



# CITY OF ST. MARYS 2005 DRINKING WATER QUALITY REPORT

Citizens of St. Marys:


The City of St. Marys is pleased to present to you the 2005 Water Quality Report. Our constant goal is to provide you with a safe and dependable supply of drinking water that meets federal and state requirements and achieves the highest standards of customer satisfaction.

St. Marys is fortunate to have a large supply of exceptional quality well water. Two of the City's wells are located in a gravel formation in the ancient Teays River Valley system, while the other two are in a limestone formation. Untreated well water pumped into the treatment plant goes through a complex, multi-stage process that takes about 12 hours, producing a consistent supply of high quality water. Seventy-two miles of underground piping distributes drinking water to the citizens and business in the greater St. Marys area.

Water fund finances were addressed in 2005 when the City made a \$786,926.11 payment to retire the 1991 Water System Revenue Bonds. Retiring the bonds in 2005 will save the City approximately \$192,000 in interest through 2011, when the bonds were scheduled to expire. At the Water Plant, two rapid sand filters were rebuilt. The filters are the last stage in the treatment process and remove very fine particles from our drinking water. The McKinley Rd. water tower was inspected in October 2005. With the exception of the paint, the tower is in very good condition. The exterior of the tower will receive a fresh coat of paint in 2006. Distribution system improvements undertaken in 2005 included the installation of 7,110 feet of new or replacement water lines, including 1,885 feet of ten and twelve inch water lines City forces installed to serve the Shoppe's at St. Marys commercial development.

Please take the time to review this report. It is a summary of the quality drinking water and services we deliver every day. It is a record reflecting the hard work of our employees to provide safe, reliable drinking water services to the citizens of St. Marys at competitive rates. In 2005, the City of St. Marys distributed 464,842,000 gallons of drinking water to customers and met all Federal and State drinking water standards. All of this at a cost of about a penny for five gallons.

Greg Freewalt, Mayor



Federal and state regulations include procedures and schedules for monitoring water at its source, in the treatment plant and distribution system, and at the customers tap. The City of St. Marys monitors for the presence of more than 130 contaminants in our drinking water, in accordance with EPA requirements. Listed below is information on the contaminants detected in the most recent testing done in accordance with regulations. None are violations. The contaminants we tested for but did not detect are not listed below. A complete listing of all the contaminants we monitor is available upon request.

| Contaminant   | Year Tested | Unit | MCL (Highest Allowed) | MCLG (Ideal Goal) | St. Marys Detected Level | St. Marys Detected Range | Violation | Possible Sources of Contamination   |
|---|-------------|------|-----------------------|-------------------|--------------------------|--------------------------|-----------|---|
| <b>Inorganic Contaminants</b>   |             |      |                       |                   |                          |                          |           |   |
| Fluoride <sup>1</sup>   | 2005        | ppm  | 4                     | 4                 | 0.42                     | N/A                      | No        | Erosion of natural deposits;<br>Water additive that promotes strong teeth;<br>Fertilizer and aluminum factory discharge |
| Lead <sup>2</sup>   | 2005        | ppb  | AL = 15               | 0                 | <2.0                     | N/A                      | No        | Corrosion of household plumbing systems;<br>Erosion of natural deposits   |
| Zero out of twenty samples was found to have lead levels in excess of the Action Level of 15 ppb    |             |      |                       |                   |                          |                          |           |   |
| Copper <sup>2</sup>   | 2005        | ppm  | AL = 1.3              | 1.3               | 0.049                    | N/A                      | No        | Corrosion of household plumbing systems;<br>Erosion of natural deposits   |
| Zero out of twenty samples was found to have copper levels in excess of the Action Level of 1.3 ppm |             |      |                       |                   |                          |                          |           |   |
| Selenium  | 2005        | ppb  | 50                    | 50                | 3.1                      | N/A                      | No        | Erosion of natural deposits;<br>Discharge from mines;<br>Petroleum & metal refineries discharge                         |
| <b>Residual Disinfectants</b>   |             |      |                       |                   |                          |                          |           |   |
| Total Chlorine  | 2005        | ppm  | MRDL = 4              | MRDLG=4           | 2.06                     | 1.5 - 2.4                | No        | Water additive used to control microbes   |

