## **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.

|   | Classifications  | Physical and B  | iological                                 |  |   | Metals (ug/L)                                 |  |
|---|--|---|---|--|---|---|--|
| Designation   | Agriculture  | ,   | DM  | MWAT   |   | acute   | chronic  |
|   | Ag Life Warm 2   | Temperature °C  | WS-II                                     | WS-II  | Aluminum  |   |  |
|   | Recreation E   | Tomporatare o   | acute                                     | chronic  | Arsenic   | 340   |  |
| Qualifiers:   |  | D.O. (mg/L)   |   | 5.0  | Arsenic(T)  |   | 7.6  |
| Fish Ingestion  | n Standards  | pH  | 6.5 - 9.0                                 |  | Beryllium   |   |  |
| Other:  |  | chlorophyll a (mg/m2)   |   | 150*   | Cadmium   | TVS   | TVS  |
| *chlorophyll a (mg/m2)(chronic) = applies only above the facilities listed at 38.5(4).  *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).  *Selenium(acute) = See section 38.6(4)(b) for selenium standards and assessment locations.  *Selenium(chronic) = See section 38.6(4)(b) for selenium standards and assessment locations. |  | E. Coli (per 100 mL)  |   | 126  | Chromium III  | TVS   | TVS  |
|   |  | Inorganic   | (ma/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  | varies*                                       | varies*  |
|   |  | Sulfate   |   |  | Silver  | TVS   | TVS  |
|   |  | Sulfide   |   | 0.002  | Uranium   |   |  |
|   |  |   |   | 0.002  | Zinc  | TVS   | TVS  |
| 16i. Mainstem   | of Sand Creek from the confluence wi   | th Toll Gate Creek to the confluen  | ce with the South                         | Platte River.  |   |   |  |
| COSPUS16I   | Classifications  | Physical and B  | iological                                 |  | ı   | 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   |   |  |
| Qualifiers:   |  |   |   | CHIOHIC  |   | 340   |  |
| Fish Ingestion Standards  |  | D.O. (mg/L)   |   | 5.0  | Arsenic(T)  | 340   | 7.6  |
| Fish Ingestion  | n Standards  | D.O. (mg/L)<br>pH   | <br>6.5 - 9.0                             |  |   |   |  |
| Fish Ingestion Other:   | n Standards  |   |   | 5.0  | Arsenic(T)  |   | 7.6  |
| Other:  |  | рН  | 6.5 - 9.0                                 | 5.0  | Arsenic(T)<br>Beryllium   |   | 7.6<br>  |
| Other: Discharger Sp  | ecific Variance(s):  | pH<br>chlorophyll a (mg/m2)   | 6.5 - 9.0<br>                             | 5.0<br><br>150*  | Arsenic(T) Beryllium Cadmium  | <br><br>TVS                                   | 7.6<br><br>TVS   |
| Other:  Discharger Sp. Selenium(acut  | ecific Variance(s):<br>:e) = TVS: no limit   | pH<br>chlorophyll a (mg/m2)<br>E. Coli (per 100 mL)   | 6.5 - 9.0<br>                             | 5.0<br><br>150*  | Arsenic(T) Beryllium Cadmium Chromium III   | <br><br>TVS<br>TVS                            | 7.6<br><br>TVS<br>TVS  |
| Other:  Discharger Sponselenium(acut Selenium(chro  | ecific Variance(s):  | pH<br>chlorophyll a (mg/m2)<br>E. Coli (per 100 mL)   | 6.5 - 9.0<br><br><br>(mg/L)               | 5.0<br><br>150*<br>126   | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T)   | <br>TVS<br>TVS                                | 7.6<br><br>TVS<br>TVS<br>100   |
| Other:  Discharger Sp Selenium(acut Selenium(chro   | ecific Variance(s):<br>e) = TVS: no limit<br>inic) = <mark>9</mark> : 24 µg/L<br>e of 12/31/2023   | pH<br>chlorophyll a (mg/m2)<br>E. Coli (per 100 mL)<br>Inorganic  | 6.5 - 9.0<br><br><br>(mg/L)<br>acute      | 5.0<br><br>150*<br>126<br><b>chronic</b>                             | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T) Chromium VI   | <br>TVS<br>TVS<br><br>TVS                     | 7.6<br><br>TVS<br>TVS<br>100<br>TVS                                    |
