

**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**

ADOPTED: March 11, 1982	EFFECTIVE: April 29, 1982
AMENDED: December 6, 1982	EFFECTIVE: January 30, 1983
AMENDED: April 1, 1985	EFFECTIVE: May 30, 1985
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AMENDED: October 15, 1998	EFFECTIVE: November 30, 1998
AMENDED: September 11, 2000	EFFECTIVE: October 30, 2000
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AMENDED: December 10, 2001	EFFECTIVE: January 30, 2002
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AMENDED: November 9, 2004	EFFECTIVE: December 30, 2004
AMENDED: December 12, 2005	EFFECTIVE: March 2, 2006
AMENDED: February 12, 2007	EFFECTIVE: July 1, 2007
AMENDED: April 9, 2007	EFFECTIVE: September 1, 2007
AMENDED: August 13, 2007	EFFECTIVE: December 31, 2007
AMENDED: July 15, 2008	EFFECTIVE: August 30, 2008
AMENDED: August 11, 2008	EFFECTIVE: January 1, 2009
AMENDED: February 9, 2009	EFFECTIVE: March 30, 2009
AMENDED: February 8, 2010	EFFECTIVE: June 30, 2010
AMENDED: July 12, 2010	EFFECTIVE: November 30, 2010
AMENDED: January 10, 2011	EFFECTIVE: June 30, 2011
EMERGENCY AMENDED: June 13, 2011	EFFECTIVE: June 30, 2011
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AMENDED: August 12, 2013	EFFECTIVE: December 31, 2013



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**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). 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. 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

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

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. 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.

(3) 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/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

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

Prior to May 31, 2022, nutrient criteria will be adopted for headwaters on a segment by segment basis for the 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 Condominiums	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	Monarch Mountain Lodge	Garfield WWTF	CO0028444
COARUA12b	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
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

Segment	Permittee	Facility name	Permit No.
COARLA01a	Pueblo City of	James R Dilorio 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	Country Host Motel	Country Host Motel	COG589038
COARLA02a	Crowley Town of	Crowley WWTF	CO0041599
COARLA02a	Eads Town of	Eads WWTF	COG589016
COARLA02a	Limon, Town of	Limon WWTF	COG589023
COARLA02a	Simla Town of	Simla WWTF	COG589031
COARLA02a	Springfield Town of	Springfield WWTF	COG589102
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 footnote “C” was added to the total phosphorus and chlorophyll a standards in these segments. The footnote references the table of qualified facilities at 32.5(4).
- For segments located entirely below these facilities, nutrient standards do not apply.

A footnote “B” 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 the attached tables 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 the attached tables:

ac	=	acute (1-day)
Ag	=	silver
Al	=	aluminum
As	=	arsenic
B	=	boron
Ba	=	barium
Be	=	beryllium
°C	=	degrees Celsius
Cd	=	cadmium
ch	=	chronic (30-day)
Chla	=	Chlorophyll a
Cl	=	chloride
CL	=	cold lake temperature tier
Cl <sub>2</sub>	=	residual chlorine
CLL	=	cold large lake temperature tier
CN	=	free cyanide
CrIII	=	trivalent chromium
CrVI	=	hexavalent chromium
CS-I	=	cold stream temperature tier one
CS-II	=	cold stream temperature tier two
Cu	=	copper
dis	=	dissolved
D.O.	=	dissolved oxygen
DM	=	daily maximum temperature
DUWS	=	direct use water supply
E. coli	=	Escherichia coli
F	=	fluoride
Fe	=	iron
Hg	=	mercury
mg/l	=	milligrams per liter
ml	=	milliliters
Mn	=	manganese
Mo	=	molybdenum
MWAT	=	maximum weekly average temperature
NH <sub>3</sub>	=	ammonia as N(nitrogen)
Ni	=	nickel
NO <sub>2</sub>	=	nitrite as N (nitrogen)
NO <sub>3</sub>	=	nitrate as N (nitrogen)
OW	=	outstanding waters
P	=	phosphorus
Pb	=	lead
S	=	sulfide as undissociated H <sub>2</sub> S (hydrogen sulfide)
Sb	=	antimony
Se	=	selenium

SO <sub>4</sub>	=	sulfate
sp	=	spawning
T	=	temperature
Tl	=	thallium
Tot	=	total
TP	=	total phosphorus
tr	=	trout
Trec	=	total recoverable
TVS	=	table value standard
U	=	uranium
ug/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
Zn	=	zinc

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

Fe(ch)	=	WS(dis)
Mn(ch)	=	WS(dis)
SO <sub>4</sub>	=	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 <sub>4</sub>	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) As used in the Temporary Modifications and Qualifiers column of the tables in 32.6(4), the term “type A” refers to a Temporary Modification adopted pursuant to subsection 31.7(3)(a)(ii)(A) of the Basin Standards and Methodologies for Surface Water (i.e., “there is significant uncertainty regarding the water quality standard necessary to protect current and/or future use”). As used in the Temporary Modifications and Qualifiers column of the tables in 32.6(4), the term “type B” refers to a Temporary Modification adopted pursuant to subsection 31.7(3)(a)(ii)(B) of the Basin Standards and Methodologies for Surface Water (i.e., “there is significant uncertainty regarding the extent to which existing quality is the result of natural or irreversible human-induced conditions”). As used in the Temporary Modifications and Qualifiers column of the tables in 32.6(4), the term “type C” refers to a Temporary Modification adopted pursuant to subsection 31.7(3)(a)(ii)(C) of the Basin Standards and Methodologies for Surface Water (i.e., “there is significant uncertainty regarding the timing of implementing attainable source controls or treatment”).

(d) 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 attached tables, 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 ug/l unless noted)	
PARAMETER <sup>(1)</sup>	TABLE VALUE STANDARDS <sup>(2)(3)</sup>
Aluminum (Trec)	<p>Acute = <math>e^{(1.3695[\ln(\text{hardness}))+1.8308]}</math></p> <p>pH equal to or greater than 7.0</p> <p>Chronic=<math>e^{(1.3695[\ln(\text{hardness}))-0.1158]}</math></p> <p>pH less than 7.0</p> <p>Chronic= <math>e^{(1.3695[\ln(\text{hardness}))-0.1158]}</math> or 87, whichever is more stringent</p>
Ammonia <sup>(4)</sup>	<p>Cold Water</p> $acute = \frac{0.275}{1 + 10^{7.204 - pH}} + \frac{39.0}{1 + 10^{pH - 7.204}}$

TABLE VALUE STANDARDS  
(Concentrations in ug/l unless noted)

PARAMETER <sup>(1)</sup>	TABLE VALUE STANDARDS <sup>(2)(3)</sup>
	$chronic = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * MIN(2.85, 1.45 * 10^{0.028(25 - T)})$ <p>Warm Water</p> $acute = \frac{0.411}{1 + 10^{7.204 - pH}} + \frac{58.4}{1 + 10^{pH - 7.204}}$ $chronic (Apr 1 - Aug 31) = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * MIN(2.85, 1.45 * 10^{0.028(25 - T)})$ $chronic (Sep 1 - Mar 31) = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * 1.45 * 10^{0.028 * (25 - MAX(T, 7))}$
Cadmium	$Acute = (1.136672 - [ln(hardness) * (0.041838)]) * e^{0.9151[ln(hardness)] - 3.1485}$ $Acute(Trout) = (1.136672 - [ln(hardness) * (0.041838)]) * e^{0.9151[ln(hardness)] - 3.6236}$ $Chronic = (1.101672 - [ln(hardness) * (0.041838)]) * e^{0.7998[ln(hardness)] - 4.4451}$
Chromium III <sup>(5)</sup>	$Acute = e^{(0.819[ln(hardness)] + 2.5736)}$ $Chronic = e^{(0.819[ln(hardness)] + 0.5340)}$
Chromium VI <sup>(5)</sup>	<p>Acute = 16</p> <p>Chronic = 11</p>
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	$Acute = e^{(0.3331[ln(hardness)] + 6.4676)}$ $Chronic = e^{(0.3331[ln(hardness)] + 5.8743)}$

**TABLE VALUE STANDARDS**  
(Concentrations in ug/l unless noted)

PARAMETER <sup>(1)</sup>	TABLE VALUE STANDARDS <sup>(2)(3)</sup>
Nickel	Acute = $e^{(0.846[\ln(\text{hardness})]+2.253)}$ Chronic = $e^{(0.846[\ln(\text{hardness})]+0.0554)}$
Selenium <sup>(6)</sup>	Acute = 18.4 Chronic = 4.6
Silver	Acute = $\frac{1}{2}e^{(1.72[\ln(\text{hardness})]-6.52)}$ Chronic = $e^{(1.72[\ln(\text{hardness})]-9.06)}$ Chronic(Trout) = $e^{(1.72[\ln(\text{hardness})]-10.51)}$

Temperature	TEMPERATURE TIER	TIER CODE	SPECIES EXPECTED TO BE PRESENT	APPLICABLE MONTHS	TEMPERATURE STANDARD (°C)	
					MWAT	DM
	Cold Stream Tier 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
				Nov. – March	9.0	13.0
	Cold Lakes	CL	brook trout, brown trout, cutthroat trout, lake trout, rainbow trout, Arctic grayling, sockeye salmon	April – Dec.	17.0	21.2
				Jan. – March	9.0	13.0
	Cold Large Lakes (>100 acres surface area)	CLL	rainbow trout, brown trout, lake trout	April – Dec.	18.3	23.8
				Jan. – March	9.0	13.0
	Warm Stream Tier 1	WS-I	common shiner, Johnny darter, orangethroat darter	March – Nov.	24.2	29.0
				Dec. – Feb.	12.1	14.5
	Warm Stream Tier 2	WS-II	brook stickleback, central stoneroller, creek chub, longnose dace, Northern redbelly dace, finescale dace, razorback sucker, white sucker	March – Nov.	27.5	28.6
				Dec. – Feb.	13.8	14.3
	Warm Stream Tier 3	WS-III	all other warm-water species	March – Nov.	28.7	31.8
				Dec. – Feb.	14.3	15.9

**TABLE VALUE STANDARDS**  
(Concentrations in ug/l unless noted)

PARAMETER<sup>(1)</sup>

TABLE VALUE STANDARDS<sup>(2)(3)</sup>

Warm Lakes	WL	black crappie, bluegill, common carp, gizzard shad, golden shiner, largemouth bass, Northern pike, pumpkinseed, sauger, smallmouth bass, spottail shiner, striped bass, tiger muskellunge, walleye, wiper, white bass, white crappie, yellow perch	April – Dec.	26.3	29.5
			Jan. – March	13.2	14.8

$$\text{Acute} = e^{(1.1021[\ln(\text{hardness})]+2.7088)}$$

Uranium

$$\text{Chronic} = e^{(1.1021[\ln(\text{hardness})]+2.2382)}$$

Zinc

$$\text{Acute} = 0.978 * e^{(0.9094[\ln(\text{hardness})]+0.9095)}$$

$$\text{Chronic} = 0.986 * e^{(0.9094[\ln(\text{hardness})]+0.6235)}$$

**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 ug/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.

**(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 85<sup>th</sup> and 95<sup>th</sup> 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

**[INSERT TABLES]**

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

OREGION: 13		Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: UPPER ARKANSAS RIVER				PHYSICAL and BIOLOGICAL	INORGANIC mg/l	METALS ug/l				
Stream Segment Description										
1a. All streams and wetlands within Mount Massive and Collegiate Peaks Wilderness areas.		OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
1b. Mainstem of the East Fork of the Arkansas River from its source to a point immediately above the confluence with Birdseye Gulch.			Aq Life Cold 1 Recreation E Water Supply	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=210(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
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.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Fe(ch)=WS(dis) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
2b. Mainstem of the Arkansas River from a point immediately above California Gulch to a point immediately above the confluence with Lake Fork.		9/30/00 Base-line does not apply	Aq Life Cold 1 Recreation E Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac)=1.136672-(ln(hardness))*0.041838)*e <sup>(0.9151*ln(hardness)-3.6236)</sup> Cd(ch)=(1.101672-[ln(hardness)*0.041838])*e <sup>(0.7998*ln(hardness)-3.1725)</sup> CrIII(ac/ch)=TVS CrIII(ch)=100(Trec)	CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac)=0.978*e <sup>(0.8537*ln(hardness)+2.2178)</sup> Zn(ch)=0.986*e <sup>(0.8537*ln(hardness)+2.0469)</sup>	
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.		9/30/00 Base-line does not apply	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=1.136672-(ln(hardness))*0.041838)*e <sup>(0.9151*ln(hardness)-3.6236)</sup> Cd(ch)=(1.101672-[ln(hardness)*0.041838])*e <sup>(0.7998*ln(hardness)-3.1725)</sup> CrIII(ac)=50(Trec) CrIII(ch)=TVS	CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac)=0.978*e <sup>(0.8537*ln(hardness)+2.2178)</sup> Zn(ch)=0.986*e <sup>(0.8537*ln(hardness)+2.0469)</sup>	
3. Mainstem of the Arkansas River from a point immediately above the confluence with the Lake Creek to the Chaffee/Fremont County line.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modifications: As(ch)=hybrid Expiration date of 12/31/21.

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

OREGION: 13		Desig	Classifications	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: UPPER ARKANSAS RIVER				PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description										
4a. Mainstem of the Arkansas River from the Chaffee/Fremont County Line to a point immediately above Highway 115 bridge, due east of Florence.			Aq Life Cold 1 Recreation E Water Supply Agriculture	Apr-Oct T <sub>(DM)</sub> =24.8 °C T <sub>(MMAT)</sub> =22.1 °C Nov-Mar T=TVS(CS-II)°C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
4b. Mainstem of the Arkansas River from a point immediately above Highway 115 bridge, due east of Florence, to the inlet of Pueblo Reservoir.			Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
5. 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 through 12b.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
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.			Recreation N Agriculture	E.Coli=630/100ml						
7. Mainstem of Evans Gulch from the source to the confluence with the Arkansas River.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
8a. Mainstem of Iowa Gulch from the source to the ASARCO water supply intake.			Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02-10(Trec) <sup>A</sup> Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01 (tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
8b. Mainstem of Iowa Gulch from a point immediately below the ASARCO water supply intake to a point immediately below the headgate of the Paddock #1 Ditch (Iowa Ditch).		UP	Aq Life Cold 2 Recreation E Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100 P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=100(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modifications Type A Temperature Nov-Mar T <sub>(DM)</sub> =No acute standard T <sub>(MMAT)</sub> =14.0 °C Cd(ch)=1.6 Zn(ch)=505 Expiration date of 12/31/2017.



# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

OREGON: 13		Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: UPPER ARKANSAS RIVER				PHYSICAL and BIOLOGICAL	INORGANIC mg/l	METALS ug/l				
Stream Segment Description										
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.			Aq Life Cold 1 Recreation E Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100 P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=7.6(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=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.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02 Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS	Cu(ac)=14.6 Cu(ch)=10.6 Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01 (tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
11. Mainstem of South Fork of Lake Creek, including all tributaries and wetlands, from the source to the confluence with Lake Creek.			Aq Life Cold 1 Recreation E Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=5.0-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100 P=110 ug/l (tot) <sup>C</sup>	Al(ac)=750 As(ac)=340 As(ch)=7.6(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=1000(Trec) Mn(ac/ch)=TVS Pb(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
12a. Mainstem of Chalk Creek from the source to the confluence with the Arkansas River.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification As(ch)=hybrid Expiration date of 12/31/21.
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.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
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.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
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.			Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=170 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

OREGON: 13		Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: UPPER ARKANSAS RIVER				PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description										
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.			Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>c</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS	CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
14c. Mainstems of North and South Hardscrabble Creeks, including all tributaries and wetlands, from their sources to their confluences.			Aq Life Cold 1 Recreation E Water Supply Agriculture	Jun-Sep T <sub>DM</sub> =22.1 °C T <sub>MMAT</sub> =17.0 °C Oct-May T=TVS(CS-I)°C D.O.=6.0 mg/l D.O. (sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>c</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=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 and 15-27.			Aq Life Cold 2 Recreation E Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75 P=110 ug/l (tot) <sup>c</sup>	As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec)	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mo(ch)=160(Trec)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	
15. 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. Mainstem of Newlin Creek from the National Forest boundary to the City of Florence water diversion.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O. (sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>c</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
16a. Mainstem of Middle Tallahassee Creek, including all tributaries and wetlands, from the source to the intersection with Road 23.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>c</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
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.			Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>c</sup>	As(ac)=340 As(ch)=0.02-10(Trec) <sup>a</sup> Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
16c. Mainstem of Tallahassee Creek from a point immediately below the confluence with South Tallahassee Creek to the confluence with the Arkansas River.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>c</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

OREGON: 13		Desig	Classifications	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: UPPER ARKANSAS RIVER				PHYSICAL and BIOLOGICAL	INORGANIC mg/l	METALS ug/l				
Stream Segment Description										
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
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.		Aq Life Cold 2 Recreation E Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100 P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
17c.	Mainstem of Cottonwood Creek from F6 Road to the confluence with Currant Creek.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
19.	Mainstem of Fourmile Creek, including all tributaries and wetlands, from the source to immediately below the confluence with High Creek.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
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.		Aq Life Cold 1 Recreation E Agriculture	March-Oct T <sub>(DM)</sub> =27.1 °C T <sub>(MWAT)</sub> =21.0 °C Nov-Feb T <sub>(DM)</sub> =14.2 °C T <sub>(MWAT)</sub> =9.7 °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100 P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=7.6(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
20b.	Mainstem of Fourmile Creek, including all tributaries and wetlands, from the confluence with Long Gulch to the confluence with the Arkansas River.		Aq Life Cold 1 Recreation E Water Supply Agriculture	March-Oct T <sub>(DM)</sub> =28.1 °C T <sub>(MWAT)</sub> =22.0 °C Nov-Feb T <sub>(DM)</sub> =13.0 °C T <sub>(MWAT)</sub> =9.4 °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS*	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)* Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

OREGION: 13		Desig	Classifications	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: UPPER ARKANSAS RIVER				PHYSICAL and BIOLOGICAL	INORGANIC mg/l	METALS ug/l				
Stream Segment Description										
*Dissolved Mn and SO <sub>4</sub> standards applicable at the point of withdrawal.										
21a.	Mainstem of Cripple Creek from the source to a point 1.5 miles upstream of the confluence with Fourmile Creek.		Aq Life Cold 2 Recreation E Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac)=TVS(sa) NH <sub>3</sub> (ch)=TVS(ela) CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100 P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=100(Trec) Cd(ac)=TVS CrIII(ac)=TVS CrIII(ch)=100(Trec) CrVI(ac)=TVS	Cu(ac/ch)=TVS Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
21b.	Mainstem of Cripple Creek from a point 1.5 miles upstream to the confluence with Fourmile Creek.		Aq Life Cold 2 Recreation E Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac)=TVS(sp) NH <sub>3</sub> (ch)=TVS(elp) CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100	As(ac)=340 As(ch)=100(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=TVS CrIII(ch)=100(Trec) CrVI(ac)=TVS	Cu(ac/ch)=TVS Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
22a.	Mainstem of Arequa Gulch from the source to the confluence with Cripple Creek.	UP	Aq Life Cold 2 Recreation N Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH=6.0-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100 P=110 ug/l (tot) <sup>C</sup>	Al(ac/ch)=11,000 As(ch)=100(Trec) As(ac)=340 Cd(ac/ch)=TVS CrIII(ac)=TVS CrIII(ch)=100(Trec) CrVI(ac)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac)=5903 Mn(ch)=3674 Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac) =3500 Zn(ch)=600	
22b.	Squaw Gulch from the source to the confluence with Cripple Creek.	UP	Aq Life Cold 2 Recreation N Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=630/100ml	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=5.0 P=110 ug/l (tot) <sup>C</sup>	As(ch)=200(Trec) Cd(ch)=50(Trec) CrIII(ch)=1000(Trec) CrVI(ch)=1000(Trec)	Cu(ch)=500(Trec) Pb(ch)=100(Trec) Hg(ch)=10(Trec) Mo(ch)=160(Trec)	Se(ch)=50(Trec) Zn(ch)=25000(Trec)	
23.	Mainstem of Wilson Creek (Teller County), including all tributaries and wetlands, from the source to the confluence with Fourmile Creek.		Aq Life Cold 2 Recreation E Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100 P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=100(Trec) Cd(ac)=TVS Cd(ch)=TVS CrIII(ac)=TVS CrIII(ch)=100(Trec) CrVI(ac)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS Zn(ac/ch)=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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
25.	Mainstem of Cottonwood Creek (Custer County) from the headwaters to Section 23, T20S, R65W.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> °C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

OREGON: 13		Desig	Classifications	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: UPPER ARKANSAS RIVER				PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l		
Stream Segment Description									
26.	Mainstem of Beaver Creek from the point of diversion for Brush Hollow Reservoir to the confluence with the Arkansas River.		Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=170 ug/l (tot) <sup>C</sup>	As(ch)=100(Trec) As(ac)=340 Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS
27.	Mainstem of Eightmile Creek, including all tributaries and wetlands, from the source to the mouth of Phantom Canyon.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS
28.	All lakes and reservoirs within the Mount Massive and Collegiate Peaks Wilderness areas.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS
30.	Turquoise Reservoir, Clear Creek Reservoir, Twin Lakes and Mt. Elbert Forebay.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CLL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02 Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS	Cu(ac/ch)=TVS Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01 (tot)	Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS
32.	All lakes and reservoirs tributary to the South Fork of the Arkansas from the source to the confluence with the Arkansas River.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

OREGON: 13		Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: UPPER ARKANSAS RIVER				PHYSICAL and BIOLOGICAL	INORGANIC mg/l	METALS ug/l				
Stream Segment Description										
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.		Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CL,CLL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02-10(Trec) <sup>A</sup> Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01 (tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O. (sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01 (tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
35.	DeWeese Reservoir.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CLL) °C April-Dec T <sub>(wat)</sub> =21.3°C D.O.=6.0 mg/l D.O. (sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01 (tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01 (tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL,CLL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01 (tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=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.		Aq Life Cold 1 Recreation E Water Supply DUWS* Agriculture	T=TVS(CL,CLL) °C D.O.=6.0 mg/l D.O. (sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01 (tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	* Bison Reservoir = DUWS
39.	All lakes and reservoirs tributary to the mainstem of Eightmile Creek from the source to the mouth of Phantom Canyon.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O. (sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01 (tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

OREGION: 13 BASIN: UPPER ARKANSAS RIVER	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
Stream Segment Description			PHYSICAL and BIOLOGICAL	INORGANIC mg/l			METALS ug/l		
40. Brush Hollow Reservoir.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=20 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=83 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7 BASIN: MIDDLE ARKANSAS RIVER Stream Segment Description	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
1. All tributaries, including wetlands, to the Arkansas River within the Sangre de Cristo, Greenhorn, and Spanish Peaks Wilderness Areas.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
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.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Fe(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac)=26.3 Se(ch)=17.1 Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
4a. Mainstem of Wildhorse Creek from the source to the confluence with the Arkansas River.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100 P=170 ug/l (tot) C	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac)=2376 Se(ch)= 2110 Ag(ac/ch)=TVS Zn(ac/ch)=TVS	See assessment location at 32.6(4).
4b. Mainstem of Rock Creek, Salt Creek and Peck Creek from their sources to the confluence with the Arkansas River.	UP	Aq Life Warm 1 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =100 P=170 ug/l (tot)	As(ac)=340 As(ch)= 7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modification Type A: All parameters = "current conditions" Expiration date of 12/31/2018.
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.		Aq Life Warm 1 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100m Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=170 ug/l (tot) C	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
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.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75 P=170 ug/l (tot) C	As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ac/ch)=TVS CrIII(ch)=100(Trec)	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mo(ch)=160(Trec)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	
4e. Golf Course Wash	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75 P=170 ug/l (tot)	As(ac)=340 As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ac/ch)=TVS CrIII(ch)=100(Trec)	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mo(ch)=160(Trec)	Ni(ch)=200(Trec) Se(ac)=1797 Se(ch)=1769 Zn(ch)=2000(Trec)	



# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7 BASIN: MIDDLE ARKANSAS RIVER	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description									
4f.	UP	Aq Life Warm 2 Recreation P Agriculture	T=TVS(WS-III) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=205/100ml Chla=150 mg/m <sup>2</sup> C	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75 P=170 ug/l (tot) C	As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec)	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mn(ch)=200(Trec) Mo(ch)=160(Trec)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	
4g.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 6.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75 P=170 ug/l (tot) C	As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec)	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mn(ch)=200(Trec) Mo(ch)=160(Trec)	Ni(ch)=200(Trec) Se(ch)=369 Se(ac)=389 Zn(ch)=2000(Trec)	See assessment location at 32.6(4).
5a.	UP	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
5b.	UP	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
6a.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=170 ug/l (tot)	As(ac)=340 As(ch)=0.02-10(Trec) A Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
6b.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02-10(Trec) A Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac)=173 Se(ch)=50 Ag(ac/ch)=TVS Zn(ac/ch)=TVS	See assessment location at 32.6(4).  Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2017.
7a.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7 BASIN: MIDDLE ARKANSAS RIVER Stream Segment Description	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
8. Deleted.									
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.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =700 P=170 ug/l (tot) <sup>c</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
10. Mainstem of Sixmile Creek from the source to the confluence with the Arkansas River.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=170 ug/l (tot)	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
12. Mainstem of Huerfano River from Highway 69 at Badito to the confluence with the Arkansas River.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=170 ug/l (tot)	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7 BASIN: MIDDLE ARKANSAS RIVER	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description									
13b. Mainstem of the Cucharas River from a point immediately above the confluence with Middle Creek to the point of diversion for the Walsenburg public water supply. 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 13a.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) C	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
14. Mainstem of the Cucharas River from the point of diversion for the Walsenburg public water supply to the outlet of Cucharas Reservoir.		Aq Life Warm 1 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=170 ug/l (tot) C	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
15. Mainstem of Cucharas River from the outlet of Cucharas Reservoir to the confluence with the Huerfano River.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75	As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mo(ch)=160(Trec)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	
16. Deleted.									
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=T VS CL <sub>2</sub> (ac)=0.01 9 CL <sub>2</sub> (ch)=0.01 1 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
18a Mainstem of Boggs Creek from the source to Pueblo Reservoir.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=T VS CL <sub>2</sub> (ac)=0.01 9 CL <sub>2</sub> (ch)=0.01 1 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=170 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=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.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=T VS CL <sub>2</sub> (ac)=0.01 9 CL <sub>2</sub> (ch)=0.01 1 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=170 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac)=2498 Se(ac)=2344 Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
19. All lakes and reservoirs tributary to the Arkansas River within the Sangre de Cristo, Greenhorn, and Spanish Peaks Wilderness areas.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/L <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) B	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7 BASIN: MIDDLE ARKANSAS RIVER	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description									
20. Pueblo Reservoir.		Aq Life Cold 1 Recreation E Water Supply Agriculture DUWS	T=TVS(CLL)°C Apr - Dec T(MWAT)=23.6 °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=5 ug/L	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	See assessment location at 32.6(4).
21. All lakes and reservoirs tributary to Chico Creek from the source to the confluence with the Arkansas River.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100m Chla=20 ug/L <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=83 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=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.	UP	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/L <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture DUWS*	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/L <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	*DUWS Applies only to Beckwith Reservoir
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/L <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
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		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/L <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7 BASIN: MIDDLE ARKANSAS RIVER	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description									
26. Horseshoe Lake, Martin Lake (Ohem Lake) and Walsenburg Lower Town Lake..		Aq Life Cold 1 Recreation E Water Supply Agriculture DUWS	Horseshoe Apr - Dec T(MWAT)= 18.8 °C Jan-Mar T=TVS(CLL)°C Martin Apr - Dec T(MWAT)= 21.7 °C Jan-Mar T=TVS(CLL)°C Walsenburg T=TVS(CL) °C D.O. = 6.0 mg/l D.O.(sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/L <sup>B</sup>	NH <sub>3</sub> (ac/ch)=T VS CL <sub>2</sub> (ac)=0.01 9 CL <sub>2</sub> (ch)=0.01 1 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
27. Teller Reservoir		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CLL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/L <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
28. Valco Ponds and Runyon/Fountain Lake.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100m	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 4 & 7 <b>BASIN: FOUNTAIN CREEK</b>	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description									
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification As(ch)=hybrid Expiration date of 12/31/21.
1b. Severy Creek and all tributaries from the source to a point just upstream of where US Forest Service Road 330 crosses the stream.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
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.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =290	As(ac)=340 As(ch)=0.02-10(Trec) <sup>A</sup> Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)= 1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)** Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac)=TVS Se(ch)=4.8 Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
2b. Mainstem of Fountain Creek from a point immediately above the State Highway 47 Bridge to the confluence with the Arkansas River.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =485	As(ac)=340 As(ch)=0.02-10(Trec) <sup>A</sup> Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=3300(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac)=42.3 Se(ch)=28.1 Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.
3b. Bear Creek, and all tributaries, from the source to a point immediately upstream of Gold Camp Road.	OW	Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 4 & 7 <b>BASIN: FOUNTAIN CREEK</b>	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description									
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.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=170 ug/l (tot) C	As(ac)=340 As(ch)=0.02-10(Trec) <sup>A</sup> Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS	CrVI(ac/ch)=TVS Cu(ac/ch)=TVS Fe(ch)=WS(dis) Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
5. 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.		Aq Life Warm 1 Recreation N Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=170 ug/l (tot) C	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
6. Mainstem of Monument Creek, from the boundary of National Forest lands to the confluence with Fountain Creek.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> C	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=170 ug/l (tot) C	As(ac)=340 As(ch)=0.02-10(Trec) <sup>A</sup> Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Copper BLM –based Fixed Monitoring Benchmark (FMB) Copper FMBa = 28.4µg/L 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.
7a. Pikeview Reservoir, Willow Springs Pond #1, and Willow Springs Pond #2.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Water + Fish Standards Apply
7b. Prospect Lake, Quail Lake, and Monument Lake.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WL) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=20 ug/l (tot) B	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=83 ug/l (tot) B	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Fish Ingestion Standards Apply
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) B	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) B	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
9. North Catamount Reservoir, South Catamount Reservoir, and Crystal Creek Reservoir.		Aq Life Cold 1 Recreation E Water Supply DUWS* Agriculture	T=TVS(CLL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) B	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) B	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	*All reservoirs=DUWS

