

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

**5 CCR 1002-38**

**REGULATION NO. 38  
CLASSIFICATIONS AND NUMERIC STANDARDS  
FOR  
SOUTH PLATTE RIVER BASIN, LARAMIE RIVER BASIN  
REPUBLICAN RIVER BASIN, SMOKY HILL RIVER BASIN**

**APPENDIX 38-1  
Stream Classifications and Water Quality Standards Tables**

Effective 06/30/~~2018~~2019

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Upper South Platte River Basin

10a. Mainstems of East Plum Creek, West Plum Creek, and Plum Creek from the boundary of National Forest lands to Chatfield Reservoir, mainstems of Stark Creek and Gove Creek from the boundary of National Forest lands to their confluence.

COSPUS10A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 1	Temperature °C	WS-I	WS-I	Aluminum	---	---
	Recreation E		<b>acute</b>	<b>chronic</b>	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---	---
<b>Other:</b>		chlorophyll a (mg/m2)	---	150*	Cadmium	TVS	TVS
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
Arsenic(chronic) = hybrid		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
Expiration Date of 12/31/2021			<b>acute</b>	<b>chronic</b>	Chromium III(T)	50	---
<del>Copper(ac/ch) = current condition*</del>		Ammonia	TVS	TVS	Chromium VI	TVS	TVS
<del>Expiration Date of 12/31/2018</del>		Boron	---	0.75	Copper	TVS	TVS
<del>Manganese(chronic) = current condition*</del>		Chloride	---	250	Iron	---	WS
<del>Expiration Date of 6/30/2019</del>		Chlorine	0.019	0.011	Iron(T)	---	1000
temperature(DM/MWAT) = current condition*	12/1 - 2/29	Cyanide	0.005	---	Lead	TVS	TVS
Expiration Date of 12/31/2020		Nitrate	10	---	Lead(T)	50	---
		Nitrite	---	0.5	Manganese	TVS	TVS/WS
*chlorophyll a (mg/m2)(chronic) = applies only above the facilities listed at 38.5(4).		Phosphorus	---	0.17*	Mercury	---	0.01(t)
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		Sulfate	---	WS	Molybdenum(T)	---	150
*TempMod: Copper = East Plum Creek and Plum Creek below the PCWRA discharge.		Sulfide	---	0.002	Nickel	TVS	TVS
*TempMod: Manganese = applies to the manganese WS standard.					Nickel(T)	---	100
*TempMod: temperature(12/1 - 2/29) = East Plum Creek and Plum Creek below the PCWRA discharge.					Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	---	---
					Zinc	TVS	TVS

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Upper South Platte River Basin

14. Mainstem of the South Platte River from the outlet of Chatfield Reservoir to the Burlington Ditch diversion in Denver, Colorado.							
COSPUS14	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 1 Recreation E Water Supply	Temperature °C	WS-I*	WS-I*	Aluminum	---	---
			<b>acute</b>	<b>chronic</b>	Arsenic	340	---
		D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---	---
<b>Other:</b>		chlorophyll a (mg/m2)	---	---	Cadmium	TVS	TVS
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
Arsenic(chronic) = hybrid		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
Expiration Date of 12/31/2021			<b>acute</b>	<b>chronic</b>	Chromium III(T)	50	---
Chloride(chronic) = current condition	12/1 - 2/13	Ammonia	TVS	TVS	Chromium VI	TVS	TVS
temperature(DM/MWAT) = current condition		Boron	---	0.75	Copper	---	TVS*
Expiration Date of 12/31/2020		Chloride	---	250	Copper	TVS*	---
*Copper(acute) = Copper BLM-based FMB		Chlorine	0.019	0.011	Iron	---	WS
Cu FMB(ac)=31.5 ug/l		Cyanide	0.005	---	Iron(T)	---	1000
downstream of Marcy Gulch.		Nitrate	10	---	Lead	TVS	TVS
*Copper(chronic) = Copper BLM-based FMB		Nitrite	---	0.5	Lead(T)	50	---
Cu FMB(ch)=20.8 ug/l		Phosphorus	---	---	Manganese	TVS	TVS/190
downstream of Marcy Gulch.		Sulfate	---	WS	Mercury	---	0.01(t)
*Temperature = summer criteria apply from 2/14 - 11/30		Sulfide	---	0.002	Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	---	---
					Zinc	TVS	TVS

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Upper South Platte River Basin

