

**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 06/30/2017

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Upper South Platte River Basin

1a. Mainstem of the South Platte River from the source of the South and Middle Forks to the inlet of Cheesman Reservoir.							
COSPUS01A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute		chronic	
Reviewable	Aq Life Cold 1 Recreation E Water Supply	CS-I*	CS-I*	---	---	---	
Qualifiers:		acute	chronic	340	---	---	
Other:		D.O. (mg/L)	6.0	---	0.02	---	
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4). *Temperature = summer criteria apply from 4/1-10/31		D.O. (spawning)	7.0	---	---	---	
		pH	6.5 - 9.0	---	---	TVS(tr)	TVS
		chlorophyll a (mg/m <sup>2</sup> )	150*	---	---	5.0	---
		E. Coli (per 100 mL)	126	---	---	---	TVS
		Inorganic (mg/L)			50	---	---
		Ammonia	TVS	TVS	---	TVS	TVS
		Boron	---	0.75	---	---	WS
		Chloride	---	250	---	TVS	TVS
		Chlorine	0.019	0.011	---	50	---
		Cyanide	0.005	---	---	TVS	TVS/WS
		Nitrate	10	---	---	---	0.01(t)
		Nitrite	---	0.05	---	---	150
		Phosphorus	---	0.11*	---	TVS	TVS
		Sulfate	---	WS	---	---	100
		Sulfide	---	0.002	---	TVS	TVS
Zinc	---	---	---	TVS	TVS(tr)		
Uranium	---	---	---	---	---		

  

1b. All tributaries to the South Platte River, including wetlands within the Lost Creek and Mt. Evans Wilderness Areas.						
COSPUS01B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute		chronic
OW	Aq Life Cold 1 Recreation E Water Supply	CS-I	CS-I	---	---	---
Qualifiers:		acute	chronic	340	---	---
Other:		D.O. (mg/L)	6.0	---	0.02	---
Qualifiers:		D.O. (spawning)	7.0	---	---	---
Other:		pH	6.5 - 9.0	---	---	TVS
Other:		chlorophyll a (mg/m <sup>2</sup> )	150	---	---	---
Other:		E. Coli (per 100 mL)	126	---	---	TVS
Inorganic (mg/L)			50	---	---	---
Ammonia	TVS	TVS	---	TVS	TVS	TVS
Boron	---	0.75	---	---	---	1000
Chloride	---	250	---	TVS	TVS	TVS
Chlorine	0.019	0.011	---	50	---	---
Cyanide	0.005	---	---	TVS	TVS/WS	TVS/WS
Nitrate	10	---	---	---	---	0.01(t)
Nitrite	---	0.05	---	---	---	150
Phosphorus	---	0.11	---	TVS	TVS	TVS
Sulfate	---	WS	---	---	---	100
Sulfide	---	0.002	---	TVS	TVS	TVS
Zinc	---	---	---	TVS	TVS(tr)	TVS(tr)
Uranium	---	---	---	---	---	---

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

2a. All tributaries to the South Platte River system, including all wetlands from the headwaters of the South and Middle Forks to a point immediately below the confluence with Tarryall Creek except for specific listings in Segment 1b, 2b and 2c.								
COSPUS02A	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture	DM	MWAT	acute      chronic				
Reviewable	Aq Life Cold 1 Recreation E Water Supply	CS-I	CS-I	Aluminum	---	---		
Qualifiers:		acute	chronic	Arsenic	340	---		
Other:		---	6.0	Arsenic(T)	---	0.02		
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		D.O. (mg/L)	---	7.0	Beryllium	---	---	
		D.O. (spawning)	---	7.0	Cadmium	TVS(tr)	TVS	
		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---	
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Chromium III	---	TVS	
		E. Coli (per 100 mL)	---	126	Chromium III(T)	50	---	
		Inorganic (mg/L)			Chromium VI	TVS	TVS	
				acute	chronic	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	---	0.05	Molybdenum(T)	---	150	
		Phosphorus	---	0.11*	Nickel	TVS	TVS	
Sulfate	---	WS	Nickel(T)	---	100			
Sulfide	---	0.002	Selenium	TVS	TVS			
			Silver	TVS	TVS(tr)			
			Uranium	---	---			
			Zinc	TVS	TVS			
2b. Mainstem of Mosquito Creek from the confluence with South Mosquito Creek to its confluence with the Middle Fork of the South Platte River.								
COSPUS02B	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture	DM	MWAT	acute      chronic				
UP	Aq Life Cold 1 Recreation E Water Supply	CS-I	CS-I	Aluminum	---	---		
Qualifiers:		acute	chronic	Arsenic	340	---		
Other:		---	6.0	Arsenic(T)	---	0.02		
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		D.O. (mg/L)	---	7.0	Beryllium	---	---	
		D.O. (spawning)	---	7.0	Cadmium	TVS(tr)	TVS	
		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---	
		chlorophyll a (mg/m <sup>2</sup> )	---	---	Chromium III	---	TVS	
		E. Coli (per 100 mL)	---	126	Chromium III(T)	50	---	
		Inorganic (mg/L)			Chromium VI	TVS	TVS	
				acute	chronic	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	---	0.05	Molybdenum(T)	---	150	
		Phosphorus	---	---	Nickel	TVS	TVS	
Sulfate	---	WS	Nickel(T)	---	100			
Sulfide	---	0.002	Selenium	TVS	TVS			
			Silver	TVS	TVS(tr)			
			Uranium	---	---			
			Zinc	---	220			

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

2c. South Mosquito Creek from the source to confluence with Mosquito Creek and No Name Creek from the source to the confluence with South Mosquito Creek.						
COSPUS02C	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
UP	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	CS-I	CS-I	Aluminum	---      ---
		acute	chronic		Arsenic	340      ---
		D.O. (mg/L)	---	6.0	Arsenic(T)	---      0.02
		D.O. (spawning)	---	7.0	Beryllium	---      ---
		pH	6.5 - 9.0	---	Cadmium	TVS(tr)      TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0      ---
		E. Coli (per 100 mL)	---	126	Chromium III	---      TVS
		Inorganic (mg/L)			Chromium III(T)	50      ---
		acute	chronic	Chromium VI	TVS      TVS	
		Ammonia	TVS	TVS	Copper	TVS      TVS
		Boron	---	0.75	Iron	---      WS
		Chloride	---	250	Iron(T)	---      1000
		Chlorine	0.019	0.011	Lead	TVS      TVS
		Cyanide	0.005	---	Lead(T)	50      ---
		Nitrate	10	---	Manganese	TVS      TVS/WS
		Nitrite	---	0.05	Mercury	---      0.01(t)
		Phosphorus	---	0.11	Molybdenum(T)	---      150
		Sulfate	---	WS	Nickel	TVS      TVS
		Sulfide	---	0.002	Nickel(T)	---      100
					Selenium	TVS      TVS
					Silver	TVS      TVS(tr)
					Uranium	---      ---
					Zinc	---      280

  

3. All tributaries to the South Platte River, including all wetlands from a point immediately below the confluence with Tarryall Creek to a point immediately above the confluence with the North Fork of the South Platte River, except for specific listings in Segment 1b.						
COSPUS03	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-I	CS-I	Aluminum	---      ---
		acute	chronic		Arsenic	340      ---
		D.O. (mg/L)	---	6.0	Arsenic(T)	---      0.02
		D.O. (spawning)	---	7.0	Beryllium	---      ---
		pH	6.5 - 9.0	---	Cadmium	TVS(tr)      TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0      ---
		E. Coli (per 100 mL)	---	126	Chromium III	---      TVS
		Inorganic (mg/L)			Chromium III(T)	50      ---
		acute	chronic	Chromium VI	TVS      TVS	
		Ammonia	TVS	TVS	Copper	TVS      TVS
		Boron	---	0.75	Iron	---      WS
		Chloride	---	250	Iron(T)	---      1000
		Chlorine	0.019	0.011	Lead	TVS      TVS
		Cyanide	0.005	---	Lead(T)	50      ---
		Nitrate	10	---	Manganese	TVS      TVS/WS
		Nitrite	---	0.05	Mercury	---      0.01(t)
		Phosphorus	---	0.11*	Molybdenum(T)	---      150
		Sulfate	---	WS	Nickel	TVS      TVS
		Sulfide	---	0.002	Nickel(T)	---      100
					Selenium	TVS      TVS
					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

## Upper South Platte River Basin

4. Mainstem of the North Fork of the South Platte River, including all tributaries and wetlands from the source to the confluence with the South Platte River, except for specific listings in Segments 1b, 5a, 5b, and 5c.

COSPUS04	Classifications	Physical and Biological			Metals (ug/L)			
Designation			DM	MWAT		acute	chronic	
Reviewable	Agriculture							
	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)	---	0.02	
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---	
<b>Other:</b>  Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (mg/m <sup>2</sup> )(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)	TVS	
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0	---	
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS	
					Chromium III(T)	50	---	
					<b>Inorganic (mg/L)</b>	Chromium VI	TVS	TVS
						acute	chronic	
		Ammonia	TVS	TVS	Copper	TVS	TVS	
		Boron	---	0.75	Iron	---	WS	
		Chloride	---	250	Iron(T)	---	1000	
		Chlorine	0.019	0.011	Lead	TVS	TVS	
		Cyanide	0.005	---	Lead(T)	50	---	
		Nitrate	10	---	Manganese	TVS	TVS/WS	
		Nitrite	---	0.05	Mercury	---	0.01(t)	
		Phosphorus	---	0.11*	Molybdenum(T)	---	150	
		Sulfate	---	WS	Nickel	TVS	TVS	
		Sulfide	---	0.002	Nickel(T)	---	100	
					Selenium	TVS	TVS	
					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 Upper South Platte River Basin

5a. Mainstem of Geneva Creek from the source to the confluence with Scott Gomer Creek.								
COSPUS05A	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT				
Reviewable	Aq Life Cold 1 Recreation E	Temperature °C	CS-I	CS-I		acute	chronic	
Qualifiers:			acute	chronic				
<b>Other:</b>	D.O. (mg/L)		---	6.0	Arsenic	---	---	
	D.O. (spawning)		---	7.0	Arsenic(T)	340	---	
	pH		3.5-9.0	---	Beryllium	---	---	
	chlorophyll a (mg/m <sup>2</sup> )		---	150	Cadmium	---	---	
	E. Coli (per 100 mL)		---	126	Cadmium(T)	---	2	
	<b>Inorganic (mg/L)</b>					Chromium III	---	---
						Chromium III(T)	---	100
						Chromium VI	---	---
						Chromium VI(T)	---	25
						Copper	---	18
						Iron(T)	---	1200
						Lead	---	---
						Lead(T)	---	4
						Manganese	---	530
						Mercury(T)	---	0.05
						Molybdenum(T)	---	150
						Nickel	---	---
						Nickel(T)	---	50
						Selenium	---	---
						Selenium(T)	---	4.6
						Silver	---	---
						Silver(T)	---	1
						Uranium	---	---
						Zinc	---	190

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

5b. Mainstem of Geneva Creek from the confluence with Scott Gomer Creek to the confluence with the North Fork of the South Platte River; all tributaries of Geneva Creek including wetlands from source to confluence with the North Fork of the South Platte River.							
COSPUS05B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture Aq Life Cold 1 Recreation E Water Supply	DM	MWAT	acute      chronic			
Reviewable		acute	chronic	Aluminum	---	---	
		Temperature °C	CS-I	CS-I	Arsenic	340	---
		D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>	Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021	pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
		Inorganic (mg/L)			Chromium III(T)	50	---
		acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	0.11	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS

  

5c. Mainstem of Gooseberry Gulch and all tributaries from source to Sunset Trail.							
COSPUS05C	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture Aq Life Cold 2 Recreation U Water Supply	DM	MWAT	acute      chronic			
Reviewable		acute	chronic	Aluminum	---	---	
		Temperature °C	CS-II	CS-II	Arsenic	340	---
		D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---	---
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	---	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	---	0.05	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

## Upper South Platte River Basin

5d. Mainstem of Gooseberry Gulch and all tributaries from Sunset Trail to confluence with Elk Creek.						
COSPUS05D	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Aluminum	---
	Recreation U		acute	chronic	Arsenic	340
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium(T)	5.0
		E. Coli (per 100 mL)	---	126	Chromium III	---
					Chromium III(T)	50
					Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury	---
					Molybdenum(T)	---
					Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS

6a. Mainstem of the South Platte River from the outlet of Cheesman Reservoir to the inlet of Chatfield Reservoir.						
COSPUS06A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum	---
	Recreation E		acute	chronic	Arsenic	340
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium(T)	5.0
		E. Coli (per 100 mL)	---	126	Chromium III	---
					Chromium III(T)	50
					Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury	---
					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 Upper South Platte River Basin

6b. Chatfield Reservoir								
COSPUS06B	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT		acute      chronic		
Reviewable	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	1/1 - 3/31	CLL	CLL	Aluminum Arsenic	--- 340	--- ---
Qualifiers:		Temperature °C	4/1 - 12/31	CLL	23.5	Arsenic(T)	---	0.02
Other:						Beryllium	---	---
*chlorophyll a (ug/L)(chronic) = measured through samples that are representative of the mixed layer during July-Sept, with an allowable exceedance frequency of 1 in 5 yrs. See section 38.6(4) for assessment thresholds. *Phosphorus(chronic) = See section 38.6(4) for assessment thresholds.						Cadmium	TVS(tr)	TVS
		D.O. (mg/L)		---	6.0	Cadmium(T)	5.0	---
		D.O. (spawning)		---	7.0	Chromium III	---	TVS
		pH		6.5 - 9.0	---	Chromium III(T)	50	---
		chlorophyll a (ug/L)	7/1 - 9/30	---	10*	Chromium VI	TVS	TVS
		E. Coli (per 100 mL)		---	126	Copper	TVS	TVS
						Iron	---	WS
						Iron(T)	---	1000
						Lead	TVS	TVS
						Lead(T)	50	---
						Manganese	TVS	TVS/WS
						Mercury	---	0.01(t)
						Molybdenum(T)	---	150
						Nickel	TVS	TVS
						Nickel(T)	---	100
						Selenium	TVS	TVS
						Silver	TVS	TVS(tr)
						Uranium	---	---
						Zinc	TVS	TVS
	6c. Deleted.							
COSPUS06C	Classifications	Physical and Biological			Metals (ug/L)			
Designation			DM	MWAT		acute      chronic		
Qualifiers:			acute	chronic				
Other:								

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

7. All tributaries to the South Platte River, including all wetlands from a point immediately below the confluence with the North Fork of the South Platte River to the outlet of Chatfield Reservoir except for specific listings in Segments 8, 9, 10, 11, 12, and 13.

COSPUS07	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 2 Recreation E Water Supply	acute	chronic				
		Temperature °C	CS-II	CS-II	Aluminum	---	---
		D.O. (mg/L)	---	6.0	Arsenic	340	---
		D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
		pH	6.5 - 9.0	---	Beryllium	---	---
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium	TVS(tr)	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
					Chromium III	---	TVS
					Chromium III(T)	50	---
					Chromium VI	TVS	TVS
					Copper	TVS	TVS
					Iron	---	WS
					Iron(T)	---	1000
					Lead	TVS	TVS
					Lead(T)	50	---
					Manganese	TVS	TVS/WS
					Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS

8. Mainstems of East and West Plum Creek from the source to the boundary of National Forest lands, including all tributaries and wetlands within the Plum Creek drainage which are on National Forest Lands, except for the specific listing in Segment 9.

COSPUS08	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1 Recreation E Water Supply	acute	chronic				
		Temperature °C	CS-I	CS-I	Aluminum	---	---
		D.O. (mg/L)	---	6.0	Arsenic	340	---
		D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02
		pH	6.5 - 9.0	---	Beryllium	---	---
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium	TVS(tr)	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
					Chromium III	---	TVS
					Chromium III(T)	50	---
					Chromium VI	TVS	TVS
					Copper	TVS	TVS
					Iron	---	WS
					Iron(T)	---	1000
					Lead	TVS	TVS
					Lead(T)	50	---
					Manganese	TVS	TVS/WS
					Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS

Other:  
Temporary Modification(s):  
Arsenic(chronic) = hybrid  
Expiration Date of 12/31/2021

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

9. Mainstem of Bear Creek, including all tributaries and wetlands from the source to the inlet of Perry Park Reservoir, a.k.a. Waucondah Reservoir (Douglas County).							
COSPUS09	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)	---	0.02
Qualifiers:		D.O. (spawning)	---	7.0	Beryllium	---	---
Other:		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
					Chromium III(T)	50	---
					Chromium VI	TVS	TVS
					Copper	TVS	TVS
					Iron	---	WS
					Iron(T)	---	1000
					Lead	TVS	TVS
					Lead(T)	50	---
					Manganese	TVS	TVS/WS
					Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					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

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

## Upper South Platte River Basin

10b. Deleted.						
COSPUS10B	Classifications	Physical and Biological			Metals (ug/L)	
Designation		DM	MWAT		acute	chronic
Qualifiers:		acute	chronic			
Other:		Inorganic (mg/L)				
		acute	chronic			
11a. All tributaries to the East Plum Creek system, including all wetlands which are not on national forest lands.						
COSPUS11A	Classifications	Physical and Biological			Metals (ug/L)	
Designation		DM	MWAT		acute	chronic
UP	Agriculture	WS-II	WS-II	Temperature °C	---	---
	Aq Life Warm 2	acute	chronic		340	---
	Recreation E	---	5.0	D.O. (mg/L)	---	0.02-10 <sup>A</sup>
	Water Supply	6.5 - 9.0	---	pH	---	---
Qualifiers:		---	150	chlorophyll a (mg/m <sup>2</sup> )	TVS	TVS
Other:		---	126	E. Coli (per 100 mL)	5.0	---
		Inorganic (mg/L)			---	TVS
		acute	chronic		50	---
	Ammonia	TVS	TVS	Chromium III(T)	TVS	TVS
	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	---	0.17	Manganese	TVS	TVSWS
	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

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

11b. All tributaries to the West Plum Creek system, including all wetlands, which are not on national forest lands, except for specific listings in Segments 9 and 12.									
COSPUS11B	Classifications	Physical and Biological			Metals (ug/L)				
Designation	Agriculture		DM	MWAT		acute	chronic		
UP	Aq Life Warm 2	Temperature °C	WS-I	WS-I	Aluminum	---	---		
	Recreation E		<b>acute</b>	<b>chronic</b>	Arsenic	340	---		
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	100		
<b>Other:</b>		pH	6.5 - 9.0	---	Beryllium	---	---		
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS	TVS		
		E. Coli (per 100 mL)	---	126	Chromium III	TVS	TVS		
		<b>Inorganic (mg/L)</b>			Chromium III(T)	---	100		
					<b>acute</b>	<b>chronic</b>	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS		
		Boron	---	0.75	Iron(T)	---	1000		
		Chloride	---	---	Lead	TVS	TVS		
		Chlorine	0.019	0.011	Manganese	TVS	TVS		
		Cyanide	0.005	---	Mercury	---	0.01(t)		
		Nitrate	100	---	Molybdenum(T)	---	150		
		Nitrite	---	0.5	Nickel	TVS	TVS		
		Phosphorus	---	0.17*	Selenium	TVS	TVS		
		Sulfate	---	---	Silver	TVS	TVS		
		Sulfide	---	0.002	Uranium	---	---		
					Zinc	TVS	TVS		
		12. Mainstem of Garber Creek and Jackson Creek from the boundary of National Forest lands to the confluence with West Plum Creek; mainstem of Bear Creek from the outlet of Perry Park Reservoir, a.k.a. Waucondah Reservoir, to the confluence with West Plum Creek.							
		COSPUS12	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/m <sup>2</sup> )	---	150	Cadmium	TVS	TVS		
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---		
		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS		
					<b>acute</b>	<b>chronic</b>	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	---	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

## Upper South Platte River Basin

13. Mainstem of Deer Creek, including the North and South Forks, from the source to Chatfield Reservoir.							
COSPUS13	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute		chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
Water Supply		D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
Arsenic(chronic) = hybrid					Chromium III(T)	50	---
Expiration Date of 12/31/2021		<b>Inorganic (mg/L)</b>			Chromium VI	TVS	TVS
			acute	chronic	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	---	0.05	Molybdenum(T)	---	150
		Phosphorus	---	0.11	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS

  

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	Temperature °C	WS-I*	WS-I*	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
Water Supply		D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02
		pH	6.5 - 9.0	---	Beryllium	---	---
<b>Qualifiers:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS
<b>Other:</b>		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
Temporary Modification(s):		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
Arsenic(chronic) = hybrid			acute	chronic	Chromium III(T)	50	---
Expiration Date of 12/31/2021		Ammonia	TVS	TVS	Chromium VI	TVS	TVS
Chloride(chronic) = current condition		Boron	---	0.75	Copper	---	TVS*
temperature(DM/MWAT) = current condition		Chloride	---	250	Copper	TVS*	---
Expiration Date of 12/31/2020		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/190
		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

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	Agriculture	DM	MWAT	acute      chronic		
UP	Aq Life Warm 2	WS-I	WS-I	Aluminum	---	---
	Recreation E	acute	chronic	Arsenic	340	---
	Water Supply	varies*	varies*	Arsenic(T)	---	0.02-10 <sup>A</sup>
Qualifiers:		pH	6.0-9.0*	---	Beryllium	---
Other:		pH	6.5 - 9.0	---	Cadmium	TVS
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium(T)	5.0
Chloride(chronic) = current condition		E. Coli (per 100 mL)	---	126	Chromium III	---
Sulfate(chronic) = current condition		Inorganic (mg/L)			Chromium III(T)	50
temperature(DM/MWAT) = current condition		acute	chronic	Chromium VI	TVS	TVS
Expiration Date of 12/31/2020		Ammonia	TVS*	TVS*	Copper	---
Discharger Specific Variance(s):		Boron	---	0.75	Copper	TVS*
Selenium(acute) = TVS: no limit		Chloride	---	250	Iron	---
Selenium(chronic) = TVS: 24 ug/L		Chlorine	0.019	0.011	Iron(T)	---
Expiration Date of 12/31/2023		Chlorine	0.019	0.011	Lead	TVS
*Ammonia(acute) = See attached table for site-specific standards.		Cyanide	0.005	---	Lead(T)	50
*Ammonia(chronic) = See attached table for site-specific standards.		Nitrate	10	---	Manganese	TVS
*Copper(acute) = Copper BLM-based FMB		Nitrite	---	1.0	Mercury	---
Cu FMB(ac)=35.1 ug/l		Phosphorus	---	---	Molybdenum(T)	---
Downstream of the Metro Hite WWTF outfall.		Sulfate	---	WS	Nickel	TVS
*Copper(chronic) = Copper BLM-based FMB		Sulfide	---	0.002	Nickel(T)	---
Cu FMB(ch)= 23.5 ug/l					Selenium	TVS
Downstream of the Metro Hite WWTF outfall.					Silver	TVS
*D.O. (mg/L)(acute) = See attached table for site-specific standards.					Uranium	---
*D.O. (mg/L)(chronic) = See attached table for site-specific standards.					Zinc	TVS
*pH(acute) = 6.0 - 9.0 from 64th Ave. downstream 2 miles						TVS
*Variance: Selenium = see 38.6(6) for details.						TVS

  

16a. Mainstem of Sand Creek from the confluence of Murphy and Coal Creek in Arapahoe County to the confluence with the Toll Gate Creek.						
COSPUS16A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
Reviewable	Aq Life Warm 2	WS-II	WS-II	Aluminum	---	---
	Recreation E	acute	chronic	Arsenic	340	---
Qualifiers:		D.O. (mg/L)	---	5.0	Arsenic(T)	---
Other:		pH	6.5 - 9.0	---	Beryllium	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS
Chloride(chronic) = current condition		E. Coli (per 100 mL)	---	126	Chromium III	TVS
Sulfate(chronic) = current condition		Inorganic (mg/L)			Chromium III(T)	---
temperature(DM/MWAT) = current condition		acute	chronic	Chromium VI	TVS	TVS
Expiration Date of 12/31/2020		Ammonia	TVS	TVS	Copper	TVS
Discharger Specific Variance(s):		Boron	---	0.75	Iron(T)	---
Selenium(acute) = TVS: no limit		Chloride	---	---	Lead	TVS
Selenium(chronic) = TVS: 24 ug/L		Chlorine	0.019	0.011	Manganese	TVS
Expiration Date of 12/31/2023		Cyanide	0.005	---	Mercury	---
*Ammonia(acute) = See attached table for site-specific standards.		Nitrate	100	---	Molybdenum(T)	---
*Ammonia(chronic) = See attached table for site-specific standards.		Nitrite	---	0.5	Nickel	TVS
*Copper(acute) = Copper BLM-based FMB		Phosphorus	---	---	Selenium	TVS
Cu FMB(ac)=35.1 ug/l		Sulfate	---	---	Silver	TVS
Downstream of the Metro Hite WWTF outfall.		Sulfide	---	0.002	Uranium	---
*Copper(chronic) = Copper BLM-based FMB					Zinc	TVS
Cu FMB(ch)= 23.5 ug/l						TVS
Downstream of the Metro Hite WWTF outfall.						TVS
*D.O. (mg/L)(acute) = See attached table for site-specific standards.						TVS
*D.O. (mg/L)(chronic) = See attached table for site-specific standards.						TVS
*pH(acute) = 6.0 - 9.0 from 64th Ave. downstream 2 miles						TVS
*Variance: Selenium = see 38.6(6) for details.						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

16b. Aurora Reservoir.						
COSPUS16B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
Reviewable	Aq Life Warm 1 Recreation E Water Supply DUWS	Temperature °C	WL	WL	Aluminum	---
			acute	chronic	Arsenic	---
		D.O. (mg/L)	---	5.0	Arsenic(T)	---
		pH	6.5 - 9.0	---	Beryllium	---
Qualifiers:		chlorophyll a (ug/L)	---	---	Cadmium	TVS
Other:		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0
Temporary Modification(s):		Inorganic (mg/L)			Chromium III	---
Arsenic(chronic) = hybrid			acute	chronic	Chromium III(T)	50
Expiration Date of 12/31/2021		Ammonia	TVS	TVS	Chromium VI	TVS
		Boron	---	0.75	Copper	TVS
		Chloride	---	250	Iron	---
		Chlorine	0.019	0.011	Iron(T)	---
		Cyanide	0.005	---	Lead	TVS
		Nitrate	10	---	Lead(T)	50
		Nitrite	---	0.5	Manganese	TVS
		Phosphorus	---	---	Mercury	---
		Sulfate	---	WS	Molybdenum(T)	---
		Sulfide	---	0.002	Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS

  

16c. All tributaries to the South Platte River, including all wetlands, from the outlet of Chatfield Reservoir, to a point immediately below the confluence with Big Dry Creek, except for specific listings in the subbasins of the South Platte River, and in Segments 16a, 16d, 16e, 16f, 16g, 16h, 16i, 16j, and 16k.						
COSPUS16C	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
UP	Aq Life Warm 2 Recreation E	Temperature °C	WS-II	WS-II	Aluminum	---
			acute	chronic	Arsenic	---
Qualifiers:		D.O. (mg/L)	---	5.0	Arsenic(T)	---
Other:		pH	6.5 - 9.0	---	Beryllium	---
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		E. Coli (per 100 mL)	---	126	Chromium III	TVS
		Inorganic (mg/L)			Chromium III(T)	---
			acute	chronic	Chromium VI	TVS
		Ammonia	TVS	TVS	Copper	TVS
		Boron	---	0.75	Iron(T)	---
		Chloride	---	---	Lead	TVS
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury	---
		Nitrate	100	---	Molybdenum(T)	---
		Nitrite	---	0.5	Nickel	TVS
		Phosphorus	---	0.17*	Selenium	TVS
		Sulfate	---	---	Silver	TVS
		Sulfide	---	0.002	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

## Upper South Platte River Basin

16d. Second Creek from the source to the O'Brian Canal.							
COSPUS16D	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
UP	Aq Life Warm 2	Temperature °C	WS-III	WS-III	Aluminum	---	
	Recreation E		acute	chronic	Arsenic	340	
<b>Qualifiers:</b>		D.O. (mg/L)	---	3.3*	Arsenic(T)	---	
<b>Other:</b>		pH	6.5 - 9.0	---	Beryllium	---	
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4). *D.O. (mg/L)(chronic) = 15th percentile of D.O. measurements collected between 6:30 a.m. and 6:30 p.m.		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS	
		E. Coli (per 100 mL)	---	126	Chromium III	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(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		Nitrite	---	0.5	Nickel	TVS	TVS
		Phosphorus	---	0.17*	Selenium	TVS	TVS
		Sulfate	---	---	Silver	TVS	TVS
		Sulfide	---	0.002	Uranium	---	---
					Zinc	TVS	TVS

  

16e. Third Creek from the source to the O'Brian Canal.							
COSPUS16E	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
UP	Aq Life Warm 2	Temperature °C	WS-III	WS-III	Aluminum	---	
	Recreation E		acute	chronic	Arsenic	340	
<b>Qualifiers:</b>		D.O. (mg/L)	---	4.0*	Arsenic(T)	---	
<b>Other:</b>		pH	6.5 - 9.0	---	Beryllium	---	
*D.O. (mg/L)(chronic) = 15th percentile of D.O. measurements collected between 6:30 a.m. and 6:30 p.m.		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	
		E. Coli (per 100 mL)	---	126	Chromium III	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(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		Nitrite	---	0.5	Nickel	TVS	TVS
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	---	Silver	TVS	TVS
		Sulfide	---	0.002	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

16f. Barr Lake Tributary from the source to the Denver Hudson Canal.							
COSPUS16F	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
UP	Aq Life Warm 2	Temperature °C	WS-III	WS-III	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
Qualifiers:	D.O. (mg/L)	---	narrative*		Arsenic(T)	---	100
Other:	pH	6.5 - 9.0	---		Beryllium	---	---
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4). *D.O. (mg/L)(chronic) = When water is present, D.O. concentrations shall be maintained at levels that protect classified uses.	chlorophyll a (mg/m <sup>2</sup> )	---	150*		Cadmium	TVS	TVS
	E. Coli (per 100 mL)	---	126		Chromium III	TVS	TVS
	Inorganic (mg/L)				Chromium III(T)	---	100
			acute	chronic	Chromium VI	TVS	TVS
	Ammonia	TVS	TVS		Copper	TVS	TVS
	Boron	---	0.75		Iron(T)	---	1000
	Chloride	---	---		Lead	TVS	TVS
	Chlorine	0.019	0.011		Manganese	TVS	TVS
	Cyanide	0.005	---		Mercury	---	0.01(t)
	Nitrate	100	---		Molybdenum(T)	---	150
	Nitrite	---	0.5		Nickel	TVS	TVS
	Phosphorus	---	0.17*		Selenium	TVS	TVS
	Sulfate	---	---		Silver	TVS	TVS
	Sulfide	---	0.002		Uranium	---	---
					Zinc	TVS	TVS

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	Agriculture	DM	MWAT	acute	chronic		
UP	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
Qualifiers:	D.O. (mg/L)	---	5.0		Arsenic(T)	---	100
Other:	pH	6.5 - 9.0	---		Beryllium	---	---
Temporary Modification(s): temperature(DM/MWAT) = current 12/1 - 2/29 condition* Expiration Date of 12/31/2020  *Copper(acute) = Copper BLM-based FMB Cu FMB(ac)=67.1 ug/l below the Centennial WWTF. *Copper(chronic) = Copper BLM-based FMB Cu FMB(ch)=43.3 ug/l below the Centennial WWTF. *Selenium(acute) = See section 38.6(4)(b) for assessment locations. *Selenium(chronic) = See section 38.6(4)(b) for assessment locations. *TempMod: temperature(12/1 - 2/29) = downstream of Centennial WWTF	chlorophyll a (mg/m <sup>2</sup> )	---	---		Cadmium	TVS	TVS
	E. Coli (per 100 mL)	---	126		Chromium III	TVS	TVS
	Inorganic (mg/L)				Chromium III(T)	---	100
			acute	chronic	Chromium VI	TVS	TVS
	Ammonia	TVS	TVS		Copper	---	TVS*
	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

## Upper South Platte River Basin

16h. Mainstem of West Toll Gate Creek, including all tributaries and wetlands, upstream of the confluence with East Toll Gate Creek. Mainstem of East Toll Gate Creek, including all tributaries and wetlands, upstream of the confluence with West Toll Gate Creek. Mainstem of Toll Gate Creek, downstream of the confluence of East and West Toll Gate Creeks, to the confluence with Sand Creek.