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 4 & 7 <b>BASIN: FOUNTAIN CREEK</b>	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l	METALS ug/l				
Stream Segment Description									
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.		Aq Life Cold 1 Recreation E Water Supply DUWS* Agriculture	T=TVS(CL,CLL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	* Rampart Reservoir = DUWS
11. All lakes and reservoirs tributary to Fountain Creek which are not within the boundaries of National Forest or Air Force Academy lands, except AFA Non-Potable Reservoir #1, from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, excluding the specific listings in segments 7a and 7b.		Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=20 ug/l (tot) <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=83 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02-10(Trec) <sup>A</sup> Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	



# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7		Desig	Classifications	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: LOWER ARKANSAS RIVER				PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description										
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.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	Jan-Feb T <sub>DM</sub> =TVS(WS-II) °C T <sub>MWAT</sub> =TVS(WS-II) °C Mar-Nov T <sub>DM</sub> =TVS(WS-II) °C T <sub>MWAT</sub> =TVS(WS-II) °C Dec T <sub>DM</sub> =21.5 °C T <sub>MWAT</sub> =20.7 °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =329	As(ac)=340 As(ch)=0.02-10(Trec) <sup>A</sup> Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=2800 (Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac)= 19.1 Se(ch)=14. 1 Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modifications: type (i) Se(ac/ch) = existing quality; SO <sub>4</sub> = existing quality. Expiration date of 6/30/2016.
1b.	Mainstem of the Arkansas River from the Colorado Canal headgate to the inlet to John Martin Reservoir.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =902	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)= 1950(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modification Type B: Se(ch)="current conditions" Expiration date of 6/30/2016.  Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.  Water + Fish Standards Apply.
1c.	Mainstem of the Arkansas River from the outlet of John Martin Reservoir to the Colorado/Kansas border.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =1900	As(ac)=340 As(ch)=0.02 (Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=190 (dis) Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.  Water + Fish Standards Apply.
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, 3a through 9b, and Middle Arkansas Basin listings.	UP	Aq Life Warm 2 Recreation N Water Supply Agriculture	T=TVS(WS-III) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=630/100ml	CN=0.2 NO <sub>2</sub> =1.0 S=0.05	B=0.75 NO <sub>2</sub> =10 Cl=250 SO <sub>4</sub> =WS P=170 ug/l (tot) <sup>C</sup>	As(ch)=0.02-10(Trec) <sup>A</sup> Be(ch)=4.0 (Trec) Cd(ac)=5.0(Trec) CrIII(ac)=50(Trec) CrIII(ch)=TVS	CrVI(ac)=50(Trec) CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Fe(ch)=WS(dis) Pb(ac)=50(Trec) Pb(ch)=100(Trec) Mn(ch)=WS(dis)	Hg(ac)=2.0(tot) Mo(ch)=160(Trec) Ni(ch)=100(Trec) Se(ch)=20(Trec) Ag(ac)=100(Trec) Zn(ch)=2000(Trec)	
2b.	King Arroyo.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-III) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup> <sup>C</sup>	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=5.0 P=170 ug/l (tot) <sup>C</sup>	As(ch)=200(Trec) Cd(ch)=50(Trec) CrIII(ch)=1000(Trec) CrIII(ac/ch)=TVS	CrVI(ch)=1000(Trec) Cu(ch)=500(Trec) Pb(ch)=100(Trec)	Hg(ch)=10.0(tot) Mo(ch)=160(Trec) Se(ch)=50(Trec) Zn(ch)=25000(Trec)	Livestock Watering Only.
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.	UP	Aq Life Warm 2 Recreation N Agriculture	T=TVS(WS-III) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=630/100ml	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75 P=170 ug/l (tot)	As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)= 50(Trec) CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mo(ch)=160(Trec)	Ni(ch)=200(Trec) Se(ch)= 50(Trec) Zn(ch)=2000(Trec)	

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7		Desig	Classifications	NUMERIC STANDARDS					TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: LOWER ARKANSAS RIVER				PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description										
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.			Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.  Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2016.
3b. Mainstem of West Torino 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.		UP	Aq Life Warm 2 Recreation N Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=630/100ml	NH <sub>3</sub> (ch)=0.5 CN=0.2 S=0.05	B=0.75 NO <sub>2</sub> (ac)=1.0 NO <sub>3</sub> (ac)=10 Cl=250 SO <sub>4</sub> =WS P=170 ug/l (tot)	As(ac)=340 As(ch)=0.02-10(Trec) ^ Cd(ac)=5.0(Trec) CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac)=50(Trec) Cu(ac)=200(Trec)	Fe(ch)=WS(dis) Pb(ac)=50(Trec) Mn(ch)=WS(dis)	Hg(ac)=2.0(Trec) Mo(ch)=160(Trec) Ni(ch)=100(Trec) Se(ch)=20(Trec) Ag(ac)=100(Trec) Zn(ch)=2000(Trec)	Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2016.
3c. The mainstem of Jarosa Canyon Creek including all tributaries from the source to the confluence with the Apishapa River.			Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02-10(Trec) ^ Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot)	Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Mn(ch)=TVS(tr) Zn(ac/ch)=TVS	
4a. Mainstem of the Apishapa River from I-25 to the confluence with the Arkansas River.		UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=170 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1805(Trec) Pb(ac/ch)=TVS Hg(ch)=0.01(tot) Mn(ac/ch)=TVS Mn(ch)=WS(dis) Mo(ch)=160(Trec) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
4b. Mainstem of Timpas Creek from the source to the confluence with the Arkansas River.		UP	Aq Life Warm 1 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=170 ug/l (tot)	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2016.
4c. Mainstem of Lorencito Canyon, from the source to the confluence with the Purgatoire River.		UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=4.0 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=170 ug/l (tot)	As(ac)=340 As(ch)=100(Trec) Cd(ac/ch)=TVS CrIII(ac/ch)=TVS CrIII(ch)=100(Trec) CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: LOWER ARKANSAS RIVER			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description									
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=4.0 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.  Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2016.
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=4.0 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.  Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2016.
5c. Purgatoire mainstem from Trinidad Lake outlet works to I-25. Mainstem of Raton Creek from the source to the confluence of Purgatoire River.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=2.0 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot) <sup>C</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	Temporary modification: As(ch)=hybrid Expiration date of 12/31/21.  Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2016.
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.	UP	Aq Life Cold 2 Recreation E Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=4.0 P=110 ug/l (tot) <sup>C</sup>	As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mo(ch)=160(Trec)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2016.
6b. Wet Canyon and all tributaries, including wetlands, from the source to the confluence with the Purgatoire River.	UP	Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CS-II) °C D.O.=6.0 mg/l D.O. (sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	CN=0.2 NO <sub>2</sub> =1.0 NO <sub>3</sub> =10 S=0.05	B=2.0 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ch)=0.02-10(Trec) <sup>A</sup> Be(ch)=4.0(Trec) Cd(ac)=5.0(Trec) CrIII(ac)=50(Trec) CrIII(ch)=TVS	CrVI(ac)=50(Trec) CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Fe(ch)=WS(dis) Pb(ac)=50(Trec) Pb(ch)=100(Trec) Mn(ch)=WS(dis)	Hg(ac)=2.0(tot) Mo(ch)=160(Trec) Ni(ch)=100(Trec) Se(ch)=20(Trec) Ag(ac)=100(Trec) Zn(ch)=2000(Trec)	Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2016.
7. Mainstem of the Purgatoire River from Interstate 25 to the confluence with the Arkansas River.		Aq Life Warm 1 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CS-I) °C D.O.=6.0 mg/l D.O. (sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=110 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS	
BASIN: LOWER ARKANSAS RIVER			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l				
Stream Segment Description										
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.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=170 ug/l (tot)	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS	Ag(ac/ch)=TVS Zn(ac/ch)=TVS		
9b. Mainstem of Apache Creek from the source to the confluence with the North Rusk 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.	UP	Aq Life Warm 2 Recreation E Water Supply Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=170 ug/l (tot)	As(ac)=340 As(ch)=0.02-10 (Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis) Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS	Ag(ac/ch)=TVS Zn(ac/ch)=TVS		
9c. Deleted.										
10. Two Buttes Reservoir, Two Buttes Pond, Hasty Lake, Holbrook Reservoir, Burchfield Lake, Nee-Skah (Queens) Reservoir, Adobe Creek Reservoir, Neeo Pah Reservoir, Nee Noshe Reservoir; Nee Gronda Reservoir.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=T VS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS		
11. John Martin Reservoir.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=T VS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ch)=TVS(dis) Mn(ac/ch)=TVS	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS		

# STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7 BASIN: LOWER ARKANSAS RIVER	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description									
12. Lake Henry, Lake Meridith.		Aq Life Warm 1 Recreation E Agriculture	T=TVS(WL) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=T VS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=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.		Aq Life Warm 1 Recreation E Agriculture	T=TVS(WL) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml	NH <sub>3</sub> (ac/ch)=T VS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS	Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/l <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	
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 of the South Fork of the Purgatoire River, from the source to Tercio. Monument Lake, North Lake, Trinidad Lake, Long Canyon Reservoir and Lake Dorothy.		Aq Life Cold 1 Recreation E Water Supply Agriculture DUWS*	T=TVS(CL) °C Trinidad Reservoir T=TVS(CLL) °C D.O. = 6.0 mg/l D.O. (sp)=7.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=8 ug/l <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	*DUWS Applies only to Monument Lake and North Lake  Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2016.
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.	UP	Aq Life Cold 2 Recreation E Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=8 ug/l <sup>B</sup>	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75 P=25 ug/l (tot) <sup>B</sup>	As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mo(ch)=160(Trec)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2016.
17. All lakes and reservoirs tributary to Wet Canyon, from the source to the confluence with the Purgatoire River.	UP	Aq Life Cold 2 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O.(sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=8 ug/l <sup>B</sup>	CN=0.2 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 S=0.05	B=0.75 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ch)=0.02-10(Trec) <sup>A</sup> Be(ch)=4.0(Trec) Cd(ac)=5.0(Trec) CrIII(ac)=50(Trec) CrIII(ch)=TVS	CrVI(ac)=50(Trec) CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Fe(ch)=WS(dis) Pb(ac)=50(Trec) Pb(ch)=100(Trec) Mn(ch)=WS(dis)	Hg(ac)=2.0(tot) Mo(ch)=160(Trec) Ni(ch)=100(Trec) Se(ch)=20(Trec) Ag(ac)=100(Trec) Zn(ch)=2000(Trec)	Temporary modification Type B: Temperature="current conditions" Expiration date of 6/30/2016.
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.		Aq Life Cold 1 Recreation E Water Supply Agriculture	T=TVS(CL) °C D.O.=6.0 mg/l D.O. (sp)=7.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=8 ug/l <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.05 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=25 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac)=TVS(tr) Cd(ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

## STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
BASIN: LOWER ARKANSAS RIVER			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
Stream Segment Description									
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.		Aq Life Warm 1 Recreation E Water Supply Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH=6.5-9.0 E.Coli=126/100ml Chla=20 ug/l <sup>B</sup>	NH <sub>3</sub> (ac/ch)=T VS CL <sub>2</sub> (ac)=0.01 9 CL <sub>2</sub> (ch)=0.01 1 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =10 Cl=250 SO <sub>4</sub> =WS P=83 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=0.02(Trec) Cd(ac/ch)=TVS CrIII(ac)=50(Trec) CrIII(ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=WS(dis) Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Mn(ch)=WS(dis)	Hg(ch)=0.01(tot) Mo(ch)=160(Trec) Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac)=TVS Ag(ch)=TVS(tr) Zn(ac/ch)=TVS	

## STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

REGION: 7 <b>BASIN: CIMARRON RIVER</b> Stream Segment Description	Desig	Classifications	NUMERIC STANDARDS						TEMPORARY MODIFICATIONS AND QUALIFIERS
			PHYSICAL and BIOLOGICAL	INORGANIC mg/l		METALS ug/l			
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.	UP	Aq Life Warm 2 Recreation N Agriculture	T=TVS(WS-II) °C D.O. = 5.0 mg/l pH = 6.5-9.0 E.Coli=630/100ml	CN=0.2 NO <sub>2</sub> =10 NO <sub>3</sub> =100	B=0.75 P=170 ug/l (tot)	As(ch)=100(Trec) Be(ch)=100(Trec) Cd(ch)=10(Trec) CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS	CrVI(ch)=100(Trec) Cu(ch)=200(Trec) Pb(ch)=100(Trec) Mo(ch)=160(Trec)	Ni(ch)=200(Trec) Se(ch)=20(Trec) Zn(ch)=2000(Trec)	
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.	UP	Aq Life Warm 1 Recreation E Agriculture	T=TVS(WS-II) °C D.O.=5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=150 mg/m <sup>2</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011	CN=0.005 S=0.002 B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=170 ug/l (tot)	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	
3. All lakes and reservoirs tributary to the Cimarron River.	UP	Aq Life Warm 2 Recreation E Agriculture	T=TVS(WL) °C D.O.=5.0 mg/l pH = 6.5-9.0 E.Coli=126/100ml Chla=20 ug/l <sup>B</sup>	NH <sub>3</sub> (ac/ch)=TVS CL <sub>2</sub> (ac)=0.019 CL <sub>2</sub> (ch)=0.011 CN=0.005 S=0.002	B=0.75 NO <sub>2</sub> =0.5 NO <sub>3</sub> =100 P=83 ug/l (tot) <sup>B</sup>	As(ac)=340 As(ch)=7.6(Trec) Cd(ac/ch)=TVS CrIII(ch)=100(Trec) CrIII(ac/ch)=TVS CrVI(ac/ch)=TVS Cu(ac/ch)=TVS	Fe(ch)=1000(Trec) Pb(ac/ch)=TVS Mn(ac/ch)=TVS Hg(ch)=0.01(tot) Mo(ch)=160(Trec)	Ni(ac/ch)=TVS Se(ac/ch)=TVS Ag(ac/ch)=TVS Zn(ac/ch)=TVS	Fish Ingestion Standards Apply.

### 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) Total phosphorus (TP) and chlorophyll a standards apply only to lakes and reservoirs larger than 25 acres surface area.
- (C) Total phosphorus and chlorophyll a standards apply only above the facilities listed at 32.5(4).

**32.52 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; JUNE 10, 2013 RULEMAKING; FINAL ACTION AUGUST, 2013; EFFECTIVE DATE DECEMBER 31, 2013**

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

**BASIS AND PURPOSE:**

A. Waterbody Segmentation

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

Upper Arkansas segments: 1a, 5, 10, 11, 12b, 13, 14b, 15, 16a, 17a-b, 18-20, 24 and 27  
Middle Arkansas segments: 1, 3, 4c, 5, 7, 8, 11, 13 and 16  
Fountain Creek segments: 1a, 3a and 4  
Lower Arkansas segments: 2a, 3a, 5a, 5b, 6 and 8  
Cimarron segment: 1

The following segments were created for lakes and reservoirs:

Upper Arkansas segments: 28-40  
Middle Arkansas segments: 19-28  
Fountain Creek segments: 8-11  
Lower Arkansas segments: 14-19  
Cimarron segment: 3

The following segments were deleted when the constituent waterbodies were merged with other segments:

Middle Arkansas segments: 8 and 16  
Lower Arkansas segment: 9c

Some renumbering and/or creation of new segments was made based on information that showed: a) the original reason for segmentation no longer applied; b) differences in water quality; and/or c) certain segments could be merged into one segment because they had similar quality and uses. In particular, segmentation was changed to facilitate the adoption of new temperature and nutrients standards into individual segments. The following changes were made:

Upper Arkansas River 1a: The lakes and reservoirs in this segment were moved to a new Segment 28 to facilitate the adoption of appropriate temperature standards.