| Other:  Discharger Sp Selenium(acut Selenium(chro Expiration Date *chlorophyll a above the facil  | ecific Variance(s):  ie) = TVS: no limit  inic) = 9: 24 µg/L  e of 12/31/2023  (mg/m2)(chronic) = applies only  lities listed at 38.5(4).  | pH chlorophyll a (mg/m2) E. Coli (per 100 mL) Inorganic Ammonia   | 6.5 - 9.0 (mg/L) acute TVS                | 5.0<br><br>150*<br>126<br><b>chronic</b><br>TVS                      | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T) Chromium VI Copper  | <br>TVS<br>TVS<br><br>TVS<br>TVS              | 7.6 TVS TVS 100 TVS TVS  |
| Other:  Discharger Sp. Selenium(acut Selenium(chro Expiration Date *chlorophyll a above the facil *Phosphorus(c facilities listed   | ecific Variance(s):  te) = TVS: no limit  tinic) = 9: 24 µg/L  te of 12/31/2023  (mg/m2)(chronic) = applies only  lities listed at 38.5(4).  thronic) = applies only above the  at 38.5(4).  | pH chlorophyll a (mg/m2) E. Coli (per 100 mL) Inorganic Ammonia Boron   | 6.5 - 9.0 (mg/L) acute TVS                | 5.0<br><br>150*<br>126<br><b>chronic</b><br>TVS<br>0.75              | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T) Chromium VI Copper Iron(T)  | TVS TVS TVS TVS                               | 7.6 TVS TVS 100 TVS TVS  |
| Other:  Discharger Sp Selenium(acut Selenium(chro Expiration Date *chlorophyll a above the facil *Phosphorus(facilities listed *Mercury(chroi   | ecific Variance(s):  ie) = TVS: no limit  inic) = 9/24 μg/L  e of 12/31/2023  (mg/m2)(chronic) = applies only  lities listed at 38.5(4).  chronic) = applies only above the  at 38.5(4).  nic) = 0.026 below Brighton Blvd, see  | pH chlorophyll a (mg/m2) E. Coli (per 100 mL) Inorganic Ammonia Boron Chloride  | 6.5 - 9.0 (mg/L) acute TVS                | 5.0<br><br>150*<br>126<br><b>chronic</b><br>TVS<br>0.75              | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T) Chromium VI Copper Iron(T) Lead   | TVS TVS TVS TVS TVS TVS TVS                   | 7.6 TVS TVS 100 TVS TVS 1000 TVS                                       |
| Other:  Discharger Sp. Selenium(acut Selenium(chro Expiration Date *chlorophyll a above the facil *Phosphorus(c facilities listed *Mercury(chrossection 38.6(4) *Selenium(acut)   | ecific Variance(s):  te) = TVS: no limit  tric) = 9/24 µg/L  e of 12/31/2023  (mg/m2)(chronic) = applies only  lities listed at 38.5(4).  chronic) = applies only above the  at 38.5(4).  nic) = 0.026 below Brighton Blvd, see  (f) for mercury assessment locations  tte) = See section 38.6(4)(f) for   | pH chlorophyll a (mg/m2) E. Coli (per 100 mL) Inorganic  Ammonia Boron Chloride Chlorine  | 6.5 - 9.0 (mg/L) acute TVS 0.019          | 5.0<br><br>150*<br>126<br><b>chronic</b><br>TVS<br>0.75<br>          | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T) Chromium VI Copper Iron(T) Lead Manganese   | TVS TVS TVS TVS TVS TVS TVS TVS               | 7.6 TVS TVS 100 TVS TVS 1000 TVS TVS                                   |
