COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL COMMISSION

5 CCR 1002-36

REGULATION NO. 36
CLASSIFICATIONS AND NUMERIC STANDARDS
FOR
RIO GRANDE BASIN

APPENDIX 36-1
Stream Classifications and Water Quality Standards Tables

Effective 06/30/2021

Abbreviations and Acronyms

Aquatic =

Aq °C degrees Celsius

CL = cold lake temperature tier CLL cold large lake temperature tier CS-I cold stream temperature tier one = CS-II = cold stream temperature tier two

D.O. = dissolved oxygen

DM daily maximum temperature DUWS = direct use water supply

E. coli = Escherichia coli EQ existing quality mg/L milligrams per liter

 $mg/m^2 =$ milligrams per square meter

mĹ

MWAT = maximum weekly average temperature

OW outstanding waters SSE site-specific equation Т total recoverable =

total t trout tr

TVS table value standard μg/L = micrograms per liter UP use-protected = WS water supply

WS-I = warm stream temperature tier one WS-II = warm stream temperature tier two WS-III = warm stream temperature tier three

WL warm lake temperature tier

REGULATION #36 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Rio Grande Basin

Mainstem of North Clear Creek from the outle	t or o oritimoritai ritocorron to a poniti	, , , , , , , , , , , , , , , , , , , ,		cc with this Hondo Orccit.		
CORGRG03 Classifications	Physical and	Biological		r	Metals (ug/L)	
Designation Agriculture		DM	MWAT		acute	chronic
Reviewable Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340	
Recreation E		acute	chronic	Arsenic(T)		7.6
Qualifiers:	D.O. (mg/L)		6.0	Cadmium	TVS	TVS
Fish Ingestion Standards Apply	D.O. (spawning)		7.0	Chromium III	TVS	TVS
Other:	pH	6.5 - 9.0		Chromium III(T)		100
	chlorophyll a (mg/m²)		150	Chromium VI	TVS	TVS
(Uranium(acute) = See 36.5(3) for details.	E. Coli (per 100 mL)		126	Copper	TVS	TVS
*Uranium(chronic) = See 36.5(3) for details.				Iron(T)		1000
	Inorgan	Inorganic (mg/L)			TVS	TVS
		acute	chronic	Manganese	TVS	TVS
	Ammonia	TVS	TVS	Mercury(T)		0.01
	Boron		0.75	Molybdenum(T)		150
	Chloride			Nickel	TVS	TVS
	Chlorine	0.019	0.011	Selenium	TVS	TVS
	Cyanide	0.005		Silver	TVS	TVS(tr)
	Nitrate	100		Uranium	varies*	varies*
	Nitrite	0.05		Zinc	TVS	TVS
	Phosphorus		0.11			
	Sulfate					
	Sulfide		0.002			
4a. Mainstem of the Rio Grande from a point im	mediately above the confluence with	Willow Creek to a p	oint immedia	ately above the confluence	with the South Fork F	Rio Grande.
CORGRG04A Classifications	Physical and	Biological		r	Metals (ug/L)	
Designation Agriculture		DM	MWAT		acute	chronic
Reviewable Aq Life Cold 1	Temperature °C	CS-II	CS-II	Arsenic	340	
Recreation E		acute	chronic	Arsenic(T)		
						0.02
Water Supply	D.O. (mg/L)		6.0	Cadmium	TVS	varies*
	D.O. (mg/L) D.O. (spawning)		6.0 7.0	Cadmium Cadmium(T)		
Qualifiers:					TVS	
Qualifiers: Other:	D.O. (spawning)		7.0	Cadmium(T)	TVS 5.0	varies*
Qualifiers: Other: Temporary Modification(s):	D.O. (spawning)	 6.5 - 9.0	7.0	Cadmium(T) Chromium III	TVS 5.0 	varies*
Qualifiers: Other: Femporary Modification(s): Arsenic(chronic) = hybrid	D.O. (spawning) pH chlorophyll a (mg/m²)	 6.5 - 9.0 	7.0 	Cadmium(T) Chromium III Chromium III(T)	TVS 5.0 50	varies* TVS
Qualifiers: Other: Femporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL)	 6.5 - 9.0 	7.0 	Cadmium(T) Chromium III Chromium III(T) Chromium VI	TVS 5.0 50 TVS	varies* TVS TVS
Qualifiers: Other: Femporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specification and assessment locations.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL)	6.5 - 9.0 	7.0 	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper	TVS 5.0 50 TVS TVS	varies* TVS TVS TVS
Qualifiers: Other: Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specifications and assessment locations. Manganese(chronic) = See 36.6(4) for site-specifications.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL)	 6.5 - 9.0 ic (mg/L)	7.0 126	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron	TVS 5.0 50 TVS TVS	varies* TVS TVS TVS WS
Qualifiers: Other: Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specification and assessment locations. Manganese(chronic) = See 36.6(4) for site-specification and assessment locations.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) ic Inorgan	6.5 - 9.0 ic (mg/L)	7.0 126 chronic	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T)	TVS 5.0 50 TVS TVS	varies* TVS TVS TVS WS 1000
Qualifiers: Dether: Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specification and assessment locations. Manganese(chronic) = See 36.6(4) for site-specification and assessment locations. Uranium(acute) = See 36.5(3) for details.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan Ammonia	 6.5 - 9.0 ic (mg/L) acute TVS	7.0 126 chronic	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead	TVS 5.0 50 TVS TVS TVS	varies* TVS TVS TVS WS 1000
Qualifiers: Dether: Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specification and assessment locations. Manganese(chronic) = See 36.6(4) for site-specification and assessment locations. Uranium(acute) = See 36.5(3) for details. Uranium(chronic) = See 36.5(3) for details. Zinc(acute) = See 36.6(4) for site-specific	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan Ammonia Boron	 6.5 - 9.0 ic (mg/L) acute TVS	7.0 126 chronic TVS 0.75	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T)	TVS 5.0 50 TVS TVS TVS 50	varies* TVS TVS TVS WS 1000 TVS