COSPUS16H	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Warm 2 Recreation E	Temperature °C	WS-II WS-II	Aluminum	---	---
		acute	chronic	Arsenic	340	---
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---
<b>Fish Ingestion Standards</b>		pH	6.5 - 9.0	---	Beryllium	---
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS
		E. Coli (per 100 mL)	---	126	Chromium III	TVS
		Inorganic (mg/L)		Chromium III(T)	---	100
		acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS
		Boron	---	0.75	Iron(T)	---
		Chloride	---	---	Lead	TVS
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury	---
		Nitrate	100	---	Molybdenum(T)	---
		Nitrite	---	0.5	Nickel	TVS
		Phosphorus	---	0.17*	Selenium	varies*
		Sulfate	---	---	Silver	TVS
		Sulfide	---	0.002	Uranium	---
					Zinc	TVS

16i. Mainstem of Sand Creek from the confluence with Toll Gate Creek to the confluence with the South Platte River.

COSPUS16I	Classifications	Physical and Biological		Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Warm 2 Recreation E	Temperature °C	WS-II WS-II	Aluminum	---	---
		acute	chronic	Arsenic	340	---
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---
<b>Fish Ingestion Standards</b>		pH	6.5 - 9.0	---	Beryllium	---
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	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
		Boron	---	0.75	Copper	TVS
		Chloride	---	---	Iron(T)	---
		Chlorine	0.019	0.011	Lead	TVS
		Cyanide	0.005	---	Lead(T)	50
		Nitrate	10	---	Manganese	TVS
		Nitrite	---	0.5	Mercury	---
		Phosphorus	---	0.17*	Mercury	---
		Sulfate	---	---	Molybdenum(T)	---
		Sulfide	---	0.002	Nickel	TVS
					Nickel(T)	---
					Selenium	---
					Selenium	varies*
					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

## Upper South Platte River Basin

16j. Lee Gulch, Little's Creek, Big Dry Creek (Douglas and Arapahoe Counties), and Little Dry Creek, including all wetlands from the source to the confluence with the South Platte.							
COSPUS16J	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	---
	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/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4). *Selenium(acute) = See section 38.6(4)(h) for selenium standards and assessment locations. *Selenium(chronic) = See section 38.6(4)(h) for selenium standards and assessment locations.		chlorophyll a (mg/m <sup>2</sup> )	---	150*	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	TVSWS
		Phosphorus	---	0.17*	Mercury	---	0.01(t)
		Sulfate	---	WS	Molybdenum(T)	---	150
		Sulfide	---	0.002	Nickel	TVS	TVS
					Nickel(T)	---	100
			Selenium	varies*	varies*		
			Silver	TVS	TVS		
			Uranium	---	---		
			Zinc	TVS	TVS		

  

16k. Mainstem of Lakewood Gulch from the source to the confluence with the South Platte.							
COSPUS16K	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	---
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	7.6
<b>Other:</b> *chlorophyll a (mg/m <sup>2</sup> )(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	---	Beryllium	---	---
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	126	Chromium III	TVS	TVS
		Inorganic (mg/L)			Chromium III(T)	---	100
			acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	---
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		Nitrite	---	0.5	Nickel	TVS	TVS
		Phosphorus	---	0.17*	Selenium	TVS	TVS
		Sulfate	---	---	Silver	TVS	TVS
		Sulfide	---	0.002	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

17a. Washington Park Lakes, City Park Lakes, Rocky Mountain Lake, Berkely Lake.						
COSPUS17A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Warm 1 Recreation E	WL	WL	Aluminum	---	---
Qualifiers:		acute	chronic	Arsenic	340	---
Other:		D.O. (mg/L)	---	5.0	Arsenic(T)	---
		pH	6.5 - 9.0	---	Beryllium	---
		chlorophyll a (ug/L)	---	---	Cadmium	TVS
		E. Coli (per 100 mL)	---	126	Chromium III	TVS
		Inorganic (mg/L)		Chromium III(T)	---	100
		acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS
		Boron	---	0.75	Iron(T)	---
		Chloride	---	---	Lead	TVS
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury	---
		Nitrate	100	---	Molybdenum(T)	---
		Nitrite	---	0.5	Nickel	TVS
		Phosphorus	---	---	Selenium	TVS
		Sulfate	---	---	Silver	TVS
		Sulfide	---	0.002	Uranium	---
					Zinc	TVS
17b. Sloan's Lake.						
COSPUS17B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Warm 1 Recreation E	WL	WL	Aluminum	---	---
Qualifiers:		acute	chronic	Arsenic	340	---
Other:		D.O. (mg/L)	---	5.0	Arsenic(T)	---
		pH	6.5 - 9.0	---	Beryllium	---
		chlorophyll a (ug/L)	---	---	Cadmium	TVS
		E. Coli (per 100 mL)	---	126	Chromium III	TVS
		Inorganic (mg/L)		Chromium III(T)	---	100
		acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS
		Boron	---	0.75	Iron(T)	---
		Chloride	---	---	Lead	TVS
		Chlorine	0.019	0.011	Manganese	TVS
		Cyanide	0.005	---	Mercury	---
		Nitrate	100	---	Molybdenum(T)	---
		Nitrite	---	0.5	Nickel	TVS
		Phosphorus	---	---	Selenium	TVS
		Sulfate	---	---	Silver	TVS
		Sulfide	---	0.002	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

## Upper South Platte River Basin

17c. Bowles Lake, a.k.a. Patrick Reservoir or Bow Mar Lake.						
COSPUS17C	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute chronic		
Reviewable	Aq Life Warm 1 Recreation E	WL	WL	Aluminum	TVS	TVS
Qualifiers:		acute	chronic	Arsenic	340	---
Other:		D.O. (mg/L)	---	5.0	Arsenic(T)	---
		D.O. (spawning)	---	7.0	Beryllium	---
		pH	6.5 - 9.0	---	Cadmium	TVS
		chlorophyll a (ug/L)	---	---	Chromium III	TVS
		E. Coli (per 100 mL)	---	126	Chromium III(T)	---
					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	---
		Chlorine	0.019	0.011	Molybdenum(T)	---
		Cyanide	0.005	---	Nickel	TVS
		Nitrate	100	---	Selenium	TVS
		Nitrite	---	0.5	Silver	TVS
		Phosphorus	---	---	Uranium	---
		Sulfate	---	---	Zinc	TVS
		Sulfide	---	0.002		
18. Lakes and reservoirs within the boundaries of the Lost Creek and Mt. Evans Wilderness areas.						
COSPUS18	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute chronic		
OW	Aq Life Cold 1 Recreation E Water Supply	CL	CL	Aluminum	---	---
Qualifiers:		acute	chronic	Arsenic	340	---
Other:		D.O. (mg/L)	---	6.0	Arsenic(T)	---
		D.O. (spawning)	---	7.0	Beryllium	---
		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
		chlorophyll a (ug/L)	---	8*	Cadmium(T)	5.0
		E. Coli (per 100 mL)	---	126	Chromium III	---
					Chromium III(T)	TVS
		Inorganic (mg/L)		Chromium VI	50	---
		acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS
		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	---	0.025*	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS
		Sulfide	---	0.002	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

## Upper South Platte River Basin

19. Lakes and reservoirs in the South Platte River system from headwaters to Chatfield Reservoir, except for specific listings in Segment 18. Includes Antero, Spinney Mountain, Elevenmile, Cheesman, and Strontia Springs.								
COSPUS19	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		<b>DM</b>	<b>MWAT</b>	<b>acute</b>	<b>chronic</b>		
Reviewable	Aq Life Cold 1	Temperature °C	3/1 - 12/31	CLL*	25.0*	Aluminum	---	---
	Recreation E	Temperature °C	4/1 - 12/31	CLL*	19.6*	Arsenic	340	---
	Water Supply	Temperature °C	4/1 - 12/31	CLL*	19.8* <sup>B</sup>	Arsenic(T)	---	0.02
	DUWS*	Temperature °C	4/1 - 12/31	CLL*	20.2*	Beryllium	---	---
<b>Qualifiers:</b>		Temperature °C	4/1 - 12/31	CLL*	21.9*	Cadmium	TVS(tr)	TVS
<b>Other:</b>		Temperature °C	4/1 - 12/31	CLL*	22.6*	Cadmium(T)	5.0	---
Temporary Modification(s):		Temperature °C		CL,CLL	CL,CLL	Chromium III	---	TVS
Arsenic(chronic) = hybrid				<b>acute</b>	<b>chronic</b>	Chromium III(T)	50	---
Expiration Date of 12/31/2021		D.O. (mg/L)		---	6.0	Chromium VI	TVS	TVS
*chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.		D.O. (spawning)		---	7.0	Copper	TVS	TVS
*Classification: DUWS applies to Strontia Springs only.		pH		6.5 - 9.0	---	Iron	---	WS
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.		chlorophyll a (ug/L)		---	8*	Iron(T)	---	1000
*Temperature(3/1 - 12/31) = Platte Canyon Res (MWAT=25.0)		E. Coli (per 100 mL)		---	126	Lead	TVS	TVS
*Temperature(4/1 - 12/31) = Antero Reservoir (MWAT=19.6)				<b>Inorganic (mg/L)</b>		Lead(T)	50	---
*Temperature(4/1 - 12/31) = Elevenmile Reservoir (MWAT=19.8)				<b>acute</b>	<b>chronic</b>	Manganese	TVS	TVS/WS
*Temperature(4/1 - 12/31) = Spinney Mt Reservoir (MWAT=20.2)		Ammonia		TVS	TVS	Mercury	---	0.01(t)
*Temperature(4/1 - 12/31) = Cheesman Reservoir (MWAT=21.9)		Boron		---	0.75	Molybdenum(T)	---	150
*Temperature(4/1 - 12/31) = Strontia Springs Res (MWAT=22.6)		Chloride		---	250	Nickel	TVS	TVS
		Chlorine		0.019	0.011	Nickel(T)	---	100
		Cyanide		0.005	---	Selenium	TVS	TVS
		Nitrate		10	---	Silver	TVS	TVS(tr)
		Nitrite		---	0.05	Uranium	---	---
		Phosphorus		---	0.025*	Zinc	TVS	TVS
		Sulfate		---	WS			
		Sulfide		---	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.



# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Upper South Platte River Basin

20. Lakes and reservoirs in the Plum Creek system within National Forest boundaries; and lakes and reservoirs in the Bear Creek drainage between the National Forest boundary and to the inlet of Perry Park Reservoir, a.k.a. Waucondah Reservoir (Douglas County).					
COSPUS20	Classifications	Physical and Biological		Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic
Reviewable	Aq Life Cold 1 Recreation E Water Supply	CL	CL	Aluminum	---
Qualifiers:		acute	chronic	Arsenic	340
Other:		D.O. (mg/L)	6.0	Arsenic(T)	0.02
		D.O. (spawning)	7.0	Beryllium	---
		pH	6.5 - 9.0	Cadmium	TVS(tr) TVS
		chlorophyll a (ug/L)	---	Cadmium(T)	5.0
		E. Coli (per 100 mL)	126	Chromium III	TVS
				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)	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	0.05	Molybdenum(T)	150
		Phosphorus	---	Nickel	TVS TVS
		Sulfate	WS	Nickel(T)	100
		Sulfide	0.002	Selenium	TVS TVS
				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

## Upper South Platte River Basin

21. Lakes and reservoirs in the Plum Creek system except for specific listings in Segment 20.						
COSPUS21	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
Reviewable	Aq Life Warm 2 Recreation E Water Supply DUWS*	WL	WL	Aluminum	---	---
		acute	chronic	Arsenic	340	---
		---	5.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
		6.5 - 9.0	---	Beryllium	---	---
Qualifiers:	chlorophyll a (ug/L)	---	---	Cadmium	TVS	TVS
Other:	E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
		Inorganic (mg/L)		Chromium III	---	TVS
		acute	chronic	Chromium III(T)	50	---
		TVS	TVS	Chromium VI	TVS	TVS
		---	0.75	Copper	TVS	TVS
		---	250	Iron	---	WS
		0.019	0.011	Iron(T)	---	1000
		0.005	---	Lead	TVS	TVS
		10	---	Lead(T)	50	---
		---	0.5	Manganese	TVS	TVSWS
		---	---	Mercury	---	0.01(t)
		---	WS	Molybdenum(T)	---	150
		---	0.002	Nickel	TVS	TVS
				Nickel(T)	---	100
				Selenium	TVS	TVS
				Silver	TVS	TVS
				Uranium	---	---
				Zinc	TVS	TVS
22a. Lakes and reservoirs in watersheds tributary to the South Platte River from the outlet of Chatfield Reservoir to a point immediately below the confluence with Big Dry Creek, except for specific listings in the subbasins of the South Platte River, and in Segments 16b, 17a, 17b, 17c, 22b, and 23.						
COSPUS22A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
Reviewable	Aq Life Warm 2 Recreation E Water Supply DUWS*	WL	WL	Aluminum	---	---
		acute	chronic	Arsenic	340	---
		---	5.0	Arsenic(T)	---	0.02
		6.5 - 9.0	---	Beryllium	---	---
Qualifiers:	chlorophyll a (ug/L)	---	---	Cadmium	TVS	TVS
Fish Ingestion Standards	E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
Other:		Inorganic (mg/L)		Chromium III	---	TVS
		acute	chronic	Chromium III(T)	50	---
		TVS	TVS	Chromium VI	TVS	TVS
		---	0.75	Copper	TVS	TVS
		---	250	Iron	---	WS
		0.019	0.011	Iron(T)	---	1000
		0.005	---	Lead	TVS	TVS
		10	---	Lead(T)	50	---
		---	0.5	Manganese	TVS	TVSWS
		---	---	Mercury	---	0.01(t)
		---	WS	Molybdenum(T)	---	150
		---	0.002	Molybdenum(T)	---	210*
				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

22b. Lakes and reservoirs located in the Rocky Mountain Arsenal National Wildlife Refuge							
COSPUS22B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
Qualifiers:	D.O. (mg/L)	---	5.0		Arsenic(T)	---	100
Other:	pH	6.5 - 9.0	---		Beryllium	---	---
	chlorophyll a (ug/L)	---	---		Cadmium	TVS	TVS
	E. Coli (per 100 mL)	---	126		Chromium III	TVS	TVS
	Inorganic (mg/L)				Chromium III(T)	---	100
		acute	chronic		Chromium VI	TVS	TVS
	Ammonia	TVS	TVS		Copper	TVS	TVS
	Boron	---	0.75		Iron(T)	---	1000
	Chloride	---	---		Lead	TVS	TVS
	Chlorine	0.019	0.011		Manganese	TVS	TVS
	Cyanide	0.005	---		Mercury	---	0.01(t)
	Nitrate	100	---		Molybdenum(T)	---	150
	Nitrite	---	0.5		Nickel	TVS	TVS
	Phosphorus	---	---		Selenium	TVS	TVS
	Sulfate	---	---		Silver	TVS	TVS
	Sulfide	---	0.002		Uranium	---	---
					Zinc	TVS	TVS

23. Lakes and reservoirs in watersheds tributary to the Upper South Platte River and within the City and County of Denver, except for specific listings in the other subbasins of the South Platte River and in Segments 17a and 17b..

23. Lakes and reservoirs in watersheds tributary to the Upper South Platte River and within the City and County of Denver, except for specific listings in the other subbasins of the South Platte River and in Segments 17a and 17b..							
COSPUS23	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT		acute	chronic	
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
Qualifiers:	D.O. (mg/L)	---	5.0		Arsenic(T)	---	7.6
Fish Ingestion Standards	pH	6.5 - 9.0	---		Beryllium	---	---
Other:	chlorophyll a (ug/L)	---	---		Cadmium	TVS	TVS
	E. Coli (per 100 mL)	---	126		Chromium III	TVS	TVS
	Inorganic (mg/L)				Chromium III(T)	---	100
		acute	chronic		Chromium VI	TVS	TVS
	Ammonia	TVS	TVS		Copper	TVS	TVS
	Boron	---	0.75		Iron(T)	---	1000
	Chloride	---	---		Lead	TVS	TVS
	Chlorine	0.019	0.011		Manganese	TVS	TVS
	Cyanide	0.005	---		Mercury	---	0.01(t)
	Nitrate	100	---		Molybdenum(T)	---	150
	Nitrite	---	0.5		Nickel	TVS	TVS
	Phosphorus	---	---		Selenium	TVS	TVS
	Sulfate	---	---		Silver	TVS	TVS
	Sulfide	---	0.002		Uranium	---	---
					Zinc	TVS	TVS

\*See section 38.7 (Marston Forebay).

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.

## UPPER SOUTH PLATTE RIVER SEGMENT 15

### Site-Specific Minimum Dissolved Oxygen and Ammonia Standards

#### UNDERLYING STANDARDS

##### Dissolved Oxygen

###### Early Life Stage Protection Period (April 1 through July 31)

1-Day<sup>1,5,6</sup> 3.0 mg/L (acute)

7-Day Average<sup>1,2,4</sup> 5.0 mg/L

###### Older Life Stage Protection Period (August 1 through March 31)

1-Day<sup>1,5</sup> 2.0 mg/L (acute)

7-Day Mean of Minimums<sup>1,3</sup> 2.5 mg/L

30-Day Average<sup>1,2</sup> 4.5 mg/L

#### TEMPORARY MODIFICATION

During the period until October 31, 2001, the Segment 15 dissolved oxygen standards from 88<sup>th</sup> Avenue north to the end of the Segment shall be the currently existing ambient conditions as monitored in 1992, 1993, and 1994 by the Division and by the Metro District. Beginning November 1, 2001, the standards shall apply to all sections of Segment 15 south of the Brighton Ditch diversion. The standards north of the Brighton Ditch diversion shall continue to be the ambient conditions existing in 1992, 1993, and 1994. Beginning November 1, 2004, the standards shall apply to all sections of Segment 15.

Refer to Section 38(6)(4)(c) for Dissolved Oxygen assessment locations.

#### Footnotes

1. For the purposes of determining compliance with the standards, dissolved oxygen measurements shall only be taken in the flowing portion of the stream at mid-depth, and at least six inches above the bottom of the channel. All sampling protocols and test procedures shall be in accordance with procedures and protocols approved by the Division.

2. A minimum of four independent daily means must be used to calculate the average for the 7-Day Average standard. A minimum of eight independent daily means must be used to calculate the average for the 30-Day Average standard. The four days and the eight days must be representative of the 7-Day and the 30-Day periods respectively. The daily means shall be the mean of the daily high and low values. In calculating the mean values, the dissolved oxygen saturation value shall be used in place of any dissolved oxygen measurements which exceed saturation.
3. The 7-Day Mean minimum is the average of the daily minimums measured at the location on each day during any 7-Day period.
4. North of the Lupton Bottoms Ditch diversion, the ELS 7-Day average standards for the period July 1 – June 31 shall be 4.6 mg/L.
5. During a 24 hour day dissolved oxygen levels are likely to be lower during the nighttime when there is no photosynthesis. The dissolved oxygen levels should not drop below the acute standard (ELS acute standard of 3.0 mg/L or the OLS standards of 2.0 mg/L). However, if during the ELS period multiple measurements are below 3.0 mg/L during the same nighttime period, the multiple measurements shall be considered a single exceedance of the acute standard. For measurements below 2.0 mg/L during either the ELS or the OLS periods, each hourly measurement below 2.0 mg/L shall be considered an exceedance of the acute standards.
6. In July, the dissolved oxygen level in Segment 15 may be lower than the 3.0 mg/L acute standard for up to 14 exceedances in any one year and up to a total of 21 exceedances in three years before there is a determination that the acute dissolved oxygen standards is not being met. Exceedances shall be counted as described in Footnote 5.

Ammonia:

Early Life Stage Protection Period (April 1 through July 31)

Ammonia

Warm Water = (mg/l as N)Total

$$acute = \frac{0.411}{1 + 10^{7.204 - pH}} + \frac{58.4}{1 + 10^{pH - 7.204}}$$

$$chronic (Apr1 - July31) = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * MIN \left( 2.85, 1.45 * 10^{0.028(25 - T)} \right)$$

$$chronic(Aug1 - Mar31) = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * 1.45 * 10^{0.028 * (25 - MAX(T, 7))}$$

NH<sub>3</sub> = old TVS

Warm Water Acute = 0.62/FT/FP/2<sup>(4 old)</sup> in mg/ (N)

# 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	Metals (ug/L)			
Reviewable	Aq Life Warm 2 Recreation E Water Supply	WS-II	WS-II	acute	chronic		
Qualifiers:	pH	acute	chronic	Aluminum	---	---	
		6.5 - 9.0	---	Arsenic	340	---	
Other:	chlorophyll a (mg/m <sup>2</sup> )	<b>Inorganic (mg/L)</b>			Arsenic(T)	---	0.02-10 <sup>A</sup>
		acute	chronic	Beryllium	---	---	
Temporary Modification(s):	E. Coli (per 100 mL)	---	126	Cadmium	TVS	TVS	
Copper(ac/ch) = current condition*	<b>Inorganic (mg/L)</b>			Cadmium(T)	5.0	---	
Expiration Date of 12/31/2020	Ammonia	acute	chronic	Chromium III	---	TVS	
*chlorophyll a (mg/m <sup>2</sup> )(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). *TempMod: Copper = below the PWSDD WWTF outfall.	Boron	TVS	TVS	Chromium III(T)	50	---	
	Chloride	---	150*	Chromium VI	TVS	TVS	
	Chlorine	---	0.75	Copper	TVS	TVS	
	Cyanide	---	250	Iron	---	WS	
	Nitrate	0.019	0.011	Iron(T)	---	1000	
	Nitrite	0.005	---	Lead	TVS	TVS	
	Phosphorus	10	---	Lead(T)	50	---	
	Sulfate	---	0.5	Manganese	TVS	TVS/WS	
	Sulfide	---	0.17*	Mercury	---	0.01(t)	
		---	WS	Molybdenum(T)	---	150	
		---	0.002	Nickel	TVS	TVS	
				Nickel(T)	---	100	
				Selenium	TVS	TVS	
				Silver	TVS	TVS	
				Uranium	---	---	
				Zinc	TVS	TVS	
2. Cherry Creek Reservoir.							
COSPCH02	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	Metals (ug/L)			
Reviewable	Aq Life Warm 1 Recreation E Water Supply	WL	WL	acute	chronic		
Qualifiers:	pH	acute	chronic	Aluminum	---	---	
		6.5 - 9.0	---	Arsenic	340	---	
Other:	chlorophyll a (ug/L) 7/1 - 9/30	<b>Inorganic (mg/L)</b>			Arsenic(T)	---	0.02
		acute	chronic	Beryllium	---	---	
Temporary Modification(s):	E. Coli (per 100 mL)	---	126	Cadmium	TVS	TVS	
Arsenic(chronic) = hybrid	<b>Inorganic (mg/L)</b>			Cadmium(T)	5.0	---	
Expiration Date of 12/31/2021	Ammonia	acute	chronic	Chromium III	---	TVS	
*chlorophyll a (ug/L)(chronic) = Season mean concentration measured in the upper three meters of the water column for the months of July through September with an exceedance frequency of once in five years.	Boron	TVS	TVS	Chromium III(T)	50	---	
	Chloride	---	18*	Chromium VI	TVS	TVS	
	Chlorine	---	0.75	Copper	TVS	TVS	
	Cyanide	---	250	Iron	---	WS	
	Nitrate	0.019	0.011	Iron(T)	---	1000	
	Nitrite	0.005	---	Lead	TVS	TVS	
	Phosphorus	10	---	Lead(T)	50	---	
	Sulfate	---	0.5	Manganese	TVS	TVS/WS	
	Sulfide	---	---	Mercury	---	0.01(t)	
		---	WS	Molybdenum(T)	---	150	
		---	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

## Cherry Creek Basin

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)	---	0.02-10 <sup>A</sup>	
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---	---	
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS	
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---	
		<b>Inorganic (mg/L)</b>			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	TVSWS	
		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			

4a. All tributaries to Cherry Creek, including all wetlands, from the source of East and West Cherry Creeks to the confluence with the South Platte River except for specific listings in Segment 4b.