| Other:  Discharger Sp Selenium(acut Selenium(chro Expiration Date *chlorophyll a above the facil *Phosphorus(c facilities listed *Mercury(chror section 38.6(4) *Selenium(acu selenium stand  | ecific Variance(s):  te) = TVS: no limit  tric) = 9: 24 μg/L  te of 12/31/2023  (mg/m2)(chronic) = applies only  lities listed at 38.5(4).  thronic) = applies only above the  at 38.5(4).  nic) = 0.026 below Brighton Blvd, see  l)(f) for mercury assessment locations  | pH chlorophyll a (mg/m2) E. Coli (per 100 mL) Inorganic  Ammonia Boron Chloride Chlorine Cyanide                                    | 6.5 - 9.0 TVS 0.019 0.005                 | 5.0<br><br>150*<br>126<br><b>chronic</b><br>TVS<br>0.75<br><br>0.011 | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T) Chromium VI Copper Iron(T) Lead Manganese Mercury                                       | TVS       | 7.6 TVS TVS 100 TVS TVS 1000 TVS TVS 1000 TVS TVS 0.026(t)*            |
| Other:  Discharger Sp. Selenium(acut Selenium(chro Expiration Date *chlorophyll a above the facil *Phosphorus(c facilities listed *Mercury(chro section 38.6(4 *Selenium(acus *Selenium(acus *Selenium(chr selenium stanc   | ecific Variance(s):  te) = TVS: no limit  tonic) = 9: 24 µg/L  te of 12/31/2023  (mg/m2)(chronic) = applies only  lities listed at 38.5(4).  thronic) = applies only above the  at 38.5(4).  nic) = 0.026 below Brighton Blvd, see  l)(f) for mercury assessment locations  te) = See section 38.6(4)(f) for  dards and assessment locations.  onic) = See section 38.6(4)(f) for  dards and assessment locations. | pH chlorophyll a (mg/m2) E. Coli (per 100 mL) Inorganic  Ammonia Boron Chloride Chlorine Cyanide Nitrate                            | 6.5 - 9.0 (mg/L) acute TVS 0.019 0.005 10 | 5.0 150* 126  chronic TVS 0.75 0.011                                 | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T) Chromium VI Copper Iron(T) Lead Manganese Mercury Mercury                               | TVS       | 7.6 TVS TVS 100 TVS TVS 1000 TVS TVS 0.026(t)*                         |
| Other:  Discharger Sp. Selenium(acut Selenium(chro Expiration Date *chlorophyll a above the facil *Phosphorus(c facilities listed *Mercury(chro) section 38.6(4 *Selenium(acus *Selenium stanc *Selenium(chr selenium stanc   | ecific Variance(s):  te) = TVS: no limit  tonic) = 9: 24 µg/L  te of 12/31/2023  (mg/m2)(chronic) = applies only  lities listed at 38.5(4).  chronic) = applies only above the  at 38.5(4).  nic) = 0.026 below Brighton Blvd, see  little) = See section 38.6(4)(f) for  dards and assessment locations.  onic) = See section 38.6(4)(f) for  | pH chlorophyll a (mg/m2) E. Coli (per 100 mL) Inorganic  Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite                    | 6.5 - 9.0 (mg/L) acute TVS 0.019 0.005 10 | 5.0 150* 126  chronic TVS 0.75 0.011 0.5                             | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T) Chromium VI Copper Iron(T) Lead Manganese Mercury Mercury Molybdenum(T)                 | TVS TVS TVS TVS TVS TVS TVS TVS T TVS TVS T T | 7.6 TVS TVS 100 TVS TVS 1000 TVS TVS 0.0026(t)* 0.01(t) 150            |
| Other:  Discharger Sp. Selenium(acut Selenium(chro Expiration Date *chlorophyll a above the facil *Phosphorus(c facilities listed *Mercury(chro: section 38.6(4 *Selenium(acus selenium stanc *Selenium(chroselenium stanc  | ecific Variance(s):  te) = TVS: no limit  tonic) = 9: 24 µg/L  te of 12/31/2023  (mg/m2)(chronic) = applies only  lities listed at 38.5(4).  thronic) = applies only above the  at 38.5(4).  nic) = 0.026 below Brighton Blvd, see  l)(f) for mercury assessment locations  te) = See section 38.6(4)(f) for  dards and assessment locations.  onic) = See section 38.6(4)(f) for  dards and assessment locations. | pH chlorophyll a (mg/m2) E. Coli (per 100 mL) Inorganic  Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus         | 6.5 - 9.0 0.019 0.005 10                  | 5.0 150* 126  chronic TVS 0.75 0.011 0.5 0.17*                       | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T) Chromium VI Copper Iron(T) Lead Manganese Mercury Mercury Molybdenum(T) Nickel          | TVS       | 7.6 TVS TVS 100 TVS 1000 TVS 1000 TVS 0.026(t)* 0.01(t) 150 TVS        |