Qualifiers: Other: Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specification and assessment locations. Manganese(chronic) = See 36.6(4) for site-specification and assessment locations. Uranium(acute) = See 36.5(3) for details. Uranium(chronic) = See 36.5(3) for details. Zinc(acute) = See 36.6(4) for site-specification and assessment locations. Zinc(chronic) = See 36.6(4) for site-specification and assessment locations.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride	6.5 - 9.0 ic (mg/L) acute TVS	7.0 126 chronic TVS 0.75 250	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese	TVS 5.0 50 TVS TVS TVS 50 TVS 50 TVS	varies* TVS TVS TVS TVS TVS VS 1000 TVS varies*
Qualifiers: Other: Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specification and assessment locations. Manganese(chronic) = See 36.6(4) for site-specification and assessment locations. Uranium(acute) = See 36.5(3) for details. Uranium(chronic) = See 36.5(3) for details. Zinc(acute) = See 36.6(4) for site-specification and assessment locations. Zinc(chronic) = See 36.6(4) for site-specification and assessment locations.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride Chlorine	6.5 - 9.0 ic (mg/L) acute TVS 0.019	7.0 126 chronic TVS 0.75 250 0.011	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T)	TVS 5.0 50 TVS TVS TVS 50 TVS TVS 50 TVS	varies*
Qualifiers: Other: Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specification and assessment locations. Manganese(chronic) = See 36.6(4) for site-specification and assessment locations. Uranium(acute) = See 36.5(3) for details. Uranium(chronic) = See 36.5(3) for details. Zinc(acute) = See 36.6(4) for site-specification and assessment locations. Zinc(chronic) = See 36.6(4) for site-specification and assessment locations.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride Chlorine Cyanide	6.5 - 9.0 ic (mg/L) acute TVS 0.019 0.005	7.0 126 chronic TVS 0.75 250 0.011	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T) Molybdenum(T)	TVS 5.0 50 TVS TVS TVS 50 TVS TVS	varies*
Qualifiers: Other: Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specification and assessment locations. Manganese(chronic) = See 36.6(4) for site-specification and assessment locations. Uranium(acute) = See 36.5(3) for details. Uranium(chronic) = See 36.5(3) for details. Zinc(acute) = See 36.6(4) for site-specification and assessment locations. Zinc(chronic) = See 36.6(4) for site-specification and assessment locations.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite	6.5 - 9.0 ic (mg/L) acute TVS 0.019 0.005 10	7.0 126 chronic TVS 0.75 250 0.011	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T) Molybdenum(T) Nickel	TVS 5.0 50 TVS TVS TVS 50 TVS 50 TVS TVS TVS	varies*
Qualifiers: Other: Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specification and assessment locations. Manganese(chronic) = See 36.6(4) for site-specification and assessment locations. Uranium(acute) = See 36.5(3) for details. Uranium(chronic) = See 36.6(4) for site-specific standards and assessment locations. Zinc(acute) = See 36.6(4) for site-specific standards and assessment locations. Zinc(chronic) = See 36.6(4) for site-specific	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan Inorgan Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus	6.5 - 9.0 ic (mg/L) acute TVS 0.019 0.005 10 0.05	7.0 126 chronic TVS 0.75 250 0.011	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T) Molybdenum(T) Nickel Nickel(T)	TVS 5.0 50 TVS TVS TVS 50 TVS 50 TVS TVS TVS	varies*
Water Supply Qualifiers: Other: Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specificatandards and assessment locations. Manganese(chronic) = See 36.5(3) for details. Curanium(acute) = See 36.5(3) for details. Curanium(chronic) = See 36.5(3) for details. Curanium(chronic) = See 36.6(4) for site-specific standards and assessment locations. Circ(chronic) = See 36.6(4) for site-specific standards and assessment locations.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan Inorgan Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus Sulfate	6.5 - 9.0 ic (mg/L) acute TVS 0.019 0.005 10 0.05	7.0 126 chronic TVS 0.75 250 0.011 WS	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T) Molybdenum(T) Nickel Nickel(T) Selenium	TVS 5.0 50 TVS TVS TVS 50 TVS 50 TVS TVS TVS TVS TVS TVS TVS	varies*
Qualifiers: Other: Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 Cadmium(chronic) = See 36.6(4) for site-specification and assessment locations. Manganese(chronic) = See 36.6(4) for site-specification and assessment locations. Uranium(acute) = See 36.5(3) for details. Uranium(chronic) = See 36.5(3) for details. Zinc(acute) = See 36.6(4) for site-specification and assessment locations. Zinc(chronic) = See 36.6(4) for site-specification and assessment locations.	D.O. (spawning) pH chlorophyll a (mg/m²) E. Coli (per 100 mL) Inorgan Inorgan Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus	6.5 - 9.0 ic (mg/L) acute TVS 0.019 0.005 10 0.05	7.0 126 chronic TVS 0.75 250 0.011	Cadmium(T) Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury(T) Molybdenum(T) Nickel Nickel(T) Selenium Silver	TVS 5.0 50 TVS TVS TVS 50 TVS TVS 50 TVS TVS TVS TVS	varies*

