

## 2004 ANNUAL WATER QUALITY REPORT CITY OF RIVER FALLS MUNICIPAL UTILITY

This report describes River Falls' drinking water sources and quality as well as programs that protect the high quality water and services delivered. Our constant goal is to provide safe drinking water to you every day.

River Falls has a ground water supply with four production wells in two different aquifers. All are located within the city limits. The Prairie du Chien/Jordan (Trempealeau) aquifer is the major municipal ground water source in the region. Two wells are cased into the Jordan Aquifer. Two wells are cased into the Prairie du Chien, but not through it, and therefore get some water from both formations.

We are pleased to report that our water is safe and meets, or is better than, state and federal standards. If you have any questions concerning your water utility, please contact Carl Gaulke, General Manager, at 425-0906. Drinking water is a complex business. If you want to learn more please attend any of our regularly scheduled Utility Commission meetings. They are generally held on the third Monday of each month at 6:30 p.m. in the City Council Chambers at 123 East Elm Street, unless otherwise specified by public notice.

Our municipal water supply monitoring schedule is based in part on a source water vulnerability assessment prepared by the utility. A copy of this study is available at the Utility Office. The municipal well water is vulnerable to contaminant sources in close proximity to the well. One potential contaminant source is unused, unsafe and non-complying private wells located within the city. As of June 30, 2003, no private wells are permitted within the city limits, except in cases where municipal services are not available. The utility has completed a survey identifying the water supply sources and wellhead protection area for River Falls Municipal water system. From this, a wellhead protection ordinance was developed and formally adopted in 2001. For more information, please contact the Utility Office.

River Falls Municipal Utilities routinely monitors water quality according to federal and state regulations. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. The following tables show the results of our monitoring for the period of January 1, 2004 and December 31, 2004. The state allows us to monitor for certain contaminants less than once per year because the concentrations of the contaminants are not expected to vary significantly from year to year. All drinking water, including bottled drinking water, may be reasonably expected to contain small amounts of contaminants. The presence of these contaminants does not necessarily pose a health risk. In the following tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we are providing the following definitions:

### DEFINITION OF TERMS

<b>AL</b>	<b>Action Level:</b> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
<b>MCL</b>	<b>Maximum Contaminant Level:</b> The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
<b>MCLG</b>	<b>Maximum Contaminant Level Goal:</b> The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
<b>MFL</b>	<b>million fibers per liter</b>
<b>mrem/year</b>	<b>millirems per year (a measure of radiation absorbed by the body)</b>
<b>ND</b>	<b>Non-Detects:</b> Laboratory analysis indicates that the contaminant is not present.
<b>NTU</b>	<b>Nephelometric Turbidity Units</b>
<b>pCi/l</b>	<b>picocuries per liter (a measure of radioactivity)</b>
<b>ppm</b>	<b>parts per million, or milligrams per liter (mg/l)</b>
<b>ppb</b>	<b>parts per billion, or micrograms per liter (ug/l)</b>
<b>ppt</b>	<b>parts per trillion, or nanograms per liter</b>
<b>ppq</b>	<b>parts per quadrillion, or picograms per liter</b>
<b>TT</b>	<b>Treatment Technique:</b> A required process intended to reduce the level of a contaminant in drinking water.

### VOLATILE ORGANIC CONTAMINANTS

CONTAMINANT (UNIT)	MEETS SAFE DRINKING WATER STANDARDS	MCL	MCLG	LEVEL FOUND	RANGE	DATE OF SAMPLE	TYPICAL SOURCE OF CONTAMINATION
Carbon Tetrachloride (ppb)	Yes	5	0	.1 Average	ND-.4	2002	Discharge from chemical plants and other industrial activities.
TTHM (ppb)	Yes	80	0	1.0 Average	ND-3.2	2004	By-product of drinking water chlorination.

### RADIOACTIVE CONTAMINANTS

CONTAMINANT (UNIT)	MEETS SAFE DRINKING WATER STANDARDS	MCL	MCLG	LEVEL FOUND	RANGE	DATE OF SAMPLE	TYPICAL SOURCE OF CONTAMINATION
Gross Alpha, Excl. R&U (pCi/l)	yes	15	0	3.9 Average	3.3-5.0	2002	Erosion of natural deposits
Radium (226+228) (pCi/l)	yes	5	0	1.6	1.6	2000	Erosion of natural deposits
Gross Beta Particle Activity (pCi/l)	yes	n/a	n/a	0.3	0.3	2000	Decay of natural and manmade deposits. MCL units are in millirem/year. Calculation for compliance with MCL is not possible unless level found is greater than 50 pCi/l.