Upper Arkansas River 3: The mainstem of Arkansas River from the Chaffee/Fremont County line to a point immediately above Highway 115 bridge due east of Florence was moved to a new Segment 4a. The mainstem of Arkansas River from a point immediately above Highway 115 bridge due east of Florence to the inlet of Pueblo Reservoir was moved to a new Segment 4b. These segments were split to facilitate the adoption of appropriate temperature standards.

Upper Arkansas River 4a: This segment, formerly part of Segment 3, was created to encompass the mainstem of Arkansas River from the Chaffee/Fremont County line to a point immediately above Highway



115 bridge due east of Florence. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 4b: This segment, formerly part of Segment 3, was created to encompass the mainstem of Arkansas River from a point immediately above Highway 115 bridge due east of Florence to the inlet of Pueblo Reservoir. This segment was created to facilitate the adoption of appropriate temperature standards.

Upper Arkansas River 5: The coldwater lakes and reservoirs less than 100 acres in this segment were moved to a new Segment 29 and combined with lakes and reservoirs from Segment 10 and 11 to facilitate the adoption of appropriate temperature and nutrients standards. Turquoise Reservoir and Clear Creek Reservoir were moved to a new Segment 30 with other coldwater lakes larger than 100 acres surface area to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 10: The coldwater lakes and reservoirs less than 100 acres in this segment were moved to a new Segment 29 and combined with lakes and reservoirs from Segments 5 and 11 to facilitate the adoption of appropriate temperature and nutrients standards. Twin Lakes and Mt. Elbert Forebay were moved to a new Segment 30 with other coldwater lakes larger than 100 acres surface area to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 11: The lakes and reservoirs in this segment were moved to a new Segment 29 and combined with lakes and reservoirs from segments 5 and 10 to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 12b: The upper portion of the South Fork of the Arkansas, including tributaries and wetlands, from its source to the National Forest boundary were moved to Segment 13. The lakes and reservoirs in this segment were moved to a new Segment 32. These waters were split into different segments to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 13: The upper portion of the South Fork of the Arkansas, including tributaries and wetlands, from its source to the National Forest boundary were moved to this segment. The portions of the North Fork and South Fork of Hardscrabble Creek, including their tributaries and wetlands, within National Forest lands were moved to new Segment 14c. The lakes and reservoirs in this segment were moved to a new Segment 31. These waters were either added or split into different segments to facilitate the adoption of appropriate temperature standards.

Upper Arkansas River 14b: All tributaries to the Arkansas River, including wetlands, which are not on National Forest lands from the Chaffee/Fremont County to the inlet of Pueblo Reservoir, were moved to new Segment 14d in order to facilitate the adoption of a Water Supply use in Segment 14b. Multiple alluvial wells that were being used as a drinking water source were discovered on numerous tributaries adjacent to the City of Salida, but north of the Chaffee/Fremont County line. Rather than propose to broadly adopt a Water Supply use for the entirety of Segment 14b, the segment was split at the Chaffee/Fremont County line to facilitate the adoption of a Water Supply use for tributaries and wetlands to the Arkansas River from Brown's Creek to the Chaffee/Fremont County line. The tributaries and wetlands to the Arkansas River, which are not on National Forest lands, from the Chaffee/Fremont County line to the inlet of Pueblo Reservoir were moved to new Segment 14d with the exception of other segment splits listed below.

The upper portions of the North Fork and South Fork of Hardscrabble Creek, including their tributaries and wetlands, which are not on National Forest lands, were moved to new Segment 14c to facilitate the adoption of appropriate temperature standards.

The tributaries and wetlands to Grape Creek from the sources to the outlet of DeWeese Reservoir were moved to Segment 15 to facilitate the adoption of a Water Supply use and appropriate temperature standards.

Lakes and reservoirs tributary to the mainstem of Grape Creek from the source to the outlet of DeWeese Reservoir were moved to a new Segment 34. All other lakes and reservoirs were moved to a new Segment 33. These waters were split into different segments to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 14c: This segment was created to encompass the North Fork and South Fork of Hardscrabble Creek, including all tributaries and wetlands, from their sources to their confluence. This segment was created to facilitate the adoption of appropriate temperature standards.

Upper Arkansas River 14d: This segment was created to encompass the tributaries and wetlands to the Arkansas River, which are not on National Forest lands, from the Chaffee/Fremont County line to the inlet of Pueblo Reservoir. This segment was created to preserve a no Water Supply use classification and appropriate temperature standards.

Upper Arkansas River 15: The tributaries and wetlands to Grape Creek from the sources to the outlet of DeWeese Reservoir were moved from Segment 14b to Segment 15 to facilitate the adoption of a Water Supply use and appropriate temperature standards. Multiple alluvial wells that were being used as a drinking water source were discovered on numerous tributaries south and west of the Town of Westcliffe, which were previously described within Segment 14b. Rather than try to describe the numerous locations of these tributaries within a new segment, these larger swaths of tributaries were moved to Segment 15, which already had an existing Water Supply use.

The lakes and reservoirs in this segment were moved to a new Segment 34, with the exception of DeWeese Reservoir, which was moved to Segment 35 as a stand-alone coldwater lake larger than 100 acres surface area.

Upper Arkansas River 16a: The lakes and reservoirs in this segment were moved to a new Segment 36 and combined with lakes and reservoirs from Segments 17a and 18 to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 17a: The lakes and reservoirs in this segment were moved to a new Segment 36 and combined with lakes and reservoirs from Segments 16a and 18 to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 17b: The lakes and reservoirs in this segment were moved to a new Segment 33 and combined with lakes and reservoirs from Segment 14b to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 18: The lakes and reservoirs in this segment were moved to a new Segment 36 and combined with lakes and reservoirs from Segments 16a and 17a to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 19: Fourmile Creek, including all tributaries and wetlands, from a point immediately below High Creek to Cripple Creek were moved to new Segment 20a to facilitate the adoption of appropriate temperature standards. The lakes and reservoirs in this segment, including the large coldwater lake Wrights Reservoir, were moved to a new Segment 37 and combined with lakes and reservoirs from Segment 20 to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 20a: This segment was created from previous Segment 20 to encompass Fourmile Creek, including all tributaries and wetlands, from immediately below High Creek to a point immediately above the confluence with Long Gulch. This segment was created to facilitate the adoption of appropriate temperature standards and removal of the Water Supply use classification and standards. The lakes and reservoirs in this segment were moved to a new Segment 37 and combined with lakes and reservoirs from Segment 19 to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 20b: This segment was created from previous Segment 20 to encompass Fourmile Creek, including all tributaries and wetlands, from the confluence of Long Gulch to the confluence with the Arkansas River to facilitate the adoption of appropriate temperature standards.

Upper Arkansas River 23: All tributaries and wetlands to Wilson Creek (Teller County) were moved from the previous Segment 20 to this segment to facilitate the adoption of an Aquatic Life use downgrade and removal of the Water Supply use classification and standards.

Upper Arkansas River 24: The lakes and reservoirs in this segment were moved to a new Segment 38 to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 27: The lakes and reservoirs in this segment were moved to a new Segment 39, with the exception of Brush Hollow Reservoir, which was moved to Segment 40 as a stand-alone warmwater lake.

Upper Arkansas River 28: This segment was created to encompass the lakes and reservoirs within the Mount Massive and Collegiate Peaks Wilderness Area, formerly in Segment 1a. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 29: This segment was created to encompass the non-large coldwater lakes and reservoirs above Brown's Creek, formerly in Segments 5, 10, and 11. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 30: This segment was created to encompass large cold lakes and reservoirs above Brown's Creek. This segment includes Turquoise Reservoir and Clear Creek Reservoir, which were formerly in Segment 5, and Twins Lakes and Mt. Elbert Forebay, which were formerly in Segment 10. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 31: This segment was created to encompass the lakes and reservoirs tributary to the Arkansas River, which are on National Forest lands, from the confluence with Brown's Creek to the inlet of Pueblo Reservoir, formerly in Segment 13. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 32: This segment was created to encompass the lakes and reservoirs tributary to the upper portions of South Fork of the Arkansas from its source to the National Forest boundary, formerly in Segment 12b. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 33: This segment was created to encompass the 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 of Pueblo Reservoir, formerly in Segment 14b; and lakes and reservoirs tributary to the mainstem of Cottonwood Creek (Fremont County) from a point immediately below the confluence with North Waugh Creek to the intersection with F6 Road, formerly in Segment 17b. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 34: This segment was created to encompass the 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, formerly in Segment 15; and lakes and reservoirs tributary to the mainstem of Grape Creek from its source to the outlet of DeWeese Reservoir, formerly in Segment 14b. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 35: This segment was created to encompass DeWeese Reservoir, a coldwater reservoir tributary to the mainstem of Grape Creek that is greater than 100 acres surface area. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 36: This segment was created to encompass the lakes and reservoirs tributary to the mainstem of Currant Creek (Park County) from the source to the confluence with Tallahassee Creek, formerly in Segment 18; lakes and reservoirs tributary to the mainstem of Middle Tallahassee Creek from the source to the intersection with Road 23, formerly in Segment 16a; and lakes and reservoirs tributary to the mainstem of Cottonwood Creek (Fremont County) from the source to a point immediately below the confluence with North Waugh Creek, formerly in Segment 17a. These waters were grouped together in one segment because they had similar quality and uses and to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 37: This segment was created to encompass the lakes and reservoirs tributary to the mainstem of Fourmile Creek from the source to the confluence with the Arkansas River, formerly in Segments 19 and 20. This includes a coldwater lake that is greater than 100 acres in surface area – Wrights Reservoir. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 38: This segment was created to encompass the lakes and reservoirs tributary to the mainstem of East and West Beaver Creeks from the source to the confluence with the Arkansas River, formerly in Segment 24. This includes coldwater lakes that are greater than 100 acres in surface area – Skagway Reservoir and Bison Reservoir. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 39: This segment was created to encompass the lakes and reservoirs tributary to the mainstem of Eightmile Creek from the source to the mouth of Phantom Canyon, formerly in Segment 27. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Upper Arkansas River 40: Brush Hollow Reservoir was moved from Segment 27 to this new segment to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 1: Pueblo Reservoir was moved to a new Segment 20 to facilitate the adoption of appropriate temperature and nutrients standards. The new Segment 1 was created to encompass tributaries to the Arkansas River within the Sangre de Cristo, Greenhorn, and Spanish Peaks Wilderness Areas. These tributaries were formerly in Middle Arkansas Segments 11, 13 and 17 and Lower Arkansas Segments 2a, 3a and 3b. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 3: Valco Ponds and Runyon/Fountain Lake were moved to a new Segment 28 to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 4c: The lakes and reservoirs in this segment were moved to a new Segment 21 to facilitate the adoption of appropriate temperature standards.

The following waters were moved to a new Segment 4f: Mainstem of Black Squirrel Creek, including all tributaries and wetlands, from just below Highway 94 to Squirrel Creek Road.

Middle Arkansas River 4d: The following waters were moved to a new Segment 7a: All tributaries to Muddy Creek other than North Muddy Creek, including wetlands, from the source to the San Isabel National Forest boundary.

The following waters were moved to a new Segment 7b: Muddy Creek, including all tributaries and wetlands, from the San Isabel National Forest boundary to 232/Bondurant Road.

The lakes and reservoirs in this segment were moved to a new Segment 23, except for Teller Reservoir, which was moved to Segment 27 as a stand-alone coldwater lake larger than 100 acres surface area.

These waters were split into different segments to facilitate the adoption of appropriate temperature and nutrients standards.

The following waters were moved to a new Segment 4g: Mainstem of Pesthouse Gulch, from the source to the confluence with Wildhorse Creek.

Middle Arkansas River 4f: This segment was created to encompass the mainstem of Black Squirrel Creek, including all tributaries and wetlands, from just below Highway 94 to Squirrel Creek Road, formerly in Segment 4c. This segment was created to facilitate the adoption of appropriate use classifications and associated standards.

Middle Arkansas River 4g: This segment was created to encompass the mainstem of Pesthouse Gulch, from the source to the confluence with Wildhorse Creek, formerly in Segment 4d. This segment was created to facilitate the adoption of acute and chronic ambient-based selenium standards.

Middle Arkansas River 5a-5b: The mainstem of the St. Charles River, including all tributaries and wetlands, from the San Isabel National Forest boundary to a point immediately above the CF&I diversion canal near Burnt Mill, was moved to a new Segment 5b. The lakes and reservoirs in Segment 5 were moved to a new Segment 22. These waters were split into different segments to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 6a-6b: Segment 6 was split at the confluence of the St. Charles River and Edson Arroyo. The mainstem of the St. Charles River from the confluence with Edson Arroyo to the confluence with the Arkansas River was moved to a new Segment 6b. These waters were split into new segments to facilitate the adoption of acute and chronic ambient-based selenium standards.

Middle Arkansas River 7a-7b: The following waters were moved to a new Segment 7b: The 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. The mainstem of Graneros Creek below the San Isabel National Forest boundary.

The following waters were moved from Segment 4d to a new Segment 7a: All tributaries to Muddy Creek other than North Muddy Creek, including wetlands, from the source to the San Isabel National Forest boundary.

The following waters were moved from Segment 4d to a new Segment 7b: Muddy Creek, including all tributaries and wetlands, from the San Isabel National Forest boundary to 232/Bondurant Road.

The lakes and reservoirs in Segment 7 were moved to a new Segment 23.

These waters were split into different segments or combined to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 8: This segment was deleted and Beckwith Reservoir was moved to a new Segment 23 to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 11a-11b, 12: The following waters were moved from Segment 11 to a new Segment 1: All tributaries, including wetlands, to the Arkansas River within the Sangre de Cristo and Greenhorn Wilderness Areas.

The following waters were moved from Segment 11 to a new Segment 11b: Mainstem of the Huerfano River including all tributaries, and wetlands, lakes and reservoirs from 570 Road near Malachite, to the confluence with Muddy Creek near Gardner. Mainstem of Turkey Creek (in Huerfano County) from 620 Road to the confluence with the Huerfano River.

The following waters were moved from Lower Arkansas Segment 2a to Segment 11a: 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, not within the Sangre de Cristo and Greenhorn Wilderness Areas.

The following waters were moved from Lower Arkansas Segment 2a to Segment 11b: All tributaries, including wetlands to the Huerfano River, from the confluence with Muddy Creek near Gardner to Highway 69 at Badito, that are not within the Sangre de Cristo and Greenhorn Wilderness Areas or the San Isabel National Forest.

