SOURCE WATER ASSESSMENT
EXECUTIVE SUMMARY
FOR
Wright Water & Sewer District

June 30, 2004

PROJECT: 424-001

ASSESSMENT COMPLETED BY: TRIHYDRO CORPORATION

1252 Commerce Drive, Laramie, WY 82070

SOURCE WATER ASSESSMENT SUMMARY
FOR Wright Water & Sewer District

PWS Source Water Assessment Summary

The Wright Water and Sewer District is a community groundwater system located in Campbell County. The system serves 1,575 people through 525 service connections year-round. The system is supplied by four wells that draw water from the Fort Union Formation. Facilities include two steel treated water storage tanks and the interconnecting transmission system. The water is blended and then disinfected using chlorine gas prior to storage. The water sources scored medium with respect to the combined integrity with respect to aquifer sensitivity ratings. The system was assigned a score of high with respect to land use susceptibility and low with respect to potential source susceptibility. However, RJ 2 received a medium point source susceptibility because of a nearby oil and gas well.

Delineation Methods

This water system is a community system that draws water from a porous sedimentary formation. A previous delineation was completed and incorporated directly into this delineation.

For this aspect of the project, TriHydro obtained and reviewed a previously completed source water area delineation be Rinehart, Edgar, and Case. The delineation was completed by a Professional Geologist licensed in the State of Wyoming. The delineation was directly incorporated into this source water assessment.

Groundwater Sources

The Wright Water and Sewer District draws water from the Fort Union Formation. Recharge to the Fort Union Formation occurs in outcrops east of the wells and reaches them through porous media flow. Groundwater flow within the Fort Union formation is generally from southeast to northwest. Additional information on these wells is included on the attached Well Information Sheet. As shown on the enclosed source water area delineation map, contaminant zones 2 and 3 are similar to a previous delineation completed by Rinehart, Edgar, and Case.

Integrity Summary

Wright Water and Sewer District uses four wells, approximately 2,660 to 3,015 feet deep. Three wells, RJ 2, RJ 3 and RJ 5 were constructed prior to 1983 when less stringent construction standards were required by the State of Wyoming. The well RJ 4 was reconstructed between 1983 and 1993 when moderate construction standards were required. However, records show that all four wells were sealed properly to protect against surface infiltration of potential contaminants and flooding around the wellhead. As shown on the Integrity Summary Table, wells RJ 2, RJ 3 and RJ 5 received a score of 3 and well RJ 4 received a score of 2.

Water Source Sensitivity Summary

As shown on the Source Sensitivity Summary Table, the wells received a sensitivity score of 6. The wells received a score of 1 for aquifer sensitivity because they draw water from a confined aquifer through porous media flow. The wells received a score of 5 for chemical sensitivity due to documented chemical detections in the groundwater.

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, the Wright Water and Sewer District received a score of medium for land use susceptibility because part of the land surrounding the water sources is urban. The overall point source contaminant susceptibility rating is low, however, well RJ 2 receives a rating of medium for an oil and gas well within Zone 3. 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 Wright Water & Sewer District

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
Coalbed Methane	N/A	1	N/A

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