

NOTICE OF PUBLIC RULEMAKING HEARING BEFORE THE COLORADO WATER QUALITY CONTROL COMMISSION

SUBJECT:

For consideration of the adoption of revisions to to correct errors in the Classifications and Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin, Regulation #38 (5 CCR 1002-38). Revisions to Clear Creek Segments 14a and 14b, Big Thompson Segment 2 and Upper South Platte Segment 16i of Regulation #38 proposed by the Water Quality Control Division, along with a proposed Statement of Basis, Specific Statutory Authority and Purpose, are attached to this notice as Exhibit 1.

In these attachments, proposed new language is shown with <u>double-underlining</u> and proposed deletions are shown with strikeouts. Any alternative proposals related to the subject of this hearing will also be considered.

During the commission's consideration of whether to approve this notice of rulemaking, the commission determined that there is not a likelihood of significant controversy during the rulemaking process. Therefore, the commission has chosen to pursue an alternative rulemaking process consistent with section 24-4-103(4)(a) C.R.S.; and section 21.3(C)(5) of the Procedural Rules. It is the goal of the commission to complete this rulemaking without oral testimony.

Initial comments due	02/01/2017 5 pm	Additional information below.
Responsive comments from the WQCD due	03/22/2017 5 pm	Additional information below.
Rulemaking Deliberations	04/10/2017 9:15 am	Florence Sabin Conference Room Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, CO 80246

SCHEDULE OF IMPORTANT DATES

HEARING SUBMITTALS:

For this hearing, the commission will receive all submittals electronically. Submittals must be provided as PDF documents, except for raw data exhibits which may be provided as Excel workbooks. Sumbittals may be emailed to <u>cdphe.wqcc@state.co.us</u>, provided via an FTP site, CD or flash drive, or otherwise conveyed to the commission office so as to be received no later than the specified date.

PARTY STATUS:

Pursuant to section 21.3(D) of the commission's Procedural Rules, there shall be no party status for this rulemaking proceeding.

WRITTEN COMMENTS:

The commission encourages input from interested members of the pubic. Written comments should be emailed to <u>cdphe.wqcc@state.co.us</u> by 03/22/2017.

SPECIFIC STATUTORY AUTHORITY:

The provisions of sections 25-8-202(1)(b); 25-8-204; and 25-8-402, C.R.S., provide the specific statutory authority for consideration of the regulatory amendments proposed by this notice. Should the commission adopt the regulatory language as proposed in this notice or alternative amendments, it will also adopt, in compliance with section 24-4-103(4) C.R.S., an appropriate Statement of Basis, Specific Statutory Authority, and Purpose.

Dated this 12th day of December, 2016 at Denver, Colorado.

WATER QUALITY CONTROL COMMISSION

Trisha Oeth, Administrator

EXHIBIT 1 WATER QUALITY CONTROL DIVISION

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

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

5 CCR 1002-38

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38.6 TABLES

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(6) Discharger Specific Variances

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(c) Upper South Platte River Segments 15 and 16i:

Discharger Specific Variance, Suncor Energy (U.S.A.) Inc., Commerce City Refinery (CO0001147): Adopted 10/11/2016.

Selenium (acute) = TVS: no limit; Selenium (chronic) = TVS_{2} : 24 µg/L. Expiration date: 12/31/2023.

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38.95 <u>STATEMENT OF BASIS SPECIFIC STATUTORY AUTHORITY AND PURPOSE APRIL 10,</u> 2017 RULEMAKING; FINAL ACTION APRIL 10, 2017; EFFECTIVE DATE JUNE 30, 2017

The provisions of C.R S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

BASIS AND PURPOSE

In this hearing, the commission made several corrections to Regulation 38. Several errors have been identified which do not reflect the commission's intended decisions from recent hearings.

A. South Platte Segment 16i

The commission made a correction to the discharger specific variance for selenium on Upper South Platte Segment 16i that was originally adopted on October 11, 2016. The variance is expressed as a hybrid standard, with the first number as the underlying standard previously adopted by the commission for the segment. The underlying chronic selenium standard for this portion of Segment 16i is 9.0 µg/L

(sese 38.6(4)(f) for site-specific standards and assessment locations). Therefore, the first number in the variance should be 9.0 μ g/L.