See 36.6 for further details on applied standards.

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6. Mainstem of West Willow Creek from immediately above Deerhorn Creek to the Park Regent Mine dump (37.890445, -106.936868). East Willow Creek from the confluence with Whited Creek to the confluence with West Willow Creek.

DRGRG06 Classifications Physic		and Biological		Metals (ug/L)		
Designation Aq Life Cold 1		DM	MWAT		acute	chronic
Reviewable Recreation E	Temperature °C	CS-I	CS-I	Arsenic	340	
Qualifiers:		acute	chronic	Arsenic(T)		7.6
Other:	D.O. (mg/L)		6.0	Cadmium	TVS	TVS
	D.O. (spawning)		7.0	Chromium III	TVS	TVS
*Uranium(acute) = See 36.5(3) for details.	рН	6.5 - 9.0		Chromium VI	TVS	TVS
*Uranium(chronic) = See 36.5(3) for details.	chlorophyll a (mg/m²)		150	Copper	TVS	TVS
	E. Coli (per 100 mL)		126	Iron(T)		1000
				Lead	TVS	TVS
	Inorganic (mg/L)			Manganese	TVS	TVS
		acute	chronic	Mercury(T)		0.01
	Ammonia	TVS	TVS	Molybdenum(T)		
	Boron			Nickel	TVS	TVS
	Chloride			Selenium	TVS	TVS
	Chlorine	0.019	0.011	Silver	TVS	TVS(tr)
	Cyanide	0.005		Uranium	varies*	varies*
	Nitrate			Zinc	TVS	TVS
	Nitrite	0.05				
	Phosphorus		0.11			
	Sulfate					
	Sulfide		0.002			