15. Mainstem of the South Platte River from the Burlington Ditch diversion in Denver, Colorado, to a point immediately below the confluence with Big Dry Creek.									
COSPUS15	Classifications	Physical and Biological			Metals (ug/L)				
Designation		DM	MWAT		acute	chronic			
UP	Agriculture								
	Aq Life Warm 2	WS-I	WS-I	Temperature °C	---	---			
	Recreation E	acute	chronic		340	---			
	Water Supply	varies*	varies*	D.O. (mg/L)	---	0.02-10 <sup>A</sup>			
<b>Qualifiers:</b>				pH	6.0-9.0*	---			
<b>Other:</b>				pH	6.5 - 9.0	---			
Temporary Modification(s):				chlorophyll a (mg/m2)	---	---			
Chloride(chronic) = current condition				E. Coli (per 100 mL)	---	126			
Sulfate(chronic) = current condition		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS		
temperature(DM/MWAT) = current condition					Chromium III(T)	50	---		
Expiration Date of 12/31/2020					Chromium VI	TVS	TVS		
Discharger Specific Variance(s):					<b>acute</b>	<b>chronic</b>	Copper	---	TVS*
Selenium(acute) = TVS: no limit				Ammonia	TVS*	TVS*	Copper	TVS*	---
Selenium(chronic) = TVS: 24 µg/L				Boron	---	0.75	Iron	---	WS
Expiration Date of 12/31/2023				Chloride	---	250	Iron(T)	---	1000
*Ammonia(acute) = See attached table for site-specific standards.				Chlorine	0.019	0.011	Lead	TVS	TVS
*Ammonia(chronic) = See attached table for site-specific standards.				Cyanide	0.005	---	Lead(T)	50	---
*Copper(acute) = Copper BLM-based FMB Cu FMB(ac)=35.1 ug/l				Nitrate	10	---	Manganese	TVS	TVS/400
Downstream of the Metro Hite WWTF outfall.				Nitrite	---	1.0	Mercury	---	0.01(t)
*Copper(chronic) = Copper BLM-based FMB Cu FMB(ch)= 23.5 ug/l				Phosphorus	---	---	Molybdenum(T)	---	150
Downstream of the Metro Hite WWTF outfall.				Sulfate	---	WS	Nickel	TVS	TVS
*D.O. (mg/L)(acute) = See attached table for site-specific standards.				Sulfide	---	0.002	Nickel(T)	---	100
*D.O. (mg/L)(chronic) = See attached table for site-specific standards.							Selenium	TVS	TVS
*pH(acute) = 6.0 - 9.0 from 64th Ave. downstream 2 miles							Silver	TVS	TVS
*Variance: Selenium = see 38.6(6) for details.							Uranium	---	---
							Zinc	TVS	TVS

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Upper South Platte River Basin

16g. Marcy Gulch, including all wetlands from the source to the confluence with the South Platte.							
COSPUS16G	Classifications	Physical and Biological			Metals (ug/L)		
Designation			DM	MWAT			
					acute	chronic	
UP	Agriculture Aq Life Warm 2 Recreation E	Temperature °C	WS-II	WS-II	Aluminum	---	---
<b>Qualifiers:</b>			<b>acute</b>	<b>chronic</b>	Arsenic	340	---
<b>Other:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	100
Temporary Modification(s): temperature(DM/MWAT) = current condition*	12/1 - 2/29	pH	6.5 - 9.0	---	Beryllium	---	---
Expiration Date of 12/31/2020		chlorophyll a (mg/m2)	---	---	Cadmium	TVS	TVS
*Copper(acute) = Copper BLM-based FMB Cu FMB(ac)=67.1 ug/l below the Centennial WWTF.		E. Coli (per 100 mL)	---	126	Chromium III	TVS	TVS
*Copper(chronic) = Copper BLM-based FMB Cu FMB(ch)=43.3 ug/l below the Centennial WWTF.		<b>Inorganic (mg/L)</b>			Chromium III(T)	---	100
*Selenium(acute) = See section 38.6(4)(b) for assessment locations.			<b>acute</b>	<b>chronic</b>	Chromium VI	TVS	TVS
*Selenium(chronic) = See section 38.6(4)(b) for assessment locations.		Ammonia	TVS	TVS	Copper	---	TVS*
*TempMod: temperature(12/1 - 2/29) = downstream of Centennial WWTF		Boron	---	0.75	Copper	TVS*	---
		Chloride	---	---	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Manganese	TVS	TVS
		Nitrate	100	---	Mercury	---	0.01(t)
		Nitrite	---	0.5	Molybdenum(T)	---	---
		Phosphorus	---	---	Nickel	TVS	TVS
		Sulfate	---	---	Selenium	21*	13*
		Sulfide	---	0.002	Silver	TVS	TVS
					Uranium	---	---
					Zinc	TVS	TVS