The following waters were moved from Segment 12 to Segment 11b: Mainstem of the Huerfano River, from the confluence with Muddy Creek near Gardner to Highway 69 at Badito.

The lakes and reservoirs in Segment 11 were moved to a new Segment 24.

These waters were split into different segments or combined to facilitate the adoption of appropriate temperature standards.

Middle Arkansas River 13a-13b: All tributaries, including wetlands, to the Cucharas River within the Spanish Peaks Wilderness Area were moved from Segment 13 to a new Segment 1.

The following waters from Segment 13 were moved to a new Segment 13b: Mainstem of the Cucharas River from a point immediately above the confluence with Middle Creek to the point of diversion for the Walsenburg public water supply (~1.75 miles downstream from 350 Road). All tributaries to the Cucharas River, including wetlands, not within the San Isabel National Forest boundaries. 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.

The lakes and reservoirs in Segment 13 were moved to a new Segment 25. The remaining portions of Segment 13 became Segment 13a

These waters were split into different segments to facilitate the adoption of appropriate temperature standards.

Middle Arkansas River 16: This segment was deleted. Huajatolla and Diagre Reservoirs were moved to a new Segment 25. Horseshoe Lake, Martin Lake (Ohem Lake) and Walsenburg Lower Town Lake were moved to a new Segment 26. These waters were split into different segments to facilitate the adoption of appropriate temperature standards.

Middle Arkansas River 17: The following waters were moved from Lower Arkansas Segment 2a: The mainstem of South Apache Creek, including all tributaries and wetlands, from the boundary of BLM lands, in Section 25, T25S, R68W to the confluence with North Apache Creek. The mainstem of North Apache Creek, including all tributaries and wetlands, from the southern boundary of Section 24, T25S, R68W to the confluence with South Apache Creek. All tributaries, including wetlands, to the Huerfano River above the confluence with the Cucharas River that are within the San Isabel National Forest boundaries that are not within the Sangre de Cristo and Greenhorn Wilderness Areas, except for specific listings in segment 11a. These waters were combined to facilitate the adoption of appropriate temperature standards.

Middle Arkansas River 19: This segment was created to encompass the lakes and reservoirs tributary to the Arkansas River within the Sangre de Cristo, Greenhorn, and Spanish Peaks Wilderness Areas, formerly in Middle Arkansas Segments 11, 13 and 17 and Lower Arkansas Segments 2a, 3a and 3b. This segment was created to facilitate the adoption of appropriate temperature standards.

Middle Arkansas River 20: This segment was created to encompass Pueblo Reservoir formerly in Segment 1. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 21: This segment was created to encompass the lakes and reservoirs tributary to Chico Creek from the source to the confluence with the Arkansas River formerly in Segment 4c. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 22: This segment was created to encompass the 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 formerly in Segment 5. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 23: This segment was created to encompass Beckwith Reservoir formerly in Segment 8; the lakes and reservoirs tributary to Greenhorn Creek from the source to a point immediately below the Greenhorn Highline (Hayden Supply Ditch) diversion dam formerly in Segment 7; the lakes and reservoirs tributary to Graneros Creek from the source to the San Isabel National Forest boundary formerly in Segment 4d; and the lakes and reservoirs tributary to Muddy Creek from the source to 232/Bondurant Road formerly in Segment 4d. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 24: This segment was created to encompass the lakes and reservoirs tributary to the Huerfano River from the source to Highway 69 at Badito, not within the Sangre de Cristo and Greenhorn Wilderness Areas formerly in Middle Arkansas Segment 11 and Lower Arkansas Segment 2a. 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, not within the Sangre de Cristo and Greenhorn Wilderness Areas formerly in Lower Arkansas Segment 2a. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 25: This segment was created to encompass Huajatolla and Diagre Reservoirs formerly in Segment 16, as well as the lakes and reservoirs tributary to the Cucharas River from the source to the point of diversion for the Walsenburg public water supply not within the Spanish Peaks Wilderness Area formerly in Segment 13. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 26: This segment was created to encompass Horseshoe Lake, Martin (Ohem) Lake, and Walsenburg Lower Town Lake formerly in Segment 16. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 27: This segment was created to encompass Teller Reservoir, which was formerly in Segment 4d. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Middle Arkansas River 28: This segment was created to encompass Valco Ponds and Runyon/Fountain Lake formerly in Segment 3. This segment was created to facilitate the adoption of appropriate temperature and nutrients and nutrients standards.

Fountain Creek 1a: The coldwater lakes and reservoirs less than 100 acres in surface area in this segment were moved to a new Segment 8. Coldwater lakes and reservoirs greater than 100 acres in surface area were moved to a new Segment 9. These large coldwater lakes included North and South Catamount Reservoirs and Crystal Creek Reservoir. These waters were split into different segments to facilitate the adoption of appropriate temperature and nutrients standards.

Fountain Creek 3a: The lakes and reservoirs in this segment, except AFA Non-Potable Reservoir #1, were moved to a new Segment 10. AFA Non-Potable Reservoir #1 was moved to a new Segment 11.

These waters were split into different segments to facilitate the adoption of appropriate temperature and nutrients standards.

Fountain Creek 3b-4: The lower boundary of Segment 3b was extended to encompass portions of Bear Creek that previously existed in Segment 4. This boundary was changed because several multi-metric index (MMI) scores indicated a diverse and sensitive benthic macroinvertebrate community that is presently under-protected by an Aquatic Life Warm 2 designation. This segment was modified to facilitate the adoption of appropriate Aquatic Life use classifications and temperature standards.

Fountain Creek 4: The lakes and reservoirs in this segment were moved to a new Segment 11 to facilitate the adoption of appropriate temperature and nutrients standards.

Fountain Creek 8: This segment was created to encompass the non-large coldwater lakes and reservoirs tributary to Fountain Creek from the source to a point immediately above the confluence with Monument Creek, formerly in Segment 1a. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Fountain Creek 9: This segment was created to encompass the large coldwater lakes and reservoirs tributary to Fountain Creek from the source to a point immediately above the confluence with Monument Creek that are larger than 100 acres in surface area, formerly in Segment 1a.

Fountain Creek 10: This segment was created to encompass the 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, formerly in Segment 3a. This includes a coldwater lake that is greater than 100 acres in surface area – Rampart Reservoir. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Fountain Creek 11: This segment was created to encompass the lakes and reservoirs tributary to Fountain Creek which are not within the boundaries of National Forest or Air Force Academy lands, except AFA Non-Potable Reservoir #1, from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, formerly in Segment 4. This segment was created to facilitate the adoption of appropriate Aquatic Life use classifications and temperature and nutrients standards.

Lower Arkansas River 2a: Numerous tributaries, including wetlands, in this segment were moved to Middle Arkansas Segments 1, 11a, 11b and 17 and Lower Arkansas Segments 9a and 9b. The lakes and reservoirs in this segment were moved to Middle Arkansas Segments 19 and 24 and Lower Arkansas segment 19. These waters were split into different segments to facilitate the adoption of appropriate temperature and nutrients standards.

Lower Arkansas River 3a: The tributaries in this segment within the Spanish Peaks Wilderness Area were moved to Middle Arkansas Segment 1. The lakes and reservoirs in this segment within the Spanish Peaks Wilderness Area were moved to a new Middle Arkansas Segment 19. The lakes and reservoirs in this segment not within the Spanish Peaks Wilderness Area were moved to a new Segment 14. These waters were split into different segments to facilitate the adoption of appropriate temperature and nutrients standards.

Lower Arkansas River 3b: The tributaries in this segment within the Spanish Peaks Wilderness Area were moved to a new Middle Arkansas Segment 1. These waters were split into different segments to facilitate the adoption of appropriate temperature standards.

Lower Arkansas River 4a-4c: The mainstem of the Apishapa River from I-25 to the confluence with the Arkansas River and the mainstem of Timpas Creek from the source to the Arkansas River were moved to



Segment 4a to facilitate the adoption of a Water Supply use classification and the appropriate Aquatic Life use classification of Aquatic Life Warm 1.

The mainstem of Lorencito Canyon from the source to the confluence with the Purgatoire River was moved to Segment 4b.

Lower Arkansas River 5a-5b: The following waters were moved to a new rivers and streams Segment 5b: The 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. The 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. The mainstem of the South Fork of the Purgatoire River from Tercio to the confluence with the Purgatoire River. The mainstem of the Purgatoire River to Interstate 25. The mainstem of Long Canyon Creek from the source to Trinidad Reservoir. The mainstem of Raton Creek from the source to the confluence with the Purgatoire River.

The lakes and reservoirs in Segment 5a, including North Lake and Monument Lake, were moved to a new Segment 15. The lakes and reservoirs formerly in Segment 5b, including Trinidad Reservoir (Lake), Long Canyon Reservoir and Lake Dorothey, were also moved to a new Segment 15.

These waters were split into different segments or combined to facilitate the adoption of appropriate temperature and nutrients standards.

Lower Arkansas River 5c: A new segment was created for the Purgatoire River from the outlet of Trinidad Lake to I-25 and the mainstem of Raton Creek from the source to the confluence of Purgatoire River

Lower Arkansas River 6a-6b: Wet Canyon and all tributaries, including wetlands, from the source to the confluence with the Purgatoire River was moved to Segment 6b to facilitate the adoption of a Water Supply use for new Segment 6b.

The lakes and reservoirs in this segment were moved to a new Segment 16. Lakes and reservoirs tributary to Wet Canyon were moved to a new Segment 17.

These waters were split into different segments or combined to facilitate the adoption of appropriate temperature and nutrients standards.

Lower Arkansas River 8: The lakes and reservoirs in this segment were moved to a new Segment 18 to facilitate the adoption of appropriate temperature and nutrients standards.

Lower Arkansas River 9a-9c: The following waters were moved from Segment 2a to Segment 9a: The mainstems of Chacuacho Creek, San Francisco Creek and Van Bremer Arroyo from their sources to their confluences with the Purgatoire River.

The following waters were moved from Segment 2a to Segment 9b: The mainstem of Mud Creek from V Road to the confluence with the Arkansas River. The mainstems of Frijole Creek and Luning Arroyo from their sources to their confluences with the Purgatoire River. The mainstem of Blackwell Arroyo from its source to the confluence with Luning Arroyo. The mainstem of San Isidro Creek from its source to the confluence with San Francisco Creek.

The following waters were moved from Segment 9b to Segment 9a: The mainstems of Wildhorse Creek and Wolf Creek from their sources to their confluences with the Arkansas River.

The following waters were moved from Segment 9c to Segment 9a: The mainstems Clay and Two Butte Creeks from their sources to their confluences with the Arkansas. The mainstem of Trinchera Creek from the source to the confluence with the Purgatoire River.

The following waters were moved from Segment 9c to Segment 9b: The mainstem of Rule Creek from the Bent/Las Animas county line to John Martin Reservoir. The mainstem of Muddy Creek from the south boundary of the Setchfield State Wildlife Area to the confluence with Rule Creek. The mainstem of Caddoa Creek from CC Road to the confluence with the Arkansas River. The mainstem of Cat Creek to the confluence with Clay Creek. The mainstem of Mustang Creek from the source to the confluence with Apishapa River. The mainstem of Chicosa Creek from the source to the Arkansas River. The mainstem of Smith Canyon from the Otero/Las Animas county line to the confluence with the Purgatoire River

Segment 9c was deleted.

These waters were split into different segments or combined to facilitate the adoption of appropriate temperature and nutrients standards.

Lower Arkansas River 14: This segment was created to encompass the lakes and reservoirs tributary to tributary to the Apishapa River from the source to I-25 not within the Spanish Peaks Wilderness Area formerly in Segment 3a. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Lower Arkansas River 15: This segment was created to encompass the lakes and reservoirs formerly in Segment 5a that are 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, including Monument Lake and North Lake. All lakes and reservoirs tributary to the Middle Fork of the Purgatoire River from the source to the USGS gage at Stonewall mainstem of the South Fork of the Purgatoire River, from the source to Tercio. Trinidad Reservoir, Long Canyon Reservoir and Lake Dorothey formerly in Segment 5b. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards. Trinidad Reservoir was changed to Trinidad Lake.

Lower Arkansas River 16: This segment was created to encompass the lakes and reservoirs tributary to the Purgatoire River from the source to I-25 that are not contained in Segment 15 and 17. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Lower Arkansas River 17: This segment was created to encompass the lakes and reservoirs tributary to Wet Canyon from the source to the confluence with the Purgatoire River formerly in Segment 6. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Lower Arkansas River 18: This segment was created to encompass the lakes and reservoirs tributary to Ricardo Creek, which are within Colorado (Costilla and Las Animas Counties) and lakes and reservoirs tributary to the Canadian River formerly in Segment 8. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Lower Arkansas River 19: This segment was created to encompass all remaining lakes and reservoirs tributary to Arkansas River, except for specific listings in segments 10-18 and Middle Arkansas Basin segments 19-28 formerly in Segment 2a. This segment was created to facilitate the adoption of appropriate temperature and nutrients standards.

Cimarron River 1: The lakes and reservoirs in this segment were moved to a new Segment 3 to facilitate the adoption of appropriate temperature and nutrients standards.

Cimarron River 3: This segment was created to encompass the lakes and reservoirs tributary to the Cimarron River formerly in Segment 1.

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

Upper Arkansas segments: 1a, 10, 11, 12b, 13, 14b, 15, 16a, 17a-c, 18, 19, 24 and 27  
Middle Arkansas segments: 4c, 4d, 5a, 7a, 11a and 18b  
Fountain Creek segments: 1a, 3a-b, 4 and 7b  
Lower Arkansas segments: 3a, 3b, 3c, 5a, 8, 9a, 9b and 13  
Cimarron segment: 1

B. Revised Aquatic-Life Use Classifications

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

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

Middle Arkansas segment: 4b  
Cimarron segment: 2

Portions of the following segments were moved which resulted in an upgrade.

Lower Arkansas segments: 2a and 9a

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

The upper portions of North and South Forks of Hardscrabble Creek above the National Forest boundary, formerly in Segment 14b, were moved to Segment 14c.

The tributaries of Grape Creek from its source to the outlet of DeWeese Reservoir, formerly in Segment 14b, were moved to Segment 15.

Portions of segments were upgraded from Warm 2 to Cold 1 based on biological data showing that the segment has a wide variety of cold-water species and moved to other segments:

Bear Creek between N38.47682/W104.54917 and Gold Camp Road, formerly in Fountain Creek Segment 4, was moved to Fountain Creek Segment 3b.

Portions of Lower Arkansas Segment 2a were moved to Middle Arkansas Segments 1, 11a, 11b and 17, and to Lower Arkansas Segments 9a and 9b to facilitate adoption of temperature standards.

The portion of Lower Arkansas 3b in the Spanish Peaks Wilderness Area was moved to Middle Arkansas Segment 1.

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

Cimarron segment: 2

A Use Attainability Analysis was prepared for each of the following segments, or portions of segments, to downgrade them from Cold 1 to Warm 1 or 2.

Upper Arkansas segments: 4b and 40  
Fountain Creek segment: 11

A Use Attainability Analysis was prepared to downgrade a portion of the following segments, from Cold 1 to Cold 2.