| Other:  Discharger Sp. Selenium(acut Selenium(chro Expiration Date *chlorophyll a above the facil *Phosphorus(c facilities listed *Mercury(chro section 38.6(4 *Selenium(acus *Selenium(acus *Selenium(chr selenium stanc   | ecific Variance(s):  te) = TVS: no limit  tonic) = 9: 24 µg/L  te of 12/31/2023  (mg/m2)(chronic) = applies only  lities listed at 38.5(4).  thronic) = applies only above the  at 38.5(4).  nic) = 0.026 below Brighton Blvd, see  l)(f) for mercury assessment locations  te) = See section 38.6(4)(f) for  dards and assessment locations.  onic) = See section 38.6(4)(f) for  dards and assessment locations. | pH chlorophyll a (mg/m2) E. Coli (per 100 mL) Inorganic  Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus Sulfate | 6.5 - 9.0 (mg/L) acute TVS 0.019 0.005 10 | 5.0 150* 126  chronic TVS 0.75 0.011 0.5 0.17*                       | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T) Chromium VI Copper Iron(T) Lead Manganese Mercury Mercury Molybdenum(T) Nickel Selenium | TVS       | 7.6 TVS TVS 100 TVS 1000 TVS 1000 TVS 0.026(t)* 0.01(t) 150 TVS        |
| Other:  Discharger Sp. Selenium(acut Selenium(chro Expiration Date *chlorophyll a above the facil *Phosphorus(c facilities listed *Mercury(chro section 38.6(4 *Selenium(acus *Selenium(acus *Selenium(chr selenium stanc   | ecific Variance(s):  te) = TVS: no limit  tonic) = 9: 24 µg/L  te of 12/31/2023  (mg/m2)(chronic) = applies only  lities listed at 38.5(4).  thronic) = applies only above the  at 38.5(4).  nic) = 0.026 below Brighton Blvd, see  l)(f) for mercury assessment locations  te) = See section 38.6(4)(f) for  dards and assessment locations.  onic) = See section 38.6(4)(f) for  dards and assessment locations. | pH chlorophyll a (mg/m2) E. Coli (per 100 mL) Inorganic  Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus Sulfate | 6.5 - 9.0 (mg/L) acute TVS 0.019 0.005 10 | 5.0 150* 126  chronic TVS 0.75 0.011 0.5 0.17*                       | Arsenic(T) Beryllium Cadmium Chromium III Chromium III(T) Chromium VI Copper Iron(T) Lead Manganese Mercury Mercury Molybdenum(T) Nickel Selenium | TVS       | 7.6 TVS TVS 100 TVS TVS 1000 TVS TVS 0.026(t)* 0.01(t) 150 TVS varies* |

tr = trout

D.O. = dissolved oxygen

DM = daily maximum

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

| 14a. Mainstem  | of Clear Creek from the Farmers High  | nline Canal diversion in Golden,  | Colorado to the De       | enver Water                            | conduit #16 crossing.  |                                      |  |
|--|---|---|--------------------------|--|--|--------------------------------------|--|
|  | Classifications   | Physical and I  |                          |  | Ī  | Metals (ug/L)                        |  |
| Designation  | Agriculture   |   | DM                       | MWAT                                   |  | acute                                | chronic  |
| IP   | Aq Life Warm 2  | Temperature °C  | WS-II                    | WS-II                                  | Aluminum   |                                      |  |
|  | Recreation N  |   | acute                    | chronic                                | Arsenic  | 340                                  |  |
|  | Water Supply  | D.O. (mg/L)   |                          | 5.0                                    | Arsenic(T)   |                                      | 0.02-10  |