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Cherry Creek Basin

1. Mainstem of Cherry Creek from the source of East and West Cherry Creek to the inlet of Cherry Creek Reservoir.						
COSPCH01	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Aluminum	---
	Recreation E		acute	chronic	Arsenic	340
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---
<b>Other:</b>		chlorophyll a (mg/m2)	---	150*	Cadmium	TVS
<del>Temporary Modification(s):</del> Copper(ac/ch) = current condition* Expiration Date of 12/31/2020  *chlorophyll a (mg/m2)(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = effective 12/31/2020. Applies only above the facilities listed at 38.5(4). <del>*TempMod: Copper = below the PWSD WWTF outfall.</del>		<b>Inorganic (mg/L)</b>		Cadmium(T)	5.0	---
			acute	chronic	Chromium III	---
		Ammonia	TVS	TVS	Chromium III(T)	50
		Boron	---	0.75	Chromium VI	TVS
		Chloride	---	250	Copper	TVS
		Chlorine	0.019	0.011	Iron	---
		Cyanide	0.005	---	Iron(T)	---
		Nitrate	10	---	Lead	TVS
		Nitrite	---	0.5	Lead(T)	50
		Phosphorus	---	0.17*	Manganese	TVS
		Sulfate	---	WS	Mercury	---
		Sulfide	---	0.002	Mercury(T)	---
					Molybdenum(T)	---
					Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS

3. Mainstem of Cherry Creek from the outlet of Cherry Creek Reservoir to the confluence with the South Platte River.						
COSPCH03	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Aluminum	---
	Recreation E		acute	chronic	Arsenic	340
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---
<b>Other:</b>		chlorophyll a (mg/m2)	---	---	Cadmium	TVS
<del>Temporary Modification(s):</del> Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		<b>Inorganic (mg/L)</b>		Cadmium(T)	5.0	---
			acute	chronic	Chromium III	---
		Ammonia	TVS	TVS	Chromium III(T)	50
		Boron	---	0.75	Chromium VI	TVS
		Chloride	---	250	Copper	TVS
		Chlorine	0.019	0.011	Iron	---
		Cyanide	0.005	---	Iron(T)	---
		Nitrate	10	---	Lead	TVS
		Nitrite	---	0.5	Lead(T)	50
		Phosphorus	---	---	Manganese	TVS
		Sulfate	---	WS	Mercury	---
		Sulfide	---	0.002	Mercury(T)	---
					Molybdenum(T)	---
					Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS

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

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Bear Creek Basin

1c. Bear Creek Reservoir.								
COSPBE01C Classifications		Physical and Biological			Metals (ug/L)			
Designation			DM	MWAT	acute	chronic		
Reviewable	Agriculture	Temperature °C	1/1 - 3/31	CLL	CLL	Aluminum	---	---
	Aq Life Cold 1	Temperature °C	4/1 - 12/31	CLL	23.3	Arsenic	340	---
	Recreation E					Arsenic(T)	---	0.02
	Water Supply							
Qualifiers:			acute	chronic				
Other:		D.O. (mg/L)	---	6.0		Beryllium	---	---
Temporary Modification(s):		D.O. (spawning)	---	7.0		Cadmium	TVS(tr)	TVS
Arsenic(chronic) = hybrid		pH	6.5 - 9.0	---		Cadmium(T)	5.0	---
Expiration Date of 12/31/2021		chlorophyll a (ug/L)	7/1 - 9/30	---	12.2*	Chromium III	---	TVS
chlorophyll a (ug/L)(chronic) = current condition		E. Coli (per 100 mL)	---	---	126	Chromium III(T)	50	---
Phosphorus(chronic) = current condition						Chromium VI	TVS	TVS
Expiration Date of 12/31/2020		Inorganic (mg/L)				Copper	TVS	TVS
			acute	chronic		Iron	---	WS
*chlorophyll a (ug/L)(chronic) = mean concentration measured through collection of samples that are representative of the mixed layer during summer months (July, August, September) and with an exceedance frequency of once in five years.		Ammonia	TVS	TVS		Iron(T)	---	1000
*Phosphorus(chronic) = mean concentration measured through collection of samples that are representative of the mixed layer during summer months (July, August, September) and with an exceedance frequency of once in five years.		Boron	---	0.75		Lead	TVS	TVS
		Chloride	---	250		Lead(T)	50	---
		Chlorine	0.019	0.011		Manganese	TVS	TVS/WS
		Cyanide	0.005	---		Mercury	---	0.01(t)
		Nitrate	10	---		Molybdenum(T)	---	150
		Nitrite	---	0.05		Nickel	TVS	TVS
		Phosphorus	7/1 - 9/30	---	22.2*	Nickel(T)	---	100
		Sulfate	---	WS		Selenium	TVS	TVS
		Sulfide	---	0.002		Silver	TVS	TVS(tr)
						Uranium	---	---
						Zinc	TVS	TVS