Tributaries and wetlands of mainstem Wilson Creek (Teller County) formerly in Upper Arkansas Segment 20 were moved to Segment 23.

A Use Attainability Analysis was prepared to downgrade the following segment from Cold 2 to Warm 1: Fountain Creek Segment 5.

#### C. Recreation Classifications and Standards

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

Portions of the following segments with year-round, or seasonal Recreation N standards were upgraded to Recreation E and moved into other segments.

Lower Arkansas segments: 2a and 3b  
Cimarron segment: 1

The following segment with year-round or seasonal Recreation P standards was upgraded to Recreation E: Fountain Creek Segment 7a.

A Use Attainability Analysis was prepared to downgrade the following segment from Recreation E to Recreation P: Middle Arkansas Segment 4f.

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

The Commission added a Water Supply use classification and standards where the evidence demonstrates 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:

Upper Arkansas segments: 2c and 14b  
Fountain Creek segment: 4  
Lower Arkansas segments: 2a, 4a, 9a and 9b

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

Upper Arkansas segment: 19  
Fountain Creek segment: 7a

#### E. Agriculture Standards

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

Upper Arkansas segments: 14a, 17b, 20a, 23 and 26  
Middle Arkansas segments: 4a, 4b, 4c, 10, 12 and 14  
Fountain Creek segments: 5 and 7b

Lower Arkansas segments: 7, 12 and 13  
Cimarron segment: 2

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

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

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

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

The assumed values for these equations are as follows:

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

A molybdenum standard of 160 ug/l was adopted for the following segments in Regulation 32 that have an Agriculture use classification, and where livestock or irrigated forage are present or expected to be present.

Upper Arkansas segments: All segments, except 1b  
Middle Arkansas segments: All segments, except 8 (deleted) and 16 (deleted)  
Fountain Creek segments: All segments  
Lower Arkansas segments: All segments, except 9c (deleted)  
Cimarron segments: All segments

The following segments do not have an Agriculture use classification, and livestock or irrigated forage are not expected to be present. A molybdenum standard of 210 ug/L was applied to these segments to protect the Water Supply use classification:

Upper Arkansas segments: 1b

#### F. Changes to Antidegradation Designation

Decoupling Cold 2 and Use-Protected designations: As part of the Basic Standards hearing of 2005, the Commission eliminated the direct linkage between Cold Water Aquatic Life Class 2 and the Use-Protected designation. The Commission reviewed all Cold 2 segments that were Use-Protected to determine if that designation was still warranted. No segments were changed to Reviewable.

Decoupling Aquatic Life Warm 2 and Use-Protected designations: As part of the Basic Standards hearing of 2005, the Commission decided that the presence of a Warm Water Class 2 classification would

still be a presumptive basis for applying a Use-Protected designation; however, that presumption can be overcome if there is data showing that the water is of high quality. The Commission reviewed all Warm 2 segments to determine if the Use-Protected designation is still warranted.

The Commission declined to adopt the Division's proposal that the Use-Protected designation be removed from Fountain Creek segment 4. The Commission decided not to proceed with this change based on the data currently available in view of the numerous tributaries included in this segment. The Commission strongly encourages further consideration of the appropriate segmentation for the waters now included in this segment.

#### G. Ambient Standards

Ambient standards are adopted where natural or irreversible man-induced conditions result in exceedances of table value standards. The Commission reviewed the information that is the basis for these standards, as well as any new information that would indicate whether they are still appropriate, need to be modified, or should be dropped. In some cases, new ambient standards were adopted.

The Commission found that elevated concentrations cannot be improved upon in several segments, and that adoption or revision of ambient quality-based standards is appropriate. Typically, water quality conditions vary spatially, and may also vary seasonally. The Commission's intent generally in adopting ambient quality-based standards where the existing quality is worse than table values is to provide that existing quality should not deteriorate. The Commission believes that the issue of how those ambient standards are implemented in specific situations needs further consideration and perhaps clarification in the Basic Standards.

The following segments have ambient-based standards:

Upper Arkansas segments: 4a, 10, 11, 14c, 20a, 20b, 22a and 35  
Middle Arkansas segments: 3, 4a, 4e, 4g, 6b and 18b  
Fountain Creek segments: 2a and 2b  
Lower Arkansas segments: 1a, 1b, 1c, 2b and 2c

The Commission adopted the Division's proposal for ambient selenium standards for Fountain Creek segments 2a and 2b, since the proposed standards are appropriately based on the currently available information and the established approach to calculating ambient water quality. The Commission strongly encourages further consideration of the appropriate segmentation of these portions of Fountain Creek.

#### H. Aquatic Life Ammonia and Metals Standards

**New Table Value Standards:** The zinc, zinc sculpin, and aluminum table values were revised in the 2010 Basic Standards hearing. The acute and chronic zinc, zinc sculpin, and aluminum equations in 32.6(3) were modified to conform to Regulation No. 31. The footnotes to the table values in 32.6(3) were renumbered to match the appropriate references. Footnote (4 old) was deleted, and footnotes 5 through 7 were renumbered 4 through 6.

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

Upper Arkansas segments: 1a-b, 2a, 3, 5, 7, 8a, 10, 12a-b, 13, 15, 16a-c, 17a, 17c, 18, 19, 20b, 23-25 and 27  
Middle Arkansas segments: 2, 3, 5a, 6, 7a, 9, 11a, 13a, 17, 18a and 18b

Fountain Creek segments: 1a-b, 2a-b, 3a-b, 6 and 7a  
Lower Arkansas segments: 1a, 1b, 1c, 2a, 3a, 3b, 3c, 5a, 8, 10 and 11

Chromium III Standards (Aquatic Life + No Water Supply use): A review of chromium III standards showed that some segments with no Water Supply use had a standard that was protective of the Agriculture use classification but was not protective of aquatic life where the average hardness is low (less than 61 mg/L). A chromium III standard, CrIII(ac/ch)=TVS, was added to the following segments with an Aquatic Life use classification, but no Water Supply use, that did not previously include this standard:

Upper Arkansas segments: 2b, 8b, 9, 11, 20a, 21a-b, 22a, and 23  
Middle Arkansas segments: 4e and 15  
Lower Arkansas segments: 2b, 2c and 6a  
Cimarron segment: 1

#### I. Uranium Standards

At the 2010 Basic Standards rulemaking hearing, the Commission changed the Water Supply table value for uranium from 30 ug/L to a hyphenated standard of 16.8-30 ug/L. The Commission revised the language in 32.5(3)(c) to reflect the change to the basin-wide standard. A new section 32.5(3)(c)(i) was added to explain the hyphenated standard. Subsection 32.5(3)(d) was deleted because it was redundant with 32.5(3)(c).

#### J. Temporary Modifications

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

The following segments had Temporary Modifications that were not renewed:

Upper Arkansas segments: 2b, 3, 8a and 12a  
Middle Arkansas segments: 4c, 6a, 6b and 9  
Fountain Creek segments: 1a, 2a, 4 and 6  
Lower Arkansas segments: 1c, 5a, 5b, 6a, 6b and 7

In some cases, the Commission adopted Temporary Modifications with a narrative value of "current conditions". It is the Commission's intent to preserve the status quo during the term of the Temporary Modification. Existing discharges shall continue to be authorized to discharge parameters with a "current conditions" Temporary Modification at their current permitted concentration and flow levels, including a "report only" value. The Commission does not intend that Temporary Modifications set at "current conditions" will apply to new or expanded facilities. Implementation of the underlying standard into existing permits is to take place as soon as feasible after the standard becomes effective in accordance with the Basic Standards and Methodologies for Surface Water.

New or extended Temporary Modifications were adopted for the following segments.

Upper Arkansas Segment 8b: The Commission adopted an extension of Type A Temporary Modifications for chronic cadmium and zinc with an expiration date of December 31, 2017. The extension of the Temporary Modifications to the underlying cadmium and zinc standards recognizes that Resurrection Mining Company (Resurrection) provided water quality data predicting a compliance issue associated with its permitted discharge on Upper Arkansas Segment 8b, and there remains uncertainty as to the appropriate standards for that segment. The Commission further updated the values for the chronic cadmium and zinc Temporary Modifications to 1.6 µg/L and 505 µg/L, respectively, based on recent water quality data. The adopted Temporary Modifications will allow time for Resurrection to develop a more

definitive monitoring plan to better demonstrate the appropriate water quality standards for Upper Arkansas Segment 8b.

The Commission also adopted a Type A seasonal Temporary Modification of the temperature standard on Upper Arkansas Segment 8b for the Cold Stream tier II winter months of November-March, with an MWAT of 14 °C and no acute DM standard. The Temporary Modification will expire on December 31, 2017. There is uncertainty as to the appropriate underlying temperature standard for Upper Arkansas Segment 8b. During the term of the Temporary Modification, Resurrection will perform additional biological sampling, flow and temperature analysis with the objective of resolving the uncertainty associated with the appropriate temperature standards. Resurrection will also further address issues associated with attainability of the temperature standards. The progress on resolving the uncertainty with the chronic cadmium, chronic zinc and winter season temperature standards will be reviewed in the annual Temporary Modification hearing in December 2016.

Middle Arkansas Segment 4b: The Commission adopted a Type A Temporary Modification for all parameters equal to “current conditions”, set to expire December 31, 2018. This would allow the Division and EVRAZ time to consider the alternatives to resolve the uncertainty regarding the appropriate use classifications and standards for Salt Creek.

During the period that the Temporary Modifications are in place, the Division and EVRAZ will complete a Use Attainability Analysis (UAA) to examine the use classifications and standards of Salt Creek, for locations above, including, and below the St. Charles Reservoirs.

On completion of the UAA, the Division and EVRAZ will recommend to the Commission adoption of any changes necessary to assure that the use classifications and standards, if any, are appropriate. Such changes may include use removal, resegmentation of parts of Salt Creek and site-specific uses and standards, if appropriate.

It is anticipated that the studies will be completed by 8/31/2017 so that a reclassification proposal can be introduced to the Commission and the public at the November 2017 Issues Formulation Hearing.

It is understood that by agreeing to work with the Division on a UAA, EVRAZ is not conceding that Salt Creek is state waters, and may assert its position that Salt Creek is not state waters in a future forum.

Lower Arkansas Segment 1b: The Commission adopted an extension of the “current conditions” selenium Temporary Modification for Lower Arkansas Segment 1b until June 30, 2016. The type of Temporary Modification was changed from Type iii to Type B, which reflects the Commission’s 2007 revisions to the Temporary Modification provision at 31.7(3) and acknowledges the uncertainty regarding the extent to which the existing quality is the result of natural or irreversible human-induced conditions.

The Commission’s decision to adopt an extension of the Temporary Modification was based on supporting information describing effluent and ambient quality submitted by the City of La Junta, which demonstrated that La Junta’s existing permitted discharge has a predicted water quality based effluent limit compliance problem.

The City of La Junta also submitted an outline of its plan to move toward elimination of the Temporary Modification. The plan includes data collection and analytical efforts that will allow La Junta to pursue a Discharger Specific Variance (effective 10/01/2013). La Junta will report its progress to the Commission at the 2013 and 2014 annual Temporary Modification hearings.

#### K. Temperature

New table values were adopted for temperature in the 2007 Basic Standards hearing, and revised in the 2010 Basic Standards hearing. Temperature standards were applied to individual segments based upon



the fish species expected to be present as provided by the Division of Parks and Wildlife, temperature data, and other available evidence.

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

Upper Arkansas segments: 1a-b, 2a-c, 5, 7, 9-11, 12a, 13, 14c, 15, 16a, 17a, 19, 21b and 25  
Middle Arkansas segments: 1, 5a, 7a, 11a, 13a and 17  
Fountain Creek segments: 1b, 3a and 3b  
Lower Arkansas segments: 5a and 8

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

Upper Arkansas segments: 3, 4a, 8a-b, 12b, 14b, 14d, 16b-c, 17b-c, 18, 20a, 20b, 21a, 22a-b, 23, 24 and 27  
Middle Arkansas segments: 2, 5b, 7b, 11b and 13b  
Fountain Creek segments: 1a  
Lower Arkansas segments: 3a, 3c, 5b, 6a and 6b

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

Upper Arkansas segments: 4b, 14a and 26  
Middle Arkansas segments: 3, 4a, 4b, 4c, 4d, 4e, 4g, 6a, 6b, 9, 10, 12, 14, 15, 18a and 18b  
Fountain Creek segments: 2a-b, 4, 5 and 6  
Lower Arkansas segments: 1a, 1b, 1c, 3b, 4a, 4b, 7, 9a and 9b  
Cimarron segments: 1 and 2

Based upon information submitted by the City of Pueblo, the Commission adopted a site-specific temperature standard for Lower Arkansas segment 1a for the month of December, based on temperatures mid-way between the summer and winter table values. The Commission is adopting this standard for this specific segment based on the evidence submitted in this hearing, and this action is not intended as a precedent for winter month standards for other water bodies. The Commission believes that there needs to be consideration in the next Basic Standards review of potential refinements to the current temperature criteria.

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

Middle Arkansas segments: 4f  
Lower Arkansas segments: 2a, 2b and 2c

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

Upper Arkansas segments: 28, 29, 31, 32, 33, 34, 36, 37, 38 and 39  
Middle Arkansas segments: 19, 22, 23, 24, 25 and 26  
Fountain Creek segments: 8 and 10  
Lower Arkansas segments: 14, 15, 16, 17 and 18

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

Upper Arkansas segments: 30, 33, 35, 37 and 38  
Middle Arkansas segments: 20, 26 and 27  
Fountain Creek segments: 9 and 10

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

Upper Arkansas segments: 40  
Middle Arkansas segments: 21 and 28  
Fountain Creek segments: 7a-b and 11  
Lower Arkansas segments: 10, 11, 12, 13 and 19  
Cimarron segments: 3

A temperature standard was not adopted for the following segment, which does not have an Aquatic Life use classification:

Upper Arkansas segments: 6

The following segments have ambient-based temperature standards:

Upper Arkansas segments: 4a, 14c, 20a-b and 35  
Middle Arkansas segments: 20 and 26

The Commission recognizes that in some cases there is uncertainty about the temperature standards adopted in this hearing. The uncertainty stems from a lack of data about temperature, the aquatic community, or where there is a conflict between these two lines of evidence. It is the Commission's intent that the Division and interested parties work to resolve the uncertainty for the following segments:

Upper Arkansas segments: 8b and 14c  
Middle Arkansas segments: 6b  
Lower Arkansas segments: 1a, 3a, 3b, 4b, 5b, 6a, 6b, 15, 16 and 17

#### L. Nutrients

In March 2012, the Commission adopted interim nutrient values in the Basic Standards (Regulation 31) and created a new statewide control regulation (Regulation 85) to address nutrients in Colorado. Regulation 31.17 includes interim nutrient values for total phosphorus, total nitrogen, and chlorophyll *a* for both lakes and reservoirs, and rivers and streams. Due to the phased implementation approach adopted with these criteria (31.17(e)), the Commission adopted only total phosphorus and chlorophyll *a* standards at this time. Nitrogen standards were not considered as part of this rulemaking hearing, but will be considered in the next triennial review, currently scheduled for June, 2018.

