

Bear Creek Watershed Association

Approved: May 7, 2014

Policy 27- Source Water Protection Planning



Statement of Basis and Purpose

A Clear Creek/Bear Creek Phase 1 Watershed Assessment (Clear/Bear Creek Watershed Assessment - Phase 1 Final Report JW Associates, May 2010) was completed as the first phase of a process to identify and prioritize sixth-level watersheds based upon their hazards of generating flooding, debris flows and increased sediment yields following wildfires that could have impacts on water supplies. The assessment expanded upon current wildfire hazard reduction efforts by including water supply watersheds as a community value. The watershed assessment follows the ranking procedure for each of the four integral components as prescribed by the Front Range Watershed Protection Data Refinement Work Group (2009).

The Phase 1 - Clear/Bear Creek Watershed Assessment provided the analysis for the first three components specified in the Front Range Watershed Protection Data Refinement Work Group (2009) procedure. It provided the analysis for: wildfire hazard, flooding or debris flow hazard, and soil erodibility. The Phase 1 assessment then combined those three components into a composite hazard ranking. The report discussed the technical approach for each component and the process used to assemble the watershed ranking. The report showed surface water intakes, diversions, conveyance structures, storage reservoirs and streams in the Bear Creek watershed were highly susceptible to the effects of wildfires.

A Phase 2 Clear/Bear Creek Wildfire/Watershed Assessment Report (Volume 2) was completed March 1 2013 (JW Associates, 2013). This report expanded on the watershed assessment process by including stakeholders from both the Clear Creek and Bear Creek Watersheds. The study gathered the key water supply stakeholders to communicate the suggested process, listen to any suggested changes, and build collaborative support for the assessment process. Four stakeholder meetings included a diverse group of stakeholders. The report identified and prioritized areas of concern within Bear Creek Watershed. The report shows portions of the Bear Creek Watershed are very susceptible to major wildfires, which could significantly impact water supply infrastructure and sources. The report recommended source water protection plans are developed for the high priority areas of concern.

The area above Evergreen Lake, which is a direct use water supply, was identified as a high priority area of concern, with an overall category 4 composite hazard (Figure 1). The area was also ranked category 5 (highest) for wildfire hazard. Consequently, the Evergreen Metropolitan District (EMD) worked collaboratively with area stakeholders to develop a Source Water Protection Plan that encompassed the Phase 2 area of concern. The effort consisted of public planning meetings and individual meetings with water operators, government, and agency representatives during 2013 and extending into 2014. Colorado Rural Water Association was instrumental in this effort by providing technical assistance.

*Bear Creek Watershed Association
32-years of Watershed Management*

EMD obtains its drinking water from Evergreen Reservoir. The Protection Area for Evergreen Reservoir is a 1,000 foot wide band from both sides of Bear Creek and its tributaries from Evergreen Lake to the Continental Divide (Zone 1) and the rest of the upper watershed (Zone 2).

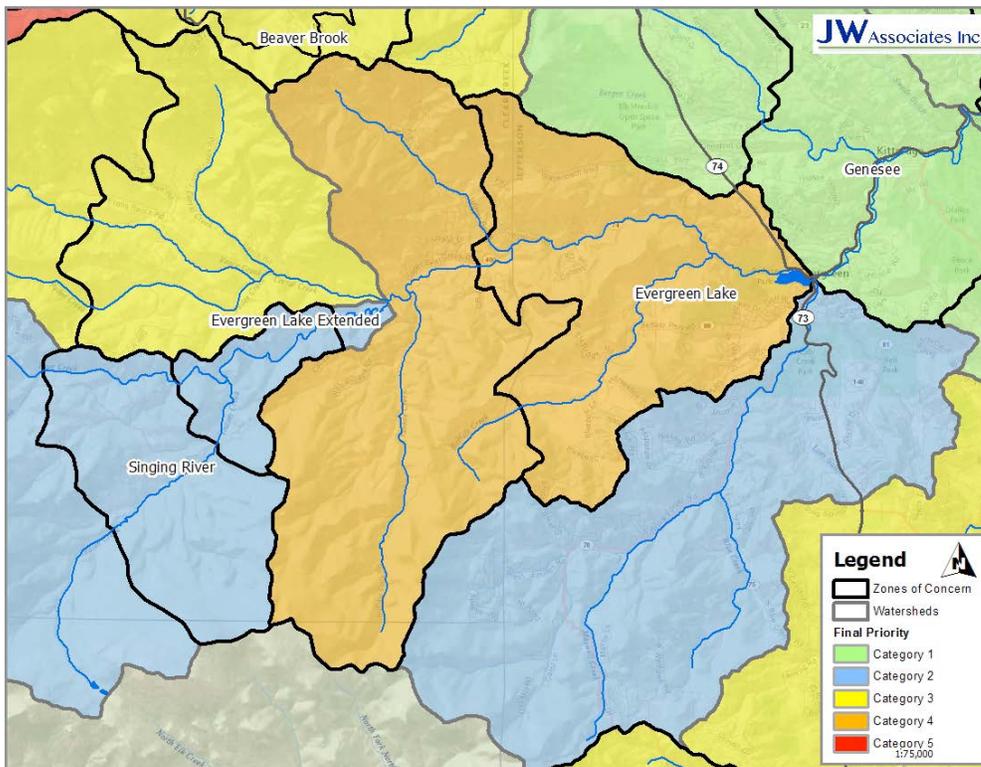


Figure 1 Evergreen Watershed Zone of Concern and Priority

An EMD Steering Committee conducted an inventory of potential contaminant sources and identified other issues of concern within the Protection Area. The highest priority potential contaminant issue of concern is stormwater runoff causing erosion. Other noted water quality threats include wildfire, septic systems and public bathroom vaults.