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Clear Creek Basin

2a. Mainstem of Clear Creek, including all tributaries and wetlands, from the I-70 bridge above Silver Plume to a point just above the confluence with West Fork Clear Creek, except for specific listings in Segments 3a and 3b.						
COSPCL02A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute chronic		
Reviewable*	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Aluminum	---
	Recreation E	acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---
Qualifiers:		D.O. (spawning)	---	7.0	Beryllium	---
Other:		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
Temporary Modification(s):		chlorophyll a (mg/m2)	---	150*	Cadmium(T)	5.0
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Chromium III	---
Expiration Date of 12/31/2021					Chromium III(T)	50
Zinc(chronic) = 353		Inorganic (mg/L)			Chromium VI	TVS
Zinc(acute) = 586		acute	chronic	Copper	TVS	TVS
Expiration Date of 7/1/2020		Ammonia	TVS	TVS	Iron	---
*chlorophyll a (mg/m2)(chronic) = applies only above the facilities listed at 38.5(4).		Boron	---	0.75	Iron(T)	---
*Designation: 9/30/00 Baseline does not apply		Chloride	---	250	Lead	TVS
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		Chlorine	0.019	0.011	Lead(T)	50
*Zinc(acute) = $0.978e^{(0.8537[\ln(\text{hardness})]+1.9467)}$		Cyanide	0.005	---	Manganese	TVS
*Zinc(chronic) = $0.986e^{(0.8537[\ln(\text{hardness})]+1.8032)}$		Nitrate	10	---	Mercury	---
		Nitrite	---	0.05	Molybdenum(T)	---
		Phosphorus	---	0.11*	Nickel	TVS
		Sulfate	---	WS	Nickel(T)	---
		Sulfide	---	0.002	Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	---
					Zinc	SSE*
					Zinc	SSE*

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.



# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Clear Creek Basin

2c. Mainstem of Clear Creek, including all tributaries and wetlands, from a point just below the confluence with Mill Creek to a point just above the Argo Tunnel discharge, except for specific listings in Segments 9a, 9b, and 10.						
COSPCL02C	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute chronic		
Reviewable*	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Aluminum	---
	Recreation E	acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---
Qualifiers:		D.O. (spawning)	---	7.0	Beryllium	---
Other:		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
Temporary Modification(s):		chlorophyll a (mg/m2)	---	150*	Cadmium(T)	5.0
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Chromium III	---
Expiration Date of 12/31/2021		Inorganic (mg/L)			Chromium III(T)	50
Cadmium(chronic) = current condition		acute	chronic	Chromium VI	TVS	TVS
Copper(chronic) = current condition		Ammonia	TVS	TVS	Copper	TVS
Expiration Date of 7/1/2020		Boron	---	0.75	Iron	---
*chlorophyll a (mg/m2)(chronic) = applies only above the facilities listed at 38.5(4).		Chloride	---	250	Iron(T)	---
*Designation: 9/30/00 Baseline does not apply		Chlorine	0.019	0.011	Lead	TVS
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		Cyanide	0.005	---	Lead(T)	50
*Zinc(acute) = $0.978e^{(0.8537[\ln(\text{hardness})]+1.9467)}$		Nitrate	10	---	Manganese	TVS
*Zinc(chronic) = $0.986e^{(0.8537[\ln(\text{hardness})]+1.8032)}$		Nitrite	---	0.05	Mercury	---
		Phosphorus	---	0.11*	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS
		Sulfide	---	0.002	Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	---
					Zinc	SSE*
					Zinc	SSE*

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Clear Creek Basin

11. Mainstem of Clear Creek from a point just above the Argo Tunnel discharge to the Farmers Highline Canal diversion in Golden, Colorado.							
COSPCL11	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture UP Aq Life Cold 1 Recreation E Water Supply	DM	MWAT	acute      chronic			
		CS-I	CS-I	Aluminum	---	---	
		acute	chronic	Arsenic	340	---	
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic(T)	---	
Other:		D.O. (spawning)	---	7.0	Beryllium	---	
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021 <del>temperature(DM/MWAT) = current condition*</del> <del>Expiration Date of 6/30/2019</del>  *Zinc(acute) = 0.978e^(0.8537[ln(hardness)]+1.9467) *Zinc(chronic) = 0.986e^(0.8537[ln(hardness)]+1.8032) <del>*TempMod: temperature = from a point just downstream of the US 6 Bridge to the Farmers Highline Canal diversion in Golden, Colorado.</del>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	
		chlorophyll a (mg/m2)	---	---	Cadmium(T)	5.0	
		E. Coli (per 100 mL)	---	126	Chromium III	---	
		Inorganic (mg/L)			Chromium III(T)	50	---
		acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	---	
		Boron	---	0.75	Iron	---	
		Chloride	---	250	Iron(T)	---	
		Chlorine	0.019	0.011	Lead	TVS	
		Cyanide	0.005	---	Lead(T)	50	
		Nitrate	10	---	Manganese	TVS	
		Nitrite	---	0.05	Mercury	---	
		Phosphorus	---	---	Molybdenum(T)	---	
		Sulfate	---	WS	Nickel	TVS	
		Sulfide	---	0.002	Nickel(T)	---	
					Selenium	TVS	
					Silver	TVS	
					Uranium	---	
					Zinc	SSE*	
					Zinc	---	

  

