

Bear Creek Watershed Association

Draft: July 10, 2019

BCWA Policy 37 BCWA Post Fire Response



Statement of Basis and Purpose

The Bear Creek Watershed Association (BCWA) is established in the Bear Creek Watershed State Control Regulation (Regulation #74, 5 CCR 1002-74) (Control Regulation). The Control Regulation assigns water quality monitoring to the Association. The Association monitors stream and reservoir quality for signs of standard exceedances (5 CCR 1002-38).

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, volume 1 and volume 2 (March 2013). There is high potential for a major wildfire in critical drainages within the watershed. Post wildfire storms in these critical drainages could cause significant water quality impairment to downstream waters. The federal forest service post wildfire Burned Area Emergency Response (BAER) program doesn't monitor the water quality impacts from a wildfire.

Policy Position

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 within the Bear Creek Watershed.
2. Contact the BAER team and inform them of BCWA interest in receiving the BAER assessment reports. Be an advocate with BAER team for post wildfire 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 measurements—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.