| Qualifiers:  |   | pН  | 6.5 - 9.0                |  | Beryllium  |                                      |  |
| Other:   |   | chlorophyll a (mg/m²)   |                          |  | Cadmium  | TVS                                  | TVS  |
| Temporary Modification(s):   |   | E. Coli (per 100 mL)  |                          | 630                                    | Cadmium(T)   | 5.0                                  |  |
| temporary Modification(s):<br>temperature(DM/MWAT) = current   |   | Inorgani  | c (mg/L)                 |  | Chromium III   |                                      | TVS  |
| condition  Expiration Date of 6/30/2019  *Zinc(acute) = TVS x (times) the FWER (final water effect ratio).  Expiration date of 12/31/20.  *Zinc(chronic) = TVS x (times) the FWER (final water effect ratio).  Expiration date of 12/31/20.  |   |   | 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                                  | 244  |
|  |   | 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*  |
| l4b. Mainstem  | n of Clear Creek from the Denver Water  | er conduit #16 crossing to a point  | just below Youngf        | ield Street in                         |  |                                      |  |
| COSPCL14B  | Classifications   | Physical and I  | Biological               |  |  | Metals (ug/L)                        |  |
| Designation  | Agriculture   |   | DM                       | MWAT                                   |  | acute                                | chronic  |
| JP   | 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   |
| Qualifiers:  |   | pH  | 6.5 - 9.0                |  | Beryllium  |                                      |  |
| Vater + Fish   | Standards   | chlorophyll a (mg/m²)   |                          |  | Cadmium  | TVS                                  | TVS  |
| Other:   |   | E. Coli (per 100 mL)  |                          |  |  |                                      |  |
| Temporary Modification(s):   |   | (  /  |                          | 126                                    | Cadmium(T)   | 5.0                                  |  |
| emporary Mo  | odification(s):   | Inorgani  | c (mg/L)                 | 126                                    | Cadmium(T) Chromium III  | 5.0                                  | TVS  |
| rsenic(chroni  | c) = hybrid   |   | c (mg/L)                 | 126                                    |  |                                      | <br>TVS<br>                                      |
| rsenic(chroni<br>expiration Date   | c) = hybrid<br>e of 12/31/2021  |   | • • •                    |  | Chromium III   |                                      | TVS<br><br>TVS                                   |
| rsenic(chroni<br>expiration Date<br>emperature(D   | c) = hybrid   | Inorgani  | acute                    | chronic                                | Chromium III<br>Chromium III(T)  | <br>50                               |  |
| rsenic(chronicxpiration Date<br>emperature(Dondition   | c) = hybrid<br>e of 12/31/2021  | Inorgani<br>Ammonia   | acute<br>TVS             | chronic<br>TVS                         | Chromium III Chromium III(T) Chromium VI   | <br>50<br>TVS                        | TVS  |
| rsenic(chroni<br>expiration Date<br>emperature(Dondition<br>expiration Date  | c) = hybrid<br>e of 12/31/2021<br>M/MWAT) = current   | Inorgani<br>Ammonia<br>Boron  | acute<br>TVS             | chronic<br>TVS<br>0.75                 | Chromium III Chromium III(T) Chromium VI Copper  | <br>50<br>TVS                        | TVS  |