**Definitions/Notes:**

- MCL (Maximum Contaminant Level) - The highest level of a contaminant that is allowed in drinking water
- MCLG (Max. Contaminant Level Goal) - The level of a contaminant in drinking water below which there is no known or expected health risk
- ppm (Parts per Million) - Units of measure for concentration (one part per million is equal to one minute in two years)
- ppb (Parts per Billion) - Units of measure for concentration (one part per billion is equal to one minute in 2,000 years)
- AL (Action Level) - The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow
- MRDL (Max. Residual Disinfectant Level) - The highest level of a disinfectant (addition is necessary to control microbial contaminants) allowed in drinking water
- MRDLG (MRDL Goal) - The disinfectant level below which there is no known or expected health risk (the goal does not reflect microbial control benefits)
- N/A - Does not apply

<sup>1</sup> - Fluoride naturally occurs in the well water used by the City of St. Marys

<sup>2</sup> - Lead and copper are measured at the customers tap, and in St. Marys their presence is due to household plumbing

## What Are The Sources Of Contamination In Water?

- ◆ Sources of both tap and bottled drinking water include rivers, lakes, reservoirs, 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. Water can also pick up substances resulting from the presence of animals or from human activity.
- ◆ Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria; (B) Inorganic contaminants, such as naturally-occurring minerals; (C) Pesticides and herbicides; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, resulting mainly from industrial activity; and, (E) Radioactive contaminants, most of which are naturally occurring.
- ◆ All 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 EPA Safe Drinking Water Hotline at 1-800-426-4791.

## How Can You Be Sure Your Drinking Water Is Safe?

- ◆ Certified City of St. Marys Water Treatment Plant operators check water quality at all stages of the treatment process to insure that the water is treated properly and that the finished water is of consistent quality. We analyzed 16,208 chemical and 869 bacteria tests in 2005.
- ◆ In order to insure that tap water is safe, the United States Environmental Protection Agency (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.
- ◆ 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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available at 1-800-426-4791 (EPA Safe Drinking Water Hotline).

## Special Information On Protecting Our Drinking Water Supply

Ohio EPA recently completed a study of the City of St. Marys' source of drinking water to determine its susceptibility to contamination. According to the study, the aquifers (water-rich zones below ground) that supply well water to the City of St. Marys have a "moderate" susceptibility to contamination. This does not mean that our well fields cannot become contaminated, only that the likelihood of contamination is moderate. Factors considered in the moderate susceptibility determination included:

- ◆ The depth of the aquifers (75-200 feet below ground level) and the presence of a thick layer of clay above the aquifer both serve to protect our well water.
- ◆ There has been no evidence to suggest that our well water has been impacted by any significant levels of chemical contaminants from human activities.
- ◆ The existence of numerous significant potential contamination sources located near our well fields.

The City of St. Marys is in the process of adopting a Wellhead Protection Program (WHP) that will develop appropriate protective measures to minimize the likelihood of aquifer contamination. We recently received endorsement from Ohio EPA for the first two phases of the WHP. Phase one identified the shape and area of our wellfields and calculated one and five year time-of-travel boundaries. These boundaries are significant in that they show how long a contaminant, if discovered, would take to impact our drinking water source. Phase two included an inventory of potential pollution contamination sources in the newly delineated wellhead protection area. We can now move on to phase three, which consists of developing management practices to help prevent contamination of our wellfields. This is typically done through a committee represented by all those who may be affected by the management practices such as agriculture, industry, political subdivisions, business, etc. More information about the source water assessment or what consumers can do to help protect our aquifer is available by calling 419-394-4114.



**Our wellfields are shown above. Shaded areas need protected to ensure a continued supply of high-quality drinking water.**

## To Learn More

The City of St. Marys is committed to providing you with information about your water supply, and encourages all citizens to learn more about water resources, water conservation, and water quality. We offer presentations and treatment plant tours to civic groups, school children, and other interested parties. Public participation and comment are encouraged at regular meetings of St. Marys City Council and Council's Water Committee meetings. Please call for more information:

- ◆ Water Department Office - 419-394-4114 (8 am - 5 pm)
- ◆ Water Treatment Plant - 419-394-5512 (8 am - 11 pm)
- ◆ Internet Web Page - [www.bright.net/~csmowwtr](http://www.bright.net/~csmowwtr)
- ◆ City Council & Water Committee meetings - 419-394-3303