



# CITY OF SAULT STE. MARIE'S



## 2010 Water Quality Report and 2011-2012 Water and Sewer Rate Report

The City of Sault Ste. Marie is pleased to present a summary report on the quality of the water that is provided to you during the year 2010. In addition, the City is providing you with an explanation of how your water and sewer rates for the fiscal year beginning July 1 are developed. We hope that this information is informative, and if you have any further questions, please feel free to contact the City at the numbers listed within.

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### REPORT ON THE WATER & SEWER RATES FOR THE YEAR BEGINNING JULY 1, 2011 AND ENDING JUNE 30, 2012

Annually, the City Administration prepares a report for the City Commission on the proposed rates for the City's budget year, which begins on July 1<sup>st</sup> to determine what the City water & sewer rates should be for the future 12 month period. These reports must be prepared in accordance with the guidelines approved by the State of Michigan as a condition of the low interest funding that the City has received related to construction costs.

As you may be aware, the City has been under a federal mandate to eliminate the overflow of sewers into the St. Mary's River since the early 1990's. This coincidentally followed another mandate to construct a new Water Filtration Plant that opened in 1993. These mandates have led to a significant increase in Water & Sewer rates over the past two decades for the City of Sault Ste. Marie to cover the debt for these improvements. It has also led to the renewal of an aged water and sewer system that had many problems resulting in regular sewer back-ups in basements throughout certain areas of the City, regular water main breaks and minimal fire flows throughout the community since we were relying on a system that had components over a century old.

The City was successful in negotiating a five phase plan with the State of Michigan so that the debt for the construction of new utilities could be phased in at the time debt for a number of earlier improvements would be retired. The final phase of these utility improvements are to be completed by 2018 under the current order.

The City has constructed sewer and water mains on the East side of the City, the South side, portions of downtown, W. Portage Ave., Little Italy, and the Hill Area. Currently, we are in the second year of Phase "C" of the CSO project, which includes the East Island area from Water St. to Maple St. and the West Island areas of Peck, Pine, Ridge, Spruce, and Arlington.

Since the streets have to be excavated to install the new piping, the City is also reconstructing the entire street, including undercutting the street to remove poor soils, placement of sand sub-base and aggregate base, concrete curbing, pavement and many sidewalk sections.

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### CUSTOMER VIEWS WELCOMED

If you are interested in learning more about your drinking water or participating in the decision-making process, there are a number of opportunities available.

Questions about water quality can be answered by calling Jim Moreau at 632-8981 or 632-3531, or by E-mail: [jmoreau@sault.com](mailto:jmoreau@sault.com). Questions about the structure of water and sewer rates can be answered by calling Kristin Collins at 632-5726. Inquiries about policy decisions can be made at City Commission meetings, which are held at 7:00 p.m. on the first and third Monday of each month at City Hall located at 225 E. Portage Ave. and are open to the public.

### FYI

Many compounds in drinking water, such as fluoride, are measured in terms of parts per million. To visualize this, here are two examples:

**One part per million equals:**

- One second of time in 11.6 days or
- 1/4 ounce of water in a 15,000 gallon swimming pool

Some compounds found in water are measured in very small units. Many of the trace materials are measured in terms of parts per billion. To help you visualize how very small this unit is, here are a couple of illustrations.

**One part per billion equals:**

- One second of time in 31.7 years or
- The first 16 inches of a trip to the moon

## 2011-12 FISCAL YEAR WATER AND SEWER RATES

There are 3 components to the City of Sault Ste. Marie's water & sewer rates. The first is Capital Cost. This includes all of the debt payments from construction projects, plus funded depreciation being paid out of current funds. The second component is referred to as the Commodity Charge. This reflects the cost of labor, gas, electricity, water & sewer main maintenance, equipment replacement, and other operational costs incurred in the operation and maintenance of the City's utilities. The final component is the Administrative Fee. This covers the cost of billing and maintaining meters, reading meters and related expenses.

