

**SOURCE WATER ASSESSMENT  
EXECUTIVE SUMMARY  
FOR  
Shoshone Municipal Pipeline**

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**June 30, 2004**

**PROJECT: 424-001**

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**ASSESSMENT COMPLETED BY: TRIHYDRO CORPORATION**

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## **SOURCE WATER ASSESSMENT SUMMARY FOR Shoshone Municipal Pipeline**

### **PWS Source Water Assessment Summary**

The Shoshone Municipal Pipeline is a community public water supply system located in Park County. The system serves 19,250 people per day through 17 service connections from April 30th to November 1st. Facilities include two surface water intakes that draw water from the Buffalo Bill Reservoir and downstream from the Shoshone River, a water treatment facility, a treated water storage tank, and the interconnecting transmission systems. The water sources scored medium with respect to the combined integrity and sensitivity ratings. The Shoshone Municipal Pipeline scored high for land use susceptibility and transportation corridor susceptibility, and low for point source contaminant susceptibility.

### **Delineation Methods**

This water system is a community supply that 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 the intakes included an area 1,000 feet on either side of the Shoshone River and around the high water line of Buffalo Bill Reservoir. Zone 3 for the intakes includes the entire stream drainage basin from Zone 2 to the basin headwaters.

### **Surface Water Sources**

The Shoshone Municipal Pipeline draws water from two surface water intakes. The main intake draws water from the Buffalo Bill Reservoir and the backup intake draws water downstream from the Shoshone River. Additional information on these intakes 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 along the Shoshone River and around Buffalo Bill Reservoir. Zone 3 encompasses the entire Shoshone River drainage basin upstream from the backup intake.

### **Integrity Summary**

The Shoshone Municipal Pipeline uses surface water from the Buffalo Bill Reservoir and Shoshone River. The intakes were constructed between 1983 and 1993, when moderately stringent construction standards were required by the State of Wyoming. Records also indicated that the area around the intakes is controlled, and that the intakes are screened to protect against the infiltration of potential contaminants. In addition the intakes are inspected regularly. As shown on the Integrity Summary Table, the intakes received integrity scores of 3.

### **Water Source Sensitivity Summary**

As shown on the Source Sensitivity Summary Table, the surface water intakes received sensitivity scores of 10. The intakes received the score for two reasons. The first reason is that surface water intakes are more vulnerable to contamination. The second reason is that 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, the Shoshone Municipal Pipeline scored high for land use susceptibility because much of the land surrounding the water sources is forest. Forested areas were included to evaluate the potential risks of increased runoff and water quality problems following forest fires. Due to the lack of contamination sources present within the delineated zones, the overall point source contaminant susceptibility rating is low. The intakes were assigned a high transportation corridor susceptibility score because two state highways pass through Zone 2 and 3.

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](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 Shoshone Municipal Pipeline  
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