

# Bear Creek Watershed Association

**Approved:** August 14, 2013, Revised September 13, 2017, Revised November 14, 2018



## BCWA Policy 13 Regulatory and Working Watershed Boundary Maps

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### Bear Creek Control Regulation Defined Boundary

The Bear Creek Watershed is a geographic area identified in the Bear Creek Watershed State Control Regulation (Regulation #74, 5 CCR 1002-74) (Control Regulation) requiring special water quality management. The watershed includes all tributary water flows that discharge into Bear Creek Reservoir. The watershed extends from the Mount Evans Wilderness on the western end (Clear Creek County) to the Town of Morrison on the eastern end (Jefferson County). A small portion of the upper watershed on the southern boundary extends into Park County.

The Control Regulation defines the watershed as:

*"Bear Creek Watershed" includes Bear Creek and all tributaries, Turkey Creek and all tributaries, and Bear Creek Reservoir in Jefferson County. The Bear Creek Watershed extends into Clear Creek and Park Counties, Colorado. The watershed area is delineated in Figure 1 attached to this regulation.*

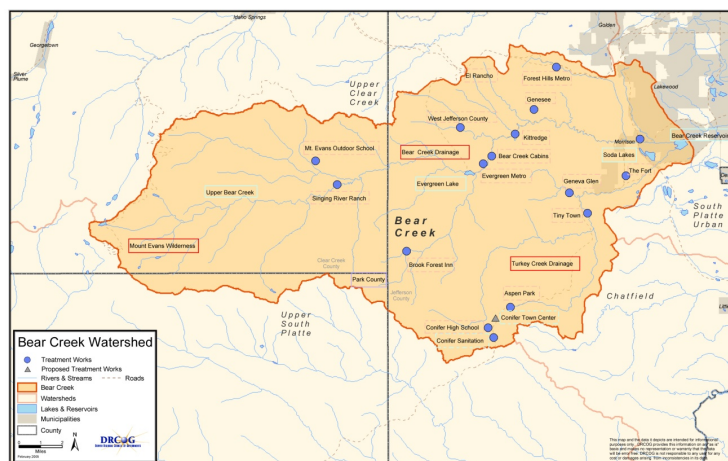


Figure 1 Control Regulation Informational Map

The version of the map in the control regulation was developed by the Denver Regional Council of Governments as an illustrative map for the adopted regulation on July 6, 1992. The map was based on the hydrologic drainage features for the upper watershed from hard copy maps. The lower extent of the watershed was loosely associated with the USGS HUC boundary below the Bear Creek Reservoir. The lower discharge trace was included in the original boundary map.

The regulatory watershed boundary map as identified in the Control Regulation #74 was shown for informational purposes:

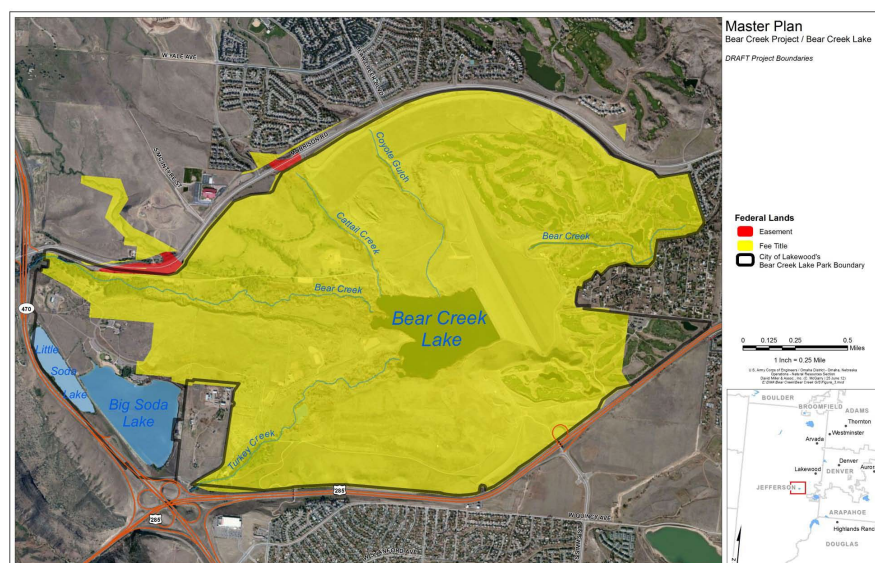
*This map and the data it depicts are intended for informational purposes only. DRCOG provides this information on an "as is" basis and makes no representation or warranty that the data will be error free. DRCOG is not responsible to any user for any cost or damages arising from inconsistencies in its data.*

### **DRCOG Clean Water Plan Boundary Updates**

After the original DRCOG mapping, several lower boundary features were determined to be best served if they were located within the Bear Creek Watershed boundary as define in the DRCOG Clean Water Plan. The revised mapping recognized the Fox Hollow Golf course as being within the boundary of Bear Creek so that it could be evaluated for water quality affects through the Association water quality monitoring program. The Association in discussions with the U.S. Army Corps of Engineers determined that the Bear Creek Master Plan boundary should be included within the watershed boundary, including the region hydrologically connected to the dam structure and project.