B. Clear Creek Segments 14a and 14b

The commission deleted the arsenic temporary modification from Clear Creek Segment 14a and adopted an arsenic temporary modification on Clear Creek Segment 14b. When the commission took preliminary final action on changes from the June 2015 Regulation 38 rulemaking hearing, the commission decided not to adopt the proposed arsenic temporary modification on Clear Creek Segment 14a. During the formation of final action documents, the arsenic temporary modification was inadvertently removed from Clear Creek Segment 14b instead of Clear Creek 14a.

C. Big Thompson Segment 2

The commission corrected the antidegradation designation for Big Thompson River Segment 2. During the June 2015 Regulation 38 rulemaking hearing, the antidegradation designation was inadvertently changed from reviewable to use protected. Because this change was in error and data are available to show waters in this segment are high quality, the commission has removed the used protected designation and reapplied the reviewable designation to Big Thompson River Segment 2.

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 03/01/201706/30/2017

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REGULATION #38 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS Upper South Platte River Basin

16i. Mainstem	of Sand Creek from the confluence with	h Toll Gate Creek to the confluence	with the South P	latte River.			
COSPUS16I	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	100(T)
Qualifiers:		D.O. (mg/L)		5.0	Beryllium		
Fish Ingestion Standards		рН	6.5 - 9.0		Cadmium	TVS	TVS
Other: *chlorophyll a (mg/m ²)(chronic) = applies only above the facilities listed at 38.5(4).		chlorophyll a (mg/m ²)		150*	Cadmium	5.0(T)	
		E. Coli (per 100 mL)		126	Chromium III	50(T)	TVS
		Inorganic (mg/L)			Chromium VI	TVS	TVS
	thronic) = applies only above the $28.5(4)$		acute	chronic	Copper	TVS	TVS
facilities listed at 38.5(4). *Mercury(chronic) = 0.026 below Brighton Blvd, see section 38.6(4)(f) for mercury assessment locations *Selenium(acute) = See section 38.6(4)(f) for selenium standards and assessment locations. *Selenium(chronic) = See section 38.6(4)(f) for selenium standards and assessment locations.		Ammonia	TVS	TVS	Iron		1000(T)
		Boron		0.75	Lead	TVS	TVS
		Chloride			Lead	50(T)	
		Chlorine	0.019	0.011	Manganese	TVS	TVS
	Cyanide	0.005		Mercury		0.01(t)	
Discharger Specific Variance(s):		Nitrate	10		Mercury		0.026(t)*
	te) = TVS: no limit onic) = TVS<u>9</u>: 24 μg/L	Nitrite		0.5	Molybdenum		150(T)
Expiration Date of 12/31/2023		Phosphorus		0.17*	Nickel	TVS	TVS
Variance: Selenium = see 38.6(nium = see 38.6(6) for details.	Sulfate			Nickel		100(T)
		Sulfide		0.002	Selenium		varies*
					Selenium	varies*	
					Silver	TVS	TVS
					Uranium		
					Zinc	TVS	TVS