Total phosphorus and chlorophyll *a* standards were adopted for waters upstream of all permitted domestic wastewater treatment facilities discharging prior to May 31, 2012 or with preliminary effluent limits requested prior to May 31, 2012, and any non-domestic facilities subject to Regulation 85 effluent limits and discharging prior to May 31, 2012. A new section (4) was added at 32.5 describing implementation of the interim nutrient values into the tables at 32.6, and includes a table which lists these facilities and the segment to which they discharge.

- For segments located entirely above these facilities, nutrient standards apply to the entire segment.
- For segments with portions downstream of these facilities, *nutrient standards only apply above these facilities*. A footnote "C" was added to the total phosphorus and chlorophyll *a* standards in these segments. The footnote references the table of qualified facilities at 36.5(4).
- For segments located entirely below these facilities, nutrient standards do not apply.

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

For lakes and reservoirs segments, a footnote “B” was added to total phosphorus and chlorophyll standards adopted for lakes in the tables at 32.6, as these standards only apply to lakes larger than 25 acres.

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

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

Chlorophyll *a* standards were adopted for the following segments:

Upper Arkansas segments: 1a-b, 2a, 5, 7, 8a-b, 9-11, 12a-b, 13, 14a-d, 15, 16a-c, 17a-c, 18, 19, 20a and 23-40  
Middle Arkansas segments: 1, 4a-g, 5a-b, 6a, 7a-b, 9, 10, 11a-b, 12, 13a-b, 14, 17, 18a-b, 19 and 21-27  
Fountain Creek segments: 1a-b, 3a-b, 4, 6, 7b and 8-11  
Lower Arkansas segments: 2b, 3a, 3c, 4a-c, 5a-b, 6a-b, 8, 9a-b, 10 and 14-19  
Cimarron segments: 2 and 3

Total Phosphorus standards were adopted for the following segments:

Upper Arkansas segments: 1a-b, 2a, 5, 7, 8a-b, 9-11, 12a-b, 13, 14a-d, 15, 16a-c, 17a-c, 18, 19, 20a, 21a, 22a-b and 23-40  
Middle Arkansas segments: 1, 4a-e, 5a-b, 6a, 7a-b, 9, 10, 11a-b, 12, 13a-b, 14, 17, 18a-b and 19-27  
Fountain Creek segments: 1a-b, 3a-b, 4-6, 7b and 8-11  
Lower Arkansas segments: 2a-c, 3a-c, 4a-b, 5a-b, 6a-b, 8, 9a-b and 14-19  
Cimarron segments: 1-3

Although the Commission adopted the Division proposal to add total phosphorus standards to Upper Arkansas segments 22a and 22b, questions were raised about the appropriateness of the application of such standards to all headwaters segments with an Aquatic Life use classification. The Commission believes that further consideration is warranted as to whether such standards are appropriate for segments with an Aquatic Life use classification but limited numerical standards, e.g. not including an ammonia standard to protect aquatic life.

#### M. 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 (Regulation #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. In this action today, the Commission has begun to apply this sub-classification and anticipates that it will take several basin reviews to evaluate all the reservoirs in the basin. The Commission adopted the DUWS sub-classification on the following reservoirs and added “DUWS” to the classification column in the standards tables. The public water systems are listed along with the reservoirs and segments.

Upper Arkansas segment 38	Bison Reservoir: City of Victor
Middle Arkansas segment 20	Pueblo Reservoir: Pueblo Board of Water Works, St Charles Mesa, Pueblo West, Fountain Valley

Middle Arkansas segment 23	Beckwith Reservoir: City of Colorado City
Middle Arkansas segment 26	Horseshoe, Martin and Lower Walsenburg Reservoirs: City of Walsenburg
Fountain Creek segment 9	North Catamount Reservoir, South Catamount Reservoir, and Crystal Creek Reservoir: City of Colorado Springs
Fountain Creek segment 10	Rampart Reservoir: City of Colorado Springs
Lower Arkansas segment 15	Monument and North Lakes: City of Trinidad

Also see Pueblo Reservoir discussion in Section “O” below.

#### N. Other Site-Specific Revisions

Upper Arkansas River 1b: This segment had an ambient acute zinc standard. Recent data showed that East Fork of the Arkansas River was attaining the table value standards for zinc, so the ambient-based acute standard was replaced with TVS.

Upper Arkansas River 2b: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Upper Arkansas River 8a: A footnote “A” was added to the chronic arsenic standard to explain the hyphenated standard.

Upper Arkansas River 8b: This segment was missing a boron and nitrate standard. A TVS boron standard of 0.75 mg/L was added to this segment to protect the Agriculture use classification. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Upper Arkansas River 9: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Upper Arkansas River 10: This segment had an ambient chronic copper standard. Recent data showed that the copper concentrations were higher than the ambient-based chronic copper and acute TVS copper standards, so the chronic copper standard was changed from 8.0 ug/L to 10.6 ug/L and an ambient-based acute copper standard was added by changing TVS to 14.6 ug/L.

Upper Arkansas River 11: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added. This segment was missing chronic copper standard. A chronic TVS copper standard was added.

The standard for pH is based on ambient conditions which are due to uncontrollable non-point sources. There continues to be no active mining in this segment and recent evidence continues to indicate low pH values. Therefore, the ambient pH standard of 5.0 was left unchanged.

This segment had ambient aluminum and iron standards. No recent data was available to determine if a change was needed to the ambient aluminum standard. Therefore, the ambient aluminum standard of 750 ug/L was left unchanged. Recent data showed that the iron concentrations were lower than the table value standard (TVS), so the total recoverable iron standard was changed from 2000 ug/L to TVS.

Upper Arkansas River 14a: This segment does not have a Water Supply use, but had a nitrite standard associated with that use. The nitrite standard was changed from 0.05 mg/L to 0.5 mg/L to protect the Aquatic Life Warm 2 use classification. This segment was also missing a nitrate standard, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Upper Arkansas River 16b: A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

Upper Arkansas River 17b: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added.

Upper Arkansas River 17c: This segment was missing acute and chronic nickel standards. Acute and chronic TVS nickel standards were added to this segment.

Upper Arkansas River 21a: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added. The acute and chronic TVS cadmium standards were combined to read as: Cd(ac/ch)=TVS.

Upper Arkansas River 21b: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Upper Arkansas River 22a: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

This segment had ambient pH, aluminum, manganese and zinc standards. No recent data was available to determine if a change was needed to any of the ambient-based standards, so all ambient standards were left unchanged.

Upper Arkansas River 23: A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

Upper Arkansas River 26: This segment does not have a Water Supply use, but had a nitrite standard associated with that use. The nitrite standard was changed from 0.05 mg/L to 0.5 mg/L to this segment to protect the Aquatic Life Warm 2 use classification. This segment was also missing a nitrate standard, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Middle Arkansas River 2: The Recreation use classification had been omitted for this segment. A Recreation E use classification was added to this segment.

Middle Arkansas River 3: Recent data showed that the selenium concentrations were lower than the ambient-based standard, so the selenium standards were recalculated and changed from (ac)=50.9 ug/L to (ac)=26.3 ug/L and (ch)=17.4 ug/L to (ch)=17.1 ug/L. The acute chromium III standard was also corrected from CrIII(ac)=TVS(Trec) to CrIII(ac)=50(Trec), to protect the Water Supply use classification.

Middle Arkansas River 4a: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Middle Arkansas River 4b: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

The Aquatic Life use classification for this segment was changed from Warm 2 to Warm 1. Therefore, an acute arsenic standard of 340 ug/L was added and the chronic arsenic standard was changed from 100(Trec) to 7.6(Trec).

Middle Arkansas River 4d: The exceptions in the segment description were amended to reflect the existence of Segments 4e, 4f, 4g and 18b.

Middle Arkansas River 6a and 6b: A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

Middle Arkansas River 10: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification. The chronic and acute arsenic standards were reordered for consistency.

Middle Arkansas River 12: A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

Middle Arkansas River 14: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Middle Arkansas River 18b: The segment description was changed to more precisely describe the unnamed tributary to the Arkansas located in Section 33, Township 20 South, Range 65 West. The segment description now states: Unnamed tributary to Arkansas River, that flows from the south and whose confluence with the Arkansas River is located at 38.267623, -104.668298.

Fountain Creek 2a: The nitrite standard was changed from 1.0 mg/L to 0.5 mg/L to protect the Aquatic Life use classification. A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

This segment had ambient sulfate and selenium standards. Recent data showed that the sulfate and selenium concentrations were lower than the ambient-based standard, so the sulfate standard was changed from 330 mg/L to 290 mg/L and the chronic selenium standard was changed from 8.0 ug/L to 4.8 ug/L. In the latter instance, an existing ambient chronic selenium standard was in place, but the acute standard was not. Recent data showed that Fountain Creek, from a point immediately above the confluence with Monument Creek to a point immediately above State Highway 47, was attaining the table value standards for acute selenium, so the TVS standard was left unchanged.

Fountain Creek 2b: The nitrite standard was changed from 1.0 mg/L to 0.5 mg/L to protect the Aquatic Life use classification. A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

This segment had an ambient iron standard. Recent data showed that the iron concentrations were lower than the ambient-based standard, so the total recoverable iron standard was changed from 5280 ug/L to 3300 ug/L.

This segment had attainability-based underlying sulfate and selenium standards. Recent water quality data showed that sulfate and selenium concentrations were higher than the attainability-based standards, so the sulfate and selenium standards were left unchanged because this increase indicates that sulfate and selenium loads in this basin are not presently being reduced enough to merit reconsideration of the attainability-based underlying standards.

Fountain Creek 3a: This segment had duplicate standards for acute manganese. The numeric standard Mn(ac)=TVS was deleted while Mn(ac/ch)=TVS was retained.

Fountain Creek 3b: This segment had duplicate standards for acute manganese. The numeric standard Mn(ac)=TVS was deleted while Mn(ac/ch)=TVS was retained.

Fountain Creek 4: A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

Fountain Creek 5: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Fountain Creek 6: This segment had ambient sulfate and iron standards. Recent data showed that Monument Creek was attaining the table value standards for sulfate and total recoverable iron, so the ambient-based standards were replaced with TVS. A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard. This segment was also missing a sulfide standard, so a TVS sulfide standard of 0.002 mg/l was added.

Fountain Creek 7b: This segment does not have a Water Supply use, but had a nitrite standard associated with that use. The nitrite standard was changed from 1.0 mg/L to 0.5 mg/L. This segment was also missing a nitrate standard, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification. The dissolved form "(dis)" was removed from the manganese TVS standard since this segment has no Water Supply use.

Fountain Creek 11: A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

Lower Arkansas River 1a: A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard. Recent data showed that the total recoverable iron concentrations were different than the ambient-based standard, so the chronic total recoverable iron standard was changed from 2765 ug/L to 2800 ug/L.

Lower Arkansas River 1c: Recent data showed that the manganese concentrations were lower than the ambient-based standard, so the chronic manganese standard was recalculated and changed from 642 ug/L to 190 ug/L.

Lower Arkansas River 2a: A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

Lower Arkansas River 3b: A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

Lower Arkansas River 3c: A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

Lower Arkansas River 4a: Recent data showed that the total recoverable iron concentrations were lower than the table value standards (TVS), so the ambient based total recoverable iron standards were changed to TVS.

Lower Arkansas River 4b: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification. Recent data showed that the total recoverable iron concentrations were lower than the table value standards (TVS), so the ambient based total recoverable iron standards were changed to TVS.

Lower Arkansas River 4c: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the

Agriculture use classification. Recent data showed that the total recoverable iron concentrations were lower than the table value standards (TVS), so the chronic ambient based total recoverable iron standard was changed to TVS.

Lower Arkansas River 6b: A footnote "A" was added to the chronic arsenic standard to explain the hyphenated standard.

Lower Arkansas River 7: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Lower Arkansas River 8: A close parenthesis was added to the chronic chromium III standard.

Lower Arkansas River 11: This segment had a chronic ambient-based manganese standard. Recent data showed that John Martin Reservoir was attaining the table value standard for manganese, so the chronic ambient-based standard was replaced with TVS.

Lower Arkansas River 12: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Lower Arkansas River 13: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

Lower Arkansas River 15: Trinidad Reservoir was changed to Trinidad Lake.

Cimarron River 2: This segment was missing a nitrate standard. This segment does not have a Water Supply use, so a TVS nitrate standard of 100 mg/L was added to this segment to protect the Agriculture use classification.

O. Site Specific Issues by segment

#### **Fourmile Creek and Wilson Creek (Upper Arkansas Segments 19, 20a, 20b and 23)**

Upper Arkansas Segment 20, described as Fourmile Creek and its tributaries from the confluence with Cripple Creek to the Arkansas River, was broken into two segments (20a and 20b) to facilitate adoption of appropriate temperature standards and Water Supply use classification. In addition, the lower boundary of Segment 19, described as Fourmile Creek from the source to the confluence with Cripple Creek, was moved upstream, also to facilitate adoption of appropriate temperature standards and Water Supply use classification.

Segment 20a includes Fourmile Creek and its tributaries from immediately below the confluence with High Creek to the confluence with Long Gulch. The Commission found that there is a significant change in the Fourmile Creek temperature regime downstream of Long Gulch, and that Fourmile Creek's elevation changes significantly in this reach. Regulation 31.6(4) states, "Segments shall generally be delineated according to the points at which the use, physical characteristics or water quality characteristics of a watercourse are determined to change significantly enough to require a change in use classifications and/or water quality standards." Therefore, Segment 20b was created to account for increasing instream water temperature and includes Fourmile Creek and its tributaries from Long Gulch to its confluence with the Arkansas River.

The Commission adopted site-specific temperature standards for summer and winter to reflect the existing thermal conditions in Segments 20a and 20b. Stream temperatures in Fourmile Creek were consistently higher than Cold Stream Tier II temperature standards over a 4-year monitoring period during



the summer months, and occasionally during the winter months, particularly during the spring shoulder season at sites upstream and downstream of both the Cripple Creek confluence and the Carlton Tunnel.

The Carlton Tunnel was completed in 1941 to drain the Cripple Creek Mining District, and has been draining the regional ground water for over 70 years. Flows from the Carlton Tunnel enter Fourmile Creek approximately ½ mile downstream of the confluence with Cripple Creek, at a relatively constant year-round flow rate and water temperature. The constant, warm temperature of the ground water flowing out of the tunnel, together with the geology of the area, indicates that natural geothermal activity probably warms the water. No person or entity controls the flow of water out of the Carlton Tunnel, and there are no further means to control the temperature of the flow.

Upstream of the Carlton Tunnel, CC&V documented that there are no known anthropogenic sources of heat to Fourmile Creek. Therefore, the Commission found that ambient temperatures in segments 20a and 20b reflect natural or irreversible man-induced conditions. In addition, stream temperatures were warmer in Segment 20b than in Segment 20a, which is expected because lower Fourmile Creek is approximately 1,000 feet lower in elevation. A robust and abundant brown trout population persists throughout Fourmile Creek, indicating that thermal conditions are not negatively affecting populations of this cold water species, and therefore ambient-based temperature standards are adequate to protect the use.

