

APPENDIX A

*SUMMARY OF CHERRY CREEK BASIN DESIGNATED USES AND
WATER QUALITY STANDARDS
REGULATION NO. 38*

**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

Cherry Creek Basin

1. Mainstem of Cherry Creek from the source of East and West Cherry Creek to the inlet of Cherry Creek Reservoir.							
COSPCH01	Classifications	Physical and Biological			Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
Reviewable	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Aluminum	---	---
	Recreation E		acute	chronic	Arsenic	340	---
	Water Supply	D.O. (mg/L)	---	5.0	Arsenic(T)	---	0.02-10 ^A
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---	---
Other:		chlorophyll a (mg/m ²)	---	150*	Cadmium	TVS	TVS
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---
Copper(ac/ch) = current condition*		Inorganic (mg/L)			Chromium III	---	TVS
Expiration Date of 12/31/2020			acute	chronic	Chromium III(T)	50	---
*chlorophyll a (mg/m ²)(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 PWSW WWTF outfall.		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

2. Cherry Creek Reservoir.								
COSPCH02	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	
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---	---	
Other:		chlorophyll a (ug/L)	7/1 - 9/30	---	18*	Cadmium	TVS	TVS
Temporary Modification(s):		E. Coli (per 100 mL)	---	126	Cadmium(T)	5.0	---	
Arsenic(chronic) = hybrid		Inorganic (mg/L)			Chromium III	---	TVS	
Expiration Date of 12/31/2021			acute	chronic	Chromium III(T)	50	---	
*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.		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 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 ^A
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---	---
Other:		chlorophyll a (mg/m ²)	---	---	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

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.

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 ^A
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---	---
Other:		chlorophyll a (mg/m ²)	---	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	Lead	TVS	TVS
		Cyanide	0.005	---	Lead(T)	50	---
		Nitrate	10	---	Manganese	TVS	TVS/WS
		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

*chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 38.5(4).
*Phosphorus(chronic) = effective 12/31/2020. Applies only above the facilities listed at 38.5(4).

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)		
			DM	MWAT		acute	chronic
UP	Agriculture						
	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 ^A
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---	---
Other:		chlorophyll a (mg/m ²)	---	150*	Cadmium	TVS	TVS
*chlorophyll a (mg/m ²)(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.		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	TVS/WS
		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)		
			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)	---	0.02-10 ^A
Qualifiers:		pH	6.5 - 9.0	---	Beryllium	---	---
Other:		chlorophyll a (ug/L)	---	20*	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.		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	TVS/WS
		Sulfate	---	WS	Mercury	---	0.01(t)
		Sulfide	---	0.002	Molybdenum(T)	---	150
					Nickel	TVS	TVS
					Nickel(T)	---	100
					Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium	---	---
					Zinc	TVS	TVS

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 Recreation E	Temperature °C	WL	WL	Aluminum	---
			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 (ug/L)	---	---	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	---	---	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.