COSPCH04A	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	---	
	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/m <sup>2</sup> )	---	150*	Cadmium	TVS	TVS	
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---	
		<b>Inorganic (mg/L)</b>			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	Lead	TVS	TVS	
		Cyanide	0.005	---	Lead(T)	50	---	
		Nitrate	10	---	Manganese	TVS	TVSWS	
		Nitrite	---	0.5	Mercury	---	0.01(t)	
		Phosphorus	---	0.17*	Molybdenum(T)	---	150	
		Sulfate	---	WS	Nickel	TVS	TVS	
		Sulfide	---	0.002	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 Cherry Creek Basin

4b. Cottonwood Creek, including all tributaries and wetlands, from the source to Cherry Creek Reservoir.						
COSPCH04B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT			
UP	Aq Life Warm 2	WS-II	WS-II	acute	chronic	
	Recreation E	acute	chronic	Aluminum	---	
	Water Supply	---	5.0	Arsenic	340	
<b>Qualifiers:</b>	pH	6.5 - 9.0	---	Arsenic(T)	---	0.02-10 <sup>A</sup>
<b>Other:</b>  *chlorophyll a (mg/m <sup>2</sup> )(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). *Selenium(acute) = See section 38.6(4)(i) for selenium standards and assessment locations. *Selenium(chronic) = See section 38.6(4)(i) for selenium standards and assessment locations.	chlorophyll a (mg/m <sup>2</sup> )	---	150*	Beryllium	---	---
	E. Coli (per 100 mL)	---	126	Cadmium	TVS	TVS
	Inorganic (mg/L)			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	---	Lead	TVS	TVS
	Nitrate	10	---	Lead(T)	50	---
	Nitrite	---	0.5	Manganese	TVS	TVSWS
	Phosphorus	---	0.17*	Mercury	---	0.01(t)
	Sulfate	---	WS	Molybdenum(T)	---	150
	Sulfide	---	0.002	Nickel	TVS	TVS
				Nickel(T)	---	100
				Selenium	varies*	varies*
				Silver	TVS	TVS
			Uranium	---	---	
			Zinc	TVS	TVS	

5. Lakes and reservoirs in the Cherry Creek system from the source of East and West Cherry Creeks to the confluence with the South Platte River, except for specific listings in Segments 2 and 6.						
COSPCH05	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT			
Reviewable	Aq Life Warm 2	WL	WL	acute	chronic	
	Recreation E	acute	chronic	Aluminum	---	
	Water Supply	---	5.0	Arsenic	340	
<b>Qualifiers:</b>	pH	6.5 - 9.0	---	Arsenic(T)	---	0.02-10 <sup>A</sup>
<b>Other:</b>  *chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.	chlorophyll a (ug/L)	---	20*	Beryllium	---	---
	E. Coli (per 100 mL)	---	126	Cadmium	TVS	TVS
	Inorganic (mg/L)			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	---	0.083*	Manganese	TVS	TVSWS
	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	

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

6. Lakes and reservoirs in watersheds tributary to Cherry Creek within the City and County of Denver.								
COSPCH06	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture	DM	MWAT		acute	chronic		
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	---	
	Recreation E		acute	chronic	Arsenic	340	---	
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	7.6	
<b>Fish Ingestion Standards</b>		pH	6.5 - 9.0	---	Beryllium	---	---	
<b>Other:</b>		chlorophyll a (ug/L)	---	---	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(T)	---	1000	
		Chloride	---	---	Lead	TVS	TVS	
		Chlorine	0.019	0.011	Manganese	TVS	TVS	
		Cyanide	0.005	---	Mercury	---	0.01(t)	
		Nitrate	100	---	Molybdenum(T)	---	150	
		Nitrite	---	0.5	Nickel	TVS	TVS	
		Phosphorus	---	---	Selenium	TVS	TVS	
		Sulfate	---	---	Silver	TVS	TVS	
		Sulfide	---	0.002	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

## Bear Creek Basin

1a. Mainstem of Bear Creek from the boundary of the Mt. Evans Wilderness area to the inlet of Evergreen Lake.									
COSPBE01A	Classifications	Physical and Biological			Metals (ug/L)				
Designation	Agriculture			DM	MWAT				
Reviewable	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	CS-I	CS-I			acute	chronic	
Qualifiers:				acute	chronic				
Other:									
Temporary Modification(s):									
Arsenic(chronic) = hybrid									
Expiration Date of 12/31/2021									
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4).									
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).									
		D.O. (mg/L)	---	6.0	---	---	---	0.02	
		D.O. (spawning)	---	7.0	---	---	---	---	
		pH	6.5 - 9.0	---	---	---	TVS(tr)	TVS	
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	---	---	5.0	---	
		E. Coli (per 100 mL)	---	126	---	---	---	TVS	
		Inorganic (mg/L)							
				acute	chronic				
		Ammonia	TVS	TVS	---	---	TVS	TVS	
		Boron	---	0.75	---	---	---	WS	
		Chloride	---	250	---	---	TVS	TVS	
		Chlorine	0.019	0.011	---	---	50	---	
		Cyanide	0.005	---	---	---	TVS	TVS/WS	
		Nitrate	10	---	---	---	---	0.01(t)	
		Nitrite	---	0.05	---	---	---	150	
		Phosphorus	---	0.11*	---	---	TVS	TVS	
		Sulfate	---	WS	---	---	---	100	
		Sulfide	---	0.002	---	---	TVS	TVS	
						---	TVS	TVS(tr)	
						---	---	---	
						---	TVS	TVS	

  

1b. Mainstem of Bear Creek from Harriman Ditch to the inlet of Bear Creek Reservoir.									
COSPBE01B	Classifications	Physical and Biological			Metals (ug/L)				
Designation	Agriculture			DM	MWAT				
Reviewable	Aq Life Cold 2 Recreation E Water Supply	Temperature °C	11/1 - 3/31	CS-II	CS-II				
Qualifiers:				acute	chronic				
Water + Fish Standards									
Other:									
Temporary Modification(s):									
Arsenic(chronic) = hybrid									
Expiration Date of 12/31/2021									
		Temperature °C	4/1 - 10/31	CS-II	19.3	---	---	---	
		D.O. (mg/L)	---	---	6.0	---	---	0.02	
		D.O. (spawning)	---	---	7.0	---	---	---	
		pH	6.5 - 9.0	---	---	---	---	TVS	
		chlorophyll a (mg/m <sup>2</sup> )	---	---	---	---	50	---	
		E. Coli (per 100 mL)	---	---	126	---	TVS	TVS	
		Inorganic (mg/L)							
				acute	chronic				
		Ammonia	TVS	TVS	---	---	TVS	TVS	
		Boron	---	0.75	---	---	---	1000	
		Chloride	---	250	---	---	TVS	TVS/WS	
		Chlorine	0.019	0.011	---	---	---	0.01(t)	
		Cyanide	0.005	---	---	---	---	150	
		Nitrate	10	---	---	---	TVS	TVS	
		Nitrite	---	0.05	---	---	---	100	
		Phosphorus	---	---	---	---	TVS	TVS	
		Sulfate	---	WS	---	---	TVS	TVS(tr)	
		Sulfide	---	0.002	---	---	---	---	
						---	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

## Bear Creek Basin

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

  

1d. Evergreen Lake.										
COSPBE01D	Classifications	Physical and Biological			Metals (ug/L)					
Designation	Agriculture		DM	MWAT	acute	chronic				
Reviewable	Aq Life Cold 1	Temperature °C		CLL	CLL	Aluminum	---	---		
	Recreation E					Arsenic	340	---		
	Water Supply					Arsenic(T)	---	0.02		
DUWS		D.O. (mg/L)		---	6.0	Beryllium	---	---		
		D.O. (spawning)		---	7.0	Cadmium	TVS(tr)	TVS		
		pH		6.5 - 9.0	---	Cadmium(T)	5.0	---		
<b>Qualifiers:</b>		chlorophyll a (ug/L)		---	---	Chromium III	---	TVS		
<b>Other:</b>		E. Coli (per 100 mL)		---	126	Chromium III(T)	50	---		
						Chromium VI	TVS	TVS		
						<b>Inorganic (mg/L)</b>				
						<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		---	0.05	Molybdenum(T)	---	150		
		Phosphorus		---	---	Nickel	TVS	TVS		
		Sulfate		---	WS	Nickel(T)	---	100		
		Sulfide		---	0.002	Selenium	TVS	TVS		
						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

## Bear Creek Basin

1e. Mainstem of Bear Creek from the outlet of Evergreen Lake to the Harriman Ditch.									
COSPBE01E	Classifications	Physical and Biological			Metals (ug/L)				
Designation	Agriculture		DM	MWAT		acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	11/1 - 3/31	CS-II	CS-II	Aluminum	---	---	
	Recreation E	Temperature °C	4/1 - 10/31	CS-II	19.3	Arsenic	340	---	
	Water Supply					Arsenic(T)	---	0.02	
Qualifiers:			acute	chronic					
Other:		D.O. (mg/L)	---	6.0		Beryllium	---	---	
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		D.O. (spawning)	---	7.0		Cadmium	TVS(tr)	TVS	
		pH	6.5 - 9.0	---		Cadmium(T)	5.0	---	
		chlorophyll a (mg/m <sup>2</sup> )	---	---		Chromium III	---	TVS	
		E. Coli (per 100 mL)	---	126		Chromium III(T)	50	---	
		Inorganic (mg/L)							
			acute	chronic					
		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	---	0.01(t)	
		Sulfate	---	WS		Molybdenum(T)	---	150	
Sulfide	---	0.002		Nickel	TVS	TVS			
				Nickel(T)	---	100			
				Selenium	TVS	TVS			
				Silver	TVS	TVS(tr)			
				Uranium	---	---			
				Zinc	TVS	TVS			

  

2. Mainstem of Bear Creek from the outlet of Bear Creek Reservoir to the confluence with the South Platte River.								
COSPBE02	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				Arsenic	340	---	
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02	
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---	---	
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS	
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---	
		Inorganic (mg/L)						
			acute	chronic				
		Ammonia	TVS	TVS		Chromium III	---	TVS
		Boron	---	0.75		Chromium III(T)	50	---
		Chloride	---	250		Chromium VI	TVS	TVS
		Chlorine	0.019	0.011		Copper	TVS	TVS
		Cyanide	0.005	---		Iron	---	WS
		Nitrate	10	---		Iron(T)	---	1000
		Nitrite	---	0.5		Lead	TVS	TVS
		Phosphorus	---	---		Lead(T)	50	---
		Sulfate	---	WS		Manganese	TVS	TVS/WS
		Sulfide	---	0.002		Mercury	---	0.01(t)
						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

## Bear Creek Basin

3. All tributaries to Bear Creek, including all wetlands, from the source to the outlet of Evergreen Lake. Except for specific listings in Segment 7.									
COSPBE03	Classifications	Physical and Biological			Metals (ug/L)				
Designation	Agriculture	DM	MWAT	acute      chronic					
Reviewable	Aq Life Cold 1 Recreation E Water Supply	acute	chronic	Temperature °C	CS-I	CS-I	Aluminum	---	---
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic	340	---	---	
Other:	Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).	D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02		
Water + Fish Standards		pH	6.5 - 9.0	---	Beryllium	---	---		
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS(tr)	TVS		
Water + Fish Standards		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---		
Other:		Inorganic (mg/L)			Chromium III	---	TVS		
Water + Fish Standards		acute	chronic	Chromium III(T)	50	---			
Other:		Ammonia	TVS	TVS	Chromium VI	TVS	TVS		
Water + Fish Standards		Boron	---	0.75	Copper	TVS	TVS		
Other:		Chloride	---	250	Iron	---	WS		
Water + Fish Standards		Chlorine	0.019	0.011	Iron(T)	---	1000		
Other:		Cyanide	0.005	---	Lead	TVS	TVS		
Water + Fish Standards		Nitrate	10	---	Lead(T)	50	---		
Other:		Nitrite	---	0.05	Manganese	TVS	TVS/WS		
Water + Fish Standards		Phosphorus	---	0.11*	Mercury	---	0.01(t)		
Other:		Sulfate	---	WS	Molybdenum(T)	---	150		
Water + Fish Standards		Sulfide	---	0.002	Nickel	TVS	TVS		
Other:					Nickel(T)	---	100		
Water + Fish Standards					Selenium	TVS	TVS		
Other:					Silver	TVS	TVS(tr)		
Water + Fish Standards					Uranium	---	---		
Other:					Zinc	TVS	TVS		

  

4a. All tributaries to Bear Creek, including all wetlands, from the outlet of Evergreen Lake to the confluence with the South Platte River, except for specific listings in Segments 5, 6a, and 6b.									
COSPBE04A	Classifications	Physical and Biological			Metals (ug/L)				
Designation	Agriculture	DM	MWAT	acute      chronic					
Reviewable	Aq Life Warm 2 Recreation E Water Supply	acute	chronic	Temperature °C	WS-I	WS-I	Aluminum	---	---
Qualifiers:		D.O. (mg/L)	---	5.0	Arsenic	340	---	---	
Other:	Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021	pH	6.5 - 9.0	---	Arsenic(T)	---	0.02		
Water + Fish Standards		chlorophyll a (mg/m <sup>2</sup> )	---	---	Beryllium	---	---		
Other:		E. Coli (per 100 mL)	---	126	Cadmium	TVS	TVS		
Water + Fish Standards		Inorganic (mg/L)			Cadmium(T)	5.0	---		
Other:		acute	chronic	Chromium III	---	TVS			
Water + Fish Standards		Ammonia	TVS	TVS	Chromium III(T)	50	---		
Other:		Boron	---	0.75	Chromium VI	TVS	TVS		
Water + Fish Standards		Chloride	---	250	Copper	TVS	TVS		
Other:		Chlorine	0.019	0.011	Iron	---	WS		
Water + Fish Standards		Cyanide	0.005	---	Iron(T)	---	1000		
Other:		Nitrate	10	---	Lead	TVS	TVS		
Water + Fish Standards		Nitrite	---	0.5	Lead(T)	50	---		
Other:		Phosphorus	---	---	Manganese	TVS	TVS/WS		
Water + Fish Standards		Sulfate	---	WS	Mercury	---	0.01(t)		
Other:		Sulfide	---	0.002	Molybdenum(T)	---	150		
Water + Fish Standards					Nickel	TVS	TVS		
Other:					Nickel(T)	---	100		
Water + Fish Standards					Selenium	TVS	TVS		
Other:					Silver	TVS	TVS		
Water + Fish Standards					Uranium	---	---		
Other:					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  
Bear Creek Basin**

4b. Deleted.				
<b>COSPBE04B</b>	<b>Classifications</b>	<b>Physical and Biological</b>		<b>Metals (ug/L)</b>
<b>Designation</b>		<b>DM</b>	<b>MWAT</b>	<b>acute      chronic</b>
<b>Qualifiers:</b>		<b>acute</b>	<b>chronic</b>	
<b>Other:</b>		<b>Inorganic (mg/L)</b>		
		<b>acute</b>	<b>chronic</b>	
4c. Deleted.				
<b>COSPBE04C</b>	<b>Classifications</b>	<b>Physical and Biological</b>		<b>Metals (ug/L)</b>
<b>Designation</b>		<b>DM</b>	<b>MWAT</b>	<b>acute      chronic</b>
<b>Qualifiers:</b>		<b>acute</b>	<b>chronic</b>	
<b>Other:</b>		<b>Inorganic (mg/L)</b>		
		<b>acute</b>	<b>chronic</b>	

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

5. Swede, Kerr, Sawmill, Troublesome, and Cold Springs Gulches, and mainstem of Cub Creek from the source to the confluence with Bear Creek.						
COSPBE05	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT			
Reviewable	Aq Life Cold 2 Recreation E Water Supply	acute	chronic	acute	chronic	
	Temperature °C	CS-II	CS-II	Aluminum	---	---
	D.O. (mg/L)	---	6.0	Arsenic	340	---
	D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02
	pH	6.5 - 9.0	---	Beryllium	---	---
	chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS(tr)	TVS
	E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
		<b>Inorganic (mg/L)</b>		Chromium III	---	TVS
		acute	chronic	Chromium III(T)	50	---
				Chromium VI	TVS	TVS
				Copper	TVS	TVS
		Ammonia	TVS	TVS	Iron	---
		Boron	---	0.75	Iron(T)	---
		Chloride	---	250	Lead	TVS
		Chlorine	0.019	0.011	Lead(T)	50
		Cyanide	0.005	---	Manganese	TVS
		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	TVS

  

6a. Turkey Creek system, including all tributaries and wetlands, from the source to the inlet of Bear Creek Reservoir, except for specific listings in Segment 6b.						
COSPBE06A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT			
Reviewable	Aq Life Cold 2 Recreation E Water Supply	acute	chronic	acute	chronic	
	Temperature °C	CS-II	CS-II	Aluminum	---	---
	D.O. (mg/L)	---	6.0	Arsenic	340	---
	D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02
	pH	6.5 - 9.0	---	Beryllium	---	---
	chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS(tr)	TVS
	E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
		<b>Inorganic (mg/L)</b>		Chromium III	---	TVS
		acute	chronic	Chromium III(T)	50	---
				Chromium VI	TVS	TVS
				Copper	TVS	TVS
		Ammonia	TVS	TVS	Iron	---
		Boron	---	0.75	Iron(T)	---
		Chloride	---	250	Lead	TVS
		Chlorine	0.019	0.011	Lead(T)	50
		Cyanide	0.005	---	Manganese	TVS
		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	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

6b. Mainstem of North Turkey Creek, from the source to the confluence with Turkey Creek.						
COSPBE06B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
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/m <sup>2</sup> )	---	---	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
			acute	chronic	Chromium VI	TVS
		Ammonia	TVS	TVS	Copper	TVS
		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	TVS

  

7. Mainstem and all tributaries to Bear Creek, including wetlands, within the Mt. Evans Wilderness Area.						
COSPBE07	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
OW	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)
*Phosphorus(chronic) = effective 12/31/2020		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0
		E. Coli (per 100 mL)	---	126	Chromium III	---
		Inorganic (mg/L)			Chromium III(T)	50
			acute	chronic	Chromium VI	TVS
		Ammonia	TVS	TVS	Copper	TVS
		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	---	0.14*	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS
		Sulfide	---	0.002	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

8. Lakes and reservoirs in the Bear Creek system from the sources to the boundary of the Mt. Evans Wilderness area.						
COSPBE08	Classifications	Physical and Biological			Metals (ug/L)	
Designation			DM	MWAT		
OW	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	CL	CL	Aluminum	---
			acute	chronic	Arsenic	340
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic(T)	---
Other:		D.O. (spawning)	---	7.0	Beryllium	---
		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
		chlorophyll a (ug/L)	---	8*	Cadmium(T)	5.0
		E. Coli (per 100 mL)	---	126	Chromium III	---
		Inorganic (mg/L)			Chromium III(T)	50
			acute	chronic	Chromium VI	TVS
		Ammonia	TVS	TVS	Copper	TVS
		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	---	0.025*	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS
		Sulfide	---	0.002	Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS

\*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.  
\*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.

  

9. Lakes and reservoirs in the Bear Creek system from the boundary of the Mt. Evans Wilderness area to the inlet of Evergreen Lake; includes Summit Lake.						
COSPBE09	Classifications	Physical and Biological			Metals (ug/L)	
Designation			DM	MWAT		
Reviewable	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	CL	CL	Aluminum	---
			acute	chronic	Arsenic	340
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic(T)	---
Other:		D.O. (spawning)	---	7.0	Beryllium	---
		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
		chlorophyll a (ug/L)	---	8*	Cadmium(T)	5.0
		E. Coli (per 100 mL)	---	126	Chromium III	---
		Inorganic (mg/L)			Chromium III(T)	50
			acute	chronic	Chromium VI	TVS
		Ammonia	TVS	TVS	Copper	TVS
		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	---	0.025*	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS
		Sulfide	---	0.002	Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS

\*chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.  
\*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.

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

10. Lakes and reservoirs in drainages of Swede Gulch, Sawmill Gulch, Troublesome Gulch, and Cold Springs Gulch from source to confluence with Bear Creek.							
COSPBE10	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 2	Temperature °C	CL	CL	Aluminum	---	
	Recreation E		acute	chronic	Arsenic	340	
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	
<b>Water + Fish Standards</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	
<b>Other:</b>		chlorophyll a (ug/L)	---	---	Cadmium(T)	5.0	
		E. Coli (per 100 mL)	---	126	Chromium III	---	
		<b>Inorganic (mg/L)</b>			Chromium III(T)	50	---
			acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	---	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS

  

11. Lakes and reservoirs in the Bear Creek system from the outlet of Evergreen Lake to the confluence with the South Platte River, except as specified in Segments 1c, 10, and 12; includes Soda Lakes.							
COSPBE11	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	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>Water + Fish Standards</b>		chlorophyll a (ug/L)	---	---	Cadmium	TVS	
<b>Other:</b>		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	
		<b>Inorganic (mg/L)</b>			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	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 Bear Creek Basin

12. Lakes and reservoirs in the Turkey Creek system from the source to the inlet of Bear Creek Reservoir.					
COSPBE12	Classifications	Physical and Biological		Metals (ug/L)	
Designation		DM	MWAT	acute	chronic
Reviewable	Agriculture				
	Aq Life Cold 2	CL	CL	Aluminum	---
	Recreation E	acute	chronic	Arsenic	340
	Water Supply			Arsenic(T)	---
Qualifiers:	D.O. (mg/L)	---	6.0	Beryllium	---
	D.O. (spawning)	---	7.0	Cadmium	TVS(tr)
Water + Fish Standards	pH	6.5 - 9.0	---	Cadmium(T)	5.0
	chlorophyll a (ug/L)	---	---	Chromium III	---
Other:	E. Coli (per 100 mL)	---	126	Chromium III(T)	50
				Chromium VI	TVS
				Copper	TVS
				Iron	---
				Iron(T)	---
				Lead	TVS
				Lead(T)	50
				Manganese	TVS
				Mercury	---
				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

## Clear Creek Basin

1. Mainstem of Clear Creek, including all tributaries and wetlands, from the source to the I-70 bridge above Silver Plume.							
COSPCL01	Classifications	Physical and Biological			Metals (ug/L)		
Designation		DM	MWAT		acute	chronic	
Reviewable*	Agriculture						
	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)	---	0.02
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0	---
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
Expiration Date of 12/31/2021					Chromium III(T)	50	---
					<b>Inorganic (mg/L)</b>		
			acute	chronic	Chromium VI	TVS	TVS
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4).		Ammonia	TVS	TVS	Copper	TVS	TVS
*Designation: 9/30/00 Baseline does not apply		Boron	---	0.75	Iron	---	WS
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	0.11*	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					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/m <sup>2</sup> )	---	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
Zinc(chronic) = 353		acute	chronic	Chromium VI	TVS	TVS
Zinc(acute) = 586		Ammonia	TVS	TVS	Copper	TVS
Expiration Date of 7/1/2020		Boron	---	0.75	Iron	---
*chlorophyll a (mg/m <sup>2</sup> )(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(hardness)]+1.9467)		Nitrate	10	---	Manganese	TVS
*Zinc(chronic) = 0.986e^(0.8537[ln(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

2b. Mainstem of Clear Creek, including all tributaries and wetlands, from the confluence with West Fork Clear Creek to a point just below the confluence with Mill Creek, except for specific listings in Segments 4 through 8.							
COSPCL02B	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/m <sup>2</sup> )	---	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	
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4).		Inorganic (mg/L)			Chromium VI	TVS	TVS
*Designation: 9/30/00 Baseline does not apply		acute	chronic	Copper	TVS	TVS	
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		Ammonia	TVS	TVS	Iron	---	
		Boron	---	0.75	Iron(T)	---	
		Chloride	---	250	Lead	TVS	
		Chlorine	0.019	0.011	Lead(T)	50	
		Cyanide	0.005	---	Manganese	TVS	
		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	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

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) TVS
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0 ---
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Chromium III	---
Expiration Date of 12/31/2021		<b>Inorganic (mg/L)</b>			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/m <sup>2</sup> )(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 <sup>(0.8537[ln(hardness)]+1.9467)</sup>		Nitrate	10	---	Manganese	TVS
*Zinc(chronic) = 0.986e <sup>(0.8537[ln(hardness)]+1.8032)</sup>		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

3a. Mainstem of South Clear Creek, including all tributaries and wetlands, from the source to the confluence with Clear Creek, except for the specific listings in Segments 3b and 19.						
COSPCL03A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable*	Aq Life Cold 1	CS-I	CS-I	---	---	
	Recreation E	acute	chronic	Aluminum	---	---
	Water Supply	---	6.0	Arsenic	340	---
Qualifiers:	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
Other:	D.O. (spawning)	---	7.0	Beryllium	---	---
Temporary Modification(s):	pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
Arsenic(chronic) = hybrid	chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
Expiration Date of 12/31/2021	E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
*Designation: 9/30/00 Baseline does not apply	Inorganic (mg/L)			Chromium III(T)	50	---
*Zinc(acute) = 0.978e^(0.8537[ln(hardness)]+1.9467)	acute	chronic	Chromium VI	TVS	TVS	
*Zinc(chronic) = 0.986e^(0.8537[ln(hardness)]+1.8032)	Ammonia	TVS	TVS	Copper	TVS	TVS
	Boron	---	0.75	Iron	---	WS
	Chloride	---	250	Iron(T)	---	1000
	Chlorine	0.019	0.011	Lead	TVS	TVS
	Cyanide	0.005	---	Lead(T)	50	---
	Nitrate	10	---	Manganese	TVS	TVS/WS
	Nitrite	---	0.05	Mercury	---	0.01(t)
	Phosphorus	---	0.11	Molybdenum(T)	---	150
	Sulfate	---	WS	Nickel	TVS	TVS
	Sulfide	---	0.002	Nickel(T)	---	100
				Selenium	TVS	TVS
				Silver	TVS	TVS(tr)
				Uranium	---	---
				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

3b. Mainstem of Leavenworth Creek from source to confluence with South Clear Creek.						
COSPCL03B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable*	Aq Life Cold 2	Temperature °C	CS-I	CS-I	Aluminum	---
	Recreation E		acute	chronic	Arsenic	340
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	50
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0
*Designation: 9/30/00 Baseline does not apply		E. Coli (per 100 mL)	---	126	Chromium III	---
*Zinc(acute) = 0.978e^(0.8537[ln(hardness)]+1.9467)					Chromium III(T)	50
*Zinc(chronic) = 0.986e^(0.8537[ln(hardness)]+1.8032)					Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury	---
					Molybdenum(T)	---
					Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	---
					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

4. Mainstem of West Fork Clear Creek from the source to the confluence with Woods Creek.						
COSPCL04	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT			
Reviewable*	Aq Life Cold 1	CS-I	CS-I	acute	chronic	
	Recreation E	acute	chronic	Aluminum	---	
	Water Supply	Temperature °C		Arsenic	340	
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic(T)	---
Other:		D.O. (spawning)	---	7.0	Beryllium	---
*Designation: 9/30/00 Baseline does not apply		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0
		E. Coli (per 100 mL)	---	126	Chromium III	---
					Chromium III(T)	50
		Inorganic (mg/L)			Chromium VI	TVS
		acute	chronic	Copper	TVS	TVS
		Ammonia	TVS	TVS	Iron	---
		Boron	---	0.75	Iron(T)	---
		Chloride	---	250	Lead	TVS
		Chlorine	0.019	0.011	Lead(T)	50
		Cyanide	0.005	---	Manganese	TVS
		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	TVS
5. Mainstem of West Fork Clear Creek from the confluence with Woods Creek to the confluence with Clear Creek.						
COSPCL05	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT			
Reviewable	Aq Life Cold 1	CS-I	CS-I	acute	chronic	
	Recreation E	acute	chronic	Aluminum	---	
	Water Supply	Temperature °C		Arsenic	340	
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic(T)	---
Other:		D.O. (spawning)	---	7.0	Beryllium	0.02
Temporary Modification(s):		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
Arsenic(chronic) = hybrid		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0
Expiration Date of 12/31/2021		E. Coli (per 100 mL)	---	126	Chromium III	---
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4).					Chromium III(T)	50
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		Inorganic (mg/L)			Chromium VI	TVS
*Manganese(chronic) = 393 ug/L at the mouth of West Fork, and 1480 ug/L below Woods Creek, see section 38.6(4)(j) for manganese assessment locations. Chronic TVS applies throughout segment.		acute	chronic	Copper	TVS	TVS
*Zinc(acute) = e^(0.8404[ln(hardness)]+1.8810)		Ammonia	TVS	TVS	Iron	---
*Zinc(chronic) = e^(08404[ln(hardness)]+1.5127)		Boron	---	0.75	Iron(T)	---
		Chloride	---	250	Lead	TVS
		Chlorine	0.019	0.011	Lead(T)	50
		Cyanide	0.005	---	Manganese	TVS
		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

6. All tributaries to West Fork Clear Creek, including all wetlands, from the source to the confluence with Clear Creek, except for specific listings in Segments 7 and 8.						
COSPCL06	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute		chronic
Reviewable*	Aq Life Cold 1	CS-I	CS-I	Aluminum	---	---
	Recreation E	acute	chronic	Arsenic	340	---
	Water Supply	---	6.0	Arsenic(T)	---	0.02
Qualifiers:		---	7.0	Beryllium	---	---
Other:		6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
Temporary Modification(s):		---	150	Cadmium(T)	5.0	---
Arsenic(chronic) = hybrid		---	126	Chromium III	---	TVS
Expiration Date of 12/31/2021		Inorganic (mg/L)		Chromium III(T)	50	---
*Designation: 9/30/00 Baseline does not apply		acute	chronic	Chromium VI	TVS	TVS
		TVS	TVS	Copper	TVS	TVS
		---	0.75	Iron	---	WS
		---	250	Iron(T)	---	1000
		0.019	0.011	Lead	TVS	TVS
		0.005	---	Lead(T)	50	---
		10	---	Manganese	TVS	TVS/WS
		---	0.05	Mercury	---	0.01(t)
		---	0.11	Molybdenum(T)	---	150
		---	WS	Nickel	TVS	TVS
		---	0.002	Nickel(T)	---	100
		---	---	Selenium	TVS	TVS
		---	---	Silver	TVS	TVS(tr)
		---	---	Uranium	---	---
		---	---	Zinc	TVS	TVS
7a. Mainstem of Woods Creek from the outlet of Upper Urad Reservoir to the confluence with West Fork Clear Creek.						
COSPCL07A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Aq Life Cold 2	DM	MWAT	acute		chronic
UP	Recreation N	CS-I	CS-I	Aluminum	---	---
Qualifiers:		acute	chronic	Arsenic	340	150
Other:		---	6.0	Beryllium	---	---
Temporary Modification(s):		---	7.0	Cadmium	TVS(tr)	TVS
Cadmium(chronic) = current condition		6.5 - 9.0	---	Chromium III	TVS	TVS
Copper(ac/ch) = current condition		---	---	Chromium VI	TVS	TVS
Iron(chronic) = current condition		---	630	Copper	TVS	TVS
Lead(chronic) = current condition		Inorganic (mg/L)		Iron(T)	---	1000
Mercury(chronic) = current condition		acute	chronic	Lead	TVS	TVS
Nickel(chronic) = current condition		TVS	TVS	Manganese	TVS	TVS
Silver(chronic) = current condition		---	---	Mercury	---	0.01(t)
temperature(DM/MWAT) = current condition	10/1 - 11/30	---	---	Molybdenum(T)	---	---
temperature(DM/MWAT) = current condition	4/1 - 5/31	---	---	Nickel	TVS	TVS
Zinc(ac/ch) = current condition		0.019	0.011	Selenium	TVS	TVS
Expiration Date of 6/30/2023		0.005	---	Silver	TVS	TVS(tr)
		---	---	Uranium	---	---
		---	0.05	Zinc	TVS	TVS
		---	0.11			
		---	---			
		---	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.

# REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Clear Creek Basin

7b. Lower Urad Reservoir							
COSPCL07B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Aq Life Cold 2		DM	MWAT		acute	chronic
UP	Recreation N	Temperature °C	CL	CL	Aluminum	---	---
Qualifiers:		acute	chronic				
Other:		D.O. (mg/L)	---	6.0	Beryllium	---	---
Temporary Modification(s):		D.O. (spawning)	---	7.0	Cadmium	TVS(tr)	TVS
Cadmium(chronic) = current condition		pH	6.5 - 9.0	---	Chromium III	TVS	TVS
Copper(ac/ch) = current condition		chlorophyll a (ug/L)	---	---	Chromium VI	TVS	TVS
Iron(chronic) = current condition		E. Coli (per 100 mL)	---	630	Copper	TVS	TVS
Lead(chronic) = current condition					Iron(T)	---	1000
Mercury(chronic) = current condition		Inorganic (mg/L)			Lead	TVS	TVS
Nickel(chronic) = current condition		acute	chronic				
Silver(chronic) = current condition		Ammonia	TVS	TVS	Manganese	TVS	TVS
temperature(DM/MWAT) = current condition		Boron	---	---	Mercury	---	0.01(t)
temperature(DM/MWAT) = current condition		Chloride	---	---	Molybdenum(T)	---	---
Zinc(ac/ch) = current condition		Chlorine	0.019	0.011	Nickel	TVS	TVS
Expiration Date of 6/30/2023		Cyanide	0.005	---	Selenium	TVS	TVS
		Nitrate	---	---	Silver	TVS	TVS(tr)
		Nitrite	---	0.05	Uranium	---	---
		Phosphorus	---	---	Zinc	TVS	TVS
		Sulfate	---	---			
		Sulfide	---	0.002			
8. Mainstem of Lion Creek from the source to the confluence with West Fork Clear Creek.							
COSPCL08	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Aq Life Cold 2		DM	MWAT		acute	chronic
UP	Recreation E	Temperature °C	CS-I	CS-I	Aluminum	---	---
Qualifiers:		acute	chronic				
Other:		D.O. (mg/L)	---	6.0	Beryllium	---	---
10/1 - 11/30		D.O. (spawning)	---	7.0	Cadmium	---	---
4/1 - 5/31		pH	3.0-9.0	---	Chromium III	---	---
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium VI	---	---
		E. Coli (per 100 mL)	---	126	Copper	---	---
					Iron	---	---
		Inorganic (mg/L)			Lead	---	---
		acute	chronic				
		Ammonia	---	---	Manganese	---	---
		Boron	---	---	Mercury	---	---
		Chloride	---	---	Molybdenum(T)	---	---
		Chlorine	---	---	Nickel	---	---
		Cyanide	---	---	Selenium	---	---
		Nitrate	---	---	Silver	---	---
		Nitrite	---	---	Uranium	---	---
		Phosphorus	---	---	Zinc	---	---
		Sulfate	---	---			
		Sulfide	---	---			

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

9a. Mainstem of Fall River, including all tributaries and wetlands, from the source to the confluence with Clear Creek.							
COSPCL09A	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-I CS-I	Aluminum	---	---	
		acute	chronic	Arsenic	340	---	
		D.O. (mg/L)	---	6.0	Arsenic(T)	---	
		D.O. (spawning)	---	7.0	Beryllium	---	
Qualifiers:							
Other:							
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		pH	6.5 - 9.0	---	Cadmium	TVS(tr) TVS	
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Designation: 9/30/00 Baseline does not apply *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0 ---	
		E. Coli (per 100 mL)	---	126	Chromium III	---	
		Inorganic (mg/L)			Chromium III(T)	50 ---	TVS
		acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	TVS TVS	
		Boron	---	0.75	Iron	---	
		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	---	
		Phosphorus	---	0.11*	Molybdenum(T)	---	
		Sulfate	---	WS	Nickel	TVS TVS	
		Sulfide	---	0.002	Nickel(T)	---	
					Selenium	TVS TVS	
					Silver	TVS TVS(tr)	
					Uranium	---	
					Zinc	TVS TVS	

  

9b. Mainstem of Trail Creek, including all tributaries and wetlands from the source to the confluence with Clear Creek.							
COSPCL09B	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-I CS-I	Aluminum	---	---	
		acute	chronic	Arsenic	340	---	
		D.O. (mg/L)	---	6.0	Arsenic(T)	---	
		D.O. (spawning)	---	7.0	Beryllium	---	
Qualifiers:							
Other:							
*Designation: 9/30/00 Baseline does not apply		pH	6.5 - 9.0	---	Cadmium	TVS(tr) TVS	
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0 ---	
		E. Coli (per 100 mL)	---	126	Chromium III	---	
		Inorganic (mg/L)			Chromium III(T)	50 ---	TVS
		acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	TVS TVS	
		Boron	---	0.75	Iron	---	
		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	---	
		Phosphorus	---	0.11	Molybdenum(T)	---	
		Sulfate	---	WS	Nickel	TVS TVS	
		Sulfide	---	0.002	Nickel(T)	---	
					Selenium	TVS TVS	
					Silver	TVS TVS(tr)	
					Uranium	---	
					Zinc	TVS 200	

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

10. Mainstem of Chicago Creek, including all tributaries and wetlands, from the source to the confluence with Clear Creek, except for specific listings in Segment 19.							
COSPCL10	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		<b>acute</b>	<b>chronic</b>	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
Qualifiers:		D.O. (spawning)	---	7.0	Beryllium	---	---
Other:		pH	6.5 - 9.0		Cadmium	TVS(tr)	TVS
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0	---
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
Expiration Date of 12/31/2021					Chromium III(T)	50	---
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4).		Inorganic (mg/L)			Chromium VI	TVS	TVS
*Designation: 9/30/00 Baseline does not apply			acute	chronic	Copper	TVS	TVS
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		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	---	0.05	Molybdenum(T)	---	150
		Phosphorus	---	0.11*	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS

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	DM	MWAT		acute	chronic	
UP	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Aluminum	---	---
	Recreation E		<b>acute</b>	<b>chronic</b>	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
Qualifiers:		D.O. (spawning)	---	7.0	Beryllium	---	---
Other:		pH	6.5 - 9.0		Cadmium	TVS(tr)	TVS
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium(T)	5.0	---
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
Expiration Date of 12/31/2021					Chromium III(T)	50	---
temperature(DM/MWAT) = current condition*		Inorganic (mg/L)			Chromium VI	TVS	TVS
Expiration Date of 6/30/2019			acute	chronic	Copper	---	17
*Zinc(acute) = 0.978e^(0.8537[ln(hardness)]+1.9467)		Ammonia	TVS	TVS	Iron	---	WS
*Zinc(chronic) = 0.986e^(0.8537[ln(hardness)]+1.8032)		Boron	---	0.75	Iron(T)	---	1000
*TempMod: temperature = from a point just downstream of the US 6 Bridge to the Farmers Highline Canal diversion in Golden, Colorado.		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	---	0.05	Molybdenum(T)	---	150
		Phosphorus	---	---	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					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

12a. All tributaries to Clear Creek, including all wetlands, from the Argo Tunnel discharge to the Farmers Highline Canal diversion in Golden, Colorado, except for specific listings in Segments 12b, 13a and 13b.

COSPCL12A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable*	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02-10
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0	---
*Designation: 9/30/00 Baseline does not apply		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).					Chromium III(T)	50	---
					Chromium VI	TVS	TVS
					Copper	TVS	TVS
					Iron	---	WS
					Iron(T)	---	1000
					Lead	TVS	TVS
					Lead(T)	50	---
					Manganese	TVS	TVS/WS
					Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS

12b. Beaver Brook from the source to Highway 40.

COSPCL12B	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	0.02
	Water Supply	D.O. (mg/L)	---	6.0	Beryllium	---	---
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Cadmium	TVS(tr)	TVS
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Chromium III	---	TVS
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Chromium III(T)	50	---
Expiration Date of 12/31/2021					Chromium VI	TVS	TVS
					Copper	TVS	TVS
					Iron	---	WS
					Iron(T)	---	1000
					Lead	TVS	TVS
					Lead(T)	50	---
					Manganese	TVS	TVS/WS
					Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					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

13a. Mainstem of North Clear Creek, including all tributaries and wetlands, from its source to its confluence with Chase Gulch, and Four Mile Gulch, including all tributaries and wetlands, from their sources to their confluence with North Clear Creek and Eureka Gulch, including all tributaries and wetlands, from its source to its confluence with Gregory Gulch.							
COSPCL13A	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)	---	0.02
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
Expiration Date of 12/31/2021					Chromium III(T)	50	---
					Chromium VI	TVS	TVS
*Designation: 9/30/00 Baseline does not apply					Copper	TVS	TVS
					Iron	---	WS
					Iron(T)	---	1000
					Lead	TVS	TVS
					Lead(T)	50	---
					Manganese	TVS	TVS/WS
					Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS

  

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		DM	MWAT		acute	chronic
UP	Aq Life Cold 2	Temperature °C	CS-I	CS-I	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
<b>Qualifiers:</b>		D.O. (mg/L)	---	6.0	Arsenic(T)	---	100
<b>Other:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
Temporary Modification(s):		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
Cadmium(chronic) = 4.7		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Chromium III	TVS	TVS
Expiration Date of 12/31/2018		E. Coli (per 100 mL)	---	126	Chromium III(T)	---	100
temperature(DM/MWAT) = current condition					Chromium VI	TVS	TVS
Expiration Date of 12/31/2020					Copper	---	64
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4).					Iron(T)	---	5400
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).					Lead	TVS	TVS
					Manganese	TVS	TVS
					Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					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	DM	MWAT		acute	chronic	
UP	Aq Life Warm 2	WS-II	WS-II	Temperature °C	---	---	
	Recreation N	<b>acute</b>	<b>chronic</b>		340	---	
	Water Supply	---	5.0	D.O. (mg/L)	---	0.02-10	
<b>Qualifiers:</b>				pH	6.5 - 9.0	---	
<b>Other:</b>				chlorophyll a (mg/m <sup>2</sup> )	---	---	
Temporary Modification(s):				E. Coli (per 100 mL)	---	630	
Arsenic(chronic) = hybrid		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
Expiration Date of 12/31/2021					<b>acute</b>	<b>chronic</b>	
temperature(DM/MWAT) = current condition				Ammonia	TVS	TVS	
Expiration Date of 6/30/2019				Boron	---	0.75	
*Zinc(acute) = TVS x (times) the FWER (final water effect ratio).				Chloride	---	250	
Expiration date of 12/31/20.				Chlorine	0.019	0.011	
*Zinc(chronic) = TVS x (times) the FWER (final water effect ratio).				Cyanide	0.005	---	
Expiration date of 12/31/20.				Nitrate	10	---	
				Nitrite	---	0.5	
				Phosphorus	---	---	
				Sulfate	---	WS	
				Sulfide	---	0.002	
				Nickel	TVS	TVS	
				Nickel(T)	---	100	
				Selenium	TVS	TVS	
				Silver	TVS	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	DM	MWAT		acute	chronic	
UP	Aq Life Warm 2	WS-II	WS-II	Temperature °C	---	---	
	Recreation E	<b>acute</b>	<b>chronic</b>		340	---	
	Water Supply	---	5.0	D.O. (mg/L)	---	0.02	
<b>Qualifiers:</b>				pH	6.5 - 9.0	---	
<b>Water + Fish Standards</b>				chlorophyll a (mg/m <sup>2</sup> )	---	---	
<b>Other:</b>				E. Coli (per 100 mL)	---	126	
Temporary Modification(s):		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
temperature(DM/MWAT) = current condition					<b>acute</b>	<b>chronic</b>	
Expiration Date of 6/30/2019				Ammonia	TVS	TVS	
*Zinc(acute) = TVS x (times) the FWER (final water effect ratio).				Boron	---	0.75	
Expiration date of 12/31/20.				Chloride	---	250	
*Zinc(chronic) = TVS x (times) the FWER (final water effect ratio).				Chlorine	0.019	0.011	
Expiration date of 12/31/20.				Cyanide	0.005	---	
				Nitrate	10	---	
				Nitrite	---	0.5	
				Phosphorus	---	---	
				Sulfate	---	WS	
				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

## 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			
Reviewable	Aq Life Warm 1*	Temperature °C	WS-II	WS-II	Aluminum	acute	chronic
			acute	chronic	Arsenic	340	---
Qualifiers:		D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02
Other:		pH	6.5 - 9.0	---	Beryllium	---	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
Expiration Date of 12/31/2021		Inorganic (mg/L)			Chromium III	---	TVS
temperature(DM/MWAT) = current condition			acute	chronic	Chromium III(T)	50	---
Expiration Date of 6/30/2019		Ammonia	TVS	TVS	Chromium VI	TVS	TVS
*Classification: Aquatic life warm 1 goal qualifier.		Boron	---	0.75	Copper	TVS	TVS
*Zinc(acute) = TVS x (times) the FWER (final water effect ratio).		Chloride	---	250	Iron	---	WS
Expiration date of 12/31/20.		Chlorine	0.019	0.011	Iron(T)	---	1000
*Zinc(chronic) = TVS x (times) the FWER (final water effect ratio).		Cyanide	0.005	---	Lead	TVS	TVS
Expiration date of 12/31/20.		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*

  

16a. Mainstem of Lena Gulch including all tributaries and wetlands from its source to the inlet of Maple Grove Reservoir.							
COSPCL16A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT			
UP	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Aluminum	acute	chronic
			acute	chronic	Arsenic	340	---
Qualifiers:		D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
Other:		pH	6.5 - 9.0	---	Beryllium	---	---
		chlorophyll a (mg/m <sup>2</sup> )	---	150	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	---	0.05	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

## Clear Creek Basin

16b. All tributaries to Clear Creek from the Farmers Highline Canal diversion in Golden, Colorado to the confluence with the South Platte River, except for specific listings in Segments 16a, 17a, 17b, 18a and 18b.

COSPCL16B	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	---	---
		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	---	---
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	126	Chromium III	TVS	TVS
		Inorganic (mg/L)			Chromium III(T)	---	100
		acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		Nitrite	---	0.5	Nickel	TVS	TVS
		Phosphorus	---	0.17	Selenium	TVS	TVS
		Sulfate	---	---	Silver	TVS	TVS
		Sulfide	---	0.002	Uranium	---	---
					Zinc	TVS	TVS

17a. Arvada Reservoir.

COSPCL17A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
UP	Aq Life Cold 2 Recreation E Water Supply DUWS	Temperature °C	CLL	CLL	Aluminum	---	---
		acute	chronic	Arsenic	340	---	
<b>Qualifiers:</b>		D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
<b>Water + Fish Standards</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (ug/L)	---	8	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
		Inorganic (mg/L)			Chromium III(T)	50	---
		acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	0.025	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					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

17b. Mainstem of Ralston Creek, including all tributaries and wetlands, from the source to the inlet of Arvada Reservoir.						
COSPCL17B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
Reviewable	Aq Life Cold 2 Recreation U Water Supply	Temperature °C	CS-II	CS-II	Aluminum	---
			acute	chronic	Arsenic	340
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic(T)	---
Water + Fish Standards		D.O. (spawning)	---	7.0	Beryllium	---
Other:		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	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
			acute	chronic	Chromium VI	TVS
		Ammonia	TVS	TVS	Copper	TVS
		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	---	0.11	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS
		Sulfide	---	0.002	Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS
18a. Mainstem of Ralston Creek, including all tributaries and wetlands, from the outlet of Arvada Reservoir to the confluence with Clear Creek.						
COSPCL18A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
UP	Aq Life Warm 2 Recreation E Water Supply	Temperature °C	WS-II	WS-II	Aluminum	---
			acute	chronic	Arsenic	340
Qualifiers:		D.O. (mg/L)	---	5.0	Arsenic(T)	---
Other:		pH	6.5 - 9.0	---	Beryllium	---
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium	TVS
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0
Expiration Date of 12/31/2021		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)	---
		Cyanide	0.005	---	Lead	TVS
		Nitrate	10	---	Lead(T)	50
		Nitrite	---	0.5	Manganese	TVS
		Phosphorus	---	0.17	Mercury	---
		Sulfate	---	WS	Molybdenum(T)	---
		Sulfide	---	0.002	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

## Clear Creek Basin

18b. Mainstem of Leyden Creek and Van Bibber Creek from their source to their confluence with Ralston Creek. Mainstem of Little Dry Creek from its source to its confluence with Clear Creek.

COSPCL18B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		<b>DM</b>	<b>MWAT</b>		<b>acute</b>	<b>chronic</b>
UP	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Aluminum	---	---
	Recreation E		<b>acute</b>	<b>chronic</b>	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/m <sup>2</sup> )	---	150	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
			<b>acute</b>	<b>chronic</b>	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	---	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

19. All tributaries to Clear Creek, including wetlands, within the Mt. Evans Wilderness Area.

COSPCL19	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		<b>DM</b>	<b>MWAT</b>		<b>acute</b>	<b>chronic</b>
OW	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Aluminum	---	---
	Recreation E		<b>acute</b>	<b>chronic</b>	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
		<b>Inorganic (mg/L)</b>			Chromium III(T)	50	---
			<b>acute</b>	<b>chronic</b>	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	0.11	Molybdenum(T)	---	150
		Sulfate	---	250	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					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

20. Lakes and reservoirs in the Clear Creek system that are within the boundary of the Mt. Evans Wilderness Area.							
COSPCL20	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute      chronic			
OW	Aq Life Cold 1	CL	CL	Aluminum	---	---	
	Recreation E	acute	chronic	Arsenic	340	---	
	Water Supply	---	6.0	Arsenic(T)	---	0.02	
Qualifiers:		---	7.0	Beryllium	---	---	
Other:		6.5 - 9.0	---	Cadmium	TVS(tr)	TVS	
*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.		---	8*	Cadmium(T)	5.0	---	
		---	126	Chromium III	---	TVS	
		Inorganic (mg/L)			Chromium III(T)	50	---
		acute	chronic	Chromium VI	TVS	TVS	
		TVS	TVS	Copper	TVS	TVS	
		---	0.75	Iron	---	WS	
		---	250	Iron(T)	---	1000	
		0.019	0.011	Lead	TVS	TVS	
		0.005	---	Lead(T)	50	---	
		10	---	Manganese	TVS	TVS/WS	
		---	0.05	Mercury	---	0.01(t)	
		---	0.025*	Molybdenum(T)	---	150	
		---	250	Nickel	TVS	TVS	
		---	0.002	Nickel(T)	---	100	
				Selenium	TVS	TVS	
				Silver	TVS	TVS(tr)	
				Uranium	---	---	
				Zinc	TVS	TVS	

  

21. Lakes and reservoirs in the Clear Creek system from sources to the Farmer's Highline Canal diversion in Golden, CO, except as specified in Segments 7, 20, 22 and 25. Upper Long Lake.							
COSPCL21	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute      chronic			
Reviewable*	Aq Life Cold 1	CL	CL	Aluminum	---	---	
	Recreation E	acute	chronic	Arsenic	340	---	
	Water Supply	---	6.0	Arsenic(T)	---	0.02	
Qualifiers:		---	7.0	Beryllium	---	---	
Other:		6.5 - 9.0	---	Cadmium	TVS(tr)	TVS	
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Designation: 9/30/00 Baseline does not apply *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.		---	8*	Cadmium(T)	5.0	---	
		---	126	Chromium III	---	TVS	
		Inorganic (mg/L)			Chromium III(T)	50	---
		acute	chronic	Chromium VI	TVS	TVS	
		TVS	TVS	Copper	TVS	TVS	
		---	0.75	Iron	---	WS	
		---	250	Iron(T)	---	1000	
		0.019	0.011	Lead	TVS	TVS	
		0.005	---	Lead(T)	50	---	
		10	---	Manganese	TVS	TVS/WS	
		---	0.05	Mercury	---	0.01(t)	
		---	0.025*	Molybdenum(T)	---	150	
		---	WS	Nickel	TVS	TVS	
		---	0.002	Nickel(T)	---	100	
				Selenium	TVS	TVS	
				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

22. Lakes and reservoirs in the North Clear Creek drainage from a point just below the confluence with Chase Gulch to the confluence with Clear Creek.							
COSPCL22	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute chronic			
Reviewable*	Aq Life Cold 1 Recreation E	CL	CL	Aluminum	---	---	
Qualifiers:		acute	chronic	Arsenic	340	---	
		D.O. (mg/L)	---	6.0	Arsenic(T)	---	7.6
Other:	*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Designation: 9/30/00 Baseline does not apply *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.	D.O. (spawning)	---	7.0	Beryllium	---	---
		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (ug/L)	---	8*	Chromium III	TVS	TVS
		E. Coli (per 100 mL)	---	126	Chromium III(T)	---	100
		Inorganic (mg/L)			Chromium VI	TVS	TVS
		acute	chronic	Copper	TVS	TVS	
		Ammonia	TVS	TVS	Iron(T)	---	1000
		Boron	---	0.75	Lead	TVS	TVS
		Chloride	---	---	Manganese	TVS	TVS
		Chlorine	0.019	0.011	Mercury	---	0.01(t)
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	100	---	Nickel	TVS	TVS
		Nitrite	---	0.05	Selenium	TVS	TVS
		Phosphorus	---	0.025*	Silver	TVS	TVS(tr)
		Sulfate	---	---	Uranium	---	---
Sulfide	---	0.002	Zinc	TVS	TVS		
23. Ralston Reservoir							
COSPCL23	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute chronic			
Reviewable	Aq Life Cold 2 Recreation U Water Supply DUWS	CLL	CLL	Aluminum	---	---	
Qualifiers:		acute	chronic	Arsenic	340	---	
		D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
Other:	*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.	D.O. (spawning)	---	7.0	Beryllium	---	---
		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (ug/L)	---	8*	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
		Inorganic (mg/L)			Chromium III(T)	50	---
		acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	0.025*	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
Sulfide	---	0.002	Nickel(T)	---	100		
			Selenium	TVS	TVS		
			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

24. Lakes and reservoirs in the Clear Creek system from the Farmers Highline Canal diversion in Golden, Colorado to the confluence with the South Platte River, except for specific listings in Segments 17a, 21 and 23.								
COSPCL24	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture Aq Life Warm 1 Recreation U Water Supply DUWS*	DM	MWAT	acute      chronic				
Reviewable		WL	WL	Aluminum	---	---		
		acute	chronic	Arsenic	340	---		
		---	5.0	Arsenic(T)	---	0.02		
Qualifiers:		D.O. (mg/L)	---	5.0	Beryllium	---		
Other:		pH	6.5 - 9.0	---	Cadmium	TVS		
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Classification: DUWS applies to Maple Grove Reservoir only. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.		chlorophyll a (ug/L)			---	20*		
		E. Coli (per 100 mL)			---	126	Cadmium(T)	5.0
		<b>Inorganic (mg/L)</b>					Chromium III	---
					<b>acute</b>	<b>chronic</b>	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)	---
		Cyanide			0.005	---	Lead	TVS
		Nitrate			10	---	Lead(T)	50
		Nitrite			---	0.5	Manganese	TVS
		Phosphorus			---	0.083*	Mercury	---
		Sulfate			---	WS	Molybdenum(T)	---
		Sulfide			---	0.002	Nickel	TVS
							Nickel(T)	---
							Selenium	TVS
							Silver	TVS
							Uranium	---
							Zinc	TVS
		25. Guanella Reservoir (near Town of Empire, 39.758,-105.700)						
COSPCL25	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture Aq Life Cold 1 Recreation E	DM	MWAT	acute      chronic				
Reviewable		CL	CL	Aluminum	---	---		
		acute	chronic	Arsenic	340	---		
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic(T)	---		
Other:		D.O. (spawning)	---	7.0	Beryllium	---		
*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.		pH	6.5 - 9.0	---	Cadmium	TVS(tr)		
		chlorophyll a (ug/L)			---	8*	Cadmium	TVS
		E. Coli (per 100 mL)			---	126	Chromium III	TVS
		<b>Inorganic (mg/L)</b>					Chromium III(T)	---
					<b>acute</b>	<b>chronic</b>	Chromium VI	TVS
		Ammonia			TVS	TVS	Copper	TVS
		Boron			---	0.75	Iron(T)	---
		Chloride			---	---	Lead	TVS
		Chlorine			0.019	0.011	Manganese	TVS
		Cyanide			0.005	---	Mercury	---
		Nitrate			100	---	Mercury	0.01(t)
		Nitrite			---	0.05	Molybdenum(T)	---
		Phosphorus			---	0.025*	Nickel	TVS
		Sulfate			---	---	Nickel	TVS
		Sulfide			---	0.002	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

## Big Dry Creek Basin

1. Mainstem of Big Dry Creek, including all tributaries and wetlands, from the source to the confluence with the South Platte River, except for specific listing in Segments 4a, 4b, 5 and 6.							
COSPBD01	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
UP	Aq Life Warm 2 Recreation P	Temperature °C	WS-I	WS-I	Aluminum	---	---
			<b>acute</b>	<b>chronic</b>	Arsenic	340	---
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	100
<b>Other:</b>		pH	6.5 - 9.0	---	Beryllium	---	---
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4). *Selenium(acute) = 19.1 ug/L from 11/1 - 3/31 TVS from 4/1 - 10/31. Refer to Section 38.6(4)(d). *Selenium(chronic) = 15 ug/L from 11/1 - 3/31 7.4 ug/L from 4/1 - 10/31. Refer to Section 38.6(4)(d).		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Beryllium(T)	---	100
		E. Coli (per 100 mL)	---	205	Cadmium	TVS	TVS
		<b>Inorganic (mg/L)</b>			Chromium III	TVS	TVS
			<b>acute</b>	<b>chronic</b>	Chromium III(T)	---	100
		Ammonia	TVS	TVS	Chromium VI	TVS	TVS
		Boron	---	0.75	Copper	TVS	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	---	4.5	Molybdenum(T)	---	150
		Phosphorus	---	0.17*	Nickel	TVS	TVS
		Sulfate	---	---	Selenium	---	varies*
		Sulfide	---	0.002	Selenium	varies*	---
					Silver	TVS	TVS
					Uranium	---	---
					Zinc	TVS	TVS
2. Standley Lake.							
COSPBD02	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)	---	0.02
<b>Other:</b>		pH	6.5 - 9.0	---	Beryllium	---	4.0
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (ug/L)(chronic) = The trophic status of Standley Lake shall be maintained as mesotrophic as measured by a combination of common indicator parameters such as total phosphorus, chlorophyll a, secchi depth, and dissolved oxygen. Refer to Section 38.6(4)(e). *Uranium(T)(chronic) = 3(t) Picocuries/Liter. See attached table 2 for additional standards for segment 2.		chlorophyll a (ug/L)	---	4.0*	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
			<b>acute</b>	<b>chronic</b>	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	---	---
					Uranium(T)	---	3*
					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 Dry Creek Basin

3. Great Western Reservoir.							
COSPBD03	Classifications	Physical and Biological			Metals (ug/L)		
Designation		DM	MWAT		acute	chronic	
UP	Agriculture						
	Aq Life Warm 2	WL	WL	Aluminum	---	---	
	Recreation N	acute	chronic	Arsenic	340	---	
	Water Supply			Arsenic(T)	---	100	
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Beryllium	---	
<b>Other:</b>		pH	6.5 - 9.0	---	Beryllium(T)	---	
*Uranium(T)(chronic) = 4(t) Picocuries/Liter. See attached table 2 for additional standards for segment 3.		chlorophyll a (ug/L)	---	---	Cadmium	TVS	
		E. Coli (per 100 mL)	---	630	Cadmium(T)	TVS	TVS
		<b>Inorganic (mg/L)</b>			Chromium III	TVS	TVS
			acute	chronic	Chromium III(T)	---	100
		Ammonia	TVS	TVS	Chromium VI	TVS	TVS
		Boron	---	0.75	Copper	TVS	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	---	2.7	Molybdenum(T)	---	150
		Phosphorus	---	---	Nickel	TVS	TVS
		Sulfate	---	---	Selenium	TVS	TVS
		Sulfide	---	0.002	Silver	TVS	TVS
					Uranium	---	---
			Uranium(T)	---	4*		
			Zinc	TVS	TVS		
4a. Mainstem and all tributaries to Woman and Walnut Creeks from sources to Standley Lake and Great Western Reservoir except for specific listings in Segments 4b and 5.							
COSPBD04A	Classifications	Physical and Biological			Metals (ug/L)		
Designation		DM	MWAT		acute	chronic	
UP	Agriculture						
	Aq Life Warm 2	WS-I	WS-I	Aluminum	---	---	
	Recreation E	acute	chronic	Arsenic	340	---	
	Water Supply			Arsenic(T)	---	0.02-10 <sup>A</sup>	
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Beryllium	---	
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS	
*Uranium(T)(chronic) = See attached table 2 for additional standards for segment 4a.		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
			acute	chronic	Chromium III(T)	50	---
		Ammonia	TVS	TVS	Chromium VI	TVS	TVS
		Boron	---	0.75	Copper	TVS	TVS
		Chloride	---	---	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS
		Nitrite	---	0.5	Mercury	---	0.01(t)
		Phosphorus	---	0.17	Molybdenum(T)	---	150
		Sulfate	---	---	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
			Silver	TVS	TVS		
			Uranium	---	---		
			Uranium(T)	---	16.8*		
			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 Dry Creek Basin

4b. North and South Walnut Creek and Walnut Creek, from the eastern edge of the Central Operable Unit on Rocky Flats Property to Indiana Street and North Walnut Creek from its source to the western edge of the Central Operable Unit.