The site-specific summer and winter temperature standards apply from March 1 through October 31, and November 1 through February 29, respectively, for both segments. The Segment 20b winter daily maximum temperature was set equal to the table value standard (TVS) because daily maximum temperatures did not exceed the Cold Stream Tier II TVS. The methodology for calculating ambient standards used the second highest observed daily maximum or maximum weekly average temperature after qualified exclusions were removed from the data set. The second highest value in the data set represents the 1 in 3 year exceedance value.

Based on evidence that there is currently no Water Supply use and there is little potential for future Water Supply use along the portion of Fourmile Creek to be included in Segment 20a, the Commission removed the Water Supply use classification from Segment 20a.

Upper Arkansas Segment 23, described as Wilson Creek (Teller County) from its source to the confluence with Fourmile Creek, was modified to include all of its tributaries and wetlands. These tributaries are currently included in Segment 20, despite the fact that the Wilson Creek tributaries do not flow directly into Fourmile Creek. This modification clarifies the boundaries of Segment 23 and makes its description more consistent with other segment descriptions. In addition, no evidence exists to suggest that the uses and classifications applied to the mainstem of Wilson Creek are not appropriate for its tributaries.

Based on evidence that there is currently no Water Supply use and there is little potential for future Water Supply use along Wilson Creek and its tributaries, the Commission removed the Water Supply use classification from Segment 23.

Similarly, long-term monitoring of the aquatic life community in Wilson Creek and North Fork Wilson Creek indicates fish do not occur and would not be expected to occur in Segment 23 due to the interrupted nature and/or low flow conditions in these streams. Therefore, acute total residual chlorine, trout-specific acute cadmium and chronic silver standards, as well as the spawning-based dissolved oxygen standard, were removed from Segment 23.

#### **Mainstem of Wildhorse Creek (Middle Arkansas Segment 4a)**

Based upon new selenium data and information regarding sources and stream flow conditions, the Commission revised the selenium ambient quality-based site-specific standards for Middle Arkansas Segment 4a. Because of the wide spatial and temporal variability of selenium concentrations in the

segment, the Commission defined assessment locations at 32.6(4) in order to ensure that assessment is consistent with the methods used to derive the standards. Pueblo West will collect dissolved selenium data in order to confirm the conversion factor-derived standard or replace it with a dissolved fraction based standard in the next review cycle.

#### **Chico and Black Squirrel Creeks (Middle Arkansas Segments 4c and 4f)**

A Use Attainability Analysis conducted in Middle Arkansas Segment 4c for Cherokee Metropolitan District concluded the seasonal and limited presence of water throughout much of the Chico Creek and Black Squirrel Creek watersheds affects the number and variety of aquatic life that can reside within these streams, making the application of an Aquatic Life Warm 1 use classification inappropriate for some portions of the segment. The sampling conducted in 2006 through 2012 indicated that, while fish populations persist in discrete locations, flow is also intermittent or ephemeral in all or most of Black Squirrel Creek and throughout some reaches of Chico Creek, limiting the potential to support reproducing fish populations. The data also indicate that only the upper third and the bottom third of the Black Squirrel Creek watershed have water in enough quantity for enough time to provide habitat for fish, and sufficient water is only present at some locations within these portions. The middle reach has primarily ephemeral flows and no water was observed during all sampling events.

Based upon these results, the Commission split a portion of Segment 4c to create a new Segment 4f and revised the Aquatic Life use classification to Warm 2 for new Segment 4f. Segment 4c now includes the mainstem of Chico Creek and its tributaries, except for specific listings in Segment 4f. Segment 4f was created to account for the absence of fish in this ephemeral reach, and includes the mainstream of Black Squirrel Creek and its tributaries from just below Highway 94 to Squirrel Creek Road.

Segment 4c has Aquatic Life Warm 1, Recreation E, and Agriculture use classifications and the full suite of standards applied for those uses. Segment 4f has Aquatic Life Warm 2, Recreation P, and Agriculture use classifications, a Use Protected designation and the metals standards for protection of agriculture irrigation uses were retained to provide a level of protection for rudimentary aquatic life in this ephemeral reach.

Based on fish species expected or observed to be present, Warm Stream Tier II temperature standards were adopted for Segment 4c. Warm Stream Tier III temperature standards were adopted for Segment 4f, where fish have not been observed.

#### **Pesthouse Gulch (Middle Arkansas Segment 4g)**

Pueblo West Metropolitan District Wastewater Treatment Plant outfall is located on Pesthouse Gulch, a tributary to Wildhorse Creek (Segment 4a) which has been included in Middle Arkansas Segment 4d, an "all tributaries" segment. Based on evidence presented that Pesthouse Gulch above the outfall has naturally elevated selenium levels, the Commission separated out Pesthouse Gulch into Segment 4g and applied ambient-based selenium standards. Because of the wide spatial and temporal variability of selenium concentrations in the segment, the Commission defined assessment locations at 32.6(4) in order to ensure that assessment is consistent with the methods used to derive the standards. The other uses and standards of Segment 4d (Aquatic Life Warm 2, Recreation P, and Agriculture use classifications, and the metals standards for protection of agriculture irrigation uses) were retained. Pueblo West will collect dissolved selenium data in order to confirm the conversion factor-derived standard or replace it with a dissolved fraction based standard in the next review cycle.

#### **Golf Course Wash and Turkey Creek (Middle Arkansas Segments 4e and 18b)**

Based upon selenium data collected in these segments and an engineering report that concluded that the source of selenium in the Pueblo West Metropolitan District Wastewater Treatment Plant influent and the surrounding ground and surface waters is the geologic shale formations ubiquitous to the Middle

Arkansas sub-basin, the Commission adopted ambient quality-based selenium standards for these segments.

### **Pueblo Reservoir (Middle Arkansas Segment 20)**

Evidence was presented by the Board of Water Works of Pueblo, Colorado (the "Board"), Pueblo West Metropolitan District, and the Division that Pueblo Reservoir is used regularly to provide raw water directly through man-made conveyances to several Public Water Systems (PWS), including Pueblo Board of Water Works, Pueblo West MD, City of Fountain, Security WSD, Stratmoor Hills WSD and Widefield WSD. As such, application of a Direct Use Water Supply subclassification is appropriate for Pueblo Reservoir (Middle Arkansas River Segment 20). Furthermore, based on the consideration of the factors set forth in Regulation 31.17(e)(ii), the Commission determined that a numerical chlorophyll a standard of 5 ug/L is appropriate to apply to Pueblo Reservoir. Because this standard represents a concentration that is close to current conditions in Pueblo Reservoir, it should have no effect on dischargers, recreation, or the ability of PWSs to meet DBP limits. Compliance with this chlorophyll a standard will be measured at USGS Site 7b, a point near the Pueblo Reservoir Dam using a March 1 to November 30 average chlorophyll a (ug/L) in the mixed layer with an allowable exceedance frequency of 1-in-5 years.

### **Monument Creek (Fountain Creek Segment 6)**

Site-specific copper criteria for a portion of Segment 6 were adopted based on U.S. EPA's water quality criteria for copper (Cu) using an approved method known as the Biotic Ligand Model or BLM (U.S. EPA 2007), and EPA's method for site-specific calculations in the April 2012 "Calculation of BLM Fixed Monitoring Benchmarks for Copper at Selected Monitoring Sites in Colorado" (820OR12009). Fixed Monitoring Benchmarks (FMB) for Cu are derived from a probability-based method that incorporates time variability in the BLM-predicted instantaneous water quality criteria (IWQC) as compared to measured in-stream Cu concentrations. The term "FMB" is used because it is a benchmark that can be used to evaluate compliance with water quality criteria at the specific allowed excursion frequency set by these criteria (i.e., no more than one excursion every three years). The site-specific standard was adopted for a portion of Segment 6, described as from immediately above Tri-Lakes Wastewater Treatment Facility to the North Gate Boulevard Bridge. The BLM derives instantaneous water quality criteria on the basis of multiple variables such as dissolved organic carbon (DOC), pH and hardness-related variables. BLM variables, like DOC, can be significantly different in streams below municipal wastewater effluent discharges.

Extensive data collection supported the derivation of the BLM-based FMB for application in Monument Creek. To generate FMB values for that portion of Segment 6, data from Baptist Road and North Gate Boulevard Bridge were combined. The resulting acute FMB (FMBa) was calculated at 28.4 µg/L, and the chronic FMB (FMBc) was calculated at 17.8 µg/L. Because of contributions of tributaries and/or groundwater inflow to Monument Creek below the North Gate Boulevard Bridge, the mitigating effects of the effluent DOC are reduced while the hardness increases, such that downstream TVS remain protective. The Commission determined that retaining the TVS below the North Gate Boulevard Bridge would still be protective of the lower standard downstream.

### **Arkansas River (Lower Arkansas Segment 1c)**

The Commission deleted the Temporary Modification to the selenium standard on Lower Arkansas Segment 1c.

There are no known permitted discharges to this segment that would face unreasonable consequences in the absence of a Temporary Modification. Uncertainty over the appropriately protective standard continues to exist on Segment 1c, complicated by uncertainty over the extent the levels of selenium in the river, ranging from two- to four-fold the chronic standard, reflect natural contributions or man-made influences from water use along the river. Historically, Segment 1c of the Lower Arkansas River has elevated selenium concentrations, invoking Temporary Modifications from the chronic table value standard of 4.6 µg/l since 1998.

The Commission endorses the ongoing efforts between the State of Kansas and Division staff to improve communications and to use the TMDL program to address the non-attainment of selenium criteria on this segment. The need for additional information regarding the extent that existing quality results from natural and human-induced conditions will continue to be assessed via ongoing modeling and water quality monitoring.

#### **Purgatoire River Basin (Lower Arkansas Segments 3a, 3b, 4b, 4c, 5a, 5b, 5c, 6a, 6b, 15, 16 and 17)**

Pioneer Natural Resources USA, Inc. and XTO Energy Inc. proposed a site-specific boron standard of 4.0 mg/L for Lower Arkansas River Basin segments 4c, 5a, 5b and 6a. Surface water standards for boron are changed from 0.75 mg/L to 4.0 mg/L for these segments. Boron is essential to the normal growth of all plants. The 0.75 mg/L boron level had been set to protect certain boron-sensitive plants such as pecan, black walnut, cherry, orange, and avocado.

The Commission has reviewed site-specific evidence regarding the crops and soil chemistry in the area of segments 4c, 5a, 5b and 6a. Crop data reflects that boron tolerant species such as alfalfa and other pasture grass and hay species are the predominant crops grown in the area. Further, boron sensitive species are not grown here due, in part, to elevation, climate, growing season, and the lack of consistent available water supply for high value crops.

The companies also proposed a site-specific boron standard of 2.0 mg/L for Lower Arkansas segments 5c and 6b. Segment 6b, Wet Canyon, has a vegetable garden that is irrigated with groundwater, not surface water. However, to protect Wet Canyon surface water for similar uses in this segment, should they occur in the future, the boron standard was set at 2.0 mg/L. This provides a transition zone from the upstream boron standard of 4.0 mg/L to the boron standard of 0.75 mg/L for areas downstream of I-25.

Accordingly, the Commission approved the 4.0 mg/L boron standards for the Lower Arkansas River Basin segments 4c, 5a, 5b and 6a; and 2.0 mg/L boron standard for segments 5c and 6b.

The Commission adopted a Type B Temporary Modification for temperature for Segments 3a, 3b, 4b, 5b, 6a, 6b, 15, 16 and 17 with a narrative value of "current conditions" and an expiration date of June 30, 2016. The Commission's decision to adopt the Temporary Modification was based on supporting information submitted by XTO/Pioneer, which included a predicted water quality based effluent limit compliance problem and a plan to eliminate the need for a Temporary Modification.

#### **St. Charles River (Middle Arkansas Segments 6a and 6b)**

The Commission divided Middle Arkansas Segment 6 (St. Charles River) into two segments. Segment 6a is the mainstem of the St. Charles River from a point immediately above the CF&I diversion canal near Burnt Mill to a point immediately upstream of the confluence with Edson Arroyo. Segment 6b is the mainstem of the Saint Charles River from the confluence with Edson Arroyo to the confluence with the Arkansas River. Public Service Company of Colorado (PSCo) presented evidence that the table value standards for selenium are met in the St. Charles River upstream of Edson Arroyo, but natural concentrations of selenium increase significantly downstream of Edson Arroyo. Therefore, the Commission chose the confluence with Edson Arroyo as the dividing point between Segments 6a and 6b.

Evidence submitted by PSCo showed that selenium loading to Segment 6b results from natural sources and is not exacerbated by land use or other reversible anthropogenic factors. Also, the evidence demonstrated that the naturally elevated selenium concentrations, which vary widely and at times greatly exceed the table value standards, are not impairing aquatic life. Therefore, for Segment 6b the Commission adopted site-specific ambient-based chronic and acute dissolved selenium standards. The chronic (50 ug/L) is based on the 85th percentile of all available data from the segment. The acute (173 ug/L) is based on the 95th percentile of all available data from the segment. Because of the wide spatial and temporal variability of selenium concentrations in the segment, the Commission defined assessment locations and methods at 32.6(4) in order to ensure that assessment is consistent with the methods used

to derive the standards. PSCo will collect dissolved selenium data in order to confirm the conversion factor-derived standard or replace it with a dissolved fraction-based standard in the next review cycle.

The Commission removed the Temporary Modification for selenium of “current condition” that had previously been in place for Segment 6.

The Commission adopted a Type B Temporary Modification for temperature for Segment 6b with a narrative value of “current conditions” and an expiration date of June 30, 2017. The Commission’s decision to adopt the Temporary Modification was based on supporting information submitted by PSCo, which included a predicted water quality based effluent limit compliance problem and a plan to eliminate the need for a Temporary Modification.

#### PARTIES TO THE RULEMAKING HEARING

1. Pueblo West Metropolitan District
2. Cherokee Metropolitan District
3. Board of Water Works of Pueblo, Colorado
4. Kansas Department of Health and Environment
5. XTO Energy and Pioneer Natural Resources
6. Tri-Lakes Wastewater Treatment Facility
7. Cripple Creek and Victor Gold Mining Company
8. Public Service Company of Colorado
9. Rio Grande Silver, Inc.
10. Hazardous Materials and Waste Management Division
11. City of Pueblo
12. Climax Molybdenum Company
13. Pikes Peak Area Council of Governments
14. U.S. Air Force Academy
15. Fountain Sanitation District
16. Lower Fountain Metropolitan Sewage Disposal District
17. Security Sanitation District
18. Upper Monument Creek Regional Wastewater Treatment Facility
19. Resurrection Mining Company
20. City of Colorado Springs and Colorado Springs Utilities
21. City of La Junta
22. Arkansas and Fountain Coalition for Urban/Rural River Evaluation
23. Colorado Monitoring Framework
24. Alamosa Riverkeeper
25. County of Pueblo
26. Colorado Parks and Wildlife
27. City of Creede
28. EVRAZ Rocky Mountain Steele
29. U.S. Environmental Protection Agency
30. Southeastern Colorado Water Conservancy District
31. U.S. Bureau of Reclamation, Eastern Colorado Area Office
32. Southwest Kansas Groundwater Management District No. 3
33. City of Lakin
34. Finney County
35. Hamilton County Economic Development
36. City of Garden City