# 2012 Annual Water Report

## Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

# Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

# Where does my water come from?

The City of Dixon Water Department is supplied by groundwater from seven wells ranging in depth from 1600 to 1800 feet at various locations throughout the city. Two of the wells are located on the Northside and the others are located on the Southside.

### Source Water Assessment and its Availability

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel free to attend our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at 815-288-3381. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility of Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <a href="http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl">http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl</a>.

Based on information obtained in a Well Site Survey published in 1990 by the Illinois EPA, several potential secondary sources are located within 1,000 feet of several of the wells. The Illinois EPA has determined that the Dixon Community Water Supply's source water is not susceptible to contamination. The determination is based on a number of criteria including: monitoring conducted at the well: monitoring conducted at the entry point to the distribution system: and available hydrogeologic data on the wells. Furthermore, in anticipation of the U.S. EPA's purposed Ground Water Rule, the Illinois EPA has determined that the Dixon Community Water Supply is not vulnerable to viral contamination. This determination is based

upon the evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper siting conditions: a hydraulic barrier exists which should prevent pathogen movement: all potential routes and sanitary defects have been mitigated such that the source water is adequately protected: monitoring data did not indicate a history of disease outbreak: and the sanitary survey of the water supply do not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not consider to be a significant factor in susceptibility determination. Hence, well hydraulics were not evaluated for this system's water supply.

# Why are there contaminants in my drinking water?

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

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 the 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: microbial contaminants, such as viruses and bacteria, that 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 water 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 storm water 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 storm water runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### How can I get involved?

We encourage public interest and participation in our community's decisions affecting drinking water. City Council meetings occur the first and third Monday's of each month at 6:30p.m. in the council chambers at City Hall. The public is welcome.

In addition to required testing we are required to perform, our water system voluntarily tests for additional substances and microscopic organisms to make certain our water is safe and of high quality. If you are interested in a more detailed report, contact Superintendent Willard Cox.

This report was prepared by CCRiWriter.

Unit Descriptions							
Term	Definition						
NA	NA: not applicable						
ND	ND: Not detected						
NR	NR: Monitoring not required, but recommended.						

Important Drinking Water Definitions					
Term	Definition				
MCLG	MCLG: Maximum Contaminant Level Goal: The level of a contaminar in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.				
MCL	MCL: Maximum Contaminant Level: The highest level of a contamina that is allowed in drinking water. MCLs are set as close to the MCLGs feasible using the best available treatment technology.				
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.				
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must				
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.				
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.				
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence the addition of a disinfectant is necessary for control of microbial contaminants.				
MNR	MNR: Monitored Not Regulated				
MPL	MPL: State Assigned Maximum Permissible Level				

#### WaterQuality Table for the City of Dixon MCLG Action 90th #Sites **Date** Unit **Major Source Violation Lead & Copper Tested** Level AL Percentile over AL 2011 0.828 Erosion of natural deposits; Leaching from wood; Copper ppm 1.3 1.3 0 NO Corrosion of household plumbing systems. Lead 2011 0 0 0.828 0 NO ppb