COSPBD04B	Classifications	Physical and Biological			Metals (ug/L)		
			DM	MWAT		acute	chronic
UP	Agriculture		WS-II	WS-II	Aluminum	---	---
	Aq Life Warm 2	Temperature °C	---	---	Arsenic	340	---
	Recreation P		acute	chronic	Arsenic(T)	---	0.02-10 <sup>A</sup>
	Water Supply	D.O. (mg/L)	---	5.0	Beryllium	---	4.0
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Cadmium	TVS	TVS
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
*Uranium(T)(chronic) = See attached table 2 for additional standards for segment 4b.		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
			acute	chronic	Chromium III(T)	50	---
		Ammonia	---	---	Chromium VI	TVS	TVS
		Boron	---	0.75	Copper	TVS	TVS
		Chloride	---	---	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS
		Nitrite	---	0.5	Mercury	---	0.01(t)
		Phosphorus	---	0.17	Molybdenum(T)	---	150
		Sulfate	---	---	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	---	---
					Uranium(T)	---	16.8*
					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 Dry Creek Basin

5. North Walnut Creek from the western edge of the Central Operable Unit and South Walnut Creek from its source, including all tributaries, lakes, reservoirs and wetlands, to the eastern boundary of the Central Operable Unit and Pond C-2 on Woman Creek.

COSPBD05	Classifications	Physical and Biological			Metals (ug/L)		
			DM	MWAT		acute	chronic
UP	Agriculture		WL	WL	Aluminum	---	---
	Aq Life Warm 2	Temperature °C	WL	WL	Arsenic	340	---
	Recreation N	Temperature °C	WS-II	WS-II	Arsenic(T)	---	0.02-10 <sup>A</sup>
	Water Supply				Beryllium	---	4.0
<b>Qualifiers:</b>			<b>acute</b>	<b>chronic</b>			
<b>Other:</b>		D.O. (mg/L)	---	5.0	Cadmium	TVS	TVS
*Uranium(T)(chronic) = See attached table 2 for additional standards for segment 5.		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
		chlorophyll a (mg/m <sup>2</sup> )	---	---	Chromium III	---	TVS
		E. Coli (per 100 mL)	---	630	Chromium III(T)	50	---
		<b>Inorganic (mg/L)</b>			Chromium VI	TVS	TVS
			<b>acute</b>	<b>chronic</b>	Copper	TVS	TVS
		Ammonia	---	---	Iron(T)	---	1000
		Boron	---	0.75	Lead	TVS	TVS
		Chloride	---	---	Lead(T)	50	---
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	10	---	Molybdenum(T)	---	150
		Nitrite	---	0.5	Nickel	TVS	TVS
		Phosphorus	---	0.17	Nickel(T)	---	100
		Sulfate	---	---	Selenium	TVS	TVS
		Sulfide	---	0.002	Silver	TVS	TVS
					Uranium	---	---
			Uranium(T)	---	16.8*		
			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 Dry Creek Basin

6. Upper Big Dry Creek and South Upper Big Dry Creek, from their source to Standley Lake.							
COSPBD06	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT				
UP	Aq Life Warm 2	WS-I	WS-I	acute	chronic		
	Recreation N	acute	chronic	Aluminum	---	---	
	Water Supply	---	5.0	Arsenic	340	---	
Qualifiers:		D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
Other:		pH	6.5 - 9.0	---	Beryllium	---	---
		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	630	Cadmium(T)	5.0	---
		Inorganic (mg/L)			Chromium III	---	TVS
		acute	chronic				
		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	---	0.17	Manganese	TVS	TVSWS
		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
7. Lakes and reservoirs in the Big Dry Creek system from the source to the confluence with the South Platte River, except for specific listings in Segments 2, 3, and 5.							
COSPBD07	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT				
Reviewable	Aq Life Warm 2	WL	WL	acute	chronic		
	Recreation P	acute	chronic	Aluminum	---	---	
	Water Supply	---	5.0	Arsenic	340	---	
Qualifiers:		D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
Other:		pH	6.5 - 9.0	---	Beryllium	---	---
		chlorophyll a (ug/L)	---	20*	Beryllium(T)	---	100
		E. Coli (per 100 mL)	---	205	Cadmium	TVS	TVS
		Inorganic (mg/L)			Cadmium(T)	5.0	---
		acute	chronic				
		Ammonia	TVS	TVS	Chromium III	---	TVS
		Boron	---	0.75	Chromium III(T)	50	---
		Chloride	---	250	Chromium VI	TVS	TVS
		Chlorine	0.019	0.011	Copper	TVS	TVS
		Cyanide	0.005	---	Iron	---	WS
		Nitrate	10	---	Iron(T)	---	1000
		Nitrite	---	0.5	Lead	TVS	TVS
		Phosphorus	---	0.083*	Lead(T)	50	---
		Sulfate	---	WS	Manganese	TVS	TVSWS
		Sulfide	---	0.002	Mercury	---	0.01(t)
					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 Boulder Creek Basin

1. All tributaries to Boulder Creek, including all wetlands, within the Indian Peaks and James Peak Wilderness Areas.						
COSPBO01	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
OW	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Aluminum	---
	Recreation E	<b>acute</b>	<b>chronic</b>	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)      TVS
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0      ---
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Chromium III	---
Expiration Date of 12/31/2021		<b>Inorganic (mg/L)</b>			Chromium III(T)	50      ---
		<b>acute</b>	<b>chronic</b>	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS      TVS
		Boron	---	0.75	Iron	---
		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	---
		Phosphorus	---	0.11	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS      TVS
		Sulfide	---	0.002	Nickel(T)	---
					Selenium	TVS      TVS
					Silver	TVS      TVS(tr)
					Uranium	---
					Zinc	TVS      TVS

  

2a. Mainstem of Boulder Creek, including all tributaries and wetlands, from the boundary of the Indian Peaks Wilderness Area to a point immediately below the confluence with North Boulder Creek, except for the specific listings in Segment 3.						
COSPBO02A	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	<b>acute</b>	<b>chronic</b>	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)      TVS
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0      ---
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Chromium III	---
Expiration Date of 12/31/2021		<b>Inorganic (mg/L)</b>			Chromium III(T)	50      ---
		<b>acute</b>	<b>chronic</b>	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS      TVS
		Boron	---	0.75	Iron	---
		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	---
		Phosphorus	---	0.11*	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS      TVS
		Sulfide	---	0.002	Nickel(T)	---
					Selenium	TVS      TVS
					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 Boulder Creek Basin

2b. Mainstem of Boulder Creek, including all tributaries and wetlands, from a point immediately below the confluence with North Boulder Creek to a point immediately above the confluence with South Boulder Creek.						
COSPBO02B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
Reviewable	Aq Life Cold 1 Recreation E Water Supply	acute	chronic	Aluminum	---	---
Qualifiers:		Temperature °C	CS-II	CS-II	Arsenic	---
Other:	Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).	D.O. (mg/L)	---	6.0	Arsenic(T)	---
		D.O. (spawning)	---	7.0	Beryllium	---
		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0
		E. Coli (per 100 mL)	---	126	Chromium III	---
					Chromium III(T)	50
					Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury	---
					Molybdenum(T)	---
					Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS
3. Mainstem of Middle Boulder Creek, including all tributaries and wetlands, from the source to the outlet of Barker Reservoir, except for specific listings in Segment 1.						
COSPBO03	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
Reviewable	Aq Life Cold 1 Recreation E Water Supply	acute	chronic	Aluminum	---	---
Qualifiers:		Temperature °C	CS-I	CS-I	Arsenic	---
Other:	Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).	D.O. (mg/L)	---	6.0	Arsenic(T)	---
		D.O. (spawning)	---	7.0	Beryllium	---
		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0
		E. Coli (per 100 mL)	---	126	Chromium III	---
					Chromium III(T)	50
					Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury	---
					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 Boulder Creek Basin

4a. Mainstem of South Boulder Creek, including all tributaries and wetlands, from the source to the outlet of Gross Reservoir except for specific listings in Segment 1.										
COSPBO04A	Classifications	Physical and Biological			Metals (ug/L)					
Designation	Agriculture	DM	MWAT	acute      chronic						
Reviewable	Aq Life Cold 1 Recreation E Water Supply	acute	chronic	Temperature °C	CS-I	CS-I	Aluminum	---	---	
					D.O. (mg/L)	---	6.0	Arsenic	340	---
					D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02
Qualifiers:										
Other:										
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		pH	6.5 - 9.0	---	chlorophyll a (mg/m <sup>2</sup> )	---	150	Beryllium	---	---
					E. Coli (per 100 mL)	---	126	Cadmium	TVS(tr)	TVS
					Inorganic (mg/L)			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	---	0.05	Lead(T)	50	---
					Phosphorus	---	0.11	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(tr)
								Uranium	---	---
								Zinc	TVS	TVS

  

4b. Mainstem of South Boulder Creek, including all tributaries and wetlands, from the outlet of Gross Reservoir to South Boulder Road, except for specific listings in Segments 4c and 4d.										
COSPBO04B	Classifications	Physical and Biological			Metals (ug/L)					
Designation	Agriculture	DM	MWAT	acute      chronic						
Reviewable	Aq Life Cold 1 Recreation E Water Supply	acute	chronic	Temperature °C	CS-II	CS-II	Aluminum	---	---	
					D.O. (mg/L)	---	6.0	Arsenic	340	---
					D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02
Qualifiers:										
Other:										
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		pH	6.5 - 9.0	---	chlorophyll a (mg/m <sup>2</sup> )	---	150*	Beryllium	---	---
					E. Coli (per 100 mL)	---	126	Cadmium	TVS(tr)	TVS
					Inorganic (mg/L)			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	---	0.05	Lead(T)	50	---
					Phosphorus	---	0.11*	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(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 Boulder Creek Basin

4c. Mainstem of Cowdrey Drainage from the source below Cowdrey Reservoir #2 to the Davidson Ditch.						
COSPBO04C Classifications		Physical and Biological			Metals (ug/L)	
Designation	Agriculture Aq Life Warm 2 Recreation E Water Supply	DM	MWAT	acute	chronic	
UP			Temperature °C	WS-II	WS-II	Aluminum
			acute	chronic	Arsenic	340
		D.O. (mg/L)	---	5.0	Arsenic(T)	---
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0
		<b>Inorganic (mg/L)</b>			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)	---
		Cyanide	0.005	---	Lead	TVS
		Nitrate	10	---	Lead(T)	50
		Nitrite	---	0.5	Manganese	TVS
		Phosphorus	---	0.17	Mercury	---
		Sulfate	---	WS	Molybdenum(T)	---
		Sulfide	---	0.002	Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
				Uranium	---	
				Zinc	TVS	

4d. Mainstem of Cowdrey Drainage from immediately downstream of the Davidson Ditch to the confluence with South Boulder Creek.						
COSPBO04D Classifications		Physical and Biological			Metals (ug/L)	
Designation	Agriculture Aq Life Warm 2 Recreation E Water Supply	DM	MWAT	acute	chronic	
UP			Temperature °C	WS-II	WS-II	Aluminum
			acute	chronic	Arsenic	340
		D.O. (mg/L)	---	5.0	Arsenic(T)	---
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0
		<b>Inorganic (mg/L)</b>			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)	---
		Cyanide	0.005	---	Lead	TVS
		Nitrate	10	---	Lead(T)	50
		Nitrite	---	0.5	Manganese	TVS
		Phosphorus	---	0.17	Mercury	---
		Sulfate	---	WS	Molybdenum(T)	---
		Sulfide	---	0.002	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 Boulder Creek Basin

5. Mainstem of South Boulder Creek from South Boulder Road to the confluence with Boulder Creek.							
COSPBO05	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>		chlorophyll a (mg/m <sup>2</sup> )	---	---	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	---
		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	TVS	TVS

6. Mainstem of Coal Creek, including all tributaries and wetlands, from the source to Highway 93.							
COSPBO06	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
		<b>Inorganic (mg/L)</b>			Chromium III(T)	50	---
			acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	0.11	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					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 Boulder Creek Basin

7a. Mainstem of Coal Creek from Highway 93 to Highway 36 (Boulder Turnpike).							
COSPBO07A	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>		chlorophyll a (mg/m <sup>2</sup> )	---	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			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	---	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

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/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
		<b>Inorganic (mg/L)</b>			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	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

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 UP Aq Life Warm 2 Recreation E	DM	MWAT	acute      chronic			
UP		WS-II	WS-II	Aluminum	---	---	
Qualifiers:		acute	chronic	D.O. (mg/L)	---	5.0	
Other:		6.5 - 9.0	---	pH	---	---	
Temporary Modification(s): Selenium(chronic) = current condition Expiration Date of 12/31/2020  *chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		---	150*	chlorophyll a (mg/m <sup>2</sup> )	---	126	
		Inorganic (mg/L)			Chromium III	---	100
		acute	chronic	Chromium VI	TVS	TVS	TVS
		TVS	TVS	Copper	TVS	TVS	TVS
		---	0.75	Iron	---	---	---
		---	---	Iron(T)	---	1000	---
		0.019	0.011	Lead	TVS	TVS	TVS
		0.005	---	Manganese	TVS	TVS	TVS
		100	---	Mercury	---	0.01(t)	---
		---	0.5	Molybdenum(T)	---	150	---
		---	0.17*	Nickel	TVS	TVS	TVS
		---	---	Selenium	TVS	TVS	TVS
		---	0.002	Silver	TVS	TVS	TVS
		---	---	Uranium	---	---	---
		---	---	Zinc	TVS	TVS	TVS
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	Agriculture Reviewable Aq Life Warm 1 Recreation E Water Supply	DM	MWAT	acute      chronic			
Reviewable		WS-II	WS-II	Aluminum	---	---	
Qualifiers:		acute	chronic	D.O. (mg/L)	---	5.0	
Other:		6.5 - 9.0	---	pH	---	---	
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021 temperature(DM/MWAT) = current condition      12/1 - 2/29 Expiration Date of 12/31/2020		---	---	chlorophyll a (mg/m <sup>2</sup> )	---	126	
		Inorganic (mg/L)			Chromium III	---	TVS
		acute	chronic	Chromium III(T)	50	---	---
		TVS	TVS	Chromium VI	TVS	TVS	TVS
		---	0.75	Copper	TVS	TVS	TVS
		---	250	Iron	---	WS	---
		0.019	0.011	Iron(T)	---	1000	---
		0.005	---	Lead	TVS	TVS	TVS
		10	---	Lead(T)	50	---	---
		---	0.5	Manganese	TVS	TVS/WS	---
		---	---	Mercury	---	0.01(t)	---
		---	WS	Molybdenum(T)	---	150	---
		---	0.002	Nickel	TVS	TVS	TVS
		---	---	Nickel(T)	---	100	---
		---	---	Selenium	TVS	TVS	TVS
---	---	Silver	TVS	TVS	TVS		
---	---	Uranium	---	---	---		
---	---	Zinc	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 Boulder Creek Basin

10. Mainstem of Boulder Creek from the confluence with Coal Creek to the confluence with St. Vrain Creek.						
COSPBO10	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
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)	---
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0
Arsenic(chronic) = hybrid		Inorganic (mg/L)			Chromium III	---
Expiration Date of 12/31/2021			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)	---
		Cyanide	0.005	---	Lead	TVS
		Nitrate	10	---	Lead(T)	50
		Nitrite	---	0.5	Manganese	TVS
		Phosphorus	---	---	Mercury	---
		Sulfate	---	WS	Molybdenum(T)	---
		Sulfide	---	0.002	Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS

  

11. All tributaries to Boulder Creek, including all wetlands from a point immediately above the confluence with South Boulder Creek to the confluence with St. Vrain Creek, except for specific listings in Segments 5, 7a and 7b.						
COSPBO11	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
UP	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)	---
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---
Other:		chlorophyll a (mg/m <sup>2</sup> )	---	---	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)	---
		Cyanide	0.005	---	Lead	TVS
		Nitrate	10	---	Lead(T)	50
		Nitrite	---	0.5	Manganese	TVS
		Phosphorus	---	---	Mercury	---
		Sulfate	---	WS	Molybdenum(T)	---
		Sulfide	---	0.002	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 Boulder Creek Basin

12. Deleted.					
COSPBO12	Classifications	Physical and Biological		Metals (ug/L)	
Designation		DM	MWAT	acute	chronic
Qualifiers:		acute	chronic		
Other:		Inorganic (mg/L)			
		acute	chronic		
13. All lakes and reservoirs tributary to Boulder Creek that are within the boundary of the Indian Peaks and James Peak Wilderness Areas.					
COSPBO13	Classifications	Physical and Biological		Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic
OW	Aq Life Cold 1	CL	CL	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:	*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.	pH	6.5 - 9.0	Cadmium	TVS(tr)
		chlorophyll a (ug/L)	8*	Cadmium(T)	5.0
		E. Coli (per 100 mL)	126	Chromium III	---
		Inorganic (mg/L)		Chromium III(T)	50
		acute	chronic	Chromium VI	TVS
		Ammonia	TVS	Copper	TVS
		Boron	---	Iron	---
		Chloride	---	Iron(T)	1000
		Chlorine	0.019	Lead	TVS
		Cyanide	0.005	Lead(T)	50
		Nitrate	10	Manganese	TVS
		Nitrite	---	Mercury	---
		Phosphorus	---	Molybdenum(T)	150
		Sulfate	---	Nickel	TVS
		Sulfide	---	Nickel(T)	---
			0.002	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 Boulder Creek Basin

14. All lakes and reservoirs tributary to Boulder Creek from the source to a point immediately above the South Boulder Creek confluence, except as specified in Segment 13. This segment includes Barker and Lakewood Reservoir.

COSPBO14	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture	DM	MWAT	acute	chronic			
Reviewable	Aq Life Cold 1	CL, CLL	CL, CLL					
	Recreation E	acute	chronic					
	Water Supply							
	DUWS*							
<b>Qualifiers:</b>		pH			6.5 - 9.0	---	Cadmium	
<b>Other:</b> Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Classification: DUWS applies to Lakewood Reservoir only. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.		chlorophyll a (ug/L)			---	8*	Cadmium(T)	
		E. Coli (per 100 mL)			---	126	Chromium III	
		<b>Inorganic (mg/L)</b>					Chromium III(T)	
					acute	chronic	Chromium VI	
		Ammonia			TVS	TVS	Copper	
		Boron			---	0.75	Iron	
		Chloride			---	250	Iron(T)	
		Chlorine			0.019	0.011	Lead	
		Cyanide			0.005	---	Lead(T)	
		Nitrate			10	---	Manganese	
Nitrite			---	0.05	Mercury			
Phosphorus			---	0.025*	Molybdenum(T)			
Sulfate			---	WS	Nickel			
Sulfide			---	0.002	Nickel(T)			
					Selenium		TVS	
					Silver		TVS	
					Uranium		TVS(tr)	
					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 Boulder Creek Basin

15. All lakes and reservoirs tributary to South Boulder Creek from the source to Highway 93. All lakes and reservoirs tributary to Coal Creek from the source to Highway 93 except for specific listings in segments 13 and 18.

COSPBO15	Classifications	Physical and Biological			Metals (ug/L)		
			DM	MWAT		acute	chronic
Designation Reviewable	Agriculture						
	Aq Life Cold 2	Temperature °C	CL	CL	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02-10
	DUWS*	D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
<b>Other:</b>		chlorophyll a (ug/L)	---	8*	Cadmium(T)	5.0	---
*chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Classification: DUWS applies to Kossler Lake only. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
		<b>Inorganic (mg/L)</b>			Chromium III(T)	50	---
			acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	0.025*	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					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 Boulder Creek Basin

16. All lakes and reservoirs tributary to South Boulder Creek system from Highway 93 to the confluence with Boulder Creek. All lakes and reservoirs tributary to Coal Creek system from Highway 93 to the confluence with Boulder Creek.

COSPBO16	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---	---
Other:		chlorophyll a (ug/L)	---	---	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	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

17. All lakes and reservoirs tributary to Boulder Creek from a point immediately below the confluence with South Boulder Creek to the confluence with St. Vrain Creek, except as specified in Segments 15 and 16.							
COSPBO17	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute chronic			
Reviewable	Aq Life Warm 2	WL	WL	Aluminum	---	---	
	Recreation E	acute	chronic	Arsenic	340	---	
	Water Supply	---	5.0	Arsenic(T)	---	0.02	
	DUWS*	pH	6.5 - 9.0	---	---	---	
Qualifiers:		chlorophyll a (ug/L)	---	---	Cadmium	TVS TVS	
Water + Fish Standards		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0 ---	
Other:		Inorganic (mg/L)			Chromium III	---	TVS
Temporary Modification(s):		acute	chronic	Chromium III(T)	50	---	
Arsenic(chronic) = hybrid		Ammonia	TVS	TVS	Chromium VI	TVS TVS	
Expiration Date of 12/31/2021		Boron	---	0.75	Copper	TVS TVS	
*Classification: DUWS applies to Baseline, Marshall, Thomas and Waneka Reservoirs only.		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	TVSWS
		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 Boulder Creek Basin

18. Gross Reservoir.								
COSPBO18	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	1/1 - 3/31	CLL	CLL	Aluminum	---	---
		Temperature °C	4/1 - 12/31	CLL	19.4	Arsenic	340	---
						Arsenic(T)	---	0.02
Qualifiers:				acute	chronic			
Other:		D.O. (mg/L)		---	6.0	Beryllium	---	---
<p>*chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.</p>		D.O. (spawning)		---	7.0	Cadmium	TVS(tr)	TVS
		pH		6.5 - 9.0	---	Cadmium(T)	5.0	---
		chlorophyll a (ug/L)		---	8*	Chromium III	---	TVS
		E. Coli (per 100 mL)		---	126	Chromium III(T)	50	---
						Chromium VI	TVS	TVS
						Copper	TVS	TVS
						Iron	---	WS
						Iron(T)	---	1000
						Lead	TVS	TVS
						Lead(T)	50	---
						Manganese	TVS	TVS/WS
						Mercury	---	0.01(t)
						Molybdenum(T)	---	150
						Nickel	TVS	TVS
						Nickel(T)	---	100
						Selenium	TVS	TVS
						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 St. Vrain Creek Basin

1. All tributaries to St. Vrain Creek, including all wetlands, which are within the Indian Peaks Wilderness Area and Rocky Mountain National Park.						
COSPSV01	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
OW	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	CS-I	CS-I	Aluminum	---      ---
		acute	chronic		Arsenic	340      ---
		D.O. (mg/L)	---	6.0	Arsenic(T)	---      0.02
		D.O. (spawning)	---	7.0	Beryllium	---      ---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)      TVS
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0      ---
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Chromium III	---      TVS
Arsenic(chronic) = hybrid		Inorganic (mg/L)			Chromium III(T)	50      ---
Expiration Date of 12/31/2021		acute	chronic		Chromium VI	TVS      TVS
		Ammonia	TVS	TVS	Copper	TVS      TVS
		Boron	---	0.75	Iron	---      WS
		Chloride	---	250	Iron(T)	---      1000
		Chlorine	0.019	0.011	Lead	TVS      TVS
		Cyanide	0.005	---	Lead(T)	50      ---
		Nitrate	10	---	Manganese	TVS      TVS/WS
		Nitrite	---	0.05	Mercury	---      0.01(t)
		Phosphorus	---	0.11	Molybdenum(T)	---      150
		Sulfate	---	WS	Nickel	TVS      TVS
		Sulfide	---	0.002	Nickel(T)	---      100
					Selenium	TVS      TVS
					Silver	TVS      TVS(tr)
					Uranium	---      ---
					Zinc	TVS      TVS

  

2a. Mainstem of St. Vrain Creek, including all tributaries and wetlands, from the boundary of the Indian Peaks Wilderness Area and Rocky Mountain National Park to the eastern boundary of Roosevelt National Forest.						
COSPSV02A	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-I	CS-I	Aluminum	---      ---
		acute	chronic		Arsenic	340      ---
		D.O. (mg/L)	---	6.0	Arsenic(T)	---      0.02
		D.O. (spawning)	---	7.0	Beryllium	---      ---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)      TVS
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0      ---
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Chromium III	---      TVS
Arsenic(chronic) = hybrid		Inorganic (mg/L)			Chromium III(T)	50      ---
Expiration Date of 12/31/2021		acute	chronic		Chromium VI	TVS      TVS
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4).		Ammonia	TVS	TVS	Copper	TVS      TVS
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		Boron	---	0.75	Iron	---      WS
		Chloride	---	250	Iron(T)	---      1000
		Chlorine	0.019	0.011	Lead	TVS      TVS
		Cyanide	0.005	---	Lead(T)	50      ---
		Nitrate	10	---	Manganese	TVS      TVS/WS
		Nitrite	---	0.05	Mercury	---      0.01(t)
		Phosphorus	---	0.11*	Molybdenum(T)	---      150
		Sulfate	---	WS	Nickel	TVS      TVS
		Sulfide	---	0.002	Nickel(T)	---      100
					Selenium	TVS      TVS
					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 St. Vrain Creek Basin

2b. Mainstem of St. Vrain Creek, including all tributaries and wetlands, from the eastern boundary of Roosevelt National Forest to Hygiene Road.										
COSPSV02B	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	Aluminum	---	---			
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic	340	---			
Other:		D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02			
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (mg/m <sup>2</sup> )(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	---	Beryllium	---	---			
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS(tr)	TVS			
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---			
		Inorganic (mg/L)			Chromium III	---	TVS			
					Chromium III(T)	50	---			
					Chromium VI	TVS	TVS			
					acute	chronic	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	---	0.05	Molybdenum(T)	---	150
					Phosphorus	---	0.11*	Nickel	TVS	TVS
			Sulfate	---	WS	Nickel(T)	---	100		
			Sulfide	---	0.002	Selenium	TVS	TVS		
					Silver	TVS	TVS(tr)			
					Uranium	---	---			
					Zinc	TVS	TVS			

  

3. Mainstem of St. Vrain Creek from Hygiene Road to the confluence with the South Platte River.										
COSPSV03	Classifications	Physical and Biological			Metals (ug/L)					
Designation	Agriculture		DM	MWAT		acute	chronic			
Reviewable	Aq Life Warm 1 Recreation E	Temperature °C	WS-I	WS-I	Aluminum	---	---			
Qualifiers:		D.O. (mg/L)	---	5.0	Arsenic	340	---			
Other:		pH	6.5 - 9.0	---	Arsenic(T)	---	7.6			
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m <sup>2</sup> )	---	---	Beryllium	---	---			
		E. Coli (per 100 mL)	---	126	Cadmium	TVS	TVS			
		Inorganic (mg/L)			Chromium III	TVS	TVS			
					Chromium III(T)	---	100			
					acute	chronic	Chromium VI	TVS	TVS	
					Ammonia	TVS	TVS	Copper	TVS	TVS
					Boron	---	0.75	Iron(T)	---	1000
					Chloride	---	---	Lead	TVS	TVS
					Chlorine	0.019	0.011	Manganese	TVS	TVS
					Cyanide	0.005	---	Mercury	---	0.01(t)
					Nitrate	100	---	Molybdenum(T)	---	150
					Nitrite	---	0.5	Nickel	TVS	TVS
					Phosphorus	---	---	Selenium	TVS	TVS
					Sulfate	---	---	Silver	TVS	TVS
					Sulfide	---	0.002	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

