

**COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL COMMISSION**

5 CCR 1002-33

**REGULATION NO. 33
CLASSIFICATIONS AND NUMERIC STANDARDS
FOR
UPPER COLORADO RIVER BASIN AND
NORTH PLATTE RIVER (PLANNING REGION 12)**

**APPENDIX 33-1
Stream Classifications and Water Quality Standards Tables**

Effective 06/30/~~2020~~2021

Abbreviations and Acronyms

Aq	=	Aquatic
°C	=	degrees Celsius
CL	=	cold lake temperature tier
CLL	=	cold large lake temperature tier
CS-I	=	cold stream temperature tier one
CS-II	=	cold stream temperature tier two
D.O.	=	dissolved oxygen
DM	=	daily maximum temperature
DUWS	=	direct use water supply
E. coli	=	<i>Escherichia coli</i>
EQ	=	existing quality
mg/L	=	milligrams per liter
mg/m ²	=	milligrams per square meter
mL	=	milliliter
MWAT	=	maximum weekly average temperature
OW	=	outstanding waters
sc	=	sculpin
SSE	=	site-specific equation
T	=	total recoverable
t	=	total
tr	=	trout
TVS	=	table value standard
µg/L	=	micrograms per liter
UP	=	use-protected
WS	=	water supply
WS-I	=	warm stream temperature tier one
WS-II	=	warm stream temperature tier two
WS-III	=	warm stream temperature tier three
WL	=	warm lake temperature tier

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2b. Mainstem of the Yampa River from a point immediately above the confluence with Oak Creek to a point immediately below the confluence with Elkhead Creek.						
COUCYA02B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT			
Reviewable	Aq Life Cold 1 Recreation E Water Supply	varies*	varies*	acute	chronic	
Qualifiers: Other: Temporary Modification(s): Arsenic(chronic) = hybrid temperature(MWAT) = current conditions* 7/1 - 9/30 temperature(MWAT) = current conditions* 11/1 - 11/30 Expiration Date of 12/31/2024 *TempMod: Temperature = applies from 7/1 - 9/30 and 11/1 - 11/30. Adopted 6/10/2019 *Uranium(acute) = See 33.5(3) for details. *Uranium(chronic) = See 33.5(3) for details. *Temperature = See 33.6(4) for temperature standards.	D.O. (mg/L)	---	6.0	Arsenic	340	---
	D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02
	pH	6.5 - 9.0	---	Cadmium	TVS	TVS
	chlorophyll a (mg/m ²)	---	---	Cadmium(T)	5.0	---
	E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
	Inorganic (mg/L)			Chromium III(T)	50	---
	Ammonia	TVS	TVS	Chromium VI	TVS	TVS
	Boron	---	0.75	Copper	TVS	TVS
	Chloride	---	250	Iron	---	WS
	Chlorine	0.019	0.011	Iron(T)	---	1000
	Cyanide	0.005	---	Lead	TVS	TVS
	Nitrate	10	---	Lead(T)	50	---
	Nitrite	0.05	---	Manganese	TVS	TVS/WS
	Phosphorus	---	---	Mercury(T)	---	0.01
	Sulfate	---	WS	Molybdenum(T)	---	150
Sulfide	---	0.002	Nickel	TVS	TVS	
			Nickel(T)	---	100	
			Selenium	TVS	TVS	
			Silver	TVS	TVS(tr)	
			Uranium	varies*	varies*	
			Zinc	TVS	TVS/TVS(sc)	

