



# BEAR CREEK RESERVOIR

## Fact Sheet 7 Bear Creek Reservoir Monitoring Program

Updated June 1, 2016

*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

The routine monitoring program (P1) focuses on Turkey Creek drainage and Bear Creek drainage inputs (*BCWA PGO24 Bear Creek 2016 Sample Plan Version 2016.01*). The BCWA monitors discharge from Bear Creek Reservoir (Site 45) into lower Bear Creek. A central pool characterization of the reservoir is done near the dam (Site 40). A permanent buoy is used locate site 40. Lower Bear Creek is monitored near Wadsworth (Site 90).

P1- Routine water quality monitoring at Bear Creek Reservoir (multiple vertical stations), Turkey Creek inflow to reservoir, Bear Creek inflow to reservoir, reservoir discharge into lower Bear Creek, and the lower edge of the watershed near Wadsworth. The P1 sites are long-term reference monitoring sites consistent with the intent of the monitoring program outlined in the Bear Creek Reservoir Control Regulation #74.

- Three (2016 monitoring at 40, 41, 420 - Five (prior years) profile monitoring stations in reservoir.
- Continuous data collection since 1990
- Sample monthly in January, February, March, April, May, June, October, November, and December. Growing season samples taken twice in July, August, and September
- Monthly field profiles for temperature, dissolved oxygen, specific conductance, and pH
- Temperature probe string at site 40 from ice off to ice on that measures temperature every 30-minutes at four depths (1/2 to 2 meters)
- Station data for Secchi depth (clarity), total suspended sediments, chlorophyll a, nutrients (total phosphorus, dissolved phosphorus, total nitrogen, ammonia nitrogen, nitrate+nitrite nitrogen, and total organic nitrogen)
- Seasonal data for phytoplankton, zooplankton (historic), bacteria at the out-fall (E. coli) and Wadsworth stations
- Bottom sediment study at 6 -17 sites for phosphorus, grain size, and total carbon.

### Bear Creek Reservoir 10/9/2015 P1 Profile Stations

