Bear Creek Watershed

Fact Sheet 65 Top Existing and Emerging Issues
Adopted August 2019

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

Membership
Clear Creek County
Jefferson County
City of Lakewood
Town of Morrison
Aspen Park Metropolitan District
Conifer Sanitation Association
Denver Water Department
Evergreen Metropolitan District
Forrest Hills Metropolitan District
Genesee Sanitation & Water District
Geneva Glen
Jefferson County School District
Kittredge Water & Sanitation District
West Jefferson County Metro District

The Colorado Control Regulation #74 identifies five mandatory Association requirements to be documented in an annual report to the Colorado Water Quality Control Commission.

- Summarize annual status and trends of water quality in the watershed and Bear Creek Reservoir.
- Provide information on the wastewater treatment facilities loading and compliance with permit limitations.
- Characterize nonpoint source loading and appropriate best management practices.
- Demonstrate through in-stream and reservoir data analyses the status of water quality goals and standards for the watershed.
- Characterize any active phosphorus trading programs.

The *Association* shapes critical watershed management decisions that directly affect and benefit member organizations. The *Association* is the water quality agency for the Bear Creek Watershed, which is located in Jefferson County and Clear Creek County with some extension into Park County. The Association maintains an administrative, water quality monitoring and implementation programs consistent with multiple State of Colorado water quality regulations.

Ongoing and Emerging Issues

1. The Bear Creek Reservoir Control Regulation #74 will undergo a rulemaking hearing by 2021. Based on a new water quality model (WQCD), changes will include watershed and reservoir nutrient load allocations, wastewater wasteload allocations, monitoring expectations, nonpoint source load reduction expectations, onsite system loads, stormwater loads and implementation practices. The Bear Creek Watershed will have a new phosphorus and nitrogen Total Maximum Daily Load (TMDL) and wasteload allocations by 2020, with anticipated phased implementation.
2. Stream and Lake/Reservoir Nutrient Management- By 2022 the Water Quality Control Commission intends to adopt new phosphorus and nitrogen numbers for *streams and lakes,* which will include statewide chlorophyll standards. Currently instream nutrient standards only apply to waters above all wastewater treatment facilities. The stream segments in the top of the watershed (Mount Evans Wilderness and Forest Service lands) are not meeting these standards. There are multiple Bear Creek and Turkey Creek stream segments that aren't meeting the proposed nutrient standards. Total nitrogen management will be a significant management element over the next 10-years. Bear Creek Reservoir is not meeting current phosphorus, nitrogen or chlorophyll standards. The load allocation of nutrients will need to be reduced to meet standard compliance. Evergreen Lake as a direct use water supply is not meeting the chlorophyll standards. Upper watershed nutrient reductions are required over the next 5-years.
3. Wastewater Treatment Facility Wasteload Allocations (WLAs)– The existing WLAs of 5,255 pounds total phosphorus will be greatly reduced (expectation 1,000 pounds). New discharge permit limits (pounds and concentrations) are expected after 2020, but within 5-years. Permit could get new total nitrogen limits.
4. Nonpoint Nutrient Management– Monitoring and data assessment has been the focus of nonpoint source nutrient tracking. A more aggressive management program with implementation projects and management controls is needed within 10-years in order for the BCR to comply with standards.
5. Major Events Likely to Alter Stream and Lake/Reservoir Quality– This is a broad category of 10-year management and implementation programs that target stream biology and fishery health; harmful algal blooms (HABs); Climate Shifts; stormwater events and loadings, onsite wastewater systems, reservoir reallocations, reservoir modifications, wildfire, urbanization/ big developments, and erosion controls.