



Butte-Silver Bow Health Department – 2012 Environmental Health Studies Fact Sheet No. 3

Butte's Drinking Water is Safe !

Is our drinking water safe? The present and future of our community depends on the availability of clean water. Reliable and adequate sources of potable water are critical to public health and to the ability of Butte to sustain itself over time.



In 1991, the City and County of Butte-Silver Bow (BSB) acquired a water system plagued by crumbling infrastructure and poor water quality, the result of decades of deferred maintenance and a failure to invest in capital improvements. BSB made immediate improvements to get the system back on line by 1994, providing safe drinking water for the community's residents. Today, while tens of millions of dollars of improvements are needed to provide a safe and reliable source of water into the future, **our drinking water remains safe.**



Figure 1 Big Hole River

Where does our water come from?

BSB is responsible for providing safe drinking water to its residents. Our water comes from three watersheds, the Big Hole River (Figure 1), the Moulton Reservoir and the Basin Creek Reservoirs. The Big Hole water supply is filtered and disinfected at the Big Hole Water Treatment Plant located at the Feeley Interchange south of Butte on I-15. The Moulton Watershed supply is filtered and disinfected at the Moulton Water Treatment Plant above Walkerville and the Basin Creek Watershed supply is disinfected/treated at the point of the source at the lower Basin Creek Reservoir south of Butte.

Water Sampling – The BSB Water Utilities Division samples drinking water supplies at multiple sites throughout the community on a routine basis. In addition, BSB is required to sample Basin Creek, which is presently an unfiltered water source. Division personnel sample for fecal coliform bacteria five times per week. Fecal coliform bacteria are commonly found in the intestines of animals and humans. Fecal coliform present in water comes from human and animal waste. During rainfalls, snow melts, or other types of precipitation, coliforms may be washed into creeks, rivers, streams, lakes, or groundwater due to animals in the watershed. **Sample results have never exceeded the allowable levels for fecal coliform in any of Butte's water supplies.**

The Federal Safe Drinking Water Act was established in 1974 to protect the quality of drinking water in the United States. The Act authorizes the United States Environmental Protection Agency (US EPA) to establish standards to protect public water supplies and requires all owners or operators of public water systems to comply with health-related standards. In Montana, the Department of Environmental Quality (MDEQ) has been approved to implement these rules for EPA. As an owner and operator of a public water system, BSB takes every possible action to comply with the Safe Drinking Water Act and continuously and systematically samples, analyzes and evaluates the drinking water supplies throughout all of the service area in accordance with the Standards set by EPA and enforced by MDEQ.

BSB routinely samples for Secondary Disinfection By-Products (DBPs). DBPs result from the interaction between the chlorine that is used to “disinfect” water and the dissolved organic carbon that is present in the water. The Water Utilities Division samples 12 sites throughout the community for DBPs on a quarterly basis in accordance with EPA’s Stage 1 Disinfectants and DBP Rule. Although Basin Creek water is not presently in compliance with the DBP Rule, plans are being made to address this issue.

BSB Water Utilities completed monthly sampling for the period of 2008 through 2010 on the Basin Creek Watershed supply in accordance with EPA’s Long Term 2 Enhanced Surface Water Treatment Rule (LT2 rule) to evaluate if there was any potential of disease-causing microorganisms (*Cryptosporidium* and *Giardia lamblia*) present in the Basin Creek Watershed supply. The purpose of the LT2 rule is to identify cryptosporidium in the source water for systems that use surface water as their main source of drinking water. *Cryptosporidium* is a significant concern in drinking water sources because it may be present in surface waters used as drinking water with inadequate or no treatment and can cause gastrointestinal illness if consumed. The Basin Creek Watershed supply tested low in numbers of *Cryptosporidium* cysts and was classified in Bin 1. Bin 1 is considered the “safest” or having the least potential for *Cryptosporidium* contamination. Following this two year sampling and analysis program, BSB is not required to further monitor for *Cryptosporidium* until the second round of sampling in 2017.

Through its management of the Basin Creek Watershed, disinfection of the source water with chlorine and continued sampling of the water supplies, **BSB provides safe drinking water to the people of our community.**

Contact Information

For further information, please contact the Butte Silver-Bow Water Division at (406) 723-9429 or the Butte-Silver Bow City/County Health Department at 406-497-5020.