13b. Mainstem of Foidel Creek, including all tributaries and wetlands, from the source to the confluence with Middle Creek. Mainstem of Fish Creek, including all tributaries and wetlands, from County Road 27 (40.355559, -107.105131) to the confluence with Trout Creek, except for specific listings in Segment 13g. Mainstem of Middle Creek, including all tributaries and wetlands, from County Road 27 (40.339183, -107.025533) to the confluence with Trout Creek.						
COUCYA13B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT			
Reviewable	Aq Life Warm 1 Recreation E	varies*	varies*	acute	chronic	
Qualifiers: Other: Temporary Modification(s): Selenium(chronic) = current conditions* Expiration Date of 12/31/2022 *Iron(T)(chronic) = See section 33.6(4) for standards and assessment locations for Foidel Creek and Middle Creek. *Uranium(acute) = See 33.5(3) for details. *Uranium(chronic) = See 33.5(3) for details. *Temperature = See 33.6(4) for temperature standards. *TempMod: Selenium = applies to Foidel Creek and Middle Creek.	D.O. (mg/L)	---	6.0	Arsenic	340	---
	D.O. (spawning)	---	7.0	Arsenic(T)	---	7.6
	pH	6.5 - 9.0	---	Cadmium	TVS	TVS
	chlorophyll a (mg/m ²)	---	150	Chromium III	TVS	TVS
	E. Coli (per 100 mL)	---	126	Chromium III(T)	---	100
	Inorganic (mg/L)			Chromium VI	TVS	TVS
	Ammonia	TVS	TVS	Copper	TVS	TVS
	Boron	---	0.75	Iron(T)	---	1000
	Chloride	---	---	Iron(T)	---	varies*
	Chlorine	0.019	0.011	Lead	TVS	TVS
	Cyanide	0.005	---	Manganese	TVS	TVS
	Nitrate	100	---	Mercury(T)	---	0.01
	Nitrite	0.05	---	Molybdenum(T)	---	150
	Phosphorus	---	0.11	Nickel	TVS	TVS
	Sulfate	---	---	Selenium	TVS	TVS
Sulfide	---	0.002	Silver	TVS	TVS	
			Uranium	varies*	varies*	
			Zinc	TVS	TVS	

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

D.O. = dissolved oxygen
 DM = daily maximum
 MWAT = maximum weekly average temperature
 See 33.6 for further details on applied standards.

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13d. Mainstem of Dry Creek, including all tributaries and wetlands, from the source to above the confluence with Temple Gulch.						
COUCYA13D	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
UP	Aq Life Warm 2 Recreation E	Temperature °C	WS-II	WS-II	Arsenic	340 ---
		acute	chronic	Arsenic(T)	---	100
Qualifiers:		D.O. (mg/L)	---	5.0	Cadmium	TVS TVS
Other:		pH	6.5 - 9.0	---	Chromium III	TVS TVS
Temporary Modification(s): Iron(chronic) = current condition Expiration Date of 6/30/2023 Selenium(chronic) = current conditions Expiration Date of 12/31/2022 *Iron(T)(chronic) = See section 33.6(4) for standards and assessment locations. *Uranium(acute) = See 33.5(3) for details. *Uranium(chronic) = See 33.5(3) for details.		chlorophyll a (mg/m ²)	---	150	Chromium III(T)	---
	3/1 - 4/30	E. Coli (per 100 mL)	---	126	Chromium VI	TVS TVS
		Inorganic (mg/L)			Copper	TVS TVS
		acute	chronic	Iron(T)	---	varies*
		Ammonia	TVS	TVS	Lead	TVS TVS
		Boron	---	0.75	Manganese	TVS TVS
		Chloride	---	---	Mercury(T)	---
		Chlorine	0.019	0.011	Molybdenum(T)	---
		Cyanide	0.005	---	Nickel	TVS TVS
		Nitrate	100	---	Selenium	TVS TVS
		Nitrite	0.05	---	Silver	TVS TVS
		Phosphorus	---	0.17	Uranium	varies* varies*
		Sulfate	---	---	Zinc	TVS TVS
		Sulfide	---	0.002		

