Aq Life Cold 1
	Recreation E
	Water Supply

Qualifiers:

Other:

Temporary Modification(s):

Ammonia(ac/ch) = current conditions

~~Cadmium(chronic) = current condition~~

~~Lead(chronic) = current condition~~

~~Zinc(chronic) = current condition~~

Expiration Date of 12/31/2018

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2021

*Cadmium(acute) = See 36.6(4) for site-specific standards and assessment locations.
*Cadmium(chronic) = See 36.6(4) for site-specific standards and assessment locations.
*Lead(chronic) = See 36.6(4) for site-specific standards and assessment locations.
*Manganese(chronic) = See 36.6(4) for site-specific standards and assessment locations.
*Zinc(acute) = See 36.6(4) for site-specific standards and assessment locations.
*Zinc(chronic) = See 36.6(4) for site-specific standards and assessment locations.

Physical and Biological	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	---
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	250
Chlorine	0.019	0.011
Cyanide	0.005	---
Nitrate	10	---
Nitrite	---	0.05
Phosphorus	---	---
Sulfate	---	WS
Sulfide	---	0.002

Metals (ug/L)	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	0.02
Beryllium	---	---
Cadmium	varies*	varies*
Chromium III	---	TVS
Chromium III(T)	50	---
Chromium VI	TVS	TVS
Copper	TVS	TVS
Iron	---	WS
Iron(T)	---	1000
Lead	TVS	varies*
Manganese	TVS	varies*
Mercury(T)	---	0.01
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	TVS	TVS(tr)
Uranium	---	---
Zinc	varies*	varies*

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS
Rio Grande River Basin

7. Mainstem of West Willow Creek from the Park Regent Mine dump to the confluence with East Willow Creek. Mainstem of Willow Creek, including all tributaries from the confluence of East and West Willow Creeks, to the confluence with the Rio Grande.

CORGRG07	Classifications
Designation	Agriculture
UP	Aq Life Cold 2
	Recreation E

Qualifiers:

Other:

Temporary Modification(s):

Ammonia(ac/ch) = current conditions*

~~Cadmium(ac/ch) = varies*~~

~~Copper(ac/ch) = varies*~~

~~Lead(ac/ch) = varies*~~

~~Silver(acute) = varies*~~

~~Zinc(ac/ch) = varies*~~

Expiration Date of 12/31/2018

*chlorophyll a (mg/m^2)(chronic) = applies only above the facilities listed at 36.5(4).
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4).
*Cadmium(acute) = See 36.6(4) for ~~temporary modifications,~~ site-specific standards and assessment locations.
*Cadmium(chronic) = See 36.6(4) for ~~temporary modifications,~~ site-specific standards and assessment locations.
*Copper(acute) = See 36.6(4) for ~~temporary modifications,~~ site-specific standards and assessment locations.
*Copper(chronic) = See 36.6(4) for ~~temporary modifications~~, site-specific standards and assessment locations.
*Lead(acute) = See 36.6(4) for ~~temporary modifications,~~ site-specific standards and assessment locations.
*Lead(chronic) = See 36.6(4) for ~~temporary modifications,~~ site-specific standards and assessment locations.
*Manganese(acute) = See 36.6(4) for site-specific standards and assessment locations.
*Manganese(chronic) = See 36.6(4) for site-specific standards and assessment locations.
*Silver(acute) = See 36.6(4) for ~~temporary modifications,~~ site-specific standards and assessment locations.
*Zinc(acute) = See 36.6(4) for ~~temporary modifications,~~ site-specific standards and assessment locations.
*Zinc(chronic) = See 36.6(4) for ~~temporary modifications,~~ site-specific standards and assessment locations.
*TempMod: Ammonia = Willow below Creede WWTF.
~~*TempMod: Cadmium = See 36.6(4) for temporary modifications and assessment locations.~~
~~*TempMod: Copper = See 36.6(4) for temporary modifications and assessment locations.~~
~~*TempMod: Lead = See 36.6(4) for temporary modifications and assessment locations.~~
~~*TempMod: Silver = See 36.6(4) for temporary modifications and assessment locations.~~
~~*TempMod: Zinc = See 36.6(4) for temporary modifications and assessment locations.~~

Physical and Biological

	DM	MWAT
Temperature °C	CS-II	CS-II
	acute	**chronic**
D.O. (mg/L)	---	6.0
D.O. (spawning)	---	7.0
pH	6.5 - 9.0	---
chlorophyll a (mg/m^2)	---	150*
E. Coli (per 100 mL)	---	126

Inorganic (mg/L)

	acute	chronic
Ammonia	TVS	TVS
Boron	---	0.75
Chloride	---	---
Chlorine	---	0.011
Cyanide	0.005	---
Nitrate	100	---
Nitrite	---	10
Phosphorus	---	0.11*
Sulfate	---	---
Sulfide	---	0.002

Metals (ug/L)

	acute	chronic
Aluminum	---	---
Arsenic	340	---
Arsenic(T)	---	100
Beryllium	---	---
Cadmium	varies*	varies*
Chromium III	TVS	TVS
Chromium III(T)	---	100
Chromium VI	TVS	TVS
Copper	varies*	varies*
Iron(T)	---	1000
Lead	varies*	varies*
Manganese	varies*	varies*
Mercury(T)	---	0.01
Molybdenum(T)	---	160
Nickel	TVS	TVS
Selenium	TVS	TVS
Silver	varies*	TVS
Uranium	---	---
Zinc	varies*	varies*

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 36.6 for details on TVS, TVS(tr), WS, temperature standards.