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

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14a. Mainsterr	n of Clear Creek from the Farmers High	hline Canal diversion in Golden, Co	lorado to the De	nver Water o	conduit #16 crossing.		
COSPCL14A	Classifications	Physical and Bio	logical			Metals (ug/L)	
Designation	Agriculture		DM	MWAT		acute	chronic
UP	Aq Life Warm 2	Temperature °C	WS-II	WS-II	Aluminum		
	Recreation N		acute	chronic	Arsenic	340	0.02-10(T)
	Water Supply	D.O. (mg/L)		5.0	Beryllium		
Qualifiers:		рН	6.5 - 9.0		Cadmium	TVS	TVS
Other:		chlorophyll a (mg/m ²)			Cadmium	5.0(T)	
Temporary M	odification(s):	E. Coli (per 100 mL)		630	Chromium III	50(T)	TVS
Arsenic(chroni		Inorganic (mg/L)		Chromium VI	TVS	TVS
	e of 12/31/2021		acute	chronic	Copper	TVS	TVS
	0M/MWAT) = current	Ammonia	TVS	TVS	Iron		WS
condition Expiration Dat	e of 6/30/2019	Boron		0.75	Iron		1000(T)
		Chloride		250	Lead	TVS	TVS
*Zinc(acute) = effect ratio).	TVS x (times) the FWER (final water	Chlorine	0.019	0.011	Lead	50(T)	
Expiration date		Cyanide	0.005		Manganese	TVS	244
*Zinc(chronic) = TVS x (times) the FWER (final water effect ratio).		Nitrate	10		Mercury		0.01(t)
Expiration date	e of 12/31/20.	Nitrite		0.5	Molybdenum		150(T)
		Phosphorus			Nickel	TVS	TVS
		Sulfate		WS	Nickel		100(T)
		Sulfide		0.002	Selenium	TVS	TVS
					Silver	TVS	TVS
					Uranium		
					Zinc	TVSx1.57*	TVSx1.57*
14b. Mainsterr	n of Clear Creek from the Denver Wate	er conduit #16 crossing to a point ju	st below Youngf	ield Street in	Wheat Ridge, Colorado).	
	n of Clear Creek from the Denver Wate Classifications	er conduit #16 crossing to a point ju Physical and Bic	5	ield Street in	Wheat Ridge, Colorado	Metals (ug/L)	
COSPCL14B		<u> </u>	5	ield Street in MWAT	Wheat Ridge, Colorado		chronic
COSPCL14B	Classifications Agriculture Aq Life Warm 2	<u> </u>	ological		Wheat Ridge, Colorado	Metals (ug/L)	chronic
COSPCL14B Designation	Classifications Agriculture Aq Life Warm 2 Recreation E	Physical and Bio	ological DM	MWAT		Metals (ug/L)	
COSPCL14B Designation UP	Classifications Agriculture Aq Life Warm 2	Physical and Bio	ological DM WS-II acute 	MWAT WS-II	Aluminum	Metals (ug/L) acute 	
COSPCL14B Designation UP Qualifiers:	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply	Physical and Bic Temperature °C D.O. (mg/L) pH	ological DM WS-II	MWAT WS-II chronic	Aluminum Arsenic	Metals (ug/L) acute 340	 0.02(T)
COSPCL14B Designation UP	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply	Physical and Bio Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²)	ological DM WS-II acute 	MWAT WS-II chronic 5.0	Aluminum Arsenic Beryllium	Metals (ug/L) acute 340 	 0.02(T)
COSPCL14B Designation UP Qualifiers:	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply	Physical and Bic Temperature °C D.O. (mg/L) pH	logical DM WS-II acute 6.5 - 9.0	MWAT WS-II chronic 5.0	Aluminum Arsenic Beryllium Cadmium	Metals (ug/L) acute 340 TVS	 0.02(T) TVS
COSPCL14B Designation UP Qualifiers: Water + Fish	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards	Physical and Bio Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²)	logical DM WS-II acute 6.5 - 9.0 	MWAT WS-II chronic 5.0 	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS	 0.02(T) TVS TVS TVS
COSPCL14B Designation UP Qualifiers: Water + Fish Other:	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s):	Physical and Bic Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL)	logical DM WS-II acute 6.5 - 9.0 	MWAT WS-II chronic 5.0 	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III	Metals (ug/L) acute 340 TVS 5.0(T) 50(T)	 0.02(T) TVS TVS
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary M Arsenic(chroni Expiration Dat	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid e of 12/31/2021	Physical and Bic Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL)	blogical DM WS-II acute 6.5 - 9.0 mg/L)	MWAT WS-II chronic 5.0 126	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS	 0.02(T) TVS TVS TVS
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary M Arsenic(chroni Expiration Dat	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid	Physical and Bic Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorganic (blogical DM WS-II acute 6.5 - 9.0 mg/L) acute	MWAT WS-II chronic 5.0 126 chronic	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI Copper	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS	 0.02(T) TVS TVS TVS TVS
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary Ma Arsenic(chroni Expiration Dat temperature(D condition	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid e of 12/31/2021	Physical and Bic Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorganic (Ammonia	Jogical DM WS-II acute 6.5 - 9.0 mg/L) acute TVS	MWAT WS-II chronic 5.0 126 thronic TVS	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI Copper Iron	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS TVS	 0.02(T) TVS TVS TVS TVS TVS WS
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary M Arsenic(chroni Expiration Dat temperature(D condition Expiration Dat	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid e of 12/31/2021 M/MWAT) = current e of 6/30/2019	Physical and Bio Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorganic (Ammonia Boron	Logical DM WS-II acute 6.5 - 9.0 mg/L) acute TVS 	MWAT WS-II chronic 5.0 126 126 chronic TVS 0.75	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI Copper Iron Iron	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS TVS TVS 	 0.02(T) TVS TVS TVS TVS WS 1000(T)
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary M Arsenic(chroni Expiration Dat temperature(D condition Expiration Dat *Zinc(acute) = effect ratio).	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid e of 12/31/2021 DM/MWAT) = current e of 6/30/2019 TVS x (times) the FWER (final water	Physical and Bio Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorganic (Ammonia Boron Chloride	blogical DM WS-II acute 6.5 - 9.0 mg/L) acute TVS TVS 	MWAT WS-II chronic 5.0 126 chronic TVS 0.75 250	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI Copper Iron Iron Lead	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS TVS TVS TVS	 0.02(T) TVS TVS TVS TVS WS 1000(T) TVS
