

# DRINKING WATER QUALITY REPORT

for 2006

## KEEPING YOU INFORMED!

The Ypsilanti Community Utilities Authority (YCUA) provides your drinking water and is pleased to present you with this ninth annual water quality report. This report follows the guidelines set by the Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (MDEQ). Our goal is to provide you with a safe and dependable water supply. This report will illustrate that we are achieving our goal.

## SOURCE WATER ASSESSMENT

YCUA obtains your drinking water from the Detroit water system. Your source water comes from the Detroit River, situated within the Lake St. Clair, Clinton River, Detroit River, Rouge River, Ecorse River, in the U.S. and parts of the Thames River, Little River, Turkey Creek, and Sydenham watersheds in Canada.

MDEQ, in partnership with the U.S. Geological Survey, the Detroit Water & Sewerage Department (DWSD), and the Michigan Public Health Institute, performed a Source Water Assessment to determine susceptibility to potential contamination.

Susceptibility was rated on a seven-tiered scale from very low to very high based primarily on geologic sensitivity, water chemistry, and contaminant sources. Even though DWSD's source water intakes were found to be highly susceptible to potential contamination, DWSD has historically met State and Federal drinking water standards.

In addition, DWSD has an emergency response management plan in place, and is developing a source water protection program. Some source water protection activities have already been initiated. These include: industrial pre-treatment; street cleaning; and mercury reduction.

If you would like to know more about the Source Water Assessment, please visit DWSD's website at [www.dwsd.org](http://www.dwsd.org) or contact Mary Lynn Semegen, 313.935.7106, [semegen@dwsd.org](mailto:semegen@dwsd.org).

Ypsilanti Community Utilities Authority

Environmental Leaders



[www.ycua.org](http://www.ycua.org)

Dedicated to Providing Top Quality, Cost Effective, and Environmentally Safe Water and Wastewater Services to Our Customers

## 2006 WATER SYSTEM IMPROVEMENTS

All communities performed routine hydrant flushing and valve exercising to ensure system reliability.

### Township and City of Ypsilanti:

#### *Water Main and Paving Improvements*

- Replaced approximately 4,200 feet of aging water mains on Holmes Road between Prospect and Rue Deauville. The work was completed in conjunction with road improvements made by the City and Washtenaw County Road Commission (WCRC). Phase I project cost: \$625,000.
- Replaced approximately 1,350 feet of aging water main on Forest Avenue between Prospect and Osband in conjunction with City road improvements. Project cost: \$300,000.
- Installed approximately 2,300 feet of new water main on River Street between Forest and Clark. Work was completed in conjunction with City road improvements. Project cost: \$350,000.
- Replaced approximately 1,800 feet of aging water main on Textile Road between Colony Park Way and South Mohawk. Work was completed in conjunction with road improvements made by WCRC. Phase II project cost: \$300,000.

### Augusta Charter Township

*Enhanced Service.* A second lead was installed at Childs Elementary School in anticipation of the completion of the second connection and looping project to provide greater reliability.

### Pittsfield Charter Township

*Elevated Water Tank Maintenance.* The 750,000-gallon elevated water storage tank was cleaned and repainted.

*Water System Operator Training.* Pittsfield Township now has six State Licensed Operators who receive continual training to provide safe and high quality water for our customers.

### Superior Township

*New Booster Station/Third Water Connection.* Work concluded on the construction of a third water connection and booster station at the intersection of Clark and LeForge. The new building contains one 50-hp and two 125-hp pumps. This will enable the Township to meet increasing demands for water service and fire protection by providing up to 7,000 gallons per minute (gpm), with future expansion capabilities for an additional 8,500 gpm.

*New Pressure Reducing Vault and Second Water Connection.* The construction of approximately 1,500 feet of water main and a meter pit, along with the installation of a pressure reducing valve has been completed. This connection utilizes an automated flow and pressure control valve to meet water system demands.

Augusta Charter Township • Pittsfield Charter Township  
Superior Charter Township • City of Ypsilanti  
Charter Township of Ypsilanti • Southwest Canton Charter Township

## HEALTH and SAFETY INFORMATION

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily pose a health risk.