| rsenic(chronic price properties of the content of t | c) = hybrid<br>e of 12/31/2021<br>M/MWAT) = current<br>e of 6/30/2019<br>TVS x (times) the FWER (final water  | Inorgani Ammonia Boron Chloride   | acute TVS                | chronic<br>TVS<br>0.75<br>250          | Chromium III Chromium III(T) Chromium VI Copper Iron   | <br>50<br>TVS<br>TVS                 | TVS<br>TVS<br>WS                                 |
| rsenic(chronic xpiration Date properture (Dondition xpiration Date Zinc(acute) = ffect ratio).  xpiration date (Zinc(chronic)  | c) = hybrid<br>e of 12/31/2021<br>M/MWAT) = current<br>e of 6/30/2019<br>TVS x (times) the FWER (final water<br>e of 12/31/20.<br>= TVS x (times) the FWER (final | Ammonia Boron Chloride Chlorine   | acute TVS 0.019          | chronic<br>TVS<br>0.75<br>250<br>0.011 | Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T)   | <br>50<br>TVS<br>TVS<br>             | TVS<br>TVS<br>WS<br>1000                         |
| rsenic(chroni<br>xpiration Dat<br>imperature(D<br>ondition<br>xpiration Dat<br>Zinc(acute) =<br>frect ratio).<br>xpiration dat<br>Zinc(chronic)<br>ater effect ra  | c) = 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 water)           | Ammonia Boron Chloride Chlorine Cyanide   | acute TVS 0.019 0.005    | chronic<br>TVS<br>0.75<br>250<br>0.011 | Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead  | <br>50<br>TVS<br>TVS<br><br><br>TVS  | TVS<br>TVS<br>WS<br>1000                         |
| rsenic(chroni<br>xpiration Dat<br>imperature(D<br>ondition<br>xpiration Dat<br>Zinc(acute) =<br>ffect ratio).<br>xpiration dat<br>Zinc(chronic)<br>ater effect ra  | c) = hybrid<br>e of 12/31/2021<br>M/MWAT) = current<br>e of 6/30/2019<br>TVS x (times) the FWER (final water<br>e of 12/31/20.<br>= TVS x (times) the FWER (final | Ammonia Boron Chloride Chlorine Cyanide Nitrate                                     | acute TVS 0.019 0.005 10 | chronic TVS 0.75 250 0.011             | Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T)  | <br>50<br>TVS<br>TVS<br><br>TVS      | TVS TVS WS 1000 TVS                              |
| rsenic(chroni<br>xpiration Dat<br>imperature(D<br>ondition<br>xpiration Dat<br>Zinc(acute) =<br>ffect ratio).<br>xpiration dat<br>Zinc(chronic)<br>ater effect ra  | c) = 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 water)           | Inorgani Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus         | acute TVS 0.019 0.005 10 | chronic TVS 0.75 250 0.011 0.5         | Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese  | 50 TVS TVS TVS 50 TVS                | TVS TVS WS 1000 TVS                              |
| rsenic(chroni<br>xpiration Dat<br>mperature(D<br>ondition<br>xpiration Dat<br>Zinc(acute) =<br>ffect ratio).<br>xpiration dat<br>Zinc(chronic)<br>ater effect ra   | c) = 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 water)           | Inorgani Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus Sulfate | acute TVS 0.019 0.005 10 | chronic TVS 0.75 250 0.011 0.5 WS      | Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury Molybdenum(T)                                  | 50 TVS TVS TVS 50 TVS                | TVS TVS WS 1000 TVS 244 0.01(t)                  |
| rsenic(chroni<br>xpiration Dat<br>imperature(D<br>ondition<br>xpiration Dat<br>Zinc(acute) =<br>ffect ratio).<br>xpiration dat<br>Zinc(chronic)<br>ater effect ra  | c) = 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 water)           | Inorgani Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus         | acute TVS 0.019 0.005 10 | chronic TVS 0.75 250 0.011 0.5         | Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury Molybdenum(T) Nickel                           | 50 TVS TVS TVS 50 TVS 50 TVS TVS     | TVS TVS WS 1000 TVS 244 0.01(t) 150 TVS          |