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary Ma Arsenic(chroni Expiration Dat temperature(D condition Expiration Dat *Zinc(acute) = effect ratio). Expiration date	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid e of 12/31/2021 DM/MWAT) = current e of 6/30/2019 TVS x (times) the FWER (final water	Physical and Bio Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorganic (Ammonia Boron Chloride Chlorine	blogical DM WS-II acute 6.5 - 9.0 mg/L) acute TVS TVS 0.019	MWAT WS-II chronic 5.0 126 Chronic TVS 0.75 250 0.011	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI Copper Iron Iron Lead Lead	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS TVS TVS TVS TVS TVS TVS TVS SO(T) TVS TVS TVS SO(T)	 0.02(T) TVS TVS TVS TVS WS 1000(T) TVS
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary M Arsenic(chroni Expiration Dat temperature(D condition Expiration Dat *Zinc(acute) = effect ratio). Expiration dat *Zinc(chronic) water effect ra	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid e of 12/31/2021 M/MWAT) = current e of 6/30/2019 TVS x (times) the FWER (final water e of 12/31/20. = TVS x (times) the FWER (final tio).	Physical and Bio Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorganic (Ammonia Boron Chloride Chlorine Cyanide	logical DM WS-II acute 6.5 - 9.0 mg/L) acute TVS 0.019 0.005	MWAT WS-II chronic 5.0 126 126 chronic TVS 0.75 250 0.011 	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI Copper Iron Iron Lead Lead Manganese	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS TVS TVS S0(T) TVS	 0.02(T) TVS TVS TVS TVS WS 1000(T) TVS 244
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary Ma Arsenic(chroni Expiration Dat *Zinc(acute) = effect ratio). Expiration data *Zinc(chronic)	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid e of 12/31/2021 M/MWAT) = current e of 6/30/2019 TVS x (times) the FWER (final water e of 12/31/20. = TVS x (times) the FWER (final tio).	Physical and Bio Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorganic (Ammonia Boron Chloride Chlorine Cyanide Nitrate	blogical DM WS-II acute 6.5 - 9.0 mg/L) acute TVS 0.019 0.005 10	MWAT WS-II chronic 5.0 126 Chronic TVS 0.75 250 0.011 	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI Copper Iron Iron Lead Lead Manganese Mercury	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS TVS TVS TVS 50(T) TVS 50(T) TVS	 0.02(T) TVS TVS TVS TVS WS 1000(T) TVS 244 0.01(t)
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary M Arsenic(chroni Expiration Dat temperature(D condition Expiration Dat *Zinc(acute) = effect ratio). Expiration dat *Zinc(chronic) water effect ra	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid e of 12/31/2021 M/MWAT) = current e of 6/30/2019 TVS x (times) the FWER (final water e of 12/31/20. = TVS x (times) the FWER (final tio).	Physical and Bio Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorganic (Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite	logical DM WS-II acute 6.5 - 9.0 mg/L) acute TVS 0.019 0.005 10 	MWAT WS-II chronic 5.0 126 Chronic TVS 0.75 250 0.011 0.5	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI Copper Iron Iron Lead Lead Lead Manganese Mercury Molybdenum	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS TVS TVS 50(T) TVS 50(T) TVS 50(T) TVS	 0.02(T) TVS TVS TVS WS 1000(T) TVS 244 0.01(t) 150(T)
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary M Arsenic(chroni Expiration Dat temperature(D condition Expiration Dat *Zinc(acute) = effect ratio). Expiration dat *Zinc(chronic) water effect ra	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid e of 12/31/2021 M/MWAT) = current e of 6/30/2019 TVS x (times) the FWER (final water e of 12/31/20. = TVS x (times) the FWER (final tio).	Physical and Bio Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorganic (Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus	blogical DM WS-II acute 6.5 - 9.0 mg/L) acute TVS 0.019 0.005 10 10	MWAT WS-II chronic 5.0 126 chronic TVS 0.75 250 0.011 0.5 0.5	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI Copper Iron Iron Lead Lead Lead Manganese Mercury Molybdenum Nickel	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS TVS 5.0(T) S0(T) TVS TVS 5.0(T) TVS TVS 5.0(T) TVS 5.0(T) TVS 5.0(T) TVS	 0.02(T) TVS TVS TVS TVS WS 1000(T) TVS 244 0.01(t) 150(T) TVS
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary M Arsenic(chroni Expiration Dat temperature(D condition Expiration Dat *Zinc(acute) = effect ratio). Expiration dat *Zinc(chronic) water effect ra	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid e of 12/31/2021 M/MWAT) = current e of 6/30/2019 TVS x (times) the FWER (final water e of 12/31/20. = TVS x (times) the FWER (final tio).	Physical and Bio Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorganic (Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus Sulfate	blogical DM WS-II acute 6.5 - 9.0 mg/L) acute TVS 0.019 0.005 10 10 	MWAT WS-II chronic 5.0 126 Chronic 7VS 0.75 250 0.011 0.5 0.5 WS	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI Copper Iron Iron Lead Lead Lead Manganese Mercury Molybdenum Nickel	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS TVS 5.0(T) TVS TVS TVS 5.0(T) TVS 5.0(T) TVS 5.0(T) TVS 5.0(T) TVS 5.0(T) TVS 5.0(T)	 0.02(T) TVS TVS TVS TVS WS 1000(T) TVS 244 0.01(t) 150(T) TVS 100(T)
COSPCL14B Designation UP Qualifiers: Water + Fish Other: Temporary M Arsenic(chroni Expiration Dat temperature(D condition Expiration Dat *Zinc(acute) = effect ratio). Expiration dat *Zinc(chronic) water effect ra	Classifications Agriculture Aq Life Warm 2 Recreation E Water Supply Standards odification(s): ic) = hybrid e of 12/31/2021 M/MWAT) = current e of 6/30/2019 TVS x (times) the FWER (final water e of 12/31/20. = TVS x (times) the FWER (final tio).	Physical and Bio Temperature °C D.O. (mg/L) pH chlorophyll a (mg/m ²) E. Coli (per 100 mL) Inorganic (Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus Sulfate	blogical DM WS-II acute 6.5 - 9.0 mg/L) acute TVS 0.019 0.005 10 10 	MWAT WS-II chronic 5.0 126 Chronic 7VS 0.75 250 0.011 0.5 0.5 WS	Aluminum Arsenic Beryllium Cadmium Cadmium Chromium III Chromium VI Copper Iron Iron Lead Lead Manganese Mercury Molybdenum Nickel Selenium	Metals (ug/L) acute 340 TVS 5.0(T) 50(T) TVS TVS State TVS	 0.02(T) TVS TVS TVS TVS WS 1000(T) TVS 244 0.01(t) 150(T) TVS 1000(T) TVS