13b. Mainstem of North Clear Creek including all tributaries and wetlands from a point just below the confluence with Chase Gulch to the confluence with Clear Creek, except for the specific listings in Segment 13a.							
COSPCL13B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture UP Aq Life Cold 2 Recreation E	DM	MWAT	acute      chronic			
		CS-I	CS-I	Aluminum	---	---	
		acute	chronic	Arsenic	340	---	
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic(T)	---	
Other:		D.O. (spawning)	---	7.0	Beryllium	---	
Temporary Modification(s): <del>Cadmium(chronic) = 4.7</del> <del>Expiration Date of 12/31/2018</del> temperature(DM/MWAT) = current condition Expiration Date of 12/31/2020  *chlorophyll a (mg/m2)(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	
		chlorophyll a (mg/m2)	---	150*	Chromium III	TVS	
		E. Coli (per 100 mL)	---	126	Chromium III(T)	---	
		Inorganic (mg/L)			Chromium III(T)	100	---
		acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	---	
		Boron	---	0.75	Iron(T)	---	
		Chloride	---	---	Lead	TVS	
		Chlorine	0.019	0.011	Manganese	TVS	
		Cyanide	0.005	---	Mercury	---	
		Nitrate	100	---	Molybdenum(T)	---	
		Nitrite	---	0.05	Nickel	TVS	
		Phosphorus	---	0.11*	Selenium	TVS	
		Sulfate	---	---	Silver	TVS	
		Sulfide	---	0.002	Uranium	---	
					Zinc	---	
					Zinc	740	

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

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Clear Creek Basin

14a. Mainstem of Clear Creek from the Farmers Highline Canal diversion in Golden, Colorado to the Denver Water conduit #16 crossing.						
COSPCL14A	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture Aq Life Warm 2 Recreation N Water Supply	DM	MWAT	acute	chronic	
UP			WS-II	WS-II	---	---
			acute	chronic	Aluminum	---
		Temperature °C			---	
				Arsenic	340	
		D.O. (mg/L)	---	5.0	Arsenic(T)	---
					0.02-10	
		pH	6.5 - 9.0	---	Beryllium	---
					---	
		chlorophyll a (mg/m2)	---	---	Cadmium	TVS
		E. Coli (per 100 mL)	---	630	Cadmium(T)	5.0
					---	
		Inorganic (mg/L)		Chromium III	---	
		acute	chronic	Chromium III(T)	50	
		Ammonia	TVS	TVS	Chromium VI	TVS
		Boron	---	0.75	Copper	TVS
		Chloride	---	250	Iron	---
		Chlorine	0.019	0.011	Iron(T)	---
		Chlorine	0.019	0.011	Lead	TVS
		Cyanide	0.005	---	Lead(T)	50
		Nitrate	10	---	Manganese	TVS
		Nitrite	---	0.5	Mercury	---
		Phosphorus	---	---	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS
		Sulfide	---	0.002	Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVSx1.57*
						TVSx1.57*

  

14b. Mainstem of Clear Creek from the Denver Water conduit #16 crossing to a point just below Youngfield Street in Wheat Ridge, Colorado.						
COSPCL14B	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture Aq Life Warm 2 Recreation E Water Supply	DM	MWAT	acute	chronic	
UP			WS-II	WS-II	---	---
			acute	chronic	Aluminum	---
		Temperature °C			---	
				Arsenic	340	
		D.O. (mg/L)	---	5.0	Arsenic(T)	---
					0.02	
		pH	6.5 - 9.0	---	Beryllium	---
					---	
		chlorophyll a (mg/m2)	---	---	Cadmium	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0
					---	
		Inorganic (mg/L)		Chromium III	---	
		acute	chronic	Chromium III(T)	50	
		Ammonia	TVS	TVS	Chromium VI	TVS
		Boron	---	0.75	Copper	TVS
		Chloride	---	250	Iron	---
		Chlorine	0.019	0.011	Iron(T)	---
		Chlorine	0.019	0.011	Lead	TVS
		Cyanide	0.005	---	Lead(T)	50
		Nitrate	10	---	Manganese	TVS
		Nitrite	---	0.5	Mercury	---
		Phosphorus	---	---	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS
		Sulfide	---	0.002	Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVSx1.57*
						TVSx1.57*

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Clear Creek Basin

15. Mainstem of Clear Creek from Youngfield Street in Wheat Ridge, Colorado, to the confluence with the South Platte River.							
COSPCL15	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Warm 1*	Temperature °C	WS-II	WS-II	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---	---
<b>Other:</b>  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021 <del>temperature(DM/MWAT) = current condition</del> <del>Expiration Date of 6/30/2019</del>  *Classification: Aquatic life warm 1 goal qualifier. *Zinc(acute) = TVS x (times) the FWER (final water effect ratio). Expiration date of 12/31/20. *Zinc(chronic) = TVS x (times) the FWER (final water effect ratio). Expiration date of 12/31/20.		chlorophyll a (mg/m2)	---	---	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
			Inorganic (mg/L)		Chromium III	---	TVS
			acute	chronic	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	---	0.5	Manganese	TVS	TVS/WS
		Phosphorus	---	---	Mercury	---	0.01(t)
		Sulfate	---	WS	Molybdenum(T)	---	150
		Sulfide	---	0.002	Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	---	---
				Zinc	TVSx1.57*	TVSx1.57*	