The City of Lakewood as a member requested the entire Bear Creek Lake Park be included within the boundary. Improved digital GIS mapping information was developed by DRCOG and used to better define the entire boundary conditions for the watershed.

The U.S. Army Corps of Engineers, Omaha District, master plan for the Bear Creek Dam and Lake Project (Design Memorandum No. PB-10) defines the federal project and Bear Creek Lake Park boundaries, which includes the golf course and hydrologic extent of the dam project. This boundary is used by the Bear Creek Watershed Association to define the lower boundary of the Bear Creek Watershed below Bear Creek Reservoir.



*Figure 2 Corps Defined Extent of the Bear Creek Dam Project*

## 2005 Water Quality Control Commission Rulemaking Hearing

The DRCOG developed an updated working version of the watershed map with a slightly revised lower boundary with corrections (inclusion of the golf course and matching the Bear Creek Lake Park boundary). This map boundary version was developed for a rulemaking regulatory change to Control Regulation #74 on April 12, 2005, but this map change was not included in the rulemaking process due to state noticing issues. The Association had an understanding with the WQCD staff that a revised map would be included at the next update to the control regulation.

Since the control regulation has not been updated, the original informational map remains unchanged in the Control Regulation #74 and continues to define the regulatory Bear Creek Watershed Boundary.

## BCWA Working Boundary

The DRCOG rescinded their planning agency status and that role reverted to the State of Colorado (see *BCWA Policy 28 BCWA Watershed Plan*). The management agency designation was retained by the WQCD and WQCC for the BCWA. Since the DRCOG Clean Water Plan was not updated before DRCOG was de-designated a planning agency, the more detailed watershed maps being used at that time by the BCWA were not kept as part of the planning agency documents forwarded to the state.

The BCWA reverted to a working boundary map to define of the watershed for water quality management purposes consistent with the BCWA watershed plan and management program. The BCWA working boundary recognizes the entire Bear Creek Lake Park as being within the Bear Creek Watershed. See the trail map below.

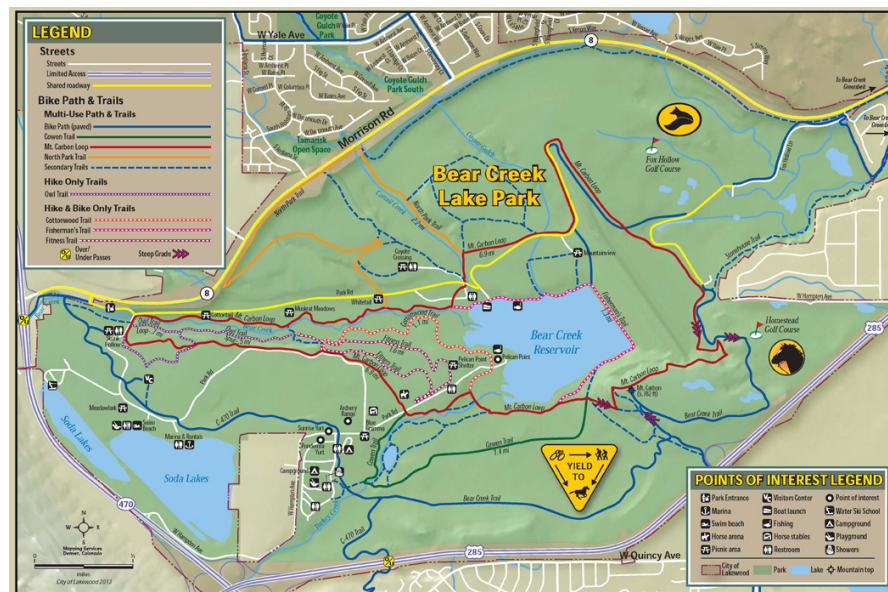


Figure 3 City of Lakewood Bear Creek Park

## 2011 Working Boundary Re-Mapped

In 2011, the BCWA contracted to get a new version of a working boundary watershed map (2011). This updated map includes all corrections and agreements made by the Association to define working boundary conditions. The 2011 working boundary map is used in the annual report provided to the Water Quality Control Commission. This working map identifies the



areas managed for water quality purposes by the BCWA. The working boundary map is not intended as a regulatory informational map.