The sources of both tap and bottled drinking 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 materials, and can also pick up substances resulting from animal or human activity. Contaminants that may be present in source 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 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, septic systems, and urban or agricultural runoff (i.e., pesticides and herbicides)
- *Radioactive contaminants*, which can be naturally occurring or the result of oil and gas production and mining activities

Based on testing results during 2006 (see table at right), all of these contaminants were below the level of concern in your water.

To ensure that tap water is safe, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration is in the process of establishing limits for contaminants in bottled water, which must provide the same level of protection for public health.

### Information for People with Special Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons 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.

Federal guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are also available from EPA's Safe Drinking Water Hotline, 800.426.4791.

## DEFINITIONS

**Parts per million (ppm) and parts per billion (ppb)** - One ppm can be equated to one gallon in 1,000,000 gallons (an Olympic-sized pool.) One ppb is like one gallon in 1,000 olympic-sized pools combined.

**Maximum Contaminant Level Goal (MCLG)** - The MCLG is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs provide for a margin of safety.

**Maximum Contaminant Level (MCL)** - The MCL is the highest level of a contaminant that is allowed in the drinking water. MCLs are set as close to the MCLGs as feasible, using the best available treatment technology. MCLs are set at very stringent levels by the State and Federal governments. To understand the possible health effects, a person would have to drink about two quarts of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the associated health effect.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - The level of 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.

**Maximum Residual Disinfectant Level (MRDL)** - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Action Level (AL)** - The concentration of a contaminant which, if exceeded, triggers treatment or other required actions a water system must follow.

**Nephelometric Turbidity Unit (ntu)** - Measures the cloudiness of water.

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

**TTHMs** - Total Trihalomethanes.

**na** - Not applicable.

**>** - Greater than.

More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline at 800.426.4791

# YCUA WATER QUALITY TEST RESULTS FOR 2006

Your drinking water is continuously monitored above and beyond Federal and State laws. The table below lists all of the contaminants detected in your drinking water during calendar year 2006, unless otherwise noted. The State allows us to monitor for certain contaminants less than once per year because their concentrations are not expected to change year to year. Lead, copper and bacteriological monitoring is performed by each individual community. There were no bacteriological detects during 2006. All other results are for the entire YCUA service area. The presence of contaminants in the water does not necessarily indicate a health risk. This table does not show the hundreds of other contaminants tested for, but not found in your drinking water. The test results confirm that your drinking water meets or surpasses all Federal and State requirements, and that ALL DETECTED CONTAMINANTS ARE BELOW ALLOWED LEVELS. THERE WERE NO VIOLATIONS.

## Regulated Inorganic Parameters (annual monitoring at plant finished water taps)

contaminant	test date	unit	avg	low	high	MCLG	MCL	likely sources
Fluoride	2006	ppm	0.951	na	na	4	4	Water additive to promote strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate	2006	ppm	0.172	na	na	10	10	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits

## Regulated Disinfectant Residuals and Disinfection By-Products (sampled in the distribution system)

contaminant	test date	unit	avg	low	high	MCLG	MCL	likely sources
TTHMs	2006	ppb	24.9	8.9	45.1	na	80	By-products of drinking water chlorination
Haloacetic Acids	2006	ppb	13.9	5.5	24.5	na	60	By-products of drinking water chlorination
Chlorine Residual	2006	ppm	0.68	0.50	0.82	MRDLG=4	MRDL=4	Water additive used to control microbes

## Regulated Microbiological Parameters (monitored every 4 hours at the plant taps)

contaminant	test date	unit	lowest %	high	MCLG	MCL	likely sources
Turbidity	2006	ntu	100%	0.30	na	TT	Soil runoff

*Turbidity measures the cloudiness of water. The rules state that turbidity must never exceed 1.0 ntu (see "high"), and must not exceed 0.3 ntu in more than 95% of daily samples in any single month (see lowest %). We achieved these requirements and remained in compliance.*

