



IMPROVED WATERSHED WATER QUALITY

Fact Sheet 13 Watershed Management Makes a Difference
Update June 6, 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

Bear Creek Watershed Association has 32-years of active service to the Watershed in Clear Creek, Jefferson and Park Counties

- BCWA spent >2.1 million on regulatory mandated programs
- Members have spent 1.4 million on data and monitoring efforts
- Discharger members have spent >24 million dollars on wastewater treatment plant upgrades
- Treatment plants have an exceptional compliance history
- Some dischargers voluntarily monitored streams
- Members spent >2 million on water quality related practices
- The Association has made over 76.7 years of voluntary efforts
- 29-years of data and studies have supported good science

Management Practices Contribute to Measureable Water Quality Improvements Bear Creek Reservoir over Last 25-years

- Reduced Chlorophyll on average by 8 ug/l
- Reduced Nitrate-nitrogen on average by 200 ug/l
- Reduced Total Phosphorus on average 125 ug/l
- Reduced Total Suspended Sediments on average 3,000 ug/l
- Improved Dissolved Oxygen, meets standards
- Reduced peak phytoplankton densities by 93%
- Removed >800 tons of Nitrate-Nitrogen
- Removed >400 tons of Total Phosphorus
- Removed >350,000 tons of Total Suspended Sediments

Management Practices Improve Fishery

- 2.6 million measurements and over 99% temperature compliance
- Reduced watershed nutrient load
- Extensive County stormwater improvements
- Increase of total trout biomass by 17 times since 1988
- In last decade, Brown Trout biomass increased 300%
- Bigger fish—Brown trout over 24 “; Greenback Cut-throat > 21”;
- Rainbow Trout > 21”, Small mouth bass >23”
- Fishery pressure in watershed over last decade has tripled
- Estimated 65,000 fishing persons per year visit watershed



Better county and other local regulations = Better Water Quality

- Use of best management practices
- Keeping water onsite and stormwater management
- Manure management
- Improvements to onsite wastewater treatment (septic) regulations
- Groundwater studies
- Community Plan Development recognize importance of water quality

Over 22 special programs encouraged by or involvement in by BCWA