

**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 06/30/2021

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

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

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			DM	MWAT			
UP	Agriculture Aq Life Warm 2 Recreation E	Temperature °C	WS-II	WS-II	Arsenic	340	---
Qualifiers:			acute	chronic	Arsenic(T)	---	100
Other:		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Temporary Modification(s):		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
Iron(chronic) = current condition	3/1 - 4/30	chlorophyll a (mg/m ²)	---	150	Chromium III(T)	---	100
Expiration Date of 6/30/2023		E. Coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
*Iron(T)(chronic) = See section 33.6(4) for standards and assessment locations.		Inorganic (mg/L)			Copper	TVS	TVS
Uranium(acute) = See 33.5(3) for details.			acute	chronic	Iron(T)	---	varies
*Uranium(chronic) = See 33.5(3) for details.		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			

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			DM	MWAT			
UP	Agriculture Aq Life Warm 2 Water Supply Recreation N	Temperature °C	WS-II	WS-II	Arsenic	340	---
Qualifiers:			acute	chronic	Arsenic(T)	---	0.02-10 ^A
Other:		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
Temporary Modification(s):		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
Selenium(chronic) = current conditions*		chlorophyll a (mg/m ²)	---	---	Chromium III	---	TVS
Expiration Date of 12/31/2022		E. Coli (per 100 mL)	---	630	Chromium III(T)	50	---
*Iron(T)(chronic) = See section 33.6(4) for standards and assessment locations for Sage Creek.		Inorganic (mg/L)			Chromium VI	TVS	TVS
*Uranium(acute) = See 33.5(3) for details.			acute	chronic	Copper	TVS	TVS
*Uranium(chronic) = See 33.5(3) for details.		Ammonia	TVS	TVS	Iron	---	WS
*TempMod: Selenium = Adopted 6/9/2014		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	250	Iron(T)	---	varies*
		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)	---	0.01
		Phosphorus	---	0.17	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					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.

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

13f. Mainstem of Trout Creek, including all tributaries and wetlands, from a point immediately below the confluence with Fish Creek to the confluence with the Yampa River.							
COUCYA13F	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1 Recreation E Water Supply	varies*	varies*	340	---	---	
Qualifiers:		acute	chronic	Arsenic(T)	---	0.02	
Other:	Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2024 *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	Cadmium	TVS	
		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	
		pH	6.5 - 9.0	---	Chromium III	---	
		chlorophyll a (mg/m ²)	---	150	Chromium III(T)	50	
		E. Coli (per 100 mL)	---	126	Chromium VI	TVS	
		Inorganic (mg/L)			Copper	TVS	TVS
		acute	chronic	Iron	---	WS	
		Ammonia	TVS	TVS	Iron(T)	---	
		Boron	---	0.75	Lead	TVS	
		Chloride	---	250	Lead(T)	50	
		Chlorine	0.019	0.011	Manganese	TVS	
		Cyanide	0.005	---	Mercury(T)	---	
		Nitrate	10	---	Molybdenum(T)	---	
		Nitrite	0.05	---	Nickel	TVS	
		Phosphorus	---	0.11	Nickel(T)	---	
		Sulfate	---	WS	Selenium	TVS	
		Sulfide	---	0.002	Silver	TVS	
					Uranium	varies*	
					Zinc	TVS	

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	340	---	---	
Qualifiers:		acute	chronic	Arsenic(T)	---	7.6	
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. *TempMod: Selenium = Adopted 6/9/2014	D.O. (mg/L)	---	5.0	Cadmium	TVS	
		pH	6.5 - 9.0	---	Chromium III	TVS	
		chlorophyll a (mg/m ²)	---	150	Chromium III(T)	---	
		E. Coli (per 100 mL)	---	126	Chromium VI	TVS	
		Inorganic (mg/L)			Copper	TVS	TVS
		acute	chronic	Iron(T)	---	1000	
		Ammonia	TVS	TVS	Lead	TVS	
		Boron	---	0.75	Manganese	TVS	
		Chloride	---	---	Mercury(T)	---	
		Chlorine	0.019	0.011	Molybdenum(T)	---	
		Cyanide	0.005	---	Nickel	TVS	
		Nitrate	100	---	Selenium	TVS	
		Nitrite	0.05	---	Silver	TVS	
		Phosphorus	---	0.17	Uranium	varies*	
		Sulfate	---	---	Zinc	TVS	
		Sulfide	---	0.002		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.

