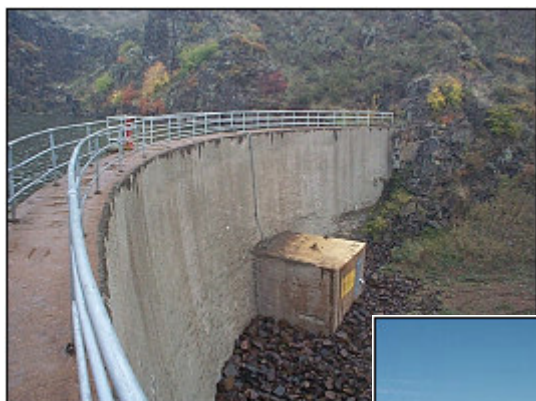


WYOMING WATER ASSESSMENT AND PROTECTION PROGRAM (SWAP)



SOURCE WATER ASSESSMENT PROGRAM EXECUTIVE SUMMARY

Source Water Assessment Prepared For:
Wamsutter

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SOURCE WATER ASSESSMENT SUMMARY FOR Wamsutter

PWS Source Water Assessment Summary

Wamsutter's water utility is classified as a community groundwater supply, and is located along I-80 about 41 miles west of Rawlins. The system serves a year round population of 310 through 254 service connections. Source water is currently blended from four wells that obtain groundwater from the Wasatch/Battle Springs Formation. A 350,000-gallon elevated storage tank and gas chlorine injection equipment complete the facility's water treatment system.

In general, the Town of Wamsutter water sources rated low for land use and point source susceptibility. The Town of Wamsutter should also be aware that potential transportation corridor contaminants associated with the railroad and pipelines lie within and adjacent to the source water areas for the Town's water supply wells.

Delineation Methods

Weston Engineering previously completed a source water delineation of the Town's four wells as part of a Wyoming Water Development Level II study. Lidstone reviewed the delineation that was previously completed by a Professional Geologist licensed in the State of Wyoming and incorporated the delineated two and five year time of travel zones directly into this source water assessment without revision.

Groundwater Sources

The Town of Wamsutter obtains its community groundwater supply from four wells that are completed in the Wasatch/Battle Springs Formation to depths ranging from 1,365 to 2,000 feet deep. This formation is composed of fine- to coarse-grained, highly permeable, arkosic sandstone and conglomerate that where saturated are capable of yielding at least 150 gpm to wells based on Wyoming Water Research Institute reports. Recharge to the formation occurs through the direct infiltration of precipitation and possibly from downward seepage from overlying permeable sediments. Groundwater flows to these wells through porous media flow. Additional information on these wells is included on the attached Well Information Sheets.

As shown on the enclosed source water area map, the contaminant inventory zones for Wamsutter's wells generally reflect hydrogeologic conditions in the Battle Springs Aquifer within the immediate vicinity of each wellhead. Generally, Zones 2 and 3 for these wells are essentially centered around the well. Individual differences in the size and shape of the source water areas are directly related to differences in pumping rates between the wells, aquifer transmissivity, and groundwater flow directions.

Integrity Summary

Wamsutter's water utility is classified as a community groundwater supply. Wamsutter #5, #6, #7, and #8 were constructed between 1983 and 1993 when less stringent construction standards were required by the State of Wyoming. As shown on the Integrity Summary Table, Wamsutter #5, #6, and #7 scored a 2, primarily due to its well completion date. Wamsutter #8 scored a 3, primarily due to its completion date and wellhead accessibility.

Water Source Sensitivity Summary

Wamsutter's water utility obtains source water from four wells that are completed in the confined Wasatch/Battle Springs Formation. As shown on the Source Sensitivity Summary Table, the wells, Wamsutter #5, #6, #7, and #8, received sensitive scores of 6.

These wells received an intermediate sensitivity score for two reasons. The first reason is that these wells obtain groundwater from a confined aquifer which is known to be less sensitive to contamination. The second reason is that laboratory analysis of water from the wells within the last five years detected a few contaminants that are listed on EPA's primary and secondary drinking water standards. These include nitrate, fluoride, and sulfate among others. While sulfate concentrations exceeded the EPA's secondary standard, the remaining contaminants were generally detected at concentrations below the EPA's maximum contaminant levels.

Water System Susceptibility Rating

Susceptibility is defined as the potential for a public water supply to draw water contaminated at concentrations that would pose a threat or concern to human health. The Town of Wamsutter's wells scored low for land use and point source susceptibility, but scored high for transportation corridor contaminants. Wamsutter #5 and Wamsutter #6 both received high ratings for transportation corridor contaminants because railroads through their respective Zone 2s. While no point sources were identified within the delineated source water areas for the wells, there are several underground tanks located north and east of the Town's three southern wells. Weston Engineering identified activities associated with the railroad, unidentified buried materials located near Wamsutter #5-#7, and a vacant lot that has been littered with drums and old vehicles near Wamsutter #7 as some of the most serious threats to the water supply for the Town. Susceptibility ratings for each type of potential contaminant source are summarized on the attached susceptibility tables.

A review of your PWS's routine water analysis results revealed that one or more chemicals that are considered contaminants in drinking water were detected at some time within the last five years. Chemical detections have a large impact on your PWS's sensitivity score because it may indicate that there is a pathway for contaminants to reach the water supply. However, it is likely that these chemicals are present only in small amounts and are not a danger to your health. Some of these chemicals may also occur naturally in water.

For more information about which chemicals were detected, please contact the PWS for a copy of the most recent Consumer Confidence Report or water analysis results. Chemical detections at levels that are a concern to human health are reported on the EPA's website:

http://www.epa.gov/enviro/html/sdwis/sdwis_query.html. To see if your PWS has exceeded the federal primary or secondary drinking water standards, just click on the State of Wyoming and then type in the name of your PWS. Consumer Confidence Reports are prepared by the PWS on a yearly basis. The reports should include information about any chemicals found in the water, even those found at very low levels. Please contact Kim Parker at DEQ, 307-777-7781, or WARWS for assistance. You may also contact EPA to find out what contaminants were detected. You may have to fill out a Freedom of Information Act request to obtain the water test results for your PWS. Please call EPA's Safe Drinking Water Hotline at 1-800-426-4791.

**POINT SUSCEPTIBILITY SUMMARY TABLE
FOR Wamsutter
Point Source Susceptibility Summary**

It may appear from the results of this point source susceptibility summary table that your system has too many PSOCs influencing the final ratings. In some cases, a specific PSOC falls within a specific contaminant inventory zone shared by multiple wells or intakes. When this is the case, that PSOC will be scored for each intake. For example, an underground storage tank may appear within a contaminant inventory zone shared by four different wells. This would cause that single storage tank to be entered into the table four times, or once for each well or intake.

Point Source Type	Low	Medium	High
None Identified	N/A	N/A	N/A

- * Illustrates the number of PSOCs in a particular rating class for all water sources
- * N/A - Not Applicable