13e. Mainstem of Sage Creek, including all tributaries and wetlands, from the source to the confluence with the Yampa River.						
COUCYA13E	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
UP	Aq Life Warm 2 Water Supply Recreation N	Temperature °C	WS-II	WS-II	Arsenic	340 ---
		acute	chronic	Arsenic(T)	---	0.02-10 ^A
Qualifiers:		D.O. (mg/L)	---	5.0	Cadmium	TVS TVS
Other:		pH	6.5 - 9.0	---	Cadmium(T)	5.0 ---
Temporary Modification(s): Selenium(chronic) = current conditions* Expiration Date of 12/31/2022 *Iron(T)(chronic) = See section 33.6(4) for standards and assessment locations for Sage Creek. *Uranium(acute) = See 33.5(3) for details. *Uranium(chronic) = See 33.5(3) for details. *TempMod: Selenium = Adopted 6/9/2014		chlorophyll a (mg/m ²)	---	---	Chromium III	---
		E. Coli (per 100 mL)	---	630	Chromium III(T)	50 ---
		Inorganic (mg/L)			Chromium VI	TVS TVS
		acute	chronic	Copper	TVS TVS	
		Ammonia	TVS	TVS	Iron	---
		Boron	---	0.75	Iron(T)	---
		Chloride	---	250	Iron(T)	---
		Chlorine	0.019	0.011	Lead	TVS TVS
		Cyanide	0.005	---	Lead(T)	50 ---
		Nitrate	10	---	Manganese	TVS TVS/WS
		Nitrite	0.05	---	Mercury(T)	---
		Phosphorus	---	0.17	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS TVS
		Sulfide	---	0.002	Nickel(T)	---
					Selenium	TVS TVS
					Silver	TVS TVS
					Uranium	varies* varies*
					Zinc	TVS TVS

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

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 33.6 for further details on applied standards.

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13g. All tributaries to Fish Creek from the confluence with Cow Camp Creek (40.398773, -107.016467) to the confluence with Trout Creek.						
COUCYA13G	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Warm 1 Recreation E	WS-II	WS-II	Arsenic	340	---
Qualifiers:		acute	chronic	Arsenic(T)	---	7.6
Other:	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Temporary Modification(s): Selenium(chronic) = current conditions* Expiration Date of 12/31/2022	pH	6.5 - 9.0	---	Chromium III	TVS	TVS
*Uranium(acute) = See 33.5(3) for details. *Uranium(chronic) = See 33.5(3) for details. <u>*TempMod: Selenium = Adopted 6/9/2014</u>	chlorophyll a (mg/m ²)	---	150	Chromium III(T)	---	100
	E. Coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
	Inorganic (mg/L)			Copper	TVS	TVS
	acute	chronic	Iron(T)	---	1000	
	Ammonia	TVS	TVS	Lead	TVS	TVS
	Boron	---	0.75	Manganese	TVS	TVS
	Chloride	---	---	Mercury(T)	---	0.01
	Chlorine	0.019	0.011	Molybdenum(T)	---	150
	Cyanide	0.005	---	Nickel	TVS	TVS
	Nitrate	100	---	Selenium	TVS	TVS
	Nitrite	0.05	---	Silver	TVS	TVS
	Phosphorus	---	0.17	Uranium	varies*	varies*
	Sulfate	---	---	Zinc	TVS	TVS
	Sulfide	---	0.002			
13h. Mainstem of Dry Creek (near Hayden), including all tributaries and wetlands, from above the confluence with Temple Gulch to the confluence with the Yampa River.						
COUCYA13H	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
UP	Aq Life Warm 2 Recreation E	WS-II	WS-II	Arsenic	340	---
Qualifiers:		acute	chronic	Arsenic(T)	---	7.6
Other:	D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Temporary Modification(s): Selenium(chronic) = current conditions Expiration Date of 12/31/2022	pH	6.5 - 9.0	---	Chromium III	TVS	TVS
*Uranium(acute) = See 33.5(3) for details. *Uranium(chronic) = See 33.5(3) for details.	chlorophyll a (mg/m ²)	---	150	Chromium III(T)	---	100
	E. Coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
	Inorganic (mg/L)			Copper	TVS	TVS
	acute	chronic	Iron(T)	---	1000	
	Ammonia	TVS	TVS	Lead	TVS	TVS
	Boron	---	0.75	Manganese	TVS	TVS
	Chloride	---	---	Mercury(T)	---	0.01
	Chlorine	0.019	0.011	Molybdenum(T)	---	150
	Cyanide	0.005	---	Nickel	TVS	TVS
	Nitrate	100	---	Selenium	TVS	TVS
	Nitrite	0.05	---	Silver	TVS	TVS
	Phosphorus	---	0.17	Uranium	varies*	varies*
	Sulfate	---	---	Zinc	TVS	TVS
	Sulfide	---	0.002			

