

Where does my water come from?

Marysville's water source is a combination of surface water (Mill Creek) and ground water (wells). We use water from Mill Creek with the intake being located at the dam just West of Maple Street. We have two wells located at the water plant, one well behind the Public Service Center building, and one located across the street from the intake on Maple Street. The sources of drinking water (both tap and bottled water) include rivers, streams, lakes, 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.

Marysville's Water Plant Up For Expansion

The water plant recently passed a test proving it can filter water faster—up to 4.3 million gallons a day—but that will only buy the burgeoning city a few years before growth outpaces water filtration. In addition, the city still draws its water mostly from wells, because Mill Creek can get low during dry seasons.

Fortunately the city is already taking steps to head off serious problems. For fresh water, the city is currently building a reservoir off Raymond Road northwest of the city. When Mill Creek is high, water can be pumped into the reservoir. When the creek is low, reservoir water can be filtered for drinking water. The reservoir will have banks that rise 20 feet above the ground and contain a 40-foot-deep pool of water. Strict guidelines will control when the city can pump excess water from Mill Creek into the reservoir.

All federal and state standards met or exceeded in 2007

The City of Marysville Division of Water is able to report that all federal and state standards for drinking water were met or exceeded in 2007. This report includes a summary of the water quality during 2007, including where your water comes from, what it contains and how it compares to standards set by federal and state agencies.

How to Contact Us

Water Billing: (937) 642-6861
8 a.m. – 4:30 p.m.
M - F (excluding Holidays)



Water Plant: (937) 644-9115
24 hours/day, 7 days/week

Water Distribution: (937) 644-9858
7 a.m. – 3:30 p.m.
M - F (excluding Holidays)

For questions about this report or to request a copy of the Drinking Water Source Assessment Report, call Fred McCreary, Chief Plant Operator, at (937) 644-9115. Public participation and comments are encouraged at regular Marysville City Council meetings which meet the second and fourth Thursdays of the month at City Hall, 125 East Sixth Street. Input on our watershed is welcome.

The City of Marysville
125 East Sixth Street
Marysville, OH 43040

City of Marysville Water Quality Report



2007



2007 Water Plant Improvements

- Purchased new chlorine feed equipment
- Rebuilt # 3 well
- Completed a filter high rate study
(This study could extend the life of the current water plant.)



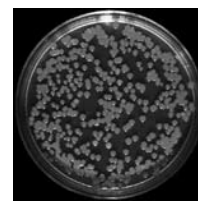
People with Special Health Needs

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-compromised people which would include someone having cancer and undergoing chemotherapy; having undergone an organ transplant; having the HIV/AIDS virus or other immune system disorders or 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 infections by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

What Causes the Pink Stain on Bathroom Fixtures?



The reddish-pink color frequently noted in bathrooms (shower stalls, tubs, tile, sinks, toilets and even on pet's water bowls) is called *Serratia marcescens* and is commonly isolated from soil, water, plants, insects and vertebrates (including man). *This bacteria is not present in water supplied to your house, but can be introduced into the house through any of the above-mentioned sources. The bathroom provides a perfect environment of moisture and warmth for this bacteria to thrive.*

The best way to eliminate this problem is to continually clean and dry the involved areas to keep them free from bacteria. Using chlorine based compounds works the best, but be advised these abrasive cleaners could scratch fixtures, making them more susceptible to bacterial growth. Chlorine bleach can be used occasionally to disinfect the toilet and aid in eliminating the pink residue. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help minimize its occurrence.

Summary of Marysville Water Quality

Listed below are 12 contaminants detected in Marysville's drinking water in 2007. All are below allowed levels. Not listed are over 100 contaminants tested, but not detected.