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Boulder Creek Basin

7b. Mainstem of Coal Creek from Highway 36 to the confluence with Boulder Creek.							
COSPBO07B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---	---
<b>Other:</b>		chlorophyll a (mg/m2)	---	---	Cadmium	TVS	TVS
<p style="color: red; margin: 0;">Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021</p>		<b>Inorganic (mg/L)</b>			Cadmium(T)	5.0	---
			acute	chronic	Chromium III	---	TVS
		Ammonia	TVS	TVS	Chromium III(T)	50	---
		Boron	---	0.75	Chromium VI	TVS	TVS
		Chloride	---	250	Copper	TVS	TVS
		Chlorine	0.019	0.011	Iron	---	WS
		Cyanide	0.005	---	Iron(T)	---	1000
		Nitrate	10	---	Lead	TVS	TVS
		Nitrite	---	0.5	Lead(T)	50	---
		Phosphorus	---	---	Manganese	TVS	TVS/WS
		Sulfate	---	WS	Mercury	---	0.01(t)
		Sulfide	---	0.002	Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	---	---
			Zinc	TVS	TVS		

8. All tributaries to South Boulder Creek, including all wetlands from South Boulder Road to the confluence with Boulder Creek and all tributaries to Coal Creek, including all wetlands from Highway 93 to the confluence with Boulder Creek.

8. All tributaries to South Boulder Creek, including all wetlands from South Boulder Road to the confluence with Boulder Creek and all tributaries to Coal Creek, including all wetlands from Highway 93 to the confluence with Boulder Creek.								
COSPBO08	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture	DM	MWAT	acute	chronic			
UP	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Aluminum	---	---	
	Recreation E		acute	chronic	Arsenic	340	---	
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	100	
<b>Other:</b>		pH	6.5 - 9.0	---	Beryllium	---	---	
<p style="color: red; margin: 0;">Temporary Modification(s): Selenium(chronic) = current condition Expiration Date of 12/31/2020</p> <p style="font-size: small; margin: 0;">*chlorophyll a (mg/m2)(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).</p>		chlorophyll a (mg/m2)	---	150*	Cadmium	TVS	TVS	
		E. Coli (per 100 mL)	---	126	Chromium III	TVS	TVS	
		<b>Inorganic (mg/L)</b>				Chromium III(T)	---	100
			acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	TVS	TVS	
		Boron	---	0.75	Iron	---	---	
		Chloride	---	---	Iron(T)	---	1000	
		Chlorine	0.019	0.011	Lead	TVS	TVS	
		Cyanide	0.005	---	Manganese	TVS	TVS	
		Nitrate	100	---	Mercury	---	0.01(t)	
		Nitrite	---	0.5	Molybdenum(T)	---	150	
		Phosphorus	---	0.17*	Nickel	TVS	TVS	
		Sulfate	---	---	Selenium	TVS	TVS	
		Sulfide	---	0.002	Silver	TVS	TVS	
					Uranium	---	---	
					Zinc	TVS	TVS	

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

## REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Boulder Creek Basin

9. Mainstem of Boulder Creek from a point immediately above the confluence with South Boulder Creek to the confluence with Coal Creek.							
COSPBO09	Classifications	Physical and Biological			Metals (ug/L)		
Designation		DM	MWAT		acute	chronic	
Reviewable	Agriculture						
	Aq Life Warm 1	Temperature °C	WS-II	WS-II	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---	---
<b>Other:</b>		chlorophyll a (mg/m2)	---	---	Cadmium	TVS	TVS
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
Arsenic(chronic) = hybrid		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
Expiration Date of 12/31/2021			acute	chronic	Chromium III(T)	50	---
temperature(DM/MWAT) = current condition		Ammonia	TVS	TVS	Chromium VI	TVS	TVS
Expiration Date of 12/31/2020		Boron	---	0.75	Copper	TVS	TVS
	12/1 - 2/29	Chloride	---	250	Iron	---	WS
		Chlorine	0.019	0.011	Iron(T)	---	1000
		Cyanide	0.005	---	Lead	TVS	TVS
		Nitrate	10	---	Lead(T)	50	---
		Nitrite	---	0.5	Manganese	TVS	TVS/WS
		Phosphorus	---	---	Mercury	---	0.01(t)
		Sulfate	---	WS	Molybdenum(T)	---	150
		Sulfide	---	0.002	Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	---	---
					Zinc	TVS	TVS

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## St. Vrain Creek Basin

6. All tributaries to St. Vrain Creek, including wetlands from Hygiene Road to the confluence with the South Platte River, except for specific listings in the Boulder Creek subbasin and in Segments 4a, 4b, 4c and 5.