Lead	Contaminant Inorganic Contaminants	Date Tested	Unit	MCL	MCLG	Highest Level*	Range	Major Source	Violation
Arsenic   2012   ppb   10   0   1   0 - 2.03   Erosion of natural deposits   Runoff from orchards   Runoff from	-	2008	daa	AL=15	0	3.5	N/A	Corrosion of household plumbing systems:	NO
Arsenic   2012   ppb   10   0   1   0 - 2.03   Erosion of natural deposits. Numoff from orchards. No   Ramoff from glass and electronics production wastes   Ramoff from glass and electronics products   NO   Ramoff from glass and electronics products and pulp mills, of natural deposits   NO   Ramoff from glass and electronics products and pulp mills, of natural deposits   NO   NO   Ramoff from glass and pulp mills, of natural deposits   NO   Ramoff from glass and pulp mills, of natural deposits   NO   Ramoff from glass and pulp mills, of natural deposits   NO   Ramoff from glass   NO								1	
Barium  2012   ppm   2   2   1.74   0.765 - 1.74	Arsenic	2012	ppb	10	0	1	0 - 2.03	· ·	NO
Chromium&   2009   ppb   100   100   184   0 - 1.84   Discharge from steel and pulp mills, of natural deposits   NO natural deposi								Runoff from glass and electronics production wastes	
Chromium&   2009   ppb   100   100   184   0 - 1.84     Discharge from steel and pulp mills, of natural deposits   NO	Barium	2012	ppm	2	2	.174	.0765 - 1.74	Discharge of drilling wastes; Discharge from	NO
Fluoride								·	
Fluoride	Chromium&	2009	ppb	100	100	184	0 - 1.84		NO
Nitrate (AsN)   2006   ppm   10   10   0.05   005   Natural, Industrial, and Agricultural Sources   NO	Flore alide	2012		4	4	1.00	040 100		NO
Selentum   2005   ppb   50   50   4   0 - 4   0   0   0   0   0   0   0   0   0			ppm					, , , ,	
Radioactive Contaminants         Contaminants         Combined Uranium         2008         ppb         30         0         0.4619         .108 · .46         Erosion of natural deposits         NO           Uranium         2012         ug/l         30         0         1.2         .84 – 1.4         Erosion of natural deposits         NO           Alpha Emitters         2007         pCi/L         15         0         17.2         4.3 – 17.2         Erosion of natural deposits         NO           Gross Alpha Emitters         2012         pCi/L         15         0         5         0 – 4.7         Erosion of natural deposits         NO           Gross Alpha Emitters         2012         pCi/L         5         0         4         .39 – 3.76         Erosion of natural deposits         NO           Combined Radium         2012         pCi/L         5         0         4         .39 – 3.76         Erosion of natural deposits         NO           Beta & Emitters         2003         mrem/Yr         50         0         11         6 – 11         Erosion of natural deposits         NO           Disinfectants and Disinfection By-Products         2012         ppb         MRDL = 4         MRDLG4         1.2         .84 – 1.4         Water additi	Nitrate (AsN)	2006	ppm	10	10	0.05	005	Natural, Industrial, and Agricultural Sources	NO
Radioactive   Contaminants   Combined Uranium   2008   ppb   30   0   0.4619   .10846   Erosion of natural deposits   NO	Selenlum	2005	ppb	50	50	4	0 – 4	Discharge from petroleum and metal refineries;	NO
Uranium								Erosion of natural deposits	
Alpha Emitters         2007         pCi/L         15         0         17.2         4.3 – 17.2         Erosion of natural deposits         NO           Gross Alpha Emitters         2012         pCi/L         15         0         5         0 – 4.7         Erosion of natural deposits         NO           excluding Radon and Uranium Combined Radium         2012         pCi/L         5         0         4         .39 – 3.76         Erosion of natural deposits         NO           Beta & Emitters         2003         mrem/Yr         50         0         11         6 – 11         Erosion of natural deposits         NO           Disinfectants and Disinfection By-Products         2012         ppm         MRDL = 4         MRDLG4         1.2         .84 – 1.4         Water additive used to control microbes         NO           Haloacetic Acids (HAA5)*         2012         ppb         60         N/A         23         23.4 – 23.4         By-product of drinking water disinfection         NO           Synthetic Organic Contaminants         Contaminants         Pesticides and Herbicides         NO           State Regulated Contaminants         NO         NO         NO         Pesticides and Herbicides         NO           Iron         2012         ppm         1 <td< td=""><td>Combined Uranium</td><td>2008</td><td>ppb</td><td>30</td><td>0</td><td>0.4619</td><td>.10846</td><td>Erosion of natural deposits</td><td>NO</td></td<>	Combined Uranium	2008	ppb	30	0	0.4619	.10846	Erosion of natural deposits	NO