CONTAMINANTS (UNITS)	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATION	YEAR SAMPLED	MAJOR SOURCES
MICROBIOLOGICAL CONTAMINANTS							
Turbidity (NTU)	NA	TT	0.58	0.12-0.58	NO	2007	Soil runoff
Turbidity (% samples meeting standard)	NA	TT	99.99%	99.99%-100%	NO	2007	Soil runoff
Chlorine (ppm)	MRDL=4.0	MRDL=4.0	1.32	1.14-1.57	NO	2007	Water additive use
Total Coliform	0	5%	4%	0-1	NO	2007	Naturally present in the environment
Total Organic Carbon (TOC)	NA	TT	1.8	0.8-3.5	NO	2007	Present in the environment
INORGANIC CHEMICALS							
Copper (ppm) sampled at customer tap	1.3*	AL=1.3	0.090 - 90%	<0.05-0.115 n/a	NO	2005	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Flouride (ppm) sampled in distribution system	4	4	0.994	0.89-1.12	NO	2007	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizers & aluminum factories
Nitrate (ppm) Sampled at plant tap	10	10	0.82	<0.1-0.82	NO	2007	Runoff from fertilizer use; leaching (from septic tanks) sewage; erosion of natural deposits
VOLATILE ORGANIC CHEMICALS							
TTHM (Total Trihalomethanes) (ppb)	0	80	59.0	33.5-73.8	NO	2007	By-product of drinking water chlorination
HAA5 (ppb)	0	60	11.8	6.07-15.6	NO	2007	By-product of drinking water chlorination
RADIOACTIVE CONTAMINANTS							
Alpha emitters (pci/L)	0	15	1.1	1.1	NO	2003	Decay of natural & man-made deposits
Beta emitters (pci/L)	0	50	5.0	5.0	NO	2003	Decay of natural & man-made deposits

(* Zero out of thirty (30) samples was found to have copper levels in excess of the action level of 1.3 ppm

Definitions

- **Maximum Contaminant Level Goal (MCLG):** 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.
- **Maximum Contaminant Level (MCL):** 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.
- **Pci/L:** Picocuries per liter is a measure of the radioactivity in water.
- **Treatment Technique (TT):** A required process intended to remove the level of a contaminant in drinking water.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.
- **ppm:** Parts per Million (one penny out of \$10,000,000)
- **ppb:** Parts per Billion (one penny out of 10 million dollars)
- **Distribution System:** System of pipes used to deliver the water to the customer.
- **"<" symbol:** Less than
- **">" symbol:** More than
- **n/a** = not applicable
- **MRDL** = Maximum Residual Disinfectant Level

Notes

- ATRAZINE, SIMAZINE and TTHM highest levels allowed (MCL) are based on a running average of the last 4 quarters. The running average is updated every 3 months.
- Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.30 NTU in 95% of the daily samples and shall not exceed 1.0 NTU at any time.

Total Organic Carbon (TOC) has no health effects. However, TOC provides a medium when the water is disinfected for the formation of disinfection byproducts. TOC removal early in the treatment plant is required. The monthly TOC removal is calculated at the ratio between the actual TOC removal and the TOC rule removal requirements. The actual ratio shown is the average of the ratios for the 12 months in 2007.

Drinking Water Contamination: How and where does it occur?

Surface waters, such as Mill Creek are, by their nature, susceptible to contamination and numerous potential contaminant sources along their banks increase the risk. The protection areas around Mill Creek and the well field include some urbanized areas and contain a moderate number of potential contaminant sources, including agricultural runoff, inadequate septic systems, leaking underground storage tanks and road and rail bridge crossings. As a result, the drinking water supplied to the City of Marysville's public water system is considered to have a moderately high susceptibility to contamination.

Contaminants that may be present in water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agriculture 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 storm runoff and residential uses;



Lab Analyst Mike Santone is pictured running one of over 10,000 water tests conducted annually to determine the potential of one of over 75 possible contaminants.

- **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;
- **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 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.

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 at 1-800-426-4791.

Historically, the Marysville public water system has effectively treated its source water to meet drinking water quality standards. The potential for water quality impacts can be further decreased by implementing measures to protect Mill Creek and the local aquifer. More detailed information is provided in the City of Marysville's Drinking Water Source Assessment report.

To receive this report, please contact Fred McCreary, Chief Plant Operator, at (937) 644-9115.