COSPSV06	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	---	---	Aluminum	---
			<b>acute</b> <b>chronic</b>			Arsenic	340 ---
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0		Arsenic(T)	---
<b>Other:</b>		pH	6.5 - 9.0	---		Beryllium	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	---		Cadmium	TVS TVS
Iron(chronic) = current condition		E. Coli (per 100 mL)	---	126		Chromium III	TVS TVS
Manganese(ac/ch) = current condition		<b>Inorganic (mg/L)</b>				Chromium III(T)	---
Expiration Date of 12/31/2020			<b>acute</b> <b>chronic</b>			Chromium VI	TVS TVS
		Ammonia	TVS	TVS		Copper	TVS TVS
		Boron	---	0.75		Iron(T)	---
		Chloride	---	---		Lead	TVS TVS
		Chlorine	0.019	0.011		Manganese	TVS TVS
		Cyanide	0.005	---		Mercury	---
		Nitrate	100	---		Molybdenum(T)	---
		Nitrite	---	0.5		Nickel	TVS TVS
		Phosphorus	---	---		Selenium	TVS TVS
		Sulfate	---	---		Silver	TVS TVS
		Sulfide	---	0.002		Uranium	---
						Zinc	TVS TVS

7. Boulder Reservoir, Coot Lake, Left Hand Valley Reservoir and Spurgeon Reservoir.

COSPSV07	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 1 Recreation E Water Supply DUWS*	Temperature °C	WL WL	---	---	Aluminum	---
			<b>acute</b> <b>chronic</b>			Arsenic	340 ---
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0		Arsenic(T)	---
<b>Other:</b>		pH	6.5 - 9.0	---		Beryllium	---
Temporary Modification(s):		chlorophyll a (ug/L)	---	---		Cadmium	TVS TVS
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126		Cadmium(T)	5.0 ---
Expiration Date of 12/31/2021		<b>Inorganic (mg/L)</b>				Chromium III	---
Iron(chronic) = current condition*			<b>acute</b> <b>chronic</b>			Chromium III(T)	50 ---
Manganese(ac/ch) = current condition		Ammonia	TVS	TVS		Chromium VI	TVS TVS
Expiration Date of 12/31/2020		Boron	---	0.75		Copper	TVS TVS
*Classification: DUWS applies to Boulder, Spurgeon and Left Hand Valley Reservoirs only.		Chloride	---	250		Iron	---
*TempMod: Iron = Trec and dissolved		Chlorine	0.019	0.011		Iron(T)	---
		Cyanide	0.005	---		Lead	TVS TVS
		Nitrate	10	---		Lead(T)	50 ---
		Nitrite	---	0.5		Manganese	TVS TVS/WS
		Phosphorus	---	---		Mercury	---
		Sulfate	---	WS		Molybdenum(T)	---
		Sulfide	---	0.002		Nickel	TVS TVS
						Nickel(T)	---
						Selenium	TVS TVS
						Silver	TVS TVS
						Uranium	---
						Zinc	TVS TVS

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Big Thompson River Basin

4b. Mainstem of the Big Thompson from the Greeley-Loveland Canal diversion to County Road 11H.							
COSPBT04B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute chronic			
Reviewable	Aq Life Warm 1	Temperature °C	WS-I	WS-I	Aluminum	---	
	Recreation E	5/1 - 10/15	acute	chronic	Arsenic	340	
	Recreation N	10/16 - 4/30	---	5.0	Arsenic(T)	---	
	Water Supply	pH	6.5 - 9.0	---	Beryllium	---	
<b>Qualifiers:</b>		chlorophyll a (mg/m2)	---	---	Cadmium	TVS	
<b>Other:</b>		E. Coli (per 100 mL)	5/1 - 10/15	---	126	Cadmium(T)	5.0
Temporary Modification(s):		E. Coli (per 100 mL)	10/16 - 4/30	---	630	Chromium III	---
Arsenic(chronic) = hybrid		<b>Inorganic (mg/L)</b>			Chromium III(T)	50	---
Expiration Date of 12/31/2021					Chromium VI	TVS	TVS
<del>Selenium(chronic) = current condition</del> <del>Expiration Date of 12/31/2020</del>		<b>acute</b>		<b>chronic</b>	Copper	TVS	TVS
		Ammonia	TVS	TVS	Iron	---	WS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	250	Lead	TVS	TVS
		Chlorine	0.019	0.011	Lead(T)	50	---
		Cyanide	0.005	---	Manganese	TVS	TVS/WS
		Nitrate	10	---	Mercury	---	0.01(t)
		Nitrite	---	0.5	Molybdenum(T)	---	150
		Phosphorus	---	---	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	---	---
					Zinc	TVS	TVS