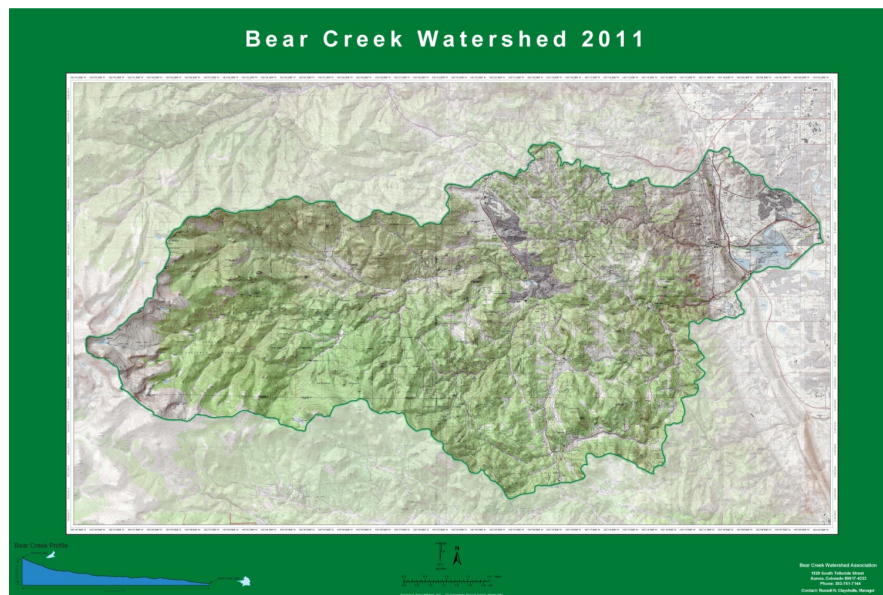


Figure 4 BCWA 2011 Working Boundary Map

### 2017 Monitoring Zone Addition to Working Boundary

In 2017, the BCWA adjusted the working boundary map to include an area below Bear Creek Reservoir extending on the mainstem of Bear Creek to Wadsworth. This working watershed boundary adjustment reflects new Lakewood and Jefferson County areas established only as a special BCWA “*monitoring zone region*”. A new BCWA site 90 was established upstream of Wadsworth and is part of the routine monitoring program. A state and local concern about potential E. coli contamination problems within the *monitoring zone region* prompted this new monitoring effort and working boundary adjustment. The BCWA Fact Sheet 51 Reducing Risk of E. coli Contamination of Streams defines how this *monitoring zone region* is being used for water quality management purposes by the BCWA.

This boundary adjustment is for BCWA water quality management purposes and doesn’t alter the regulatory informational map shown in Bear Creek Control Regulation #74.

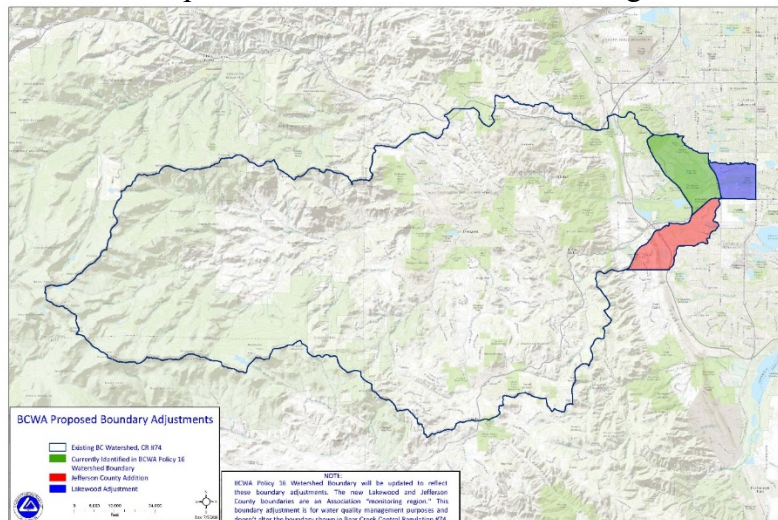


Figure 5 2017 BCWA Working Boundary Map

## **Policy Positions**

- The map contained in the Bear Creek Control Regulation #74 is a regulatory informational map that generally defines watershed boundaries (Figure 1).
- The BCWA will not recommend to the WQCD or the WQCC any adjustment of the regulatory informational boundary map as contained in Control Regulation #74 through a rulemaking process.
- The regulatory informational map is used by the BCWA to define land areas used in the cost share program and as currently defined in *MSD20 Cost Share Structure*.
- The BCWA working watershed boundary map (Figure 5) is used for water quality management and monitoring purposes.
- The BCWA working boundary map includes all hydrologic drainages from the Bear Creek and Turkey systems from the headwaters to a boundary below the Bear Creek Reservoir at Wadsworth on the mainstem of Bear Creek. This working boundary includes the Fox Hollow Golf Course, Homestead Golf Course, Bear Creek Lake Park boundary and the hydrologically connected federal project boundaries as defined in the U.S. Army Corps of Engineers, Omaha District, master plan (as periodically updated), and the drainage area extending to Wadsworth. The lower watershed includes portions of developments on Green Mountain, Weaver Gulch and the Coyote Gulch drainage from the headwaters into Bear Creek Reservoir.
- The BCWA working watershed boundary map is reflected in the BCWA *Policy 28 BCWA Watershed Plan*, *BCWA Policy 14 Data Collection in BCW*. These policies refer to the working boundary map. Additionally, *BCWA Policy 29 BCWA Integration with Other Planning Efforts* uses the working boundary in established working relationships with the Barr-Milton watershed management program and Lower Bear Creek Sub-watershed management program.
- The working watershed boundary map as adopted by the BCWA can be updated as necessary for water quality management purposes consistent with *BCWA Policy 12 Vision Mission & Targets*.