The Steering Committee developed several best management practices that may help reduce the risks from the potential contaminant sources and other issues of concern. The best management practices are centered on the themes of building partnerships with community members, businesses, and local decision makers; raising awareness of the value of protecting community drinking water supplies; and empowering local communities to become stewards of their drinking water supplies by taking actions to protect their water sources:

- Conduct an engineering study to design the removal of sediment from catchment basins,
- Create accessibility for removal of the captured sediment on an annual basis to keep the catchment basins functional.

This Source Water Protection Plan is a living document that is meant to be updated to address any changes that will inevitably come. The Steering Committee will review this Plan at a frequency of once every two years or if circumstances change resulting in the development of new water sources and source water protection areas, or if new risks are identified.

Policy Positions

1. The BCWA supports the designated areas of concern identified in the Phase 2 Bear Creek Wildfire/Watershed Assessment Report and acknowledges that there is a potentially high risk from wildfires that could significantly impact water supply infrastructure and source waters within portions of the watershed (Figure 2).
2. The BCWA recommends the development of source water protection plans for all water suppliers and particularly for those water supplies located within higher priority areas of concern in the watershed.
3. The BCWA endorses and provides ongoing support for the EMD Source Water Protection Plan.

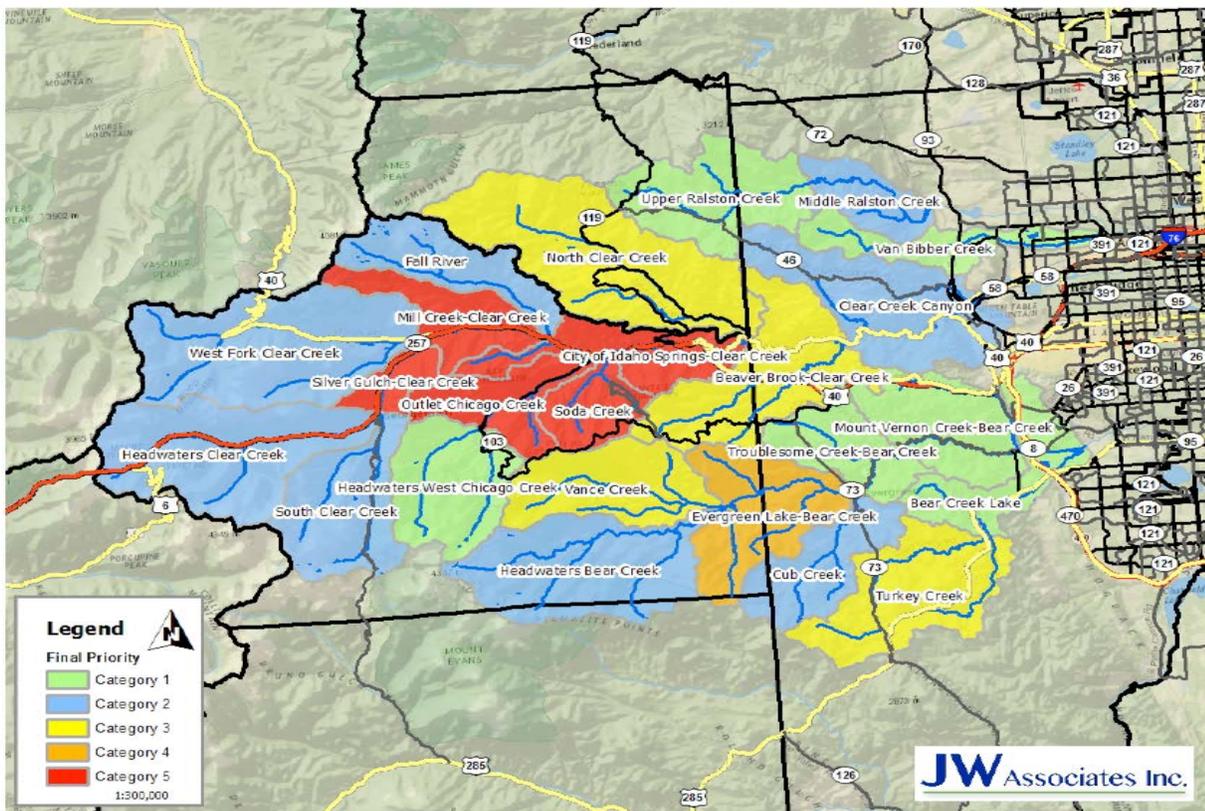


Figure 2 Final Priority Areas of Concern