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

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	Temperature °C	WS-II	WS-II	Arsenic	340	---
			acute	chronic	Arsenic(T)	---	7.6
Qualifiers:	D.O. (mg/L)	---	5.0		Cadmium	TVS	TVS
Other:	pH	6.5 - 9.0	---		Chromium III	TVS	TVS
*Uranium(acute) = See 33.5(3) for details.	chlorophyll a (mg/m ²)	---	150		Chromium III(T)	---	100
*Uranium(chronic) = See 33.5(3) for details.	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				

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	DM	MWAT	acute	chronic		
UP	Aq Life Warm 2 Recreation N	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):	chlorophyll a (mg/m ²)	---	---		Chromium III(T)	---	100
Iron(chronic) = current conditions*	E. Coli (per 100 mL)	---	630		Chromium VI	TVS	TVS
Expiration Date of 6/30/2023	Inorganic (mg/L)				Copper	TVS	TVS
Selenium(chronic) = current conditions*		acute	chronic		Iron(T)	---	1000
Expiration Date of 12/31/2022	Ammonia	TVS	TVS		Lead	TVS	TVS
*Uranium(acute) = See 33.5(3) for details.	Boron	---	0.75		Manganese	TVS	TVS
*Uranium(chronic) = See 33.5(3) for details.	Chloride	---	---		Mercury(T)	---	0.01
*TempMod: Iron = applies to Grassy Creek.	Chlorine	0.019	0.011		Molybdenum(T)	---	150
*TempMod: Selenium = Adopted 6/9/2014	Cyanide	0.005	---		Nickel	TVS	TVS
	Nitrate	100	---		Selenium	TVS	TVS
	Nitrite	0.05	---		Silver	TVS	TVS
	Phosphorus	---	0.17		Uranium	varies*	varies*
	Sulfate	---	---		Zinc	TVS	TVS
	Sulfide	---	0.002				

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

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

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

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	DM	MWAT	acute	chronic		
UP	Aq Life Warm 2 Recreation N	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): Selenium(chronic) = current conditions* Expiration Date of 12/31/2022		chlorophyll a (mg/m ²)	---	---	Chromium III(T)	---	100
*Uranium(acute) = See 33.5(3) for details. *Uranium(chronic) = See 33.5(3) for details. *TempMod: Selenium = Adopted 12/11/2017		E. Coli (per 100 mL)	---	630	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			
14. Mainstem of Elkhead Creek, including all tributaries and wetlands, from the boundary of the National Forest lands, to a point immediately below the confluence with Calf Creek. Dry Fork Elkhead Creek, including all tributaries and wetlands, from the source to a point immediately below 80A Road (40.612676, -107.228533), which are not on National Forest lands.							
COUCYA14	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	CS-II	CS-II	Arsenic	340	---
		acute	chronic	Arsenic(T)	---	0.02	
Qualifiers:		D.O. (mg/L)	---	6.0	Cadmium	TVS	TVS
Other:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0	---
*Uranium(acute) = See 33.5(3) for details. *Uranium(chronic) = See 33.5(3) for details.		pH	6.5 - 9.0	---	Chromium III	---	TVS
		chlorophyll a (mg/m ²)	---	150	Chromium III(T)	50	---
		E. Coli (per 100 mL)	---	126	Chromium VI	TVS	TVS
		Inorganic (mg/L)			Copper	TVS	TVS
		acute	chronic	Iron	---	WS	
		Ammonia	TVS	TVS	Iron(T)	---	1000
		Boron	---	0.75	Lead	TVS	TVS
		Chloride	---	250	Lead(T)	50	---
		Chlorine	0.019	0.011	Manganese	TVS	TVS/WS
		Cyanide	0.005	---	Mercury(T)	---	0.01
		Nitrate	10	---	Molybdenum(T)	---	150
		Nitrite	0.05	---	Nickel	TVS	TVS
		Phosphorus	---	0.11	Nickel(T)	---	100
		Sulfate	---	WS	Selenium	TVS	TVS
		Sulfide	---	0.002	Silver	TVS	TVS(tr)
					Uranium	varies*	varies*
					Zinc	TVS	TVS

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

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

STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS – FOOTNOTES

- (A) Whenever a range of standards is listed and referenced to this footnote, the first number in the range is a strictly health-based value, based on the Commission's established methodology for human health-based standards. The second number in the range is a maximum contaminant level, established under the federal Safe Drinking Water Act that has been determined to be an acceptable level of this chemical in public water supplies, taking treatability and laboratory detection limits into account. Control requirements, such as discharge permit effluent limitations, shall be established using the first number in the range as the ambient water quality target, provided that no effluent limitation shall require an "end-of-pipe" discharge level more restrictive than the second number in the range. Water bodies will be considered in attainment of this standard, and not included on the Section 303(d) List, so long as the existing ambient quality does not exceed the second number in the range.

- (B) Assessment of adequate refuge shall rely on the Cold Large Lake table value temperature criterion and applicable dissolved oxygen standard rather than the site-specific temperature standard.