### UNREGULATED CONTAMINANTS

CONTAMINANT (UNIT)	MEETS SAFE DRINKING WATER STANDARDS	MCL	MCLG	LEVEL FOUND	RANGE	DATE OF SAMPLE	TYPICAL SOURCE OF CONTAMINATION
Bromodichloromethane (ppb)	Yes	n/a	n/a	.36 average	ND-.97	2004	n/a
Chloroform (ppb)	Yes	n/a	n/a	.51 average	ND-1.6	2004	n/a
Dibromochloromethane (ppb)	Yes	Na	n/a	.21 average	ND-.59	2004	n/a
Sulfate (ppm)	Yes	n/a	n/a	16.50 (Average)	16.00-17.00	2002	n/a

### MICROBIOLOGICAL CONTAMINANTS

CONTAMINANT (UNIT)	MEETS SAFE DRINKING WATER STANDARDS	MCL	MCLG	LEVEL FOUND	RANGE	DATE OF SAMPLE	TYPICAL SOURCE OF CONTAMINATION
Coliform (TCR)	Yes	≥5% of monthly samples	0	1	n/a	2004	Naturally present in the environment

### DISINFECTION BYPRODUCTS

CONTAMINANT (UNIT)	MEETS SAFE DRINKING WATER STANDARDS	MCL	MCLG	LEVEL FOUND	RANGE	DATE OF SAMPLE	TYPICAL SOURCE OF CONTAMINATION
HAA5 (ppb)	Yes	60	60	8 average	ND-28	2004	n/a

**INORGANIC CONTAMINANTS**

CONTAMINANT (UNIT)	MEETS SAFE DRINKING WATER STANDARDS	MCL	MCLG	LEVEL FOUND	RANGE	DATE OF SAMPLE	TYPICAL SOURCE OF CONTAMINATION
Barium (ppm)	Yes	2	2	.008 Average	.007-.010	2002	Discharge or drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cadium (ppb)	Yes	5	5	.1 Average	ND-.3	2002	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints.
Chromium (ppb)	Yes	100	100	0.14 Average	ND – 0.57	2002	Discharge from steel and pulp mills; Erosion of natural deposits.
Copper (ppm)	Yes	AL=1.3	1.3	0.23 Average	ND –1.7	2002	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives
Fluoride (ppm)	Yes	4	4	1.1 Average	1.1 – 1.2	Daily in 2004	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Lead (ppb)	Yes	AL=15	0	6.65 Average	ND – 170	2002	Corrosion of household plumbing systems; Erosion of natural deposits.
Nickel (ppb)	Yes	100		1.1750 Average	1.0000-1.3000	2002	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
Nitrate (NO3-N) (ppm)	Yes	10	10	0.05 Average	ND-.21	2004	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium (ppb)	Yes	50	50	1 Average	ND-3	2002	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium (ppm)	Yes	n/a	n/a	2.43 Average	2.30-2.50	2002	n/a
Arsenic (ppb)	Yes	50	0	2.6	ND - 2.6	2000	Herbicides, pesticides, and erosion of natural deposits.

**MONITORING REPORT VIOLATIONS**

CONTAMINANT (UNIT)	SAMPLE LOCATION	COMPLIANCE PERIOD BEGINNING	COMPLIANCE PERIOD ENDING
Fluoride	Distribution System	June 1, 2004	June 30, 2004

Monitoring and reporting violations occur when a water system fails to collect and/or report results for State required drinking water sampling. "Sample location" refers to the distribution system, or an entry point or well number from which a sample is required to be taken. Between June 1, 2004 and June 30, 2004, the testing for Fluoride contaminants was not completed properly, causing a monitoring violation. Fluoride residuals were collected and tested daily (30 times) during the month of June. The violation resulted when our lab neglected to send half of one of those 30 samples to the state lab to verify the accuracy of our testing. The incident was corrected by providing and testing samples appropriately in July 2004 and going forward. The violation has been properly resolved. The Wisconsin Department of Natural Resources has confirmed that there are no special precautions that need to be taken as a result of this monitoring violation. We are confident that there are no adverse health effects as a result of not verifying testing for Fluoride contaminants in June. Our testing processes have been reviewed and we determined that this is an unusual occurrence that is very unlikely to be repeated. We are committed to providing the highest quality drinking water to our consumers and will make every effort to fulfill that commitment.

We are proud that our drinking water meets or exceeds all State and Federal safe drinking water standards.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants in drinking water include:

- ◆ microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- ◆ inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial, or domestic wastewater discharges, oil and gas production, mining or farming.
- ◆ pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- ◆ organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- ◆ radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining.

As stated previously, all drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791. Questions can also be addressed to Linda Knoblock, Wisconsin Department of Health and Family Services, at 1414 E. Washington Avenue, Room 96, Madison, WI 53707 or call 608-266-0923.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised person (such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants) can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

Safe drinking water is an essential resource for our community. The bottom line is that we utilize the latest technology to treat your drinking water, and this water is tested continuously to insure high quality.

The POWER of Community!



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