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

COSPBT02 Classifications		Physical and	Biological		Metals (ug/L)		
Designation	Agriculture		DM	MWAT		acute	chronic
U P	Aq Life Cold 1	Temperature °C	CS-II	CS-II	Aluminum		
	Recreation E		acute	chronic	Arsenic	340	0.02(T)
	Water Supply	D.O. (mg/L)		6.0	Beryllium		
Qualifiers:		D.O. (spawning)		7.0	Cadmium	TVS(tr)	TVS
Other:		pН	6.5 - 9.0		Cadmium	5.0(T)	
Temporary M	odification(s):	chlorophyll a (mg/m ²)		150*	Chromium III	50(T)	TVS
Arsenic(chroni		E. Coli (per 100 mL)		126	Chromium VI	TVS	TVS
Expiration Date of 12/31/2021					Copper		7.5*
chlorophyll a	(mg/m ²)(chronic) = applies only abo	Inorgan	iic (mg/L)		Copper	11	TVS
the facilities lis	sted at 38.5(4).		acute	chronic	Copper	TVS	
*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.		Ammonia	TVS	TVS	Iron		WS
		Boron		0.75	Iron		1000(T)
		Chloride		250	Lead	TVS	TVS
		Chlorine	0.019	0.011	Lead	50(T)	
		Cyanide	0.005		Manganese	TVS	TVS
		Nitrate	10		Manganese		WS
	Nitrite		0.05	Mercury		0.01(t)	
	Phosphorus		0.11*	Molybdenum		150(T)	
	Sulfate		WS	Nickel	TVS	TVS	
		Sulfide		0.002	Nickel		100(T)
				Selenium	TVS	TVS	
				Silver	TVS	TVS(tr)	
				Uranium			
			Zinc	TVS	TVS		