

WYOMING WATER ASSESSMENT AND PROTECTION PROGRAM (SWAP)



SOURCE WATER ASSESSMENT PROGRAM EXECUTIVE SUMMARY

Source Water Assessment Prepared For:
Boysen SP HQ

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SOURCE WATER ASSESSMENT SUMMARY FOR Boysen SP HQ

PWS Source Water Assessment Summary

The Boysen State Park/Headquarters water system is classified as a non-community surface water supply. The treatment facility is located in the park area, off U.S. Highway 20 at mile marker 113 north of Shoshoni. The facility provides water to 13 year round residents and a daily average of 25 users through 22 service connections. Source water for this system is obtained from Boysen Reservoir.

In general, the Boysen State Park/Headquarters scores medium for land use susceptibility. The headquarters should be aware that several potential line source contaminants lie within the delineation zone.

Delineation Methods

The Boysen SP HQ water system is a non-community surface water system that receives its entire supply from a surface water source. For that reason, Lidstone delineated the source water area using surface water methods.

Surface Water Sources

The Boysen State Park/Headquarters obtains all of its water from an intake in Boysen Reservoir. The diversion structure consists of a single intake pipe that is located about three feet off the bottom of the reservoir, and is protected with a screen. Additional information on this source is included on the enclosed Surface Water Information Sheet.

As shown on the enclosed delineation maps, the source water area includes the drainage basin of Boysen Reservoir. Zone 2 consists of 1,000 foot buffer around Boysen Reservoir and the reservoir itself. Zone 3 includes the remaining watershed upstream from the intake.

Integrity Summary

The Boysen State Park/Headquarters' intake was constructed before 1983, when less stringent construction standards were required by the State of Wyoming. Records also indicated that while the area around the intake is unrestricted, the intake is screened to protect against the infiltration of potential contaminants. As shown on the Integrity Summary Table, the system's intake received an integrity score of 7. This score was primarily due to the fact the intake was completed before 1983, the surface water intake is reportedly not inspected regularly and that the area around the intake is unprotected.

As shown on the Source Sensitivity Summary Table, the Headquarters' intake received a sensitivity score of 10.

The intake received the maximum sensitivity score for two reasons. The first reason is because it obtains water from a surface water source that is vulnerable to contamination. The second reason is that laboratory analysis of water samples from the system within the last five years detected several contaminants that are listed on EPA's primary and secondary drinking water standards. These included nitrate and total coliform. Despite detection, these 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. In general, the Boysen State Park/Headquarters scores medium for land use susceptibility. The presence of a storage tank within Zone 2 resulted in a high point source contaminant susceptibility. Two railroads and three state highway run through Zone 2. The intake was assigned a high susceptibility for the transportation corridor contaminants. 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 Boysen SP HQ
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
Storage Tank	N/A	N/A	1

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