

WYOMING WATER ASSESSMENT AND PROTECTION PROGRAM (SWAP)



SOURCE WATER ASSESSMENT PROGRAM EXECUTIVE SUMMARY

Source Water Assessment Prepared For:
Jamestown Rio Vista W&S Dist

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SOURCE WATER ASSESSMENT SUMMARY FOR Jamestown Rio Vista W&S Dist

PWS Source Water Assessment Summary

The Jamestown-Rio Vista Water and Sewer District is classified as a PWS having a community surface water supply. The facility is located about four miles west of the City of Green River and provides treated water to approximately 525 District residents through 187 service connections year round. Source water for this facility is obtained from the Green River.

The Jamestown-Rio Vista Water and Sewer District scores low for land use in Zone 1 and high in Zone 2 susceptibility because approximately half of the land surrounding the water source is forest. Zone 1 was rated low because no contamination sources were present. The Jamestown-Rio Vista Water and Sewer District should be aware of several potential line source contaminants, including a pipeline, railroad and several highways.

Delineation Methods

The Jamestown Rio Vista Water & Sewer District operates a 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 source areas were delineated using surface topographic techniques. Zone 2 for surface water systems included an area 1,000 feet on either side of the perennial streams that extended upstream of the intake for a distance of 15 miles, or the distance from the intake to the headwaters of the drainage contributing water to that intake. Zone 3 for surface water sources includes the entire stream drainage basin from Zone 2 to the basin headwaters.

Surface Water Sources

The Jamestown Rio Vista Water & Sewer District obtains all of its water from its intake on the Green River. Raw water is obtained through tee-shaped well screens that are located on two 12-inch diameter pipes that are extended 25 feet below the river bottom and are covered by gravel. Vertical turbine pumps purvey water through two 12-inch ductile iron pipes to the treatment plant. Additional information on this source is included on the enclosed Surface Water Information Sheet.

As shown on the enclosed delineation maps, the source water includes the drainage basin of the Green River. Zone 2 extends 15 river miles upstream from the intake and includes a 1,000 foot buffer on both banks of the river and all perennial tributaries. Zone 3 includes the remaining watershed upstream from the intake.

Integrity Summary

The Jamestown-Rio Vista Water and Sewer District obtains its source water from the Green River. The 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 and inspected regularly to protect against the infiltration of potential contaminants. As shown on the Integrity Summary Table, the District's intake received an integrity score of 5. This score primarily reflects the fact that the intake was completed before 1983 and the intake area is unprotected.

Water Source Sensitivity Summary

The Jamestown-Rio Vista Water and Sewer District obtains its surface water from the Green River. As shown on the Source Sensitivity Summary Table, the 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. The second reason is that laboratory analysis of water samples from the system within the last five years detected contaminants that are listed on EPA's primary and secondary drinking water standards. These include: nitrate, fluoride, chloroforms, total trihalomethanes and sulfate among others. Despite detection, these contaminants were 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 Jamestown-Rio Vista Water and Sewer District scores low for land use in Zone 1 and high in Zone 2 susceptibility because approximately half of the land surrounding the water source is forest. Zone 1 was rated low because no contamination sources were present. A railroad, pipeline and several highways 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 Jamestown Rio Vista W&S Dist
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