Gross Alpha Emitters excluding Radon and Uranium Combined Radium         2012         pCi/L         15         0         5         0 - 4.7         Erosion of natural deposits         NO           Beta & Emitters         2003         mrem/Yr         50         0         11         6 - 11         Erosion of natural deposits         NO           Disinfectants and Disinfection By-Products Chlorine         2012         ppm         MRDL = 4         MRDLG4         1.2         .84 - 1.4         Water additive used to control microbes         NO           Haloacetic Acids (HAA5)*         2012         ppb         60         N/A         23         23.4 - 23.4         By-product of drinking water disinfection         NO           Synthetic Organic Contaminants         2004         ppm         200         0         0.027         N/A         Pesticides and Herbicides         NO           State Regulated Contaminants         2012         ppb         80         N/A         36         35.8 - 35.8         By-product of drinking water disinfection         NO           Iron         2012         ppm         1         N/A         0.579         Erosion of natural deposits         NO           Manganese         2012         ppm         150         150         24.9         17.9 - 24.9	Uranium	2012	ug/l	30	0	1.2	.84 – 1.4	Erosion of natural deposits	NO
excluding Radon and Uranium Combined Radium         2012         pCi/L         5         0         4         .39 – 3.76         Erosion of natural deposits         NO           Beta & Emitters         2003         mrem/Yr         50         0         11         6 – 11         Erosion of natural deposits         NO           Disinfectants and Disinfection By-Products Chlorine         2012         ppm         MRDL = 4         MRDLG4         1.2         .84 – 1.4         Water additive used to control microbes         NO           Haloacetic Acids (HAA5)*         2012         ppb         60         N/A         23         23.4 – 23.4         By-product of drinking water disinfection         NO           Synthetic Organic Contaminants         2012         ppm         200         0         0.027         N/A         Pesticides and Herbicides         NO           State Regulated Contaminants         2012         ppb         80         N/A         36         35.8 – 35.8         By-product of drinking water disinfection         NO           Iron         2012         ppm         1         N/A         0.579         0579         Erosion of natural deposits         NO           Manganese         2012         ppm         N/A         N/A         8         3 – 8	Alpha Emitters	2007	pCi/L	15	0	17.2	4.3 – 17.2	Erosion of natural deposits	NO
Combined Radium  2012 pCi/L  Beta & Emitters  2003 mrem/Yr  50 0 11 6 - 11 Erosion of natural deposits  NO  Disinfectants and Disinfection By-Products Chlorine  2012 ppm MRDL = 4 MRDLG4  Haloacetic Acids (HAA5)*  Synthetic Organic Contaminants  Benzo (A) Pyrene  2004 ppm 200 0 0.027 N/A  State Regulated Contaminants  TTHMs (Total)  2012 ppb 80 N/A 36 35.8 - 35.8 By-product of drinking water disinfection  NO  NO  Iron  2012 ppb 150 150 24.9 17.9 - 24.9 Erosion of natural deposits  NO  4 .39 - 3.76 Erosion of natural deposits  NO  Erosion of natural deposits  NO  Water additive used to control microbes  NO  NO  NO  Synthetic Organic Contaminants  Benzo (A) Pyrene  2004 ppm 200 0 0.027 N/A Pesticides and Herbicides  NO  State Regulated Contaminants  TTHMs (Total)  2012 ppb 10 N/A 0.579 0579 Erosion of natural deposits  NO  Manganese  2012 ppb 150 150 24.9 17.9 - 24.9 Erosion of natural deposits: Used as water softener  NO  Zinc  2005 ppm 5 5 0.47 047 Naturally occurring: Discharge	Gross Alpha Emitters	2012	pCi/L	15	0	5	0 – 4.7	Erosion of natural deposits	NO
