

# **DRINKING WATER SOURCE PROTECTION PUBLIC SUMMARY**

## **Weber Basin Water Conservancy District**

**November 2001**

### **Introduction**

Weber Basin Water Conservancy District has completed a Drinking Water Source Protection Plan for all of its public drinking water sources as required by the Safe Drinking Water Act and by R309-605 of the State of Utah Drinking Water Regulations. The Drinking Water Source Protection program includes identification of the area from which the drinking water source receives water, an assessment of the potential contamination threats to the source within this area, and management programs to help control both existing and future potential sources of contamination. This Public Summary has been prepared to inform Weber Basin Water Conservancy District's public drinking water customers regarding the District's efforts to protect their water supplies from contamination.

### **What is the Source of Your Drinking Water?**

Weber Basin Water Conservancy District withdraws surface water from two locations on the Weber River and from several creeks along the Wasatch Front including Burch Creek, Shepard Creek, Farmington Creek, Steed Creek, Ricks Creek, and Stone Creek. The majority of the water withdrawn by the District is from the Weber River. The Weber River Watershed covers over 1,600 square miles which includes most of Morgan and Summit counties. Each of the Wasatch Front Canyons covers between 2 and 10 square miles and are located in Davis and Weber counties. Several communities are located within the Weber River Watershed including Park City, Snyderville, Jeremy Ranch, Kamas, Marion, Oakley, Peoa, Wanship, Hoytsville, Coalville, Upton, Echo, Henefer, Croydon, Morgan, Richville, Littleton, Milton, Stoddard, Peterson, and Mountain Green. Most of the land between and throughout these communities is used for various agricultural purposes.

Weber Basin Water Conservancy District also withdraws ground water from thirteen well in the Davis and Weber Counties. Protection easements were obtained for each of these sources as well as guidelines, detailing potential contamination sources and best management practices, were distributed to all residences and businesses in the protection zones as defined in the regulation

### **Water Quality and Water Treatment Information**

Water that is withdrawn from Weber Basin Water Conservancy District's surface water sources is filtered and disinfected prior to distribution to customers. Water quality sampling results indicate that the water in the distribution system is acceptable.

### **Assessment of Susceptibility to Contamination**

Each of the District's surface water sources were evaluated for how sensitive the watershed or canyon is to contamination. Factors that influence the sensitivity of the watershed or canyon include how easily water flows over the ground surface, the average amount of precipitation, and the degree of human development. The Weber River Watershed was assigned a high sensitivity to contamination mostly due to the extensive human development throughout the watershed. Each of the Wasatch Front canyons were assigned a medium sensitivity to contamination, due in part to the large amount of precipitation.

This assessment evaluates sources that have the potential to enter and contaminate the water drawn directly from the Weber River or the Wasatch Front creeks before treatment. The contaminants addressed in this assessment include those that Weber Basin Water Conservancy District has determined may present a concern to health. Descriptions of the significant potential sources of contamination located within the area tributary to the District's surface water sources are included below. Each significant potential source of contamination has been analyzed and assigned a qualitative susceptibility rating according to its potential to impact the water supply. This rating includes such

factors as the likelihood of a release of potential contaminants, the ability of the potential contaminant to travel to the river or stream, and the ability of the intake to bypass contamination. These factors are weighted approximately the same with a total possible risk score of 100. Potential contamination sources are summarized in the table below.

The susceptibility of the Weber River Watershed to contamination is considered to be high because of the presence of many potential sources of contamination. The susceptibility of Farmington Creek Canyon to contamination is considered to be moderate due to the presence of a few potential sources of contamination. The susceptibility of the remaining surface water sources to contamination is considered to be low because no potential sources of contamination were identified in these canyons.

<b>Potential Sources of Contamination</b>	<b>Description of Contaminants</b>	<b>Potential Risk to Surface Water Score</b>
Transportation of Hazardous Materials along Roadways and Railroads	Accidents along highways and other major roads and along railroads could lead to spills of hazardous materials, which could lead to contamination of surface water sources.	67 to 70
Industrial Manufacturers & Related Companies and Large Commercial Production and Maintenance Operations	Products and materials are used and stored in various quantities at these companies including acids, solvents, waste oils, other oils, gasoline, diesel fuel, and other chemicals. Spills of these products and materials could lead to contamination of surface water sources.	55 to 69
Rural Residential Areas	Household septic systems that are failing contain bacteria and viral pathogens that are discharged directly into the ground and may eventually enter the surface water source. Fuels, fertilizers, and pesticides that may be used and stored also have the potential to contaminate.	54 to 68
Agricultural Activities	Runoff containing fertilizers, herbicides, and pesticides applied to croplands could enter the surface water sources. Also, runoff containing bacteria and viruses from animal wastes from pastures or animal farms has the potential to enter the surface water sources.	30 to 64
Mineral Producers	Tunnels or stripped land from mining operations could lead to higher acidity or sediment loads in surface water sources.	42 to 55
Sewage Treatment Facilities	Untreated sewage could be discharged directly into the surface water source in extreme or emergency conditions.	22 to 35
Camping Areas and Other Recreational Activities	Camping wastes and fuels used for recreational vehicles have the potential to be spilled and enter the surface water sources.	25 to 27
Underground Fuel Storage	Fuel in underground storage tanks may enter groundwater and eventually reach the surface water sources if a leak occurs in the tank.	10 to 25

### **Management Strategies to Control Sources of Potential Contamination**

Weber Basin Water Conservancy District has adopted a public education program that informs the public about sources of potential contamination and how to reduce the risk of contamination to the District's surface water sources through the implementation of best management practices. The District will periodically send an information packet to the potential sources of contamination that present the highest risk to the surface water sources.