

**SOURCE WATER ASSESSMENT
EXECUTIVE SUMMARY
FOR
YNP Grant Village**

June 30, 2004

PROJECT: 424-001

ASSESSMENT COMPLETED BY: TRIHYDRO CORPORATION

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SOURCE WATER ASSESSMENT SUMMARY FOR YNP Grant Village

PWS Source Water Assessment Summary

Yellowstone National Park - Grant Village is a non-community, ground-water supply system. The water is supplied from Yellowstone Lake. The water system serves an average of 5,500 people per day through 175 service connections. The system has both storage and a distribution systems. The water source scored medium with respect to the combined integrity and sensitivity ratings. The village scores low with respect to land use susceptibility, and high for point source susceptibility and transportation corridor susceptibility.

Delineation Methods

This water system draws water from surface water. Surface water mapping methods were used to determine contaminant inventory zones 2 and 3.

The surface water source area was delineated using surface topographic techniques. Zone 2 for included an area 1,000 feet around the high water line of Yellowstone Lake. Zone 3 for the intake includes the entire stream drainage basin from Zone 2 to the basin headwaters.

Surface Water Sources

Yellowstone National Park Grant Village draws water from one surface water intake. Additional information on this surface water intake source is included on the attached Surface Water Information Sheet. As shown on the enclosed source water area delineation map, contaminant inventory Zones 2 and 3 were delineated using surface water mapping methods. Zone 2 consists of a 1000 foot buffer zone area around Yellowstone Lake. Zone 3 encompasses the Yellowstone Lake drainage basin.

Integrity Summary

The Yellowstone National Park Grant Village uses surface water from the Yellowstone Lake. The intake was constructed between 1983 and 1993, when more stringent construction standards were required by the State of Wyoming. Records indicate that the area around the intake is restricted, and that the intake is screened to protect against the infiltration of potential contaminants. The system does have a long conveyance structure. As shown on the Integrity Summary Table, the intake received an integrity score of 3 that directly reflects intake construction date and conveyance length.

Water Source Sensitivity Summary

As shown on the Source Sensitivity Summary Table, the surface water intake received a sensitivity score of 10. The intake received the score for two reasons. The first reason is that surface water intakes are more vulnerable to contamination. The second reason is there are

documented chemical detections in the surface water.

Water System Susceptibility Rating

Susceptibility is defined as the potential for a public water supply to draw contaminated water at concentrations that would pose a threat or concern to human health. In general, Yellowstone National Park Grant Village scores low for land use susceptibility. The presence of two underground storage tanks, one waste water discharge, one storage tank, and three miscellaneous point sources (restaurant grease traps and a raw water intake) within Zones 1 and 2 resulted in a high point source contaminant susceptibility for the surface water intake. The intake was assigned a high susceptibility for Zone 2 state highway types of 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 YNP Grant Village
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
Wastewater Discharge	N/A	N/A	1
Underground Tank	N/A	N/A	2
Storage Tank	N/A	N/A	1
Misc. Site	N/A	N/A	3

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