| rsenic(chroni<br>xpiration Dat<br>imperature(D<br>ondition<br>xpiration Dat<br>Zinc(acute) =<br>ffect ratio).<br>xpiration dat<br>Zinc(chronic)<br>ater effect ra  | c) = 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 water)           | Inorgani Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus Sulfate | acute TVS 0.019 0.005 10 | chronic TVS 0.75 250 0.011 0.5 WS      | Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury Molybdenum(T) Nickel Nickel(T)                 | 50 TVS TVS TVS 50 TVS 50 TVS TVS TVS | TVS TVS WS 1000 TVS 244 0.01(t) 150 TVS          |
| rsenic(chroni<br>xpiration Dat<br>imperature(D<br>ondition<br>xpiration Dat<br>Zinc(acute) =<br>ffect ratio).<br>xpiration dat<br>Zinc(chronic)<br>ater effect ra  | c) = 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 water)           | Inorgani Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus Sulfate | acute TVS 0.019 0.005 10 | chronic TVS 0.75 250 0.011 0.5 WS      | Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury Molybdenum(T) Nickel Nickel(T) Selenium        | 50 TVS TVS TVS 50 TVS 50 TVS TVS TVS | TVS TVS WS 1000 TVS 244 0.01(t) 150 TVS 1000 TVS |
| rsenic(chroni<br>xpiration Dat<br>temperature(Dondition<br>xpiration Dat<br>Zinc(acute) =<br>ffect ratio).<br>xpiration dat<br>Zinc(chronic)<br>rater effect ra  | c) = 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 water)           | Inorgani Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus Sulfate | acute TVS 0.019 0.005 10 | chronic TVS 0.75 250 0.011 0.5 WS      | Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury Molybdenum(T) Nickel Nickel(T) Selenium Silver | 50 TVS TVS TVS 50 TVS 50 TVS TVS TVS | TVS TVS WS 1000 TVS 244 0.01(t)                  |
| rsenic(chroni<br>expiration Date<br>emperature(D<br>ondition<br>expiration Date<br>Zinc(acute) =<br>effect ratio).<br>Expiration date<br>Zinc(chronic)<br>vater effect ra  | c) = 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 water)           | Inorgani Ammonia Boron Chloride Chlorine Cyanide Nitrate Nitrite Phosphorus Sulfate | acute TVS 0.019 0.005 10 | chronic TVS 0.75 250 0.011 0.5 WS      | Chromium III Chromium III(T) Chromium VI Copper Iron Iron(T) Lead Lead(T) Manganese Mercury Molybdenum(T) Nickel Nickel(T) Selenium        | 50 TVS TVS TVS 50 TVS 50 TVS TVS TVS | TVS TVS WS 1000 TVS 244 0.01(t) 150 TVS          |

## 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 |
| 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    |
| Qualifiers:  |                 | D.O. (spawning)         |           | 7.0         | Beryllium       |         |         |
| Other:   |                 | рН                      | 6.5 - 9.0 |             | Cadmium         | TVS(tr) | TVS     |
| Temporary Modification(s):  Arsenic(chronic) = hybrid  Expiration Date of 12/31/2021   |                 | chlorophyll a (mg/m²)   |           | 150*        | Cadmium(T)      | 5.0     |         |
|  |                 | E. Coli (per 100 mL)    |           | 126         | Chromium III    |         | TVS     |
|  |                 |                         |           |             | Chromium III(T) | 50      |         |
| *chlorophyll a (mg/m²)(chronic) = applies only above the facilities listed at 38.5(4).  *Phosphorus(chronic) = applies only above the facilities listed at 38.5(4).  *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     |