Beta & Emitters 2003 mrem/Yr 50 0 11 6 - 11 Erosion of natural deposits NO  Disinfectants and Disinfection By-Products Chlorine 2012 ppm MRDL = 4 MRDLG4 1.2 .84 - 1.4 Water additive used to control microbes NO  Haloacetic Acids (HAA5)* 2012 ppb 60 N/A 23 23.4 - 23.4 By-product of drinking water disinfection NO  Synthetic Organic Contaminants Benzo (A) Pyrene 2004 ppm 200 0 0.027 N/A Pesticides and Herbicides NO  State Regulated Contaminants  TTHMs (Total) 2012 ppb 80 N/A 36 35.8 - 35.8 By-product of drinking water disinfection NO  Iron 2012 ppm 1 N/A 0.579 0579 Erosion of natural deposits NO  Manganese 2012 ppb 150 150 24.9 17.9 - 24.9 Erosion of natural deposits NO  Sodium 2012 ppm 5 5 0.47 047 Naturally occurring; Discharge NO	The state of the s	2012	nCi/l	Ę	0	1	20 2.76	Erocion of natural deposits	NO
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Disinfection By-Products Chlorine	Beta & Emitters	2003	mrem/Yr	50	0	11	6-11	Erosion of natural deposits	NO
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Synthetic Organic Contaminants Benzo (A) Pyrene 2004 ppm 200 0 0.027 N/A Pesticides and Herbicides NO  State Regulated Contaminants  TTHMs (Total) 2012 ppb 80 N/A 36 35.8 – 35.8 By-product of drinking water disinfection NO  Iron 2012 ppm 1 N/A 0.579 0579 Erosion of natural deposits NO  Manganese 2012 ppb 150 150 24.9 17.9 – 24.9 Erosion of natural deposits NO  Sodium 2012 ppm N/A N/A 8 3 – 8 Erosion of natural deposits; Used as water softener NO  Zinc 2005 ppm 5 5 0.47 047 Naturally occurring; Discharge NO	Chlorine	2012	ppm	MRDL = 4	MRDLG4	1.2	.84 – 1.4	Water additive used to control microbes	NO
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State Regulated Contaminants           TTHMs (Total)         2012         ppb         80         N/A         36         35.8 – 35.8         By-product of drinking water disinfection         NO           Iron         2012         ppm         1         N/A         0.579         0579         Erosion of natural deposits         NO           Manganese         2012         ppb         150         24.9         17.9 – 24.9         Erosion of natural deposits         NO           Sodium         2012         ppm         N/A         N/A         8         3 – 8         Erosion of natural deposits; Used as water softener         NO           Zinc         2005         ppm         5         5         0.47         047         Naturally occurring; Discharge         NO	-								
Contaminants         Description         Security of the content of th	Benzo (A) Pyrene	2004	ppm	200	0	0.027	N/A	Pesticides and Herbicides	NO
Iron         2012         ppm         1         N/A         0.579         0579         Erosion of natural deposits         NO           Manganese         2012         ppb         150         24.9         17.9 - 24.9         Erosion of natural deposits         NO           Sodium         2012         ppm         N/A         N/A         8         3 - 8         Erosion of natural deposits; Used as water softener         NO           Zinc         2005         ppm         5         5         0.47         047         Naturally occurring; Discharge         NO									
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Sodium 2012 ppm N/A N/A 8 3 - 8 Erosion of natural deposits; Used as water softener NO Zinc 2005 ppm 5 5 0.47 047 Naturally occurring; Discharge NO	Iron	2012		1	N/A	0.579	0579	Erosion of natural deposits	NO
Zinc 2005 ppm 5 5 0.47 047 Naturally occurring; Discharge NO	Manganese	2012	ppb	150	150	24.9	17.9 – 24.9	Erosion of natural deposits	NO
	Sodium	2012	ppm	N/A	N/A	8	3 – 8	Erosion of natural deposits; Used as water softener	NO
I I I I I I I I I I I I I I I I I I I	Zinc	2005	ppm	5	5	0.47	047	Naturally occurring; Discharge From metal factories	NO

<sup>\*</sup>Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

#### **Additional Information for Lead**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Dixon is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <a href="http://www.epa.gov/safewater/lead.">http://www.epa.gov/safewater/lead.</a>

We will be happy to answer any questions about the City of Dixon Water Department and our water quality. Please call Superintendent Willard Cox at 815-284-3009 if you would like additional information.

#### For more information please contact:

Contact Name: Rusty Cox

Address: 121 W. 2nd St. Dixon, IL 61021 Phone: 815-284-3009 Fax: 815-288-5945

<u>E-Mail: rusty.cox@discoverdixon.org</u> Website: <u>www.discoverdixon.org</u>