

Detected Substances 2017 results except as noted

<u>Substances</u>	<u>Units</u>	<u>MCLG</u>	<u>MCL</u>	<u>Range of detected values</u>	<u>Likely Source</u>	<u>Water Quality Violation</u>