9. Mainstem of the Little Thompson River from the Culver Ditch diversion to the confluence with the Big Thompson River.							
COSPBT09	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute chronic			
Reviewable	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Aluminum	---	
	Recreation E		acute	chronic	Arsenic	340	
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---	
<b>Other:</b>		chlorophyll a (mg/m2)	---	150*	Cadmium	TVS	
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	
Selenium(chronic) = 12.3		<b>Inorganic (mg/L)</b>			Chromium III	---	
Expiration Date of 12/31/2020		<b>acute</b>		<b>chronic</b>	Chromium III(T)	50	
*chlorophyll a (mg/m2)(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		Ammonia	TVS	TVS	Chromium VI	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	---	0.5	Manganese	TVS	TVS/WS
		Phosphorus	---	0.17*	Mercury	---	0.01(t)
		Sulfate	---	WS	Molybdenum(T)	---	150
		Sulfide	---	0.002	Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	---	---
			Zinc	TVS	TVS		

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

D.O. = dissolved oxygen  
 DM = daily maximum  
 MWAT = maximum weekly average temperature  
 See 38.6 for details on TVS, TVS(tr), WS, temperature standards.



# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Cache La Poudre River Basin

11. Mainstem of the Cache La Poudre River from Shields Street in Ft. Collins to a point immediately above the confluence with Boxelder Creek.						
COSPCP11	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 1 Recreation E	WS-I	WS-I	Temperature °C	---	---
Qualifiers:		acute	chronic			
Other:				D.O. (mg/L)	---	5.0
Temporary Modification(s): temperature(DM/MWAT) = current condition Expiration Date of 12/31/2020	12/1 - 2/29			pH	6.5 - 9.0	---
				chlorophyll a (mg/m2)	---	---
				E. Coli (per 100 mL)	---	126
		Inorganic (mg/L)				
		acute	chronic			
				Ammonia	TVS	TVS
				Boron	---	0.75
				Chloride	---	---
				Chlorine	0.019	0.011
				Cyanide	0.005	---
				Nitrate	100	---
				Nitrite	---	2.7
				Phosphorus	---	---
				Sulfate	---	---
				Sulfide	---	0.002
					---	---
					TVS	TVS
					---	1000
					TVS	TVS
					TVS	TVS
					---	0.01(t)
					---	150
					TVS	TVS
					TVS	TVS
					---	---
					TVS	TVS
12. Mainstem of the Cache La Poudre River from a point immediately above the confluence with Boxelder Creek to the confluence with the South Platte River.						
COSPCP12	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 1 Recreation E	WS-I	WS-I	Temperature °C	---	---
Qualifiers:		acute	chronic			
Other:				D.O. (mg/L)	---	5.0
Temporary Modification(s): temperature(DM/MWAT) = current condition Expiration Date of 12/31/2020				pH	6.5 - 9.0	---
				chlorophyll a (mg/m2)	---	---
				E. Coli (per 100 mL)	---	126
		Inorganic (mg/L)				
		acute	chronic			
				Ammonia	TVS	TVS
				Boron	---	0.75
				Chloride	---	---
				Chlorine	0.019	0.011
				Cyanide	0.005	---
				Nitrate	100	---
				Nitrite	---	2.7
				Phosphorus	---	---
				Sulfate	---	---
				Sulfide	---	0.002
					---	---
					TVS	TVS
					---	1000
					TVS	TVS
					TVS	TVS
					---	0.01(t)
					---	150
					TVS	TVS
					TVS	TVS
					---	---
					TVS	TVS

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.

## REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Cache La Poudre River Basin

13b. Mainstem of Boxelder Creek from its source to the confluence with the Cache La Poudre River.							
COSPCP13B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 2	WS-II	WS-II	---	---	Aluminum	
	Recreation N 9/16 - 5/14	acute	chronic	340	---	Arsenic	
	Recreation P 5/15 - 9/15	---	5.0	---	100	Arsenic(T)	
Qualifiers:		pH	6.5 - 9.0	---	---	Beryllium	
Other:		chlorophyll a (mg/m2)	---	150*	TVS	TVS	
<del>Temporary Modification(s):</del>		E. Coli (per 100 mL)	5/15 - 9/15	---	205	Chromium III	
Selenium(chronic) = current condition		E. Coli (per 100 mL)	9/16 - 5/14	---	630	Chromium III(T)	
Expiration Date of 12/31/2020						Chromium VI	
		Inorganic (mg/L)			TVS	TVS	Copper
		acute	chronic	---	1000	Iron(T)	
		TVS	TVS	TVS	TVS	Lead	
		---	0.75	TVS	TVS	Manganese	
		---	---	---	0.01(t)	Mercury	
		0.019	0.011	---	150	Molybdenum(T)	
		0.005	---	TVS	TVS	Nickel	
		100	---	TVS	TVS	Selenium	
		---	0.5	TVS	TVS	Silver	
		---	0.17*	---	---	Uranium	
		---	---	TVS	TVS	Zinc	
		---	0.002				

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

D.O. = dissolved oxygen  
DM = daily maximum  
MWAT = maximum weekly average temperature  
See 38.6 for details on TVS, TVS(tr), WS, temperature standards.