The City has approved the following rates for Water & Sewer service for the fiscal year beginning July 1, 2011 and ending June 30, 2012:

<b><u>Administrative Fee:</u></b>	<b><u>Water</u></b>	<b><u>Sewer</u></b>	<b><u>Total</u></b>
5/8" or 3/4" meter	\$1.25	\$2.68	\$3.93
1" meter	\$6.50	\$6.50	\$13.00
1 1/2" meter	\$17.30	\$17.30	\$34.60
2" meter	\$23.27	\$23.27	\$47.54
3" meter	\$63.09	\$63.09	\$126.18
4" meter	\$109.59	\$109.59	\$219.18
6" meter	\$189.24	\$189.24	\$378.48
10" meter	\$317.48	\$317.48	\$634.96

### **Composition of 2011-2012 Rates:**

<b><u>Inside City Rates</u></b>	<b><u>Water</u></b>	<b><u>Sewer</u></b>
Commodity Charge	\$2.84 per 100 cf	\$3.06 per 100 cf
Capital Charge	\$2.99 per 100 cf	\$3.19 per 100 cf

<b><u>Outside City Rates</u></b>	<b><u>Water</u></b>	<b><u>Sewer</u></b>
Commodity Charge	\$5.68 per 100 cf	\$3.06 per 100 cf
Capital Charge	\$5.98 per 100 cf	\$6.38 per 100 cf

## EPA'S REQUIRED HEALTH INFORMATION

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/CEC 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)

## EPA's REQUIRED INFORMATION ON CONTAMINANTS AND HEALTH RISKS

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 Safe Drinking Water Hotline (800-426-4791)

## **A MESSAGE FROM THE EPA REGARDING LEAD IN DRINKING WATER**

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. The City of Sault Ste. Marie is responsible for providing high quality drinking water, but cannot control the variety of materials used in home 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## **SOURCE WATER PROTECTION**

The 1996 amendments to the federal Safe Drinking Water Act require states to conduct assessments of all sources of public drinking water. These assessments consist of defining the source water area, analyzing source sensitivity, conducting a contaminant source inventory, and determining source susceptibility. The intent of these assessments will ultimately be to prioritize protection activities for all sources of public drinking water. Susceptibility ratings range from “very high” for inland river sources to “moderately low” for deep intakes located miles out in the Great Lakes.

The State of Michigan performed an assessment of our source water, the St. Mary’s River, in 2003. Our susceptibility rating was determined to be “High”, due to land uses and potential contaminant sources within the source water area.

Source water protection is just one of many multiple barriers or safeguards available to water suppliers to protect public health.

If you would like to know more about the Source Water Assessment, please contact Jim Moreau at 632-8981. A copy of the Source Water Assessment is available for public review at the City Clerk’s Office.

## **2010 WATER QUALITY REPORT**

### **SOURCE WATER AND TREATMENT PROCESS DESCRIPTION**

Since its inception over a century ago, the City of Sault Ste. Marie Water Department’s goal has been to produce the safest and highest quality water for all it’s customers. We are proud of our history of quality service. To maintain our commitment to you, our analysts routinely collect and test water samples every step of the way- from the source water to various points throughout the distribution system- checking purity and resolving potential problems. Our treatment facility is constantly maintained, evaluated and upgraded to stay abreast of advancements in technology, health science and government regulations. Our water quality laboratory is the heart of our quality assurance program. Staffed by EPA and State of Michigan certified personnel, our lab analyzes thousands of water samples

annually to assure the highest quality water for our families, friends, and neighbors in the City of Sault Ste. Marie.

The water that we supply to our customers comes from the St. Mary’s River. It is our sole source of water. The St. Mary’s River joins Lake Superior with Lake Huron. Our water treatment facility is located at 1634 W. 24th Street, approximately one quarter mile from the St. Mary’s Southern shore.

The source water is pumped to the water treatment facility and is tested continually during each process that it passes through to maintain the highest water quality possible. In the treatment facility, the water goes through disinfection, filtration, pH adjustment, fluoridation, and on-site storage. The water is then pumped to the water tanks and into your home or business.

## **SUBSTANCES EXPECTED TO BE FOUND IN DRINKING WATER SOURCES**

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.

