

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 Water & Sanitation District
 Geneva Glen
 Jefferson County School District
 Kittedge Sanitation & Water District
 The Fort Restaurant
 West Jefferson County Metropolitan District
 Evergreen Trout Unlimited
 U.S. Army Corps of Engineers

BCWA PINNACLE



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New Watershed Study - CREAT

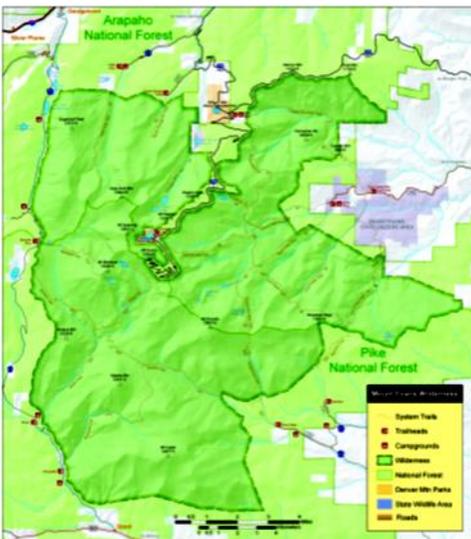
In the past decade, the Bear Creek Watershed has experienced both extreme drought and flood events. The patterns are not predictable. There are now many more water temperature concerns and listed problems in the watershed streams. This includes stream segments high in the watershed near the boundary with the Mt. Evans Wilderness. The BCWA temperature data sets show a trend of more days with elevated daily maximum tempera-

tures and some weekly average temperatures exceeding stream standards. The long-term runoff pattern clearly shows a trend toward less water with the spring melt-off peak almost 3-weeks earlier than historic records.

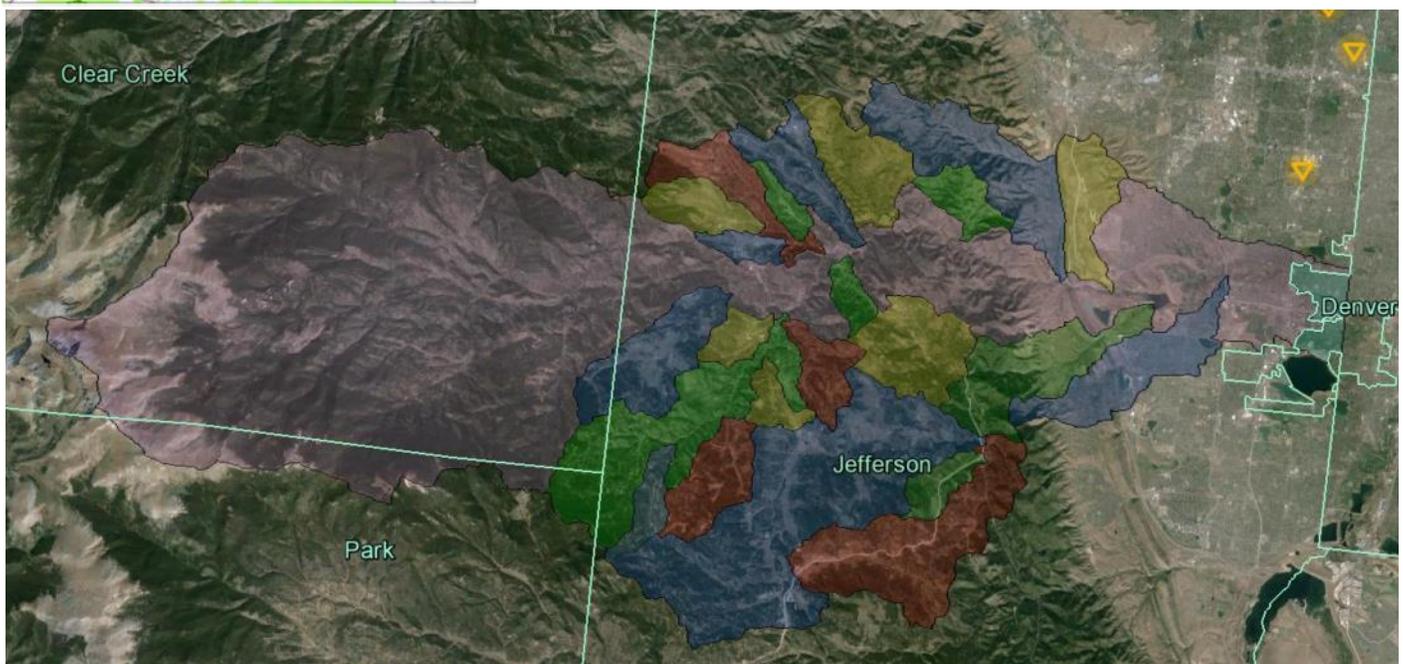
The Climate Resilience Evaluation and Awareness Tool is a risk assessment and planning application for water, wastewater and stormwater utilities. CREAT helps water sector utilities understand and adapt to climate change. This tool will