7. Mainstem of West Willow Creek from the Park Regent Mine dump (37.890445, -106.936868) to the confluence with East Willow Creek. Mainstem of Willow Creek, including all tributaries, from the confluence of East and West Willow Creeks to the confluence with the Rio Grande.

CORGRG07	Classifications	Physical and Biological		Metals (ug/L)			
Designation	Agriculture		DM	MWAT		acute	chronic
UP	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Arsenic	340	
	Recreation E		acute	chronic	Arsenic(T)		100
Qualifiers:		D.O. (mg/L)		6.0	Cadmium	varies*	varies*
Other:		D.O. (spawning)		7.0	Chromium III	TVS	TVS
*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 36.5(4).	pH	6.5 - 9.0		Chromium III(T)		100	
	chlorophyll a (mg/m²)		150*	Chromium VI	TVS	TVS	
*Phosphorus(chronic) = applies only above the facilities listed at 36.5(4). *Cadmium(acute) = See 36.6(4) for site-specific standards and assessment locations. *Cadmium(chronic) = See 36.6(4) for site-specific standards and assessment locations. *Copper(acute) = See 36.6(4) for site-specific standards and assessment locations. *Copper(chronic) = See 36.6(4) for site-specific		E. Coli (per 100 mL)		126	Copper	varies*	varies*
					Iron(T)		1000
		Inorganic (mg/L)			Lead	varies*	varies*
			acute	chronic	Manganese	varies*	varies*
		Ammonia	TVS	TVS	Mercury(T)		0.01
		Boron		0.75	Molybdenum(T)		150
standards and assessment locations. *Lead(acute) = See 36.6(4) for site-specific	Chloride			Nickel	TVS	TVS	
	standards and assessment locations. *Lead(chronic) = See 36.6(4) for site-specific standards and assessment locations. *Manganese(acute) = See 36.6(4) for site-specific standards and assessment locations.	Chlorine	0.019	0.011	Selenium	TVS	TVS
standards and		Cyanide	0.005		Silver	TVS	TVS
		Nitrate	100		Uranium	varies*	varies*
*Manganese(chronic) = See 36.6(4) for site-specific standards and assessment locations. *Uranium(acute) = See 36.5(3) for details.	Nitrite	10		Zinc	varies*	varies*	
	Phosphorus		0.11*				
*Uranium(chronic) = See 36.5(3) for details.		Sulfate					
*Zinc(acute) = standards and *Zinc(chronic)	See 36.6(4) for site-specific assessment locations. = See 36.6(4) for site-specific assessment locations.	Sulfide		0.002			

STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS - FOOTNOTES

- (A) Whenever a range of standards is listed and referenced to this footnote, the first number in the range is a strictly health-based value, based on the Commission's established methodology for human health-based standards. The second number in the range is a maximum contaminant level, established under the federal Safe Drinking Water Act that has been determined to be an acceptable level of this chemical in public water supplies, taking treatability and laboratory detection limits into account. Control requirements, such as discharge permit effluent limitations, shall be established using the first number in the range as the ambient water quality target, provided that no effluent limitation shall require an "end-of-pipe" discharge level more restrictive than the second number in the range. Water bodies will be considered in attainment of this standard, and not included on the Section 303(d) List, so long as the existing ambient quality does not exceed the second number in the range.
- (B) Reserved.
- (C) For certain site-specific temperature standards, the temperature excursions listed in Table I Footnote 5(c) of 31.16 do not apply. Assessment of ambient-based temperature standards should be conducted in a way that represents similar conditions to those under which the criteria were developed (i.e., air, low flow, and warming event excursions should not apply). Similarly, where site-specific adjustments to the winter shoulder season have been adopted, the winter shoulder season excursion does not apply.