## Individual Community Regulated Copper and Lead Testing (sampled at individual taps)

contaminant	test date	unit	90th	samples >AL	MCLG	MCL	likely sources
Charter Township of Ypsilanti, City of Ypsilanti, Southwest Canton Charter Township							
Lead	2005	ppb	5	0	0	AL=15	The likely sources of lead and copper are the corrosion of household plumbing and erosion of natural deposits.
Copper	2005	ppm	0.181	0	1.3	AL=1.3	
Superior Charter Township							
Lead	2005	ppb	2	0	0	AL=15	
Copper	2005	ppm	0.027	0	1.3	AL=1.3	
Pittsfield Charter Township							
Lead	2005	ppb	0	0	0	AL=15	
Copper	2005	ppm	.0565	0	1.3	AL=1.3	
Augusta Charter Township							
Lead	2005	ppb	6	0	0	AL=15	
Copper	2005	ppm	0.559	0	1.3	AL=1.3	

*Lead and Copper compliance is based on the 90th percentile, where nine out of ten samples must be below the Action Level (AL).*

**Total Organic Carbon (TOC) Removal** The TOC removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. During 2006, TOC was measured each month and because the level was low, there was no requirement for TOC removal. The major source of TOC in drinking water is the erosion of natural deposits.

## UNREGULATED PARAMETERS (No established EPA drinking water standards)

contaminant	test date	unit	level found	likely sources
Sodium	2006	ppm	5.54	Erosion of natural deposits

*This information is provided for those concerned with sodium in their diet. 5.54 ppm equates to about 1.3 milligrams of sodium per 8 ounce glass of water.*

## GENERAL INFORMATION ABOUT YCUA

YCUA staff works around the clock to provide you with a reliable supply of water. If you have questions about the YCUA water system, please contact Jeff Castro, Water Distribution Supervisor, at [jcastro@ycua.org](mailto:jcastro@ycua.org) or 734.484.4600 extension 305.

Additional information about YCUA is available on our website at [www.ycua.org](http://www.ycua.org). Click on the tab "DWSD Lab Reports" for more detailed water quality data. This report is also published on our website and additional copies of this report may be obtained by calling YCUA Customer Service at 734.484.4600.

If you wish to learn more about the plants that treat our water or obtain information regarding Detroit Board of Water Commissioner meetings, please visit [www.dwsd.org](http://www.dwsd.org) or call DWSD's Water Quality Division at 313.267.3629.

### IMPORTANT CONTACTS (clip and save for future reference)

YCUA: 734.484.4600 / [www.ycua.org](http://www.ycua.org)  
DWSD: 313.267.3629 / [www.dwsd.org](http://www.dwsd.org)  
EPA Safe Drinking Water Hotline: 800.426.4791  
EPA Website: [www.epa.gov/safewater](http://www.epa.gov/safewater)  
MDEQ Website: [www.michigan.gov/deq](http://www.michigan.gov/deq)

## QUESTIONS? COMMENTS?

If you have questions specific to your community's water distribution system, please contact the following individuals, or attend your local board meeting:

### *Augusta Charter Township:*

John Linville, Utilities Manager, 734.439.7715, 800.884.2860, or 734.817.2326 (pager). The Township Board meets on the second and fourth Tuesdays of each month at the Township Hall, 8021 Talladay Road. Dates and times are posted on cable channel 12 or call 734.461.6117.

### *Pittsfield Charter Township:*

Michael Luptowski, Utilities Director: 734.822.2110; Utilities Customer Service: 734.822.3105; Water and Sewer Field Office and 24-hour Emergency Line: 734.822.2110. The Township Board meets on the second and fourth Tuesdays of the month at 7:30 pm at the Administration Building, 6201 W. Michigan Avenue. For more information call 734.822.3120.

### *Superior Charter Township:*

Rick Church, Utilities Director, 734.480.5500. The Township Board meets on the first and third Mondays of the month at 7:30 pm at the Township Hall, 3040 North Prospect Road.

### *Charter Township of Ypsilanti, City of Ypsilanti, and Southwest Canton Charter Township:*

Jeff Castro, Water Distribution Supervisor, [jcastro@ycua.org](mailto:jcastro@ycua.org) or 734.484.4600 extension 305. YCUA's Board meets the fourth Tuesday of the month at 4:00 pm at the YCUA Eldon P. Ahles Administration Building located at the corner of State and McGregor Roads.

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