help the BCWA find out which future extreme weather events may pose significant challenges to our utilities and allow us to build scenarios to identify potential impacts and find solutions.

The BCWA is working with EPA to develop a version of the CREAT model specific for our watershed. Preliminary EPA climate model results for the Front Range show within 20-years there will be many more hotter days, annually drier conditions, less snow pack, and a greater chance of extreme weather events.



The Bear Creek Watershed is located in Clear Creek, Jefferson and Park Counties. A major portion of the watershed within Clear Creek County includes the Mt. Evans Wilderness (Insert left, BCWA Map 31). The BCWA uses Google Earth to map drainage basins, monitoring sites, treatment facilities, and watershed features.





Greenback Cut-Throat Trout, Summit Lake

www.bearcreekwatershed.org

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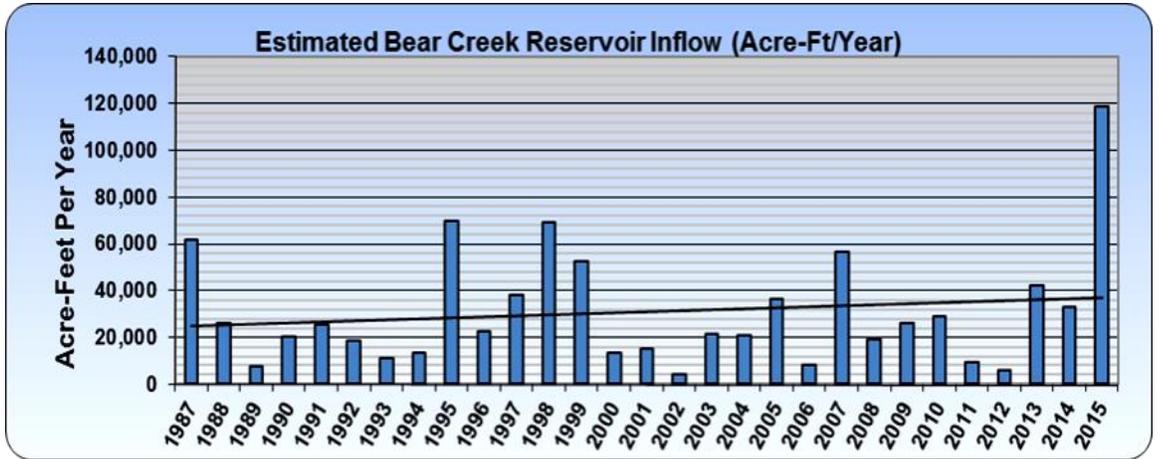
BCWA Fact Sheet 54 is an update to the *BCWA Fact Sheet 21 303 (d) List of Pollutants of Concern*. In December 2015, The Colorado Water Quality Control Commission adopted a revised 303(d) list of priority pollutants causing impairment or those needing further monitoring and evaluation. The Colorado 303(d) List identifies those water bodies, where there are exceedances of water quality standards or non-attainment of uses.