4a. Mainstem of Left Hand Creek, including all tributaries and wetlands, from the source to a point immediately below the confluence with James Creek, except for specific listings in Segment 4b.									
COSPSV04A	Classifications	Physical and Biological			Metals (ug/L)				
Designation	Agriculture	DM	MWAT	acute      chronic					
UP	Aq Life Cold 1	CS-I	CS-I	Aluminum	---	---			
	Recreation E	acute	chronic	Arsenic	340	---			
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02		
Qualifiers:		D.O. (spawning)	---	7.0	Beryllium	---	---		
Other:		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS		
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---		
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS		
		Inorganic (mg/L)			Chromium III(T)	50	---		
					Chromium VI	TVS	TVS		
					acute	chronic	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	---	0.05	Molybdenum(T)	---	150		
		Phosphorus	---	0.11	Nickel	TVS	TVS		
		Sulfate	---	WS	Nickel(T)	---	100		
		Sulfide	---	0.002	Selenium	TVS	TVS		
					Silver	TVS	TVS(tr)		
					Uranium	---	---		
					Zinc	TVS	TVS		

  

4b. Mainstem of James Creek, including all tributaries and wetlands, from the source to the confluence with Left Hand Creek.									
COSPSV04B	Classifications	Physical and Biological			Metals (ug/L)				
Designation	Agriculture	DM	MWAT	acute      chronic					
Reviewable	Aq Life Cold 1	CS-I	CS-I	Aluminum	---	---			
	Recreation E	acute	chronic	Arsenic	340	---			
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02		
Qualifiers:		D.O. (spawning)	---	7.0	Beryllium	---	---		
Other:		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS		
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---		
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS		
		Inorganic (mg/L)			Chromium III(T)	50	---		
					Chromium VI	TVS	TVS		
					acute	chronic	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	---	0.05	Molybdenum(T)	---	150		
		Phosphorus	---	0.11	Nickel	TVS	TVS		
		Sulfate	---	WS	Nickel(T)	---	100		
		Sulfide	---	0.002	Selenium	TVS	TVS		
					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 St. Vrain Creek Basin

4c. Mainstem of Left Hand Creek, including all tributaries and wetlands, from a point immediately below the confluence with James Creek to Highway 36.						
COSPSV04C	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum	---
	Recreation E		<b>acute</b>	<b>chronic</b>	Arsenic	340
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	---	126	Chromium III	---
Expiration Date of 12/31/2021		<b>Inorganic (mg/L)</b>			Chromium III(T)	50
			<b>acute</b>	<b>chronic</b>	Chromium VI	TVS
		Ammonia	TVS	TVS	Copper	TVS
		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	---	0.11	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS
		Sulfide	---	0.002	Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS

  

5. Mainstem of Left Hand Creek, including all tributaries and wetlands from Highway 36 to the confluence with St. Vrain Creek.						
COSPSV05	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 2	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)	---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0
		<b>Inorganic (mg/L)</b>			Chromium III	---
			<b>acute</b>	<b>chronic</b>	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)	---
		Cyanide	0.005	---	Lead	TVS
		Nitrate	10	---	Lead(T)	50
		Nitrite	---	0.5	Manganese	TVS
		Phosphorus	---	0.17	Mercury	---
		Sulfate	---	WS	Molybdenum(T)	---
		Sulfide	---	0.002	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 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		DM	MWAT		acute	chronic	
UP	Agriculture						
	Aq Life Warm 2 Recreation E	Temperature °C	WS-II	WS-II	Aluminum	---	---
		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	---	---
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)	---	100
Expiration Date of 12/31/2020			acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		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		DM	MWAT		acute	chronic	
Reviewable	Agriculture						
	Aq Life Warm 1 Recreation E Water Supply DUWS*	Temperature °C	WL	WL	Aluminum	---	---
		acute	chronic	Arsenic	340	---	
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02
<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	---	TVS
Iron(chronic) = current condition*			acute	chronic	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	---	WS
*TempMod: Iron = Trec and dissolved		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

8. All lakes and reservoirs tributary to St. Vrain Creek that are within the boundary of the Indian Peaks Wilderness Area and Rocky Mountain National Park.							
COSPSV08	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
OW	Aq Life Cold 1	Temperature °C	CL	CL	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (ug/L)	---	---	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
					Chromium III(T)	50	---
					Chromium VI	TVS	TVS
					Copper	TVS	TVS
					Iron	---	WS
					Iron(T)	---	1000
					Lead	TVS	TVS
					Lead(T)	50	---
					Manganese	TVS	TVS/WS
					Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS

  

9. All lakes and reservoirs tributary to St. Vrain Creek from sources to Hygiene Road, including Button Rock Reservoir, except as specified in Segment 8.							
COSPSV09	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CL,CLL	CL,CLL	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (ug/L)	---	---	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
					Chromium III(T)	50	---
					Chromium VI	TVS	TVS
					Copper	TVS	TVS
					Iron	---	WS
					Iron(T)	---	1000
					Lead	TVS	TVS
					Lead(T)	50	---
					Manganese	TVS	TVS/WS
					Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					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 St. Vrain Creek Basin

10. All lakes and reservoirs tributary to Left Hand Creek from sources to Highway 36.						
COSPSV10	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
Reviewable	Aq Life Cold 1 Recreation E Water Supply DUWS*	CL	CL	Aluminum	---	---
		acute	chronic	Arsenic	340	---
		---	6.0	Arsenic(T)	---	0.02
		---	7.0	Beryllium	---	---
Qualifiers:		6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
Other:		---	8*	Cadmium(T)	5.0	---
*chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Classification: DUWS applies to Joder Reservoir only. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.		---	126	Chromium III	---	TVS
		Inorganic (mg/L)		Chromium III(T)	50	---
		acute	chronic	Chromium VI	TVS	TVS
		TVS	TVS	Copper	TVS	TVS
		---	0.75	Iron	---	WS
		---	250	Iron(T)	---	1000
		0.019	0.011	Lead	TVS	TVS
		0.005	---	Lead(T)	50	---
		10	---	Manganese	TVS	TVS/WS
		---	0.025*	Mercury	---	0.01(t)
		---	WS	Molybdenum(T)	---	150
		---	0.002	Nickel	TVS	TVS
		---	---	Nickel(T)	---	100
		---	---	Selenium	TVS	TVS
		---	---	Silver	TVS	TVS(tr)
		---	---	Uranium	---	---
		---	---	Zinc	TVS	TVS
11. Barbour Ponds.						
COSPSV11	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
Reviewable	Aq Life Warm 1 Recreation E Water Supply	WL	WL	Aluminum	---	---
		acute	chronic	Arsenic	340	---
		---	5.0	Arsenic(T)	---	0.02
Qualifiers:		6.5 - 9.0	---	Beryllium	---	---
Other:		---	---	Cadmium	TVS	TVS
*chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Classification: DUWS applies to Joder Reservoir only. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.		---	126	Cadmium(T)	5.0	---
		Inorganic (mg/L)		Chromium III	---	TVS
		acute	chronic	Chromium III(T)	50	---
		TVS	TVS	Chromium VI	TVS	TVS
		---	0.75	Copper	TVS	TVS
		---	250	Iron	---	WS
		0.019	0.011	Iron(T)	---	1000
		0.005	---	Lead	TVS	TVS
		10	---	Lead(T)	50	---
		---	0.5	Manganese	TVS	TVS/WS
		---	---	Mercury	---	0.01(t)
		---	WS	Molybdenum(T)	---	150
		---	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

12. All lakes and reservoirs tributary to Left Hand Creek from Highway 36 to the confluence with St. Vrain Creek, except as specified in Segment 7.							
COSPSV12	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	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>Water + Fish Standards</b>		chlorophyll a (ug/L)	---	---	Cadmium	TVS	TVS
<b>Other:</b>		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		<b>Inorganic (mg/L)</b>			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	TVS	TVS
13. All lakes and reservoirs tributary to St. Vrain Creek from Hygiene Road to the confluence with the South Platte River, except as specified in Segments 7, 10, 11 and 12.							
COSPSV13	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
	DUWS*	pH	6.5 - 9.0	---	Beryllium	---	---
<b>Qualifiers:</b>		chlorophyll a (ug/L)	---	---	Cadmium	TVS	TVS
<b>Other:</b>		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
*Classification: DUWS applies to Burch lake only.		<b>Inorganic (mg/L)</b>			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	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

## Middle South Platte River Basin

1a. Mainstem of the South Platte River from a point immediately below the confluence with Big Dry Creek to the confluence with St. Vrain Creek.							
COSPMS01A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute		chronic	
UP	Aq Life Warm 2	WS-II	WS-II	---	---	---	
	Recreation E	acute	chronic	---	---	---	
	Water Supply	varies*	varies*	340	---	---	
Qualifiers:		D.O. (mg/L)	pH	6.5 - 9.0	---	0.02 <sup>A</sup>	
Water + Fish Standards		chlorophyll a (mg/m <sup>2</sup> )	---	---	TVS	TVS	
Other:		E. Coli (per 100 mL)	---	126	5.0	---	
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *Ammonia(acute) = See attached table for site-specific standards. *Ammonia(chronic) = See attached table for site-specific standards. *Copper(acute) = Copper BLM-based FMB Cu FMB(ac)=35.1 ug/l *Copper(chronic) = Copper BLM-based FMB Cu FMB(ch)= 23.5 ug/l *D.O. (mg/L)(acute) = See attached table for site-specific standards. *D.O. (mg/L)(chronic) = See attached table for site-specific standards.		Inorganic (mg/L)			---	TVS	TVS
		acute	chronic	50	---	---	
		TVS*	TVS*	TVS	TVS	TVS	
		---	0.75	---	---	23.5*	
		---	250	35.1*	---	---	
		0.019	0.011	---	---	WS	
		0.005	---	---	---	1000	
		10	---	TVS	TVS	TVS	
		---	0.5	50	---	---	
		---	---	TVS	TVS	TVS/WS	
		---	WS	---	---	0.01(t)	
		---	0.002	---	---	150	
		---	---	TVS	TVS	TVS	
		---	---	---	---	100	
		---	---	TVS	TVS	TVS	
		---	---	TVS	TVS	TVS	
		---	---	---	---	---	
		---	---	TVS	TVS	TVS	

  

1b. Mainstem of the South Platte River from a point immediately below the confluence with St. Vrain Creek to the Weld/Morgan County Line.							
COSPMS01B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute		chronic	
Reviewable	Aq Life Warm 2	WS-II	WS-II	---	---	---	
	Recreation E	acute	chronic	---	---	---	
	Water Supply	---	5.0	340	---	0.02	
Qualifiers:		D.O. (mg/L)	pH	6.5 - 9.0	---	---	
Water + Fish Standards		chlorophyll a (mg/m <sup>2</sup> )	---	---	TVS	TVS	
Other:		E. Coli (per 100 mL)	---	126	5.0	---	
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		Inorganic (mg/L)			---	TVS	TVS
		acute	chronic	50	---	---	
		TVS	TVS	TVS	TVS	TVS	
		---	0.75	TVS	TVS	TVS	
		---	250	TVS	TVS	TVS	
		0.019	0.011	---	---	WS	
		0.005	---	---	---	1000	
		10	---	TVS	TVS	TVS	
		---	0.5	50	---	---	
		---	---	TVS	TVS	TVS/WS	
		---	WS	---	---	0.01(t)	
		---	0.002	---	---	150	
		---	---	TVS	TVS	TVS	
		---	---	---	---	100	
		---	---	TVS	TVS	TVS	
		---	---	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

## Middle South Platte River Basin

2. Deleted.

COSPMS02	Classifications	Physical and Biological		Metals (ug/L)	
Designation		DM	MWAT	acute	chronic
<b>Qualifiers:</b>		acute	chronic		
<b>Other:</b>		<b>Inorganic (mg/L)</b>			
		acute	chronic		

3a. All tributaries to the South Platte River, including all wetlands, from a point immediately below the confluence with Big Dry Creek to the Weld/Morgan County line, except for specific listings in the subbasins of the South Platte River, and in Segments 3b, 5a, 5b, 5c, and 6.

COSPMS03A	Classifications	Physical and Biological		Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic
UP	Aq Life Warm 2	WS-I	WS-I	Aluminum	---
	Recreation E	acute	chronic	Arsenic	340
	Water Supply	---	5.0	Arsenic(T)	---
<b>Qualifiers:</b>		6.5 - 9.0	---	Beryllium	---
<b>Water + Fish Standards</b>		---	150*	Cadmium	TVS
<b>Other:</b>		---	126	Cadmium(T)	5.0
Temporary Modification(s):		<b>Inorganic (mg/L)</b>		Chromium III	---
Arsenic(chronic) = hybrid		acute	chronic	Chromium III(T)	50
Expiration Date of 12/31/2021		TVS	TVS	Chromium VI	TVS
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4).		---	0.75	Copper	TVS
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		---	250	Iron	---
		0.019	0.011	Iron(T)	---
		0.005	---	Lead	TVS
		10	---	Lead(T)	50
		---	0.5	Manganese	TVS
		---	0.17*	Mercury	---
		---	WS	Molybdenum(T)	---
		---	0.002	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

## Middle South Platte River Basin

3b. Hayesmount Tributaries including the Upper Hayesmount Tributary from the source to the confluence with Box Elder Creek and the Lower Hayesmount Tributaries from the source to the Denver Hudson Canal.							
COSPMS03B	Classifications	Physical and Biological			Metals (ug/L)		
Designation			DM	MWAT			
UP	Agriculture						
	Aq Life Warm 2	Temperature °C	WS-III	WS-III	Aluminum	---	
	Recreation E		<b>acute</b>	<b>chronic</b>	Arsenic	340	
Qualifiers:		D.O. (mg/L)	---	narrative*	Arsenic(T)	---	
Other:		pH	6.5 - 9.0	---	Beryllium	---	
*D.O. (mg/L)(chronic) = When water is present, D.O. concentrations shall be maintained at levels that protect classified uses.		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium	TVS	
		E. Coli (per 100 mL)	---	126	Chromium III	TVS	
		Inorganic (mg/L)			Chromium III(T)	---	100
			acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		Nitrite	---	0.5	Nickel	TVS	TVS
		Phosphorus	---	0.17	Selenium	TVS	TVS
		Sulfate	---	---	Silver	TVS	TVS
		Sulfide	---	0.002	Uranium	---	---
					Zinc	TVS	TVS
4. Barr Lake and Milton Reservoir.							
COSPMS04	Classifications	Physical and Biological			Metals (ug/L)		
Designation			DM	MWAT			
UP	Agriculture						
	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	
	Recreation E		<b>acute</b>	<b>chronic</b>	Arsenic	340	
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---	
Water + Fish Standards		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	
Other:		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		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	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

## Middle South Platte River Basin

5a. Mainstem of Lone Tree Creek from the source to the confluence with the South Platte River.							
COSPMS05A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT			
Reviewable	Aq Life Warm 2 Recreation N Water Supply	Temperature °C	WS-I	WS-I	Aluminum	acute	chronic
Qualifiers:			acute	chronic	Arsenic	340	---
Other:		D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		pH	6.5 - 9.0	---	Beryllium	---	---
		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	630	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	TVSWS
		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
5b. Mainstem of Box Elder Creek from the confluence with Coyote Run to the Denver Hudson Canal.							
COSPMS05B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT			
UP	Aq Life Warm 2 Recreation N	Temperature °C	WS-III	WS-III	Aluminum	acute	chronic
Qualifiers:			acute	chronic	Arsenic	340	---
Other:		D.O. (mg/L)	---	4.7*	Arsenic(T)	---	100
*D.O. (mg/L)(chronic) = 15th percentile of D.O. measurements collected between 6:30 a.m. and 6:30 p.m.		pH	6.5 - 9.0	---	Beryllium	---	---
		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	630	Chromium III	TVS	TVS
		Inorganic (mg/L)			Chromium III(T)	---	100
			acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		Nitrite	---	10	Nickel	TVS	TVS
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	---	Silver	TVS	TVS
		Sulfide	---	0.002	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

## Middle South Platte River Basin

5c. Mainstems of Crow Creek and Box Elder Creek from their sources to their confluences with the South Platte River, except for specific listings in Segment 5b.								
COSPMS05C	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture	DM	MWAT		acute	chronic		
Reviewable	Aq Life Warm 2 Recreation N	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)	---	100	
<b>Other:</b>	*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).	pH	6.5 - 9.0	---	Beryllium	---	---	
		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS	
		E. Coli (per 100 mL)	---	630	Chromium III	TVS	TVS	
			<b>Inorganic (mg/L)</b>		Chromium III(T)	---	100	
				<b>acute</b>	<b>chronic</b>	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS	
		Boron	---	0.75	Iron(T)	---	1000	
		Chloride	---	---	Lead	TVS	TVS	
		Chlorine	0.019	0.011	Manganese	TVS	TVS	
		Cyanide	0.005	---	Mercury	---	0.01(t)	
		Nitrate	100	---	Molybdenum(T)	---	150	
		Nitrite	---	0.5	Nickel	TVS	TVS	
		Phosphorus	---	0.17*	Selenium	TVS	TVS	
		Sulfate	---	---	Silver	TVS	TVS	
		Sulfide	---	0.002	Uranium	---	---	
					Zinc	TVS	TVS	
6. Lost Creek from the source to Interstate 76, including all its tributaries, stock ponds and wetlands.								
COSPMS06	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture	DM	MWAT		acute	chronic		
UP	Aq Life Warm 2 Recreation N	Temperature °C	WS-III	WS-III	Aluminum	---	---	
			<b>acute</b>	<b>chronic</b>	Arsenic	340	---	
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	100	
<b>Other:</b>	*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).	pH	6.5 - 9.0	---	Beryllium	---	---	
		chlorophyll a (mg/m <sup>2</sup> )	---	---	Beryllium(T)	---	100	
		E. Coli (per 100 mL)	---	630	Cadmium	---	---	
			<b>Inorganic (mg/L)</b>		Cadmium(T)	---	10	
				<b>acute</b>	<b>chronic</b>	Chromium III	---	---
		Ammonia	---	---	Chromium III(T)	---	100	
		Boron	---	0.75	Chromium VI	---	---	
		Chloride	---	---	Chromium VI(T)	---	100	
		Chlorine	---	---	Copper	---	---	
		Cyanide	0.2	---	Copper(T)	---	200	
		Nitrate	100	---	Iron	---	---	
		Nitrite	---	10	Lead	---	---	
		Phosphorus	---	0.17*	Lead(T)	---	100	
		Sulfate	---	---	Manganese	---	---	
		Sulfide	---	0.002	Manganese(T)	---	200	
					Mercury	---	---	
					Molybdenum(T)	---	150	
				Nickel	---	---		
				Nickel(T)	---	200		
				Selenium	---	---		
				Selenium(T)	---	20		
				Silver	---	---		
				Uranium	---	---		
				Zinc	---	---		
				Zinc(T)	---	2000		

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

## Middle South Platte River Basin

7. All lakes and reservoirs tributary to the South Platte River from a point immediately below the confluence with Big Dry Creek to the Weld/Morgan County line, except for specific listings in the subbasins of the South Platte River, and in Segment 4.

COSPMS07	Classifications	Physical and Biological			Metals (ug/L)		
Designation			DM	MWAT		acute	chronic
Reviewable	Agriculture						
	Aq Life Warm 2	Temperature °C	WL	WL	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>Water + Fish Standards</b>		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS
<b>Other:</b>		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
Temporary Modification(s):		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
Arsenic(chronic) = hybrid			acute	chronic	Chromium III(T)	50	---
Expiration Date of 12/31/2021		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	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.

Site-Specific Minimum Dissolved Oxygen and Ammonia Standards for Middle South Platte Segment 1a

Dissolved Oxygen:

STANDARDS

Early Life Stage Protection Period (April 1 through July 31)

1-Day<sup>1.4,5</sup> 3.0 mg/L (acute)

7-Day Average<sup>1.2</sup> 5.0 mg/L

Older Life Stage Protection Period (August 1 through March 31)

1-Day<sup>1.4</sup> 2.0 mg/L (acute)

7-Day Mean of Minimums<sup>1.3</sup> 2.5 mg/L

30-Day Average<sup>1.2</sup> 4.5 mg/L

Refer to Section 38(6)(4)(c) for Dissolved Oxygen assessment locations.

Footnotes

1. For the purpose of determining compliance with the standards, dissolved oxygen measurements shall only be taken in the flowing portion of the stream at mid-depth, and at least six inches above the bottom of the channel. All sampling protocols and test procedures shall be in accordance with procedures and protocols approved by the Division.
2. A minimum of four independent daily means must be used to calculate the average for the 7-Day Average standard. A minimum of eight independent daily means must be used to calculate the average for the 30-Day Average standard. The four days and the eight days must be representative of the 7-Day and the 30-Day periods respectively. The daily mean shall be the mean of the daily high and low values. In calculating the mean values, the dissolved oxygen saturation value shall be used in place of any dissolved oxygen measurements which exceed saturation.
3. The 7-Day Mean Minimum is the average of the daily minimums measured at a location on each day during any 7-Day period.
4. During a 24 hour day, dissolved oxygen levels are likely to be lower during the nighttime when there is no photosynthesis. The dissolved oxygen levels should not drop below the acute standard (ELS acute standard of 3.0 mg/L or the OLS standard of 2.0 mg/L). However, if during the ELS period multiple measurements are below 3.0 mg/L during the same nighttime period, the multiple measurements shall be considered a single exceedance of the acute standard. For measurements below 2.0 mg/L during either the ELS or the OLS periods, each hourly measurement below 2.0 mg/L shall be considered an exceedance of the acute standard.
5. In July, the dissolved oxygen level in Segment 1a may be lower than the 3.0 mg/L acute standard for up to 14 exceedances in any one year and up to a total of 21 exceedances in three years before there is a determination that the acute dissolved oxygen standards is not being met. Exceedances shall be counted as described in Footnote 4.

Ammonia:

Early Life Stage Protection Period (April 1 through July 31)

---

Ammonia

Warm Water = (mg/l as N)Total

$$acute = \frac{0.411}{1 + 10^{7.204 - pH}} + \frac{58.4}{1 + 10^{pH - 7.204}}$$

$$chronic (Apr1 - July31) = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * MIN \left( 2.85, 1.45 * 10^{0.028(25 - T)} \right)$$

$$chronic(Aug1 - Mar31) = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) * 1.45 * 10^{0.028 * (25 - MAX(T, 7))}$$

---

NH<sub>3</sub> = old TVS

Warm Water Acute = 0.62/FT/FPH/2<sup>(4 old)</sup> in mg/ (N)

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

1. Mainstem of the Big Thompson River, including all tributaries and wetlands, within Rocky Mountain National Park, except for specific listings in Segment 2.							
COSPBT01	Classifications	Physical and Biological			Metals (ug/L)		
Designation		DM	MWAT		acute	chronic	
OW	Agriculture						
	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
Qualifiers:	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
		D.O. (spawning)	---	7.0	Beryllium	---	---
Other:		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
					Chromium III(T)	50	---
					Chromium VI	TVS	TVS
					Copper	TVS	TVS
					Iron	---	WS
					Iron(T)	---	1000
					Lead	TVS	TVS
					Lead(T)	50	---
					Manganese	TVS	TVS/WS
					Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					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

## Big Thompson River Basin

2. Mainstem of the Big Thompson River, including all tributaries and wetlands from the boundary of Rocky Mountain National Park to the Home Supply Canal diversion, except for the specific listing in Segment 7; mainstem of Black Canyon Creek and Glacier Creek below Estes Park water treatment plant.							
COSPBT02	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute chronic			
UP	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum	---	
	Recreation E		acute	chronic	Arsenic	340	
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr) TVS	
Temporary Modification(s):		chlorophyll a (mg/m <sup>2</sup> )	---	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	
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4). *Copper(acute) = 11 ug/L from immediately above the Upper Thompson Sanitation District's wastewater treatment plant outfall to the Home Supply Canal Diversion. *Copper(chronic) = 7.5 ug/L from immediately above the Upper Thompson Sanitation District's wastewater treatment plant outfall to the Home Supply Canal Diversion.		Inorganic (mg/L)			Chromium VI	TVS	TVS
		acute	chronic	Copper	---	7.5*	
		Ammonia	TVS	TVS	Copper	11*	TVS
		Boron	---	0.75	Copper	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	---	0.11*	Mercury	---	0.01(t)
		Sulfate	---	WS	Molybdenum(T)	---	150
		Sulfide	---	0.002	Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					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 Big Thompson River Basin

3. Mainstem of the Big Thompson River from the Home Supply Canal diversion to the Big Barnes Ditch diversion.						
COSPBT03	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Aluminum	---
	Recreation E		acute	chronic	Arsenic	340
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---
<b>Water + Fish Standards</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium(T)	5.0
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Chromium III	---
Arsenic(chronic) = hybrid					Chromium III(T)	50
Expiration Date of 12/31/2021					Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury	---
					Molybdenum(T)	---
					Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS

4a. Mainstem of the Big Thompson from the Big Barnes Ditch diversion to the Greeley-Loveland Canal diversion.						
COSPBT04A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute	chronic	
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum	---
	Recreation E		acute	chronic	Arsenic	340
	Recreation N	D.O. (mg/L)	---	6.0	Arsenic(T)	---
	Water Supply	D.O. (spawning)	---	7.0	Beryllium	---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium(T)	5.0
Temporary Modification(s):		E. Coli (per 100 mL)	5/1 - 10/15	---	Chromium III	---
Arsenic(chronic) = hybrid		E. Coli (per 100 mL)	10/16 - 4/30	---	Chromium III(T)	50
Expiration Date of 12/31/2021					Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury	---
					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 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		
Reviewable	Aq Life Warm 1	Temperature °C	WS-I	WS-I	Aluminum	---
	Recreation E      5/1 - 10/15		<b>acute</b>	<b>chronic</b>	Arsenic	---
	Recreation N      10/16 - 4/30	D.O. (mg/L)	---	5.0	Arsenic(T)	---
	Water Supply	pH	6.5 - 9.0		Beryllium	---
Qualifiers:		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS
Other:		E. Coli (per 100 mL)	10/16 - 4/30	---	630	---
Temporary Modification(s):		E. Coli (per 100 mL)	5/1 - 10/15	---	126	---
Arsenic(chronic) = hybrid					Chromium III	---
Expiration Date of 12/31/2021					Chromium III(T)	50
Selenium(chronic) = current condition					Chromium VI	TVS
Expiration Date of 12/31/2020					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury	---
					Molybdenum(T)	---
					Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS
4c. Mainstem of the Big Thompson from County Road 11H to I-25.						
COSPBT04C	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
Reviewable	Aq Life Warm 2	Temperature °C	WS-I	WS-I	Aluminum	---
	Recreation E      5/1 - 10/15		<b>acute</b>	<b>chronic</b>	Arsenic	340
	Recreation N      10/16 - 4/30	D.O. (mg/L)	---	5.0	Arsenic(T)	---
Qualifiers:		pH	6.5 - 9.0		Beryllium	---
Fish Ingestion Standards		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS
Other:		E. Coli (per 100 mL)	5/1 - 10/15	---	126	---
		E. Coli (per 100 mL)	10/16 - 4/30	---	630	---
					Chromium III	TVS
					Chromium III(T)	---
					Chromium VI	TVS
					Copper	TVS
					Iron(T)	---
					Lead	TVS
					Manganese	TVS
					Mercury	---
					Molybdenum(T)	---
					Nickel	TVS
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS
					Sulfide	---

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

5. Mainstem of The Big Thompson River from I-25 to the confluence with the South Platte River.							
COSPBT05	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT			
Reviewable	Aq Life Warm 2	Temperature °C	WS-I	WS-I	Aluminum	---	
	Recreation N 10/16 - 4/30		acute	chronic	Arsenic	340	
	Recreation P 5/1 - 10/15	D.O. (mg/L)	---	5.0	Arsenic(T)	---	
Qualifiers:		pH		6.5 - 9.0	---	Beryllium	
Other:		chlorophyll a (mg/m <sup>2</sup> )		---	---	Cadmium	TVS
		E. Coli (per 100 mL) 5/1 - 10/15		---	205	Chromium III	TVS
		E. Coli (per 100 mL) 10/16 - 4/30		---	630	Chromium III(T)	---
						Chromium VI	TVS
				Inorganic (mg/L)		Copper	TVS
				acute	chronic	Iron(T)	---
		Ammonia		TVS	TVS	Lead	TVS
		Boron		---	0.75	Manganese	TVS
		Chloride		---	---	Mercury	---
		Chlorine		0.019	0.011	Molybdenum(T)	---
		Cyanide		0.005	---	Nickel	TVS
		Nitrate		100	---	Selenium	TVS
		Nitrite		---	0.5	Silver	TVS
		Phosphorus		---	---	Uranium	---
		Sulfate		---	---	Zinc	TVS
		Sulfide		---	0.002		
6. All tributaries to the Big Thompson River, including all wetlands, from the Home Supply Canal diversion to the confluence with the South Platte River.							
COSPBT06	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT			
UP	Aq Life Warm 2	Temperature °C	WS-I	WS-I	Aluminum	---	
	Recreation E		acute	chronic	Arsenic	340	
Qualifiers:		D.O. (mg/L)		---	5.0	Arsenic(T)	---
Fish Ingestion Standards		pH		6.5 - 9.0	---	Beryllium	---
Other:		chlorophyll a (mg/m <sup>2</sup> )		---	150	Cadmium	TVS
		E. Coli (per 100 mL)		---	126	Chromium III	TVS
				Inorganic (mg/L)		Chromium III(T)	---
				acute	chronic	Chromium VI	TVS
		Ammonia		TVS	TVS	Copper	TVS
		Boron		---	0.75	Iron(T)	---
		Chloride		---	---	Lead	TVS
		Chlorine		0.019	0.011	Manganese	TVS
		Cyanide		0.005	---	Mercury	---
		Nitrate		100	---	Molybdenum(T)	---
		Nitrite		---	0.5	Nickel	TVS
		Phosphorus		---	0.17	Selenium	TVS
		Sulfate		---	---	Silver	TVS
		Sulfide		---	0.002	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 Big Thompson River Basin