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

D.O. = dissolved oxygen
 DM = daily maximum
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 See 33.6 for further details on applied standards.

REGULATION #33 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Yampa River Basin

13i. Mainstem of Grassy Creek, including all tributaries and wetlands, from the source to immediately above the confluence with Scotchmans Gulch.						
COUCYA13I	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture UP Aq Life Warm 2 Recreation N	DM	MWAT	acute chronic		
Qualifiers:	D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL)	acute	chronic	Arsenic 340 --- Arsenic(T) --- 100 Cadmium TVS TVS Chromium III TVS TVS Chromium III(T) --- 100 Chromium VI TVS TVS Copper TVS TVS Iron(T) --- 1000 Lead TVS TVS Manganese TVS TVS Mercury(T) --- 0.01 Molybdenum(T) --- 150 Nickel TVS TVS Selenium TVS TVS Silver TVS TVS Uranium varies* varies* Zinc TVS TVS		
Other:	Temporary Modification(s): Iron(chronic) = current conditions* Expiration Date of 6/30/2023 Selenium(chronic) = current conditions* Expiration Date of 12/31/2022 *Uranium(acute) = See 33.5(3) for details. *Uranium(chronic) = See 33.5(3) for details. *TempMod: Iron = applies to Grassy Creek. <u>*TempMod: Selenium = Adopted 6/9/2014</u>	Inorganic (mg/L)				
		acute	chronic			
		Ammonia	TVS	TVS		
		Boron	---	0.75		
		Chloride	---	---		
		Chlorine	0.019	0.011		
		Cyanide	0.005	---		
		Nitrate	100	---		
		Nitrite	0.05	---		
		Phosphorus	---	0.17		
		Sulfate	---	---		
		Sulfide	---	0.002		
13j. Mainstem of Grassy Creek (near Hayden), including all tributaries and wetlands, from above the confluence with Scotchmans Gulch to the confluence with the Yampa River.						
COUCYA13J	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture UP Aq Life Warm 2 Recreation N	DM	MWAT	acute chronic		
Qualifiers:	D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL)	acute	chronic	Arsenic 340 --- Arsenic(T) --- 100 Cadmium TVS TVS Chromium III TVS TVS Chromium III(T) --- 100 Chromium VI TVS TVS Copper TVS TVS Iron(T) --- 1000 Lead TVS TVS Manganese TVS TVS Mercury(T) --- 0.01 Molybdenum(T) --- 150 Nickel TVS TVS Selenium TVS TVS Silver TVS TVS Uranium varies* varies* Zinc TVS TVS		
Other:	Temporary Modification(s): Selenium(chronic) = current conditions* Expiration Date of 12/31/2022 *Uranium(acute) = See 33.5(3) for details. *Uranium(chronic) = See 33.5(3) for details. <u>*TempMod: Selenium = Adopted 12/11/2017</u>	Inorganic (mg/L)				
		acute	chronic			
		Ammonia	TVS	TVS		
		Boron	---	0.75		
		Chloride	---	---		
		Chlorine	0.019	0.011		
		Cyanide	0.005	---		
		Nitrate	100	---		
		Nitrite	0.05	---		
		Phosphorus	---	0.17		
		Sulfate	---	---		
		Sulfide	---	0.002		

All metals are dissolved unless otherwise noted.
 T = total recoverable
 t = total
 tr = trout
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D.O. = dissolved oxygen
 DM = daily maximum
 MWAT = maximum weekly average temperature
 See 33.6 for further details on applied standards.