Extreme Stream Flow Year

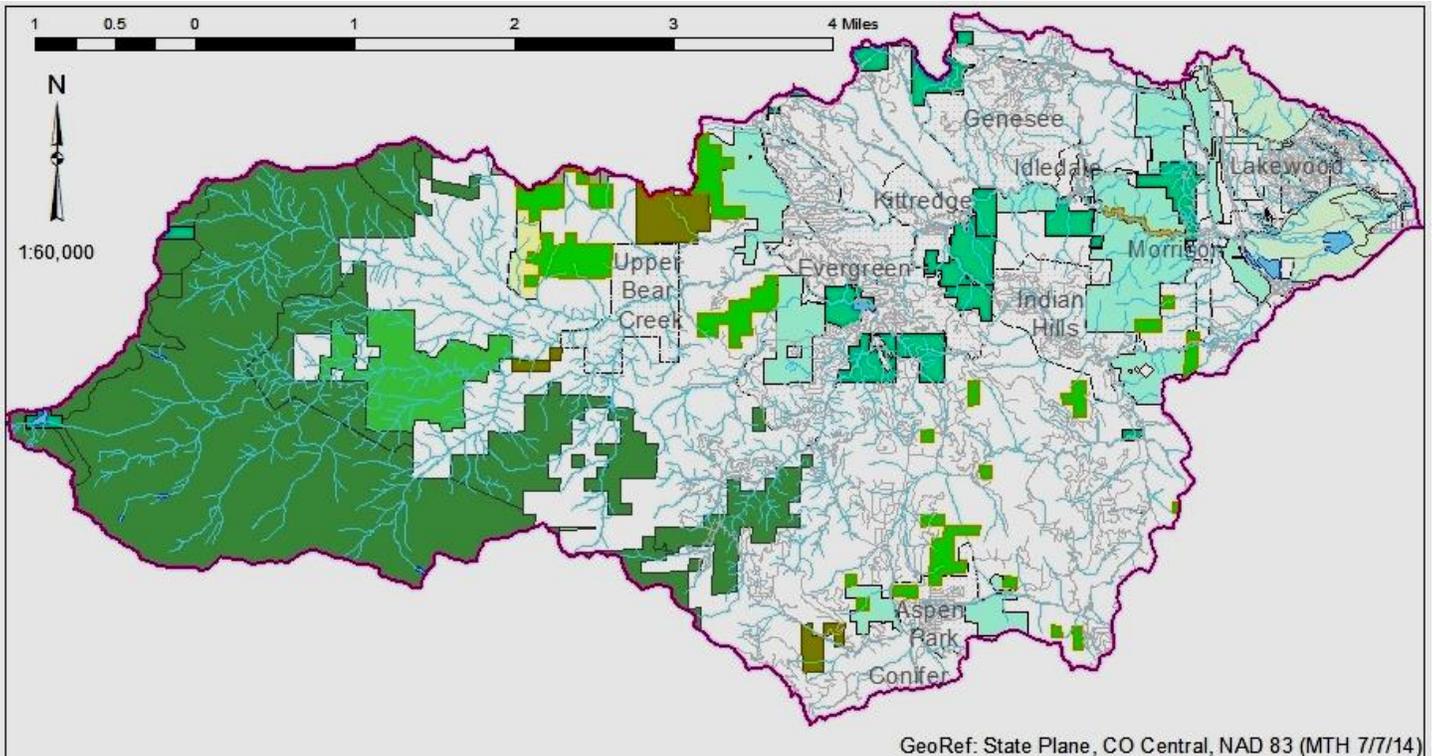
The average inflow into Bear Creek Reservoir from both Turkey Creek & Bear Creek (1987-2014) was 27,100 acre-feet per year.

In 2015, 118,925 acre-feet flowed through the reservoir.

Mean annual flow in the South Platte River at Waterton (1926-2015) is 119,450 acre-feet.



A portion of the Bear Creek Watershed is public lands, parks, and open space. This mostly mountainous watershed includes a large area of Arapahoe National Forest. Urbanization tends to be located in the middle and lower portions of the watershed along valley areas or stream corridors. Potential or identifiable pollutant sources (either unregulated point or non-point) are associated with public lands, parks and open space. The highest priority zone for monitoring and observations by BCWA is the land area in an estimated 200-foot buffer either side of any stream, lake, reservoir, wetland, or otherwise designated *waters of the state*. These buffer areas introduce pollutant loads to the waterways via surface runoff sheet flow or groundwater.



Bear Creek Watershed: Public Lands, Parks, and Open Space

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|---------------------------|-------------------------------|-----------------------------|------------------------------|
| BCWA Control Boundary | City of Lakewood | Colorado State Land Board | Jefferson County Schools |
| Denver Conservation Tract | Clear Creek County Open Space | Denver Water Board | US Bureau of Land Management |
| Denver Mountain Park | Colorado Parks & Wildlife | Jefferson County Open Space | USDA Forest Service |

GeoRef: State Plane, CO Central, NAD 83 (MTH 7/7/14)