The City of Sault Ste. Marie is very fortunate to have the St. Mary’s River as the source of it’s water supply. In the hundreds of samples that we analyze on our source water, relatively few contaminants are found in the river before the water is treated. These are:

Microbial contaminants, such as viruses and bacteria, which may come from wildlife, agricultural livestock operations, septic systems and sewage treatment plants. The chlorination and filtration process in our water treatment facility removes all microbial contamination.

Extremely small amounts of radioactive contaminants, which are naturally occurring. These levels are far below the maximum contaminant level set by the EPA and are just above the detection level

Turbidity, present in all water sources, is a measurement of the cloudiness of the water. It is expressed in Nephelometric Turbidity Units or NTU’s. Turbidity is mainly caused by surface runoff and by the motion of the moving water in the St. Mary’s River as it picks up sediment and debris off the bottom.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

# WHAT'S IN MY WATER?

We are pleased to report that during the year of 2010, the water delivered to your homes or businesses did better than all state and federal drinking water requirements. From the hundreds of regulated substances tested for, there were only seven regulated substances detected in the water for the City of Sault Ste. Marie during 2010.

Although all of these substances listed below are under the Maximum Contaminant Limit (MCL) set by the U.S. EPA, and therefore not expected to cause any health risks, we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

## SUBSTANCES REGULATED AT THE TREATMENT PLANT

SUBSTANCE NAME	AMOUNT DETECTED	MCL	MCLG	RANGE LOW/HIGH	TYPICAL SOURCE OF SUBSTANCE
Fluoride	.90 ppm	4.0 ppm	4.0 ppm	n/a	Water Additive Which Promotes Strong Teeth
Turbidity (TT)	0.04 NTU	3.0 NTU	0.30 NTU	0.02 NTU / 0.07 NTU	Soil Runoff
Radium 226-228	2.3 pCi/L	5 pCi/L	0 pCi/L	n/a	Decay of Natural and Man-made Deposits
Sodium	0 ppm	n/a	n/a	None detected 0 ppm	Erosion of Natural Deposits

## SUBSTANCES REGULATED IN THE DISTRIBUTION SYSTEM

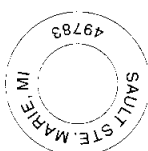
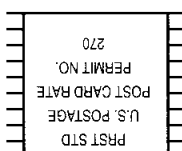
SUBSTANCE NAME	AMOUNT DETECTED	MCL	MCLG	RANGE LOW/HIGH	TYPICAL SOURCE OF SUBSTANCE
Chlorine	.67 ppm	4.0 ppm	4.0 ppm	.50 ppm / 1.0 ppm	Additive for Water Disinfection
Total Trihalomethanes (TTHM's)	28.0 ppb	80 ppb	0 ppb	16.0 ppb / 38.0 ppb	By-Product of Drinking Water Chlorination
Halo Acetic	19.0 ppb	60 ppb	0 ppb	16.0 ppb / 23.0 ppb	

## SUBSTANCES REGULATED AT THE CONSUMER'S TAP

SUBSTANCE NAME	AMOUNT DETECTED	MCL	ACTION LEVEL	MCLG	RANGE LOW/HIGH	TYPICAL SOURCE OF SUBSTANCE
Lead	0.3 ppb	n/a	15 ppb	0 ppb	0 ppb / 3 ppb	Household Plumbing Systems
Copper	38 ppb	1300 ppb	1300 ppb	n/a	0 ppb / 150 ppb	Household Plumbing Systems

### DEFINITIONS

- Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG's as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- ppm:** parts per million. For example, 1 ppm of fluoride means one part of fluoride to a million parts of water.
- n/a:** not applicable to this substance.
- Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water. The TT for turbidity removal is filtration.
- Nephelometric Turbidity Unit (NTU):** The unit of measurement for turbidity.
- pCi/L:** picocuries per liter- the measurement of the natural rate of disintegration.
- ppb:** parts per billion. For example, 1ppb of lead means one part of lead to a billion parts of water.
- Action Level:** The concentration of a substance which, if exceeded, triggers treatment or other requirements which a water system must follow.



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