

BEAR CREEK WATERSHED

Fact Sheet 28 Adopted Stream Standards

Update June 7, 2016

The Colorado Water Quality Control Commission adopts stream standards for all waters of the state.

The classifications identify the actual beneficial uses of the water. The numeric standards are assigned to determine the allowable concentrations of various parameters. Discharge permits will be issued by the Water Quality Control Division to comply with basic, narrative, and numeric standards and control regulations so that all discharges to waters of the state protect the classified uses. Table Value Standards (TVS) refer to numerical criteria set forth in the Basic Standards and Methodologies for Surface Water and the values are based on a formula that is specific to hardness conditions in a waterbody. The stream standards effective in 2014 for the Bear Creek Watershed are:

Physical & Biological Inorganic (mg/l) Temperature = Site-specific table values | Ammonia (ac/ch) = TVS Dissolved Oxygen = 6.0 mg/l Residual Chlorine (ac) = 0.019 Residual Chlorine (ch) = 0.011 Dissolved Oxygen (spawning) = 7.0 mg/l pH = 6.5-9.0Free Cyanide = 0.005 E. coli = 126/100ml Sulfide = 0.002Boron = 0.75Mean Chlorophyll = 12.2 ug/l Total Phosphorus = 22.2 ug/l Nitrite-nitrogen = 0.05 Nitrate-nitrogen = 10 Chloride = 250 Sulfate = if Water Supply = 250

The Bear Creek Watershed Association protects and restores water and environmental quality within the Bear Creek Watershed from the effects of land use.

Clear Creek County Jefferson County City of Lakewood Town of Morrison Aspen Park Metropolitan District Brook Forest Inn Conifer Sanitation Association Conifer Metropolitan District Denver Water Department Evergreen Metropolitan District Forrest Hills Metropolitan District Genesee Sanitation & Water District Geneva Glen Jefferson County School District Kittredge Water & Sanitation District Tiny Town Foundation, Inc. West Jefferson County Metropolitan District **Evergreen Trout Unlimited** U.S. Army Corps of Engineers

ac = acute (1-day)
ch = chronic (30-day)
Sulfide= sulfide as undissociated
H2S (hydrogen sulfide)
Trec = total recoverable
TVS = table value standard
Tr = Trout

Bear Creek Reservoir Site-Specific Standards

Mean chlorophyll = $12.2 \, \mu g/l$ and mean total phosphorus = $22.2 \, \mu g/l$ 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. See *BCWA Fact Sheet 53 BCR 2015 Regulation #38 Update.*

Metals (ug/l)

Arsenic (ac) = 340

Arsenic (ch) = 0.02 (Trec)

Cadmium (ac) = TVS (tr)

Cadmium (ch) = TVS

Trivalent Chromium (ac) =50 (Trec)

Hexavalent Chromium (ac/ch) = TVS

Copper (ac/ch) = TVS

Iron (ch) = Water Supply 300 (dissolved)

Iron (ch) = 1000 (Trec)

Lead (ac/ch) = TVS

Manganese (ac/ch) = TVS

Manganese (ch) = Water Supply 50 (dissolved)

Mercury (ch) = 0.01 (total)

Nickel (ac/ch) = TVS

Selenium (ac) = 18.4

Selenium (ch) = 4.6

Silver (ac) = TVS

Silver (ch) = TVS (tr)

Zinc (ac/ch) = TVS

A temporary modification set at "current conditions" to expire 12/31/2020, is adopted in order to recognize the uncertainty regarding how soon the internal load will be reduced. Progress on resolving uncertainty will be

reviewed in the

annual temporary

modification hear-

ings in December

2018 and 2019.