



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
 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
 West Jefferson County Metropolitan District
 Evergreen Trout Unlimited
 U.S. Army Corps of Engineers

Burned Area Emergency Response

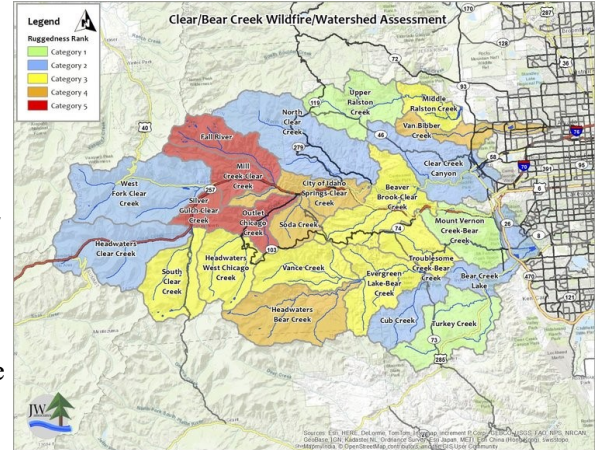
Three phases of recovery following wildfires on federal lands:

1. Fire Suppression Repair of hand and dozer fire lines, roads, trails, staging areas, safety zones, and drop points caused by fire suppression efforts.
2. Emergency Stabilization—Burned Area Emergency Response takes immediate actions to implement emergency stabilization measures before the first major storms.
3. Long-Term Recovery and Restoration may include restoring burned habitat, reforestation, other planting or seeding, monitoring fire effects, replacing burned fences, interpreting cultural sites, treating noxious weed infestations, and installing interpretive

BEAR CREEK RESERVOIR

Fact Sheet 64 BCWA Post Fire Response July 2019

The Bear Creek Watershed has large areas of federal forested lands scattered throughout the watershed. The BCWA was involved in a wildfire hazard study by JW Associates Inc., called *Clear/Bear Creek Wildfire/Watershed Assessment Prioritization of wildfire/watershed-based hazards to water supplies (March 2013)*. There is high potential for a major wildfire in critical drainages. Post wildfire storms in these drainages could result in significant water quality impairment to downstream waters.



The federal forest service post wildfire Burned Area Emergency Response (BAER) program is designed to identify and manage potential risks to resources on National Forest System lands and reduce these threats through appropriate emergency measures to protect human life and safety, property, and critical natural or cultural resources. BAER is an emergency program for stabilization work that involves time-critical activities to be completed before the first damaging storm event to meet program objectives. The program can install temporary water or erosion control devices or management practices. The program doesn't monitor the water quality impacts from a wildfire.

The BCWA water quality monitoring program for post wildfire may include:

1. During a wildfire, determine if the fire is burning or likely to burn intensely in a designated high hazard area.
2. Contact the BAER team and inform them of BCWA interest in receiving the BAER assessment reports. Be an advocate with BAER team for watershed protection measures to protect water quality.
3. When safe, identify critical limited number of downstream monitoring sites for water quality sampling and short-term monitoring (less than 6 months).
4. Every attempt should be made to begin sampling with the first storm event following a fire. This will allow first flush effects to be captured, since the first pulse of runoff following a fire usually contains the highest concentrations of contaminants.
5. Field measures—Temperature, specific conductance, pH, dissolved oxygen, turbidity and clarity, sediment load, and flow. Make observations on habitat changes and pebble counts, if appropriate. Also monitor for fish or macroinvertebrate kills.
6. Samples for laboratory analyses—Total Phosphorus, Total Nitrogen, Total Suspended Sediments, Total Organic Carbon, and select total metals Al, Fe, Cd, Cu, Pb, Mn, Ni, As, Hg, and Zn.
7. If burn area and monitoring location includes a BCWA macroinvertebrate or fishing monitoring station, then collect a macroinvertebrate sample as an indicator of toxicity effects.