7. Mainstem of the North Fork of the Big Thompson River from the boundary of Rocky Mountain National Park to the confluence with the Big Thompson River; mainstem of Buckhorn Creek from the source to the confluence with the Big Thompson River.							
COSPBT07	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture Aq Life Cold 1 Recreation E Water Supply	DM	MWAT	acute      chronic			
Reviewable		acute	chronic	Aluminum	---	---	
		Temperature °C	CS-II	CS-II	Arsenic	340	---
		D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>	Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (mg/m <sup>2</sup> )(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)	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
		<b>Inorganic (mg/L)</b>			Chromium III(T)	50	---
			acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	0.11*	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
				Zinc	TVS	TVS	

  

8. Mainstem of the Little Thompson River, including all tributaries and wetlands, from the source to the Culver Ditch diversion.							
COSPBT08	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture Aq Life Cold 1 Recreation E Water Supply	DM	MWAT	acute      chronic			
Reviewable		acute	chronic	Aluminum	---	---	
		Temperature °C	CS-II	CS-II	Arsenic	340	---
		D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>	Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021	pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
		<b>Inorganic (mg/L)</b>			Chromium III(T)	50	---
			acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	0.11	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					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 Big Thompson River Basin

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)	---	0.02-10 <sup>A</sup>
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---	---
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS	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	---	TVS
Expiration Date of 12/31/2020			acute	chronic	Chromium III(T)	50	---
*chlorophyll a (mg/m <sup>2</sup> )(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	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	TVSWS
		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

  

10. All tributaries to the Little Thompson River, including all wetlands, from the Culver Ditch diversion to the confluence with the Big Thompson River.							
COSPBT10	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	---	---
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m <sup>2</sup> )	---	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(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		Nitrite	---	0.5	Nickel	TVS	TVS
		Phosphorus	---	0.17*	Selenium	TVS	TVS
		Sulfate	---	---	Silver	TVS	TVS
		Sulfide	---	0.002	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

11. Carter Lake.							
COSPBT11	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute      chronic	
Reviewable	Aq Life Cold 1 Recreation E Water Supply DUWS	Temperature °C	1/1 - 3/31	CLL	CLL	Aluminum	---      ---
		Temperature °C	4/1 - 12/31	CLL	22.7	Arsenic	340      ---
						Arsenic(T)	---      0.02
						Beryllium	---      ---
Qualifiers:			acute	chronic		Cadmium	TVS(tr)      TVS
Other:		D.O. (mg/L)	---	6.0		Cadmium(T)	5.0      ---
		D.O. (spawning)	---	7.0		Chromium III	---      TVS
		pH	6.5 - 9.0	---		Chromium III(T)	50      ---
		chlorophyll a (ug/L)	---	---		Chromium VI	TVS      TVS
		E. Coli (per 100 mL)	---	126		Copper	TVS      TVS
						Iron	---      WS
						Iron(T)	---      1000
						Lead	TVS      TVS
						Lead(T)	50      ---
						Manganese	TVS      TVS/WS
						Mercury	---      0.01(t)
						Molybdenum(T)	---      150
						Nickel	TVS      TVS
						Nickel(T)	---      100
						Selenium	TVS      TVS
						Silver	TVS      TVS(tr)
						Uranium	---      ---
						Zinc	TVS      TVS
12. Lake Loveland, Horseshoe Lake, Boyd Lake.							
COSPBT12	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	---      ---
			acute	chronic		Arsenic	340      ---
		D.O. (mg/L)	---	5.0		Arsenic(T)	---      0.02
		pH	6.5 - 9.0	---		Beryllium	---      ---
Qualifiers:		chlorophyll a (ug/L)	---	---		Cadmium	TVS      TVS
Other:		E. Coli (per 100 mL)	---	126		Cadmium(T)	5.0      ---
						Chromium III	---      TVS
						Chromium III(T)	50      ---
						Chromium VI	TVS      TVS
						Copper	TVS      TVS
						Iron	---      WS
						Iron(T)	---      1000
						Lead	TVS      TVS
						Lead(T)	50      ---
						Manganese	TVS      TVS/WS
						Mercury	---      0.01(t)
						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 Big Thompson River Basin

13. Berthoud Reservoir, Johnstown Reservoir.						
COSPBT13	Classifications	Physical and Biological			Metals (ug/L)	
Designation			DM	MWAT		
UP	Agriculture		WL	WL		
	Aq Life Warm 2	Temperature °C	acute	chronic	Aluminum	acute chronic
	Recreation E				Arsenic	340 ---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---
	DUWS	pH	6.5 - 9.0	---	Beryllium	---
<b>Qualifiers:</b>		chlorophyll a (ug/L)	---	---	Cadmium	TVS TVS
<b>Water + Fish Standards</b>		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0 ---
<b>Other:</b>		<b>Inorganic (mg/L)</b>			Chromium III	---
			acute	chronic	Chromium III(T)	50 ---
		Ammonia	TVS	TVS	Chromium VI	TVS TVS
		Boron	---	0.75	Copper	TVS TVS
		Chloride	---	250	Iron	---
		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
14. Welch Reservoir, Lonetree Reservoir, Boedecker Lake, Lon Hagler Reservoir.						
COSPBT14	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
Reviewable	Aq Life Warm 1	Temperature °C	WL	WL	Aluminum	acute chronic
	Recreation E		acute	chronic	Arsenic	340 ---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---
	DUWS*	pH	6.5 - 9.0	---	Beryllium	---
<b>Qualifiers:</b>		chlorophyll a (ug/L)	---	---	Cadmium	TVS TVS
<b>Other:</b>		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0 ---
Temporary Modification(s):		<b>Inorganic (mg/L)</b>			Chromium III	---
Arsenic(chronic) = hybrid			acute	chronic	Chromium III(T)	50 ---
Expiration Date of 12/31/2021		Ammonia	TVS	TVS	Chromium VI	TVS TVS
*Classification: DUWS applies to Lonetree Reservoir only.		Boron	---	0.75	Copper	TVS TVS
		Chloride	---	250	Iron	---
		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

15. All lakes and reservoirs tributary to the Big Thompson River within Rocky Mountain National Park.							
COSPBT15	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute      chronic			
OW	Aq Life Cold 1 Recreation E Water Supply	CL	CL	Aluminum	---	---	
		acute	chronic	Arsenic	340	---	
		---	6.0	Arsenic(T)	---	0.02	
		---	7.0	Beryllium	---	---	
<b>Qualifiers:</b>		6.5 - 9.0	---	Cadmium	TVS(tr)	TVS	
<b>Other:</b>		---	---	Cadmium(T)	5.0	---	
		---	126	Chromium III	---	TVS	
		Inorganic (mg/L)			Chromium III(T)	50	---
		acute	chronic	Chromium VI	TVS	TVS	
		TVS	TVS	Copper	TVS	TVS	
		---	0.75	Iron	---	WS	
		---	250	Iron(T)	---	1000	
		0.019	0.011	Lead	TVS	TVS	
		0.005	---	Lead(T)	50	---	
		10	---	Manganese	TVS	TVS/WS	
		---	0.05	Mercury	---	0.01(t)	
		---	---	Molybdenum(T)	---	150	
		---	---	Nickel	TVS	TVS	
		---	WS	Nickel(T)	---	100	
		---	0.002	Selenium	TVS	TVS	
				Silver	TVS	TVS(tr)	
				Uranium	---	---	
				Zinc	TVS	TVS	

  

16. All lakes and reservoirs tributary to the Big Thompson River from the boundary of Rocky Mountain National Park to the Home Supply Canal diversion. This segment includes Lake Estes and St Mary's Lake.							
COSPBT16	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute      chronic			
Reviewable	Aq Life Cold 1 Recreation E Water Supply DUWS*	CL,CLL	CL,CLL	Aluminum	---	---	
		acute	chronic	Arsenic	340	---	
		---	6.0	Arsenic(T)	---	0.02	
		---	7.0	Beryllium	---	---	
<b>Qualifiers:</b>		6.5 - 9.0	---	Cadmium	TVS(tr)	TVS	
<b>Other:</b>		---	---	Cadmium(T)	5.0	---	
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *Classification: DUWS applies to St.Mary's Lake only.		---	126	Chromium III	---	TVS	
		Inorganic (mg/L)			Chromium III(T)	50	---
		acute	chronic	Chromium VI	TVS	TVS	
		TVS	TVS	Copper	TVS	TVS	
		---	0.75	Iron	---	WS	
		---	250	Iron(T)	---	1000	
		0.019	0.011	Lead	TVS	TVS	
		0.005	---	Lead(T)	50	---	
		10	---	Manganese	TVS	TVS/WS	
		---	0.05	Mercury	---	0.01(t)	
		---	---	Molybdenum(T)	---	150	
		---	---	Nickel	TVS	TVS	
		---	WS	Nickel(T)	---	100	
		---	0.002	Selenium	TVS	TVS	
				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

## Big Thompson River Basin

17. All lakes and reservoirs tributary to the Big Thompson River from the Home Supply Canal diversion to the confluence with the South Platte River, except for specific listings in Segments 12 and 14.

COSPBT17	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	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>Water + Fish Standards</b>		chlorophyll a (ug/L)	---	---	Cadmium	TVS	TVS
<b>Other:</b>		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
Temporary Modification(s):		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
Arsenic(chronic) = hybrid			acute	chronic	Chromium III(T)	50	---
Expiration Date of 12/31/2021		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	TVS	TVS

18. All lakes and reservoirs tributary to the Little Thompson River from the source to the Culver Ditch diversion.

COSPBT18	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CL	CL	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (ug/L)	---	---	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
		<b>Inorganic (mg/L)</b>			Chromium III(T)	50	---
			acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	---	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					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 Big Thompson River Basin

19. All lakes and reservoirs tributary to the Little Thompson River from the Culver Ditch diversion to the confluence with the Big Thompson River, except for specific listings in Segments 11 and 13.

COSPBT19	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---	---
Other:		chlorophyll a (ug/L)	---	---	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	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

1. Mainstem of the Cache La Poudre River, and all tributaries and wetlands, within Rocky Mountain National Park and the Rawah, Neota, Comanche Peak, and Cache La Poudre Wilderness Areas.

COSPCP01	Classifications	Physical and Biological			Metals (ug/L)		
Designation		DM	MWAT		acute	chronic	
OW	Agriculture						
	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)	---	0.02
		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
Arsenic(chronic) = hybrid					Chromium III(T)	50	---
Expiration Date of 12/31/2021					Chromium VI	TVS	TVS
		<b>Inorganic (mg/L)</b>			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	---	0.01(t)
		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	---	---
					Zinc	TVS	TVS

2a. Mainstem of the Cache La Poudre River, including all tributaries and wetlands, from the boundaries of Rocky Mountain National Park and the Rawah, Neota, Comanche Peak, and Cache La Poudre Wilderness Areas to a point immediately below the confluence with the South Fork Cache La Poudre River.

COSPCP02A	Classifications	Physical and Biological			Metals (ug/L)		
Designation		DM	MWAT		acute	chronic	
Reviewable	Agriculture						
	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)	---	0.02
		D.O. (spawning)	---	7.0	Beryllium	---	---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0	---
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
Arsenic(chronic) = hybrid					Chromium III(T)	50	---
Expiration Date of 12/31/2021					Chromium VI	TVS	TVS
		<b>Inorganic (mg/L)</b>			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	---	0.01(t)
		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	---	---
					Zinc	TVS	TVS

\*chlorophyll a (mg/m<sup>2</sup>)(chronic) = applies only above the facilities listed at 38.5(4).  
\*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).

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

2b. Mainstem of the Cache La Poudre River, including all tributaries and wetlands, from a point immediately below the confluence with the South Fork Cache La Poudre River to the Munroe Gravity Canal Headgate (also known as the North Poudre Supply Canal diversion).							
COSPCP02B	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture Aq Life Cold 1 Recreation E Water Supply	DM	MWAT	acute      chronic			
Reviewable		acute	chronic	Aluminum	---	---	
		Temperature °C	CS-II	CS-II	---	---	
		D.O. (mg/L)	---	6.0	Arsenic	340      ---	
		D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02
		pH	6.5 - 9.0	---	Beryllium	---	---
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium	TVS(tr)	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
					Chromium III	---	TVS
					Chromium III(T)	50	---
					Chromium VI	TVS	TVS
					Copper	TVS	TVS
					Iron	---	WS
					Iron(T)	---	1000
					Lead	TVS	TVS
					Lead(T)	50	---
					Manganese	TVS	TVS/WS
					Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS
3. Deleted.							
COSPCP03	Classifications	Physical and Biological			Metals (ug/L)		
Designation		DM	MWAT	acute      chronic			
Qualifiers:		acute	chronic				
Other:		Inorganic (mg/L)					
		acute	chronic				

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**

4. Deleted.				
COSPCP04	Classifications	Physical and Biological		Metals (ug/L)
Designation		DM	MWAT	acute      chronic
Qualifiers:		acute	chronic	
Other:				
		Inorganic (mg/L)		
		acute	chronic	

  

5. Deleted.				
COSPCP05	Classifications	Physical and Biological		Metals (ug/L)
Designation		DM	MWAT	acute      chronic
Qualifiers:		acute	chronic	
Other:				
		Inorganic (mg/L)		
		acute	chronic	

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

6. Mainstem of the North Fork of the Cache La Poudre River, including all tributaries and wetlands, from the source to the inlet of Halligan Reservoir.							
COSPCP06	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT				
Reviewable	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	CS-I	CS-I	acute	chronic	
Qualifiers:			acute	chronic	Aluminum	---	---
		D.O. (mg/L)	---	6.0	Arsenic	340	---
Other:	Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021	D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02
		pH	6.5 - 9.0	---	Beryllium	---	---
		Inorganic (mg/L)			Cadmium	TVS(tr)	TVS
			acute	chronic	Cadmium(T)	5.0	---
		Ammonia	TVS	TVS	Chromium III	---	TVS
		Boron	---	0.75	Chromium III(T)	50	---
		Chloride	---	250	Chromium VI	TVS	TVS
		Chlorine	0.019	0.011	Copper	TVS	TVS
		Cyanide	0.005	---	Iron	---	WS
		Nitrate	10	---	Iron(T)	---	1000
		Nitrite	---	0.05	Lead	TVS	TVS
		Phosphorus	---	0.11	Lead(T)	50	---
		Sulfate	---	WS	Manganese	TVS	TVS/WS
		Sulfide	---	0.002	Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS
7. Mainstem of the North Fork of the Cache La Poudre River from the inlet of Halligan Reservoir to the confluence with the Cache La Poudre River, except for specific listings in Segment 20.							
COSPCP07	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT				
Reviewable	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	CS-II	CS-II	acute	chronic	
Qualifiers:			acute	chronic	Aluminum	---	---
		D.O. (mg/L)	---	6.0	Arsenic	340	---
Other:	Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021	D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02
		pH	6.5 - 9.0	---	Beryllium	---	---
		Inorganic (mg/L)			Cadmium	TVS(tr)	TVS
			acute	chronic	Cadmium(T)	5.0	---
		Ammonia	TVS	TVS	Chromium III	---	TVS
		Boron	---	0.75	Chromium III(T)	50	---
		Chloride	---	250	Chromium VI	TVS	TVS
		Chlorine	0.019	0.011	Copper	TVS	TVS
		Cyanide	0.005	---	Iron	---	WS
		Nitrate	10	---	Iron(T)	---	1000
		Nitrite	---	0.05	Lead	TVS	TVS
		Phosphorus	---	---	Lead(T)	50	---
		Sulfate	---	WS	Manganese	TVS	TVS/WS
		Sulfide	---	0.002	Mercury	---	0.01(t)
					Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					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

## Cache La Poudre River Basin

8. All tributaries to the North Fork of the Cache La Poudre River, including all wetlands, from the inlet of Halligan Reservoir to the confluence with the Cache La Poudre River, except for specific listings in Segment 9.						
COSPCP08	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture Aq Life Cold 2 Recreation E Water Supply	DM	MWAT	acute      chronic		
Reviewable		acute	chronic			
		Temperature °C	CS-II	CS-II	Aluminum	---      ---
		D.O. (mg/L)	---	6.0	Arsenic	340      ---
		D.O. (spawning)	---	7.0	Arsenic(T)	---      0.02
		pH	6.5 - 9.0	---	Beryllium	---      ---
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS(tr)      TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0      ---
		<b>Inorganic (mg/L)</b>			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	---	0.05	Manganese	TVS      TVS/WS
		Phosphorus	---	0.11*	Mercury	---      0.01(t)
		Sulfate	---	WS	Molybdenum(T)	---      150
		Sulfide	---	0.002	Nickel	TVS      TVS
					Nickel(T)	---      100
					Selenium	TVS      TVS
					Silver	TVS      TVS(tr)
					Uranium	---      ---
					Zinc	TVS      TVS
9. Mainstem of Rabbit Creek and Lone Pine Creek from the source to the confluence with the North Fork of the Cache La Poudre River.						
COSPCP09	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture Aq Life Cold 1 Recreation E Water Supply	DM	MWAT	acute      chronic		
Reviewable		acute	chronic			
		Temperature °C	CS-II	CS-II	Aluminum	---      ---
		D.O. (mg/L)	---	6.0	Arsenic	340      ---
		D.O. (spawning)	---	7.0	Arsenic(T)	---      0.02
		pH	6.5 - 9.0	---	Beryllium	---      ---
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS(tr)      TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0      ---
		<b>Inorganic (mg/L)</b>			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	---	0.05	Manganese	TVS      TVS/WS
		Phosphorus	---	0.11*	Mercury	---      0.01(t)
		Sulfate	---	WS	Molybdenum(T)	---      150
		Sulfide	---	0.002	Nickel	TVS      TVS
					Nickel(T)	---      100
					Selenium	TVS      TVS
					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

## Cache La Poudre River Basin

10a. Mainstem of the Cache La Poudre River from the Munroe Gravity Canal Headgate (also known as the North Poudre Supply Canal diversion) to a point immediately above the Larimer County Ditch diversion (40.657, -105.185).

COSPCP10A	Classifications	Physical and Biological			Metals (ug/L)				
Designation	Agriculture	DM	MWAT	acute	chronic				
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum	---	---		
	Recreation E		acute	chronic	Arsenic	340	---		
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02		
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---		
<b>Other:</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS		
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium(T)	5.0	---		
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS		
		<b>Inorganic (mg/L)</b>			Chromium III(T)	50	---		
					acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS	TVS	
		Boron	---	0.75	Iron	---	WS		
		Chloride	---	250	Iron(T)	---	1000		
		Chlorine	0.019	0.011	Lead	TVS	TVS		
		Cyanide	0.005	---	Lead(T)	50	---		
		Nitrate	10	---	Manganese	TVS	TVS/WS		
		Nitrite	---	0.05	Mercury	---	0.01(t)		
		Phosphorus	---	---	Molybdenum(T)	---	150		
		Sulfate	---	WS	Nickel	TVS	TVS		
		Sulfide	---	0.002	Nickel(T)	---	100		
					Selenium	TVS	TVS		
					Silver	TVS	TVS(tr)		
					Uranium	---	---		
					Zinc	TVS	TVS		

10b. Mainstem of the Cache La Poudre River from a point immediately above the Larimer County Ditch diversion (40.657, -105.185) to Shields Street in Ft. Collins, Colorado.

COSPCP10B	Classifications	Physical and Biological			Metals (ug/L)				
Designation	Agriculture	DM	MWAT	acute	chronic				
Reviewable	Aq Life Cold 2	Temperature °C	CS-II	CS-II	Aluminum	---	---		
	Recreation E		acute	chronic	Arsenic	340	---		
	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02		
<b>Qualifiers:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---		
<b>Water + Fish Standards</b>		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS		
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium(T)	5.0	---		
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS		
		<b>Inorganic (mg/L)</b>			Chromium III(T)	50	---		
					acute	chronic	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS	TVS	
		Boron	---	0.75	Iron	---	WS		
		Chloride	---	250	Iron(T)	---	1000		
		Chlorine	0.019	0.011	Lead	TVS	TVS		
		Cyanide	0.005	---	Lead(T)	50	---		
		Nitrate	10	---	Manganese	TVS	TVS/WS		
		Nitrite	---	0.05	Mercury	---	0.01(t)		
		Phosphorus	---	---	Molybdenum(T)	---	150		
		Sulfate	---	WS	Nickel	TVS	TVS		
		Sulfide	---	0.002	Nickel(T)	---	100		
					Selenium	TVS	TVS		
					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 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	Temperature °C	WS-I	WS-I	Aluminum	---	---
			<b>acute</b>	<b>chronic</b>	Arsenic	340	---
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	7.6
<b>Other:</b>		pH	6.5 - 9.0	---	Beryllium	---	---
Temporary Modification(s): temperature(DM/MWAT) = current condition	12/1 - 2/29	chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS
Expiration Date of 12/31/2020		E. Coli (per 100 mL)	---	126	Chromium III	TVS	TVS
		<b>Inorganic (mg/L)</b>			Chromium III(T)	---	100
			<b>acute</b>	<b>chronic</b>	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		Nitrite	---	2.7	Nickel	TVS	TVS
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	---	Silver	TVS	TVS
		Sulfide	---	0.002	Uranium	---	---
					Zinc	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	Temperature °C	WS-I	WS-I	Aluminum	---	---
			<b>acute</b>	<b>chronic</b>	Arsenic	340	---
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	7.6
<b>Other:</b>		pH	6.5 - 9.0	---	Beryllium	---	---
Temporary Modification(s): temperature(DM/MWAT) = current condition		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS	TVS
Expiration Date of 12/31/2020		E. Coli (per 100 mL)	---	126	Chromium III	TVS	TVS
		<b>Inorganic (mg/L)</b>			Chromium III(T)	---	100
			<b>acute</b>	<b>chronic</b>	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		Nitrite	---	2.7	Nickel	TVS	TVS
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	---	Silver	TVS	TVS
		Sulfide	---	0.002	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

13a. All tributaries to the Cache La Poudre River, including all wetlands, from the Munroe Gravity Canal/North Poudre Supply canal diversion to the confluence with the South Platte River, except for specific listings in Segments 6, 7, 8, 13b and 13c.

COSPCP13A	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 2	Temperature °C	WS-I	WS-I	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/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m <sup>2</sup> )	---	150*	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	---	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

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	Temperature °C	WS-II	WS-II	Aluminum	---	---	
	Recreation N	9/16 - 5/14	acute	chronic	Arsenic	340	---	
	Recreation P	5/15 - 9/15	D.O. (mg/L)	---	5.0	Arsenic(T)	---	100
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Beryllium	---	---	
<b>Other:</b>  Temporary Modification(s): Selenium(chronic) = current condition Expiration Date of 12/31/2020  *chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium	TVS	TVS	
		E. Coli (per 100 mL)	9/16 - 5/14	---	630	Chromium III	TVS	TVS
		E. Coli (per 100 mL)	5/15 - 9/15	---	205	Chromium III(T)	---	100
		Inorganic (mg/L)			Chromium VI	TVS	TVS	
		acute	chronic	Copper	TVS	TVS		
		Ammonia	TVS	TVS	Iron(T)	---	1000	
		Boron	---	0.75	Lead	TVS	TVS	
		Chloride	---	---	Manganese	TVS	TVS	
		Chlorine	0.019	0.011	Mercury	---	0.01(t)	
		Cyanide	0.005	---	Molybdenum(T)	---	150	
		Nitrate	100	---	Nickel	TVS	TVS	
		Nitrite	---	0.5	Selenium	TVS	TVS	
		Phosphorus	---	0.17*	Silver	TVS	TVS	
		Sulfate	---	---	Uranium	---	---	
		Sulfide	---	0.002	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

13c. Mainstems of South Branch of Boxelder Creek, North Branch of Boxelder Creek, and Sand Creek from their sources to their confluences with the mainstem of Boxelder Creek.						
COSPCP13C	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
Reviewable	Aq Life Cold 2	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)
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0
		E. Coli (per 100 mL)	---	126	Chromium III	---
					Chromium III(T)	50
					Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury	---
					Molybdenum(T)	---
					Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS
14. Horsetooth Reservoir.						
COSPCP14	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
Reviewable	Aq Life Cold 1	Temperature °C	1/1 - 3/31	CLL	Aluminum	---
	Recreation E	Temperature °C	4/1 - 12/31	CLL	Arsenic	340
	Water Supply				Arsenic(T)	---
	DUWS				Beryllium	---
Qualifiers:		D.O. (mg/L)	---	6.0	Cadmium	TVS(tr)
Other:		D.O. (spawning)	---	7.0	Cadmium(T)	5.0
		pH	6.5 - 9.0	---	Chromium III	---
		chlorophyll a (ug/L)	---	---	Chromium III(T)	50
		E. Coli (per 100 mL)	---	126	Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury	---
					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 Cache La Poudre River Basin

15. Watson Lake.						
COSPCP15	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
Reviewable	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	CL	CL	Aluminum	---
			acute	chronic	Arsenic	340
Qualifiers:		D.O. (mg/L)	---	6.0	Arsenic(T)	---
Other:		D.O. (spawning)	---	7.0	Beryllium	---
		pH	6.5 - 9.0	---	Cadmium	TVS(tr)
		chlorophyll a (ug/L)	---	---	Cadmium(T)	5.0
		E. Coli (per 100 mL)	---	126	Chromium III	---
					Chromium III(T)	50
					Chromium VI	TVS
					Copper	TVS
					Iron	---
					Iron(T)	---
					Lead	TVS
					Lead(T)	50
					Manganese	TVS
					Mercury	---
					Molybdenum(T)	---
					Nickel	TVS
					Nickel(T)	---
					Selenium	TVS
					Silver	TVS
					Uranium	---
					Zinc	TVS
16. Reservoir #4 (T 9 N, R 68 W), Water Supply Reservoir #3 (T 8 N, R 68 W), Claymore Lake, College Lake, Dixon Reservoir, Robert Benson Lake, Black Hollow Reservoir, Seeley Lake.						
COSPCP16	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
UP	Aq Life Warm 1 Recreation E	Temperature °C	WL	WL	Aluminum	---
			acute	chronic	Arsenic	340
Qualifiers:		D.O. (mg/L)	---	5.0	Arsenic(T)	---
Other:		pH	6.5 - 9.0	---	Beryllium	---
		chlorophyll a (ug/L)	---	20*	Cadmium	TVS
		E. Coli (per 100 mL)	---	126	Chromium III	TVS
					Chromium III(T)	---
					Chromium VI	TVS
					Copper	TVS
					Iron(T)	---
					Lead	TVS
					Manganese	TVS
					Mercury	---
					Molybdenum(T)	---
					Nickel	TVS
					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 Cache La Poudre River Basin

17. All lakes and reservoirs tributary to the Cache La Poudre River within Rocky Mountain National Park and the Rawah, Neota, Comanche Peak, and Cache La Poudre Wilderness Areas.

COSPCP17	Classifications	Physical and Biological			Metals (ug/L)		
Designation		DM	MWAT		acute	chronic	
OW	Agriculture						
	Aq Life Cold 1	CL	CL	Temperature °C	---	---	
	Recreation E	acute	chronic				
	Water Supply			D.O. (mg/L)	---	6.0	
<b>Qualifiers:</b>				D.O. (spawning)	---	7.0	
<b>Other:</b>				pH	6.5 - 9.0	---	
				chlorophyll a (ug/L)	---	---	
				E. Coli (per 100 mL)	---	126	
		<b>Inorganic (mg/L)</b>					
		acute	chronic				
	Ammonia	TVS	TVS	Copper	TVS	TVS	
	Boron	---	0.75	Iron	---	WS	
	Chloride	---	250	Iron(T)	---	1000	
	Chlorine	0.019	0.011	Lead	TVS	TVS	
	Cyanide	0.005	---	Lead(T)	50	---	
	Nitrate	10	---	Manganese	TVS	TVS/WS	
	Nitrite	---	0.05	Mercury	---	0.01(t)	
	Phosphorus	---	---	Molybdenum(T)	---	150	
	Sulfate	---	WS	Nickel	TVS	TVS	
	Sulfide	---	0.002	Nickel(T)	---	100	
				Selenium	TVS	TVS	
				Silver	TVS	TVS(tr)	
				Uranium	---	---	
				Zinc	TVS	TVS	

18. All lakes and reservoirs tributary to the Cache La Poudre River from the boundaries of Rocky Mountain National Park, and the Rawah, Neota, Comanche Peak, and Cache La Poudre Wilderness Areas to the Munroe Gravity Canal/North Poudre Supply canal diversion.

COSPCP18	Classifications	Physical and Biological			Metals (ug/L)		
Designation		DM	MWAT		acute	chronic	
Reviewable	Agriculture						
	Aq Life Cold 1	CL,CLL	CL,CLL	Temperature °C	---	---	
	Recreation E	acute	chronic				
	Water Supply			D.O. (mg/L)	---	6.0	
<b>Qualifiers:</b>				D.O. (spawning)	---	7.0	
<b>Other:</b>				pH	6.5 - 9.0	---	
				chlorophyll a (ug/L)	---	8*	
				E. Coli (per 100 mL)	---	126	
		<b>Inorganic (mg/L)</b>					
		acute	chronic				
	Ammonia	TVS	TVS	Copper	TVS	TVS	
	Boron	---	0.75	Iron	---	WS	
	Chloride	---	250	Iron(T)	---	1000	
	Chlorine	0.019	0.011	Lead	TVS	TVS	
	Cyanide	0.005	---	Lead(T)	50	---	
	Nitrate	10	---	Manganese	TVS	TVS/WS	
	Nitrite	---	0.05	Mercury	---	0.01(t)	
	Phosphorus	---	0.025*	Molybdenum(T)	---	150	
	Sulfate	---	WS	Nickel	TVS	TVS	
	Sulfide	---	0.002	Nickel(T)	---	100	
				Selenium	TVS	TVS	
				Silver	TVS	TVS(tr)	
				Uranium	---	---	
				Zinc	TVS	TVS	

\*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.  
\*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.

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

19. All lakes and reservoirs tributary to the North Fork of the Cache La Poudre River from the source to the inlet of Halligan Reservoir.							
COSPCP19	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Cold 1 Recreation E Water Supply	Temperature °C	CL	CL	Aluminum	---	---
Qualifiers:		acute	chronic				
Other:	*chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.	D.O. (mg/L)	---	6.0	Arsenic	340	---
		D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02
		pH	6.5 - 9.0	---	Beryllium	---	---
		chlorophyll a (ug/L)	---	8*	Cadmium	TVS(tr)	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
		Inorganic (mg/L)			Chromium III	---	TVS
		acute	chronic				
		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	---	0.05	Lead(T)	50	---
		Phosphorus	---	0.025*	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(tr)
					Uranium	---	---
					Zinc	TVS	TVS

  

20. All lakes and reservoirs tributary to the North Fork of the Cache La Poudre River from the inlet of Halligan Reservoir to the confluence with the Cache La Poudre River. This segment includes Halligan Reservoir and Seaman Reservoir.								
COSPCP20	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture		DM	MWAT		acute	chronic	
Reviewable	Aq Life Cold 2 Recreation E Water Supply	Temperature °C	1/1 - 3/31	CL,CLL	CL,CLL	Aluminum	---	---
Qualifiers:		acute	chronic					
Water + Fish Standards	*chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Temperature(4/1 - 12/31) = Seaman Reservoir	D.O. (mg/L)	---	6.0	Arsenic	340	---	
Other:		D.O. (spawning)	---	7.0	Arsenic(T)	---	0.02	
		pH	6.5 - 9.0	---	Beryllium	---	---	
		chlorophyll a (ug/L)	---	8*	Cadmium	TVS(tr)	TVS	
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---	
		Inorganic (mg/L)			Chromium III	---	TVS	
		acute	chronic					
		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	---	0.05	Lead(T)	50	---	
		Phosphorus	---	0.025*	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(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

## Cache La Poudre River Basin

21. All lakes and reservoirs tributary to the Cache La Poudre River from the Munroe Gravity Canal/North Poudre Supply canal diversion to the confluence with the South Platte River, except for specific listings in Segments 14, 15, 16, 19, 20 and 22.

COSPCP21	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	---
	Recreation E		<b>acute</b>	<b>chronic</b>	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
	DUWS*	pH	6.5 - 9.0	---	Beryllium	---	---
<b>Qualifiers:</b>		chlorophyll a (ug/L)	---	20*	Cadmium	TVS	TVS
<b>Other:</b>  *chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Classification: DUWS applies to North Poudre Reservoir No. 3 only. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
		<b>Inorganic (mg/L)</b>			Chromium III	---	TVS
			<b>acute</b>	<b>chronic</b>	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	---	0.083*	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

22. Fossil Creek Reservoir.

COSPCP22	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
UP	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	---
	Recreation E		<b>acute</b>	<b>chronic</b>	Arsenic	340	---
<b>Qualifiers:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	100
<b>Other:</b>		pH	6.5 - 9.0	---	Beryllium	---	---
		chlorophyll a (ug/L)	---	---	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	126	Chromium III	TVS	TVS
		<b>Inorganic (mg/L)</b>			Chromium III(T)	---	100
			<b>acute</b>	<b>chronic</b>	Chromium VI	TVS	TVS
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		Nitrite	---	0.5	Nickel	TVS	TVS
		Phosphorus	---	---	Selenium	TVS	TVS
		Sulfate	---	---	Silver	TVS	TVS
		Sulfide	---	0.002	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 Laramie River Basin

1. All tributaries to the Laramie River, including all wetlands, which are within the Rawah Wilderness Area.							
COSPLA01	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute      chronic			
OW	Aq Life Cold 1	Temperature °C	CS-I	CS-I	Aluminum	---	---
	Recreation E Water Supply	acute	chronic	Arsenic	340	---	
<b>Qualifiers:</b>		D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
<b>Other:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
		Inorganic (mg/L)			Chromium III(T)	50	---
		acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	---	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS(tr)
					Uranium	---	---
					Zinc	TVS	TVS

  

2a. Mainstem of the Laramie River from the source to the National Forest boundary, and all tributaries and wetlands, from the source to the Colorado/Wyoming border, except for specific listings in Segment 1.							
COSPLA02A	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 Water Supply	acute	chronic	Arsenic	340	---	
<b>Qualifiers:</b>		D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02
<b>Other:</b>		D.O. (spawning)	---	7.0	Beryllium	---	---
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium(T)	5.0	---
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS
		Inorganic (mg/L)			Chromium III(T)	50	---
		acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	TVS	TVS
		Boron	---	0.75	Iron	---	WS
		Chloride	---	250	Iron(T)	---	1000
		Chlorine	0.019	0.011	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		Nitrite	---	0.05	Mercury	---	0.01(t)
		Phosphorus	---	0.11	Molybdenum(T)	---	150
		Sulfate	---	WS	Nickel	TVS	TVS
		Sulfide	---	0.002	Nickel(T)	---	100
					Selenium	TVS	TVS
					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 Laramie River Basin

2b. Mainstem of the Laramie River from the National Forest boundary to the Colorado/Wyoming border.						
COSPLA02B	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	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/m <sup>2</sup> )	---	---	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
			acute	chronic	Chromium VI	TVS
		Ammonia	TVS	TVS	Copper	TVS
		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	TVS

  

3. All lakes and reservoirs tributary to the Laramie River within the Rawah Wilderness Area.						
COSPLA03	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		
OW	Aq Life Cold 1	Temperature °C	CL	CL	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)
*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.		chlorophyll a (ug/L)	---	8*	Cadmium(T)	5.0
*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.		E. Coli (per 100 mL)	---	126	Chromium III	---
		Inorganic (mg/L)			Chromium III(T)	50
			acute	chronic	Chromium VI	TVS
		Ammonia	TVS	TVS	Copper	TVS
		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	---	0.025*	Molybdenum(T)	---
		Sulfate	---	WS	Nickel	TVS
		Sulfide	---	0.002	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 Laramie River Basin

4. All lakes and reservoirs tributary to the Laramie River from the source to the Colorado/Wyoming border, except for specific listings in Segment 3.

COSPLA04	Classifications	Physical and Biological			Metals (ug/L)		
		DM	MWAT		acute	chronic	
Designation Reviewable	Agriculture						
	Aq Life Cold 1	CL	CL	Aluminum	---	---	
	Recreation E	acute	chronic	Arsenic	340	---	
	Water Supply			Arsenic(T)	---	0.02	
Qualifiers:		D.O. (mg/L)	---	6.0	Beryllium	---	---
		D.O. (spawning)	---	7.0	Cadmium	TVS(tr)	TVS
Other:		pH	6.5 - 9.0	---	Cadmium(T)	5.0	---
*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.		chlorophyll a (ug/L)	---	8*	Chromium III	---	TVS
		E. Coli (per 100 mL)	---	126	Chromium III(T)	50	---
		<b>Inorganic (mg/L)</b>			Chromium VI	TVS	TVS
			acute	chronic	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	---	0.05	Molybdenum(T)	---	150
		Phosphorus	---	0.025*	Nickel	TVS	TVS
		Sulfate	---	WS	Nickel(T)	---	100
		Sulfide	---	0.002	Selenium	TVS	TVS
					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

## Lower South Platte River Basin

1. Mainstem of the South Platte River from the Weld/Morgan County line to the Colorado/Nebraska border.						
COSPLS01	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
Reviewable	Aq Life Warm 2 Recreation E Water Supply	Temperature °C	WS-II	WS-II	Aluminum	---      ---
		<b>acute</b>	<b>chronic</b>			
		D.O. (mg/L)	---	5.0	Arsenic	340      ---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Arsenic(T)	---      0.02
<b>Water + Fish Standards</b>		chlorophyll a (mg/m <sup>2</sup> )	---	---	Beryllium	---      ---
<b>Other:</b>		E. Coli (per 100 mL)	---	126	Cadmium	TVS      TVS
Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021		Inorganic (mg/L)			Cadmium(T)	5.0      ---
		acute	chronic			
		Ammonia	TVS	TVS	Chromium III	---      TVS
		Boron	---	0.75	Chromium III(T)	50      ---
		Chloride	---	250	Chromium VI	TVS      TVS
		Chlorine	0.019	0.011	Copper	TVS      TVS
		Cyanide	0.005	---	Iron	---      WS
		Nitrate	10	---	Iron(T)	---      1000
		Nitrite	---	0.5	Lead	TVS      TVS
		Phosphorus	---	---	Lead(T)	50      ---
		Sulfate	---	WS	Manganese	TVS      TVS/WS
		Sulfide	---	0.002	Mercury	---      0.01(t)
				Molybdenum(T)	---	150
				Nickel	TVS	TVS
				Nickel(T)	---	100
				Selenium	TVS	TVS
				Silver	TVS	TVS
				Uranium	---	---
				Zinc	TVS	TVS

  

2a. All tributaries to the South Platte River, including all wetlands, from the Weld/Morgan County line to the Colorado/Nebraska border, except for the specific listings in Segment 2b.						
COSPLS02A	Classifications	Physical and Biological			Metals (ug/L)	
Designation	Agriculture	DM	MWAT	acute      chronic		
UP	Aq Life Warm 2 Recreation P Water Supply	Temperature °C	WS-II	WS-II	Aluminum	---      ---
		<b>acute</b>	<b>chronic</b>			
		D.O. (mg/L)	---	5.0	Arsenic	340      ---
<b>Qualifiers:</b>		pH	6.5 - 9.0	---	Arsenic(T)	---      0.02-10 <sup>A</sup>
<b>Other:</b>		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Beryllium	---      ---
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		E. Coli (per 100 mL)	---	205	Beryllium(T)	---      4.0
		Inorganic (mg/L)			Cadmium(T)	5.0      10
		acute	chronic			
		Ammonia	---	---	Chromium III(T)	50      100
		Boron	---	0.75	Chromium VI(T)	50      100
		Chloride	---	250	Copper	---      ---
		Chlorine	---	---	Copper(T)	---      200
		Cyanide	0.2	---	Iron	---      WS
		Nitrate	10	---	Lead(T)	50      100
		Nitrite	---	1.0	Manganese	---      WS
		Phosphorus	---	0.17*	Mercury	---      ---
		Sulfate	---	WS	Molybdenum(T)	---      150
		Sulfide	---	0.05	Nickel	---      ---
				Nickel(T)	---	100
				Selenium	---	---
				Selenium(T)	---	20
				Silver	---	---
				Silver(T)	100	---
				Uranium	---	---
				Zinc	---	---
				Zinc(T)	---	2000

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

## Lower South Platte River Basin

2b. All tributaries to the South Platte River, including all wetlands, north of the South Platte River and below 4,500 feet in elevation in Morgan County, north of the South Platte River in Washington County, north of the South Platte River and below 4,200 feet in elevation in Logan County, north of the South Platte River and below 3,700 feet in elevation in Sedgwick County, and the mainstems of Beaver Creek, Bijou Creek and Kiowa Creek from their sources to the confluence with the South Platte River, except for the portion of Beaver Creek from its source to the Fort Morgan Canal.

COSPLS02B	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	---	---
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m <sup>2</sup> )	---	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(T)	---	1000
		Chloride	---	---	Lead	TVS	TVS
		Chlorine	0.019	0.011	Manganese	TVS	TVS
		Cyanide	0.005	---	Mercury	---	0.01(t)
		Nitrate	100	---	Molybdenum(T)	---	150
		Nitrite	---	0.5	Nickel	TVS	TVS
		Phosphorus	---	0.17*	Selenium	TVS	TVS
		Sulfate	---	---	Silver	TVS	TVS
		Sulfide	---	0.002	Uranium	---	---
					Zinc	TVS	TVS

3. Jackson Reservoir, Prewitt Reservoir, North Sterling Reservoir, Jumbo (Julesburg), Riverside Reservoir, Empire Reservoir, and Vancil Reservoir.

COSPLS03	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture	DM	MWAT	acute	chronic		
UP	Aq Life Warm 1	Temperature °C	WL	WL	Aluminum	---	---
	Recreation E	Temperature °C	4/1 - 12/31	WL*	26.1*	Arsenic	340
	Water Supply	Temperature °C	4/1 - 12/31	WL*	27*	Arsenic(T)	---
<b>Qualifiers:</b>		Temperature °C	4/1 - 12/31	WL*	28.1*	Beryllium	---
<b>Other:</b>					Cadmium	TVS	TVS
*chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Temperature(4/1 - 12/31) = North Sterling Res. (MWAT=26.1) *Temperature(4/1 - 12/31) = Jumbo Reservoir (MWAT=27) *Temperature(4/1 - 12/31) = Jackson Reservoir (MWAT=28.1)			acute	chronic	Cadmium(T)	5.0	---
		D.O. (mg/L)	---	5.0	Chromium III	---	TVS
		pH	6.5 - 9.0	---	Chromium III(T)	50	---
		chlorophyll a (ug/L)	---	20*	Chromium VI	TVS	TVS
		E. Coli (per 100 mL)	---	126	Copper	TVS	TVS
		<b>Inorganic (mg/L)</b>			Iron	---	WS
			acute	chronic	Iron(T)	---	1000
		Ammonia	TVS	TVS	Lead	TVS	TVS
		Boron	---	0.75	Lead(T)	50	---
		Chloride	---	250	Manganese	TVS	TVS/WS
		Chlorine	0.019	0.011	Mercury	---	0.01(t)
		Cyanide	0.005	---	Molybdenum(T)	---	150
		Nitrate	10	---	Nickel	TVS	TVS
		Nitrite	---	0.5	Nickel(T)	---	100
		Phosphorus	---	0.083*	Selenium	TVS	TVS
Sulfate	---	WS	Silver	TVS	TVS		
Sulfide	---	0.002	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

## Lower South Platte River Basin

4. All lakes and reservoirs tributary to the South Platte River from the Weld/Morgan County line to the Colorado/Nebraska border, except for specific listings in Segments 3 and 5.

COSPLS04	Classifications	Physical and Biological		Metals (ug/L)				
Designation		DM	MWAT	acute	chronic			
Reviewable	Agriculture							
	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	---	
	Recreation P		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 (ug/L)	---	20*	Beryllium(T)	---	4.0	
*chlorophyll a (ug/L)(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area. *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4), applies only to lakes and reservoirs larger than 25 acres surface area.		E. Coli (per 100 mL)	---	205	Cadmium(T)	5.0	10	
		<b>Inorganic (mg/L)</b>				Chromium III(T)	50	100
			acute	chronic	Chromium VI(T)	50	100	
		Ammonia	---	---	Copper	---	---	
		Boron	---	0.75	Copper(T)	---	200	
		Chloride	---	250	Iron	---	WS	
		Chlorine	---	---	Iron(T)	---	1000	
		Cyanide	0.2	---	Lead(T)	50	100	
		Nitrate	10	---	Manganese	TVS	TVSWS	
		Nitrite	---	0.5	Mercury	---	0.01(t)	
		Phosphorus	---	0.083*	Molybdenum(T)	---	150	
		Sulfate	---	WS	Nickel	---	---	
		Sulfide	---	0.002	Nickel(T)	---	100	
					Selenium	---	---	
					Selenium(T)	---	20	
					Silver	---	---	
					Silver(T)	100	---	
					Uranium	---	---	
					Zinc	---	---	
					Zinc(T)	---	2000	

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

## Lower South Platte River Basin

5. All lakes and reservoirs tributary to the South Platte River north of the South Platte River and below 4,500 feet in elevation in Morgan County, north of the South Platte River in Washington County, north of the South Platte River and below 4,200 feet in elevation in Logan County, north of the South Platte River and below 3,700 feet in elevation in Sedgwick County, and the mainstems of Beaver Creek, Bijou Creek and Kiowa Creek from their sources to the confluence with the South Platte River, except for those specific listings in Segment 3.

COSPLS05	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02-10 <sup>A</sup>
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---	---
Other:		chlorophyll a (ug/L)	---	20*	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	TVSWS
		Phosphorus	---	0.083*	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 Republican River Basin

1. Mainstem of the South Fork of the Republican River from a point 23 miles above the Colorado-Kansas border (39.582154°, -102.350838°) to the Colorado-Kansas border.						
COSPREF01	Classifications	Physical and Biological			Metals (ug/L)	
Designation			DM	MWAT		
Reviewable	Agriculture Aq Life Warm 1 Recreation E Water Supply	Temperature °C	WS-I	WS-I	Aluminum	acute      chronic
Qualifiers:			acute	chronic	Arsenic	340      ---
Other:		D.O. (mg/L)	---	5.0	Arsenic(T)	---      0.02
Temporary Modification(s):		pH	6.5 - 9.0	---	Beryllium	---      ---
Arsenic(chronic) = hybrid		chlorophyll a (mg/m <sup>2</sup> )	---	---	Cadmium	TVS      TVS
Expiration Date of 12/31/2021		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	TVS      TVS
2. Deleted.						
COSPREF02	Classifications	Physical and Biological			Metals (ug/L)	
Designation			DM	MWAT		
Qualifiers:			acute	chronic		
Other:		Inorganic (mg/L)				
			acute	chronic		

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 Republican River Basin

3. Mainstem of the North Fork of the Republican River from the source to the Colorado/Nebraska border and the mainstem of Chief Creek.								
COSPRE03	Classifications	Physical and Biological			Metals (ug/L)			
Designation	Agriculture	DM	MWAT		acute	chronic		
Reviewable	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum	---	---	
	Recreation E		acute	chronic	Arsenic	340	---	
<b>Qualifiers:</b>  <b>Other:</b> Temporary Modification(s): Arsenic(chronic) = hybrid Expiration Date of 12/31/2021  *chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).	Water Supply	D.O. (mg/L)	---	6.0	Arsenic(T)	---	0.02	
		D.O. (spawning)	---	7.0	Beryllium	---	---	
		pH	6.5 - 9.0	---	Cadmium	TVS(tr)	TVS	
		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Cadmium(T)	5.0	---	
		E. Coli (per 100 mL)	---	126	Chromium III	---	TVS	
			Inorganic (mg/L)			Chromium III(T)	50	---
			acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	TVS	TVS	
		Boron	---	0.75	Iron	---	WS	
		Chloride	---	250	Iron(T)	---	1000	
		Chlorine	0.019	0.011	Lead	TVS	TVS	
		Cyanide	0.005	---	Lead(T)	50	---	
		Nitrate	10	---	Manganese	TVS	TVS/WS	
		Nitrite	---	0.05	Mercury	---	0.01(t)	
		Phosphorus	---	0.11*	Molybdenum(T)	---	150	
	Sulfate	---	WS	Nickel	TVS	TVS		
	Sulfide	---	0.002	Nickel(T)	---	100		
				Selenium	TVS	TVS		
				Silver	TVS	TVS(tr)		
				Uranium	---	---		
				Zinc	TVS	TVS		

  

4. Mainstem of the Arikaree River from the confluence of the North and South Forks to the Colorado/Kansas border.								
COSPRE04	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		acute	chronic	Arsenic	340	---	
<b>Qualifiers:</b>  <b>Other:</b>		D.O. (mg/L)	---	5.0	Arsenic(T)	---	7.6	
		pH	6.5 - 9.0	---	Beryllium	---	---	
		chlorophyll a (mg/m <sup>2</sup> )	---	150	Cadmium	TVS	TVS	
		E. Coli (per 100 mL)	---	126	Chromium III	TVS	TVS	
			Inorganic (mg/L)			Chromium III(T)	---	100
			acute	chronic	Chromium VI	TVS	TVS	
		Ammonia	TVS	TVS	Copper	TVS	TVS	
		Boron	---	0.75	Iron(T)	---	1000	
		Chloride	---	---	Lead	TVS	TVS	
		Chlorine	0.019	0.011	Manganese	TVS	TVS	
		Cyanide	0.005	---	Mercury	---	0.01(t)	
		Nitrate	100	---	Molybdenum(T)	---	150	
		Nitrite	---	0.5	Nickel	TVS	TVS	
		Phosphorus	---	0.17	Selenium	TVS	TVS	
		Sulfate	---	---	Silver	TVS	TVS	
	Sulfide	---	0.002	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 Republican River Basin

5. Mainstem of Black Wolf Creek from the source to the confluence with the Arikaree River.							
COSPRE05	Classifications	Physical and Biological			Metals (ug/L)		
Designation		DM	MWAT		acute	chronic	
Reviewable	Agriculture						
	Aq Life Warm 1	Temperature °C	WS-I	WS-I	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/m <sup>2</sup> )	---	150	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
		<b>Inorganic (mg/L)</b>			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	TVSWS
		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 Republican River Basin

6. All tributaries to the Republican River system in Colorado, including all wetlands, except for specific listings in Segments 1, 3, 4 and 5.							
COSPREG06	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT			
UP	Aq Life Warm 2 Recreation P	Temperature °C	WS-I	WS-I	Aluminum	acute      chronic	
			acute	chronic	Arsenic	340      ---	
Qualifiers:		D.O. (mg/L)	---	5.0	Arsenic(T)	---      100	
Other:		pH	6.5 - 9.0	---	Beryllium	---      ---	
*chlorophyll a (mg/m <sup>2</sup> )(chronic) = applies only above the facilities listed at 38.5(4). *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m <sup>2</sup> )	---	150*	Beryllium(T)	---      100	
		E. Coli (per 100 mL)	---	205	Cadmium	---      ---	
			Inorganic (mg/L)		Cadmium(T)	---      10	
				acute	chronic	Chromium III	---      ---
			Ammonia	---	---	Chromium III(T)	---      100
			Boron	---	0.75	Chromium VI	---      ---
			Chloride	---	---	Chromium VI(T)	---      100
			Chlorine	---	---	Copper	---      ---
			Cyanide	0.2	---	Copper(T)	---      200
			Nitrate	100	---	Iron	---      ---
			Nitrite	---	10	Lead	---      ---
			Phosphorus	---	0.17*	Lead(T)	---      100
			Sulfate	---	---	Manganese	---      ---
			Sulfide	---	---	Mercury	---      ---
						Molybdenum(T)	---      150
						Nickel	---      ---
						Nickel(T)	---      200
						Selenium	---      ---
						Selenium(T)	---      20
						Silver	---      ---
					Uranium	---      ---	
					Zinc	---      ---	
					Zinc(T)	---      2000	

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 Republican River Basin

7. Mainstem of the North Fork of the Smoky Hill River and mainstem of the Smoky Hill River, including all tributaries and wetlands, from the source to the Colorado/Kansas border.						
COSPRE07	Classifications	Physical and Biological		Metals (ug/L)		
Designation		DM	MWAT	acute	chronic	
UP	Agriculture					
	Aq Life Warm 2					
	Recreation N	Temperature °C	WS-III	WS-III	Aluminum --- ---	
			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 --- ---	
*Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m <sup>2</sup> )	---	---	Beryllium(T) --- 100	
		E. Coli (per 100 mL)	---	630	Cadmium --- ---	
			<b>Inorganic (mg/L)</b>		Cadmium(T) --- 10	
				acute	chronic	Chromium III --- ---
		Ammonia	---	---	---	Chromium III(T) --- 100
		Boron	---	0.75	---	Chromium VI --- ---
		Chloride	---	---	---	Chromium VI(T) --- 100
		Chlorine	---	---	---	Copper --- ---
		Cyanide	0.2	---	---	Copper(T) --- 200
		Nitrate	100	---	---	Iron --- ---
		Nitrite	---	10	---	Lead --- ---
		Phosphorus	---	0.17*	---	Lead(T) --- 100
		Sulfate	---	---	---	Manganese --- ---
		Sulfide	---	---	---	Mercury --- ---
						Molybdenum(T) --- 150
						Nickel --- ---
						Nickel(T) --- 200
						Selenium --- ---
						Selenium(T) --- 20
						Silver --- ---
					Uranium --- ---	
					Zinc --- ---	
					Zinc(T) --- 2000	

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 Republican River Basin

8. All lakes and reservoirs tributary to the Republican and Smoky Hill Rivers in Colorado, except for specific listings in Segment 9.								
COSPREG08	Classifications	Physical and Biological			Metals (ug/L)			
Designation		DM	MWAT		acute	chronic		
Reviewable	Agriculture							
	Aq Life Warm 2	Temperature °C	WL	WL	Aluminum	---	---	
	Recreation U		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/m <sup>2</sup> )	---	---	Beryllium(T)	---	4.0	
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	10	
			<b>Inorganic (mg/L)</b>		Chromium III(T)	50	100	
				acute	chronic	Chromium VI(T)	50	100
		Ammonia	---	---	Copper	---	---	
		Boron	---	0.75	Copper(T)	---	200	
		Chloride	---	250	Iron	---	WS	
		Chlorine	---	---	Iron(T)	---	1000	
		Cyanide	0.2	---	Lead(T)	50	100	
		Nitrate	10	---	Manganese	TVS	TVSWS	
		Nitrite	---	0.5	Mercury	---	0.01(t)	
		Phosphorus	---	---	Molybdenum(T)	---	150	
		Sulfate	---	WS	Nickel	---	---	
		Sulfide	---	0.002	Nickel(T)	---	100	
					Selenium	---	---	
					Selenium(T)	---	20	
					Silver	---	---	
					Silver(T)	100	---	
					Uranium	---	---	
					Zinc	---	---	
				Zinc(T)	---	2000		

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 Republican River Basin

9. Bonny Reservoir, Stalker Lake.							
COSPRE09	Classifications	Physical and Biological		Metals (ug/L)			
Designation	Agriculture	DM	MWAT	acute	chronic		
Reviewable	Aq Life Warm 1	Temperature °C	WL	WL	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 (ug/L)	---	20*	Cadmium	TVS	TVS
		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
		<b>Inorganic (mg/L)</b>			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	---	0.05	Manganese	TVS	TVS/WS
		Phosphorus	---	0.083*	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

\*chlorophyll a (ug/L)(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.  
\*Phosphorus(chronic) = applies only to lakes and reservoirs larger than 25 acres surface area.

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.

Table 2

SITE SPECIFIC RADIONUCLIDE STANDARDS\*

(in Picocuries/Liter, except as noted)

The radionuclides listed below shall be maintained at the lowest practical level and in no case shall they be increased by any cause attributable to municipal, industrial, or agricultural practices to exceed the site specific numeric standards.

A. Ambient based site-specific standards:				
	Segment 2 Standley Lake	Segment 3 Great Western Reservoir	Segment 4a Segment 5 Woman Creek	Segment 4a Segment 4b Segment 5 Walnut Creek
Gross Alpha	6	5		
Gross Beta	9	12		
Plutonium	.03	.03	0.15** ***	0.15** ***
Americium	.03	.03	0.15** ***	0.15** ***
Tritium	500	500	500	500
Uranium	3	4	16.8 µg/l	16.8 µg/l
B. Other site-specific standard applicable to segments 2,3,4a, 4b, and 5.				
Curium	60	60	60	60
Neptunium	30	30	30	30

\*Statewide standards also apply for radionuclides not listed above.

\*\*0.15pCi/l Statewide Basic Standards.

\*\*\*For plutonium and americium measurements in Segment 5 in Woman Creek and Segment 5 in Walnut Creek, attainment will be assessed based on the results of a 12-month flow-weighted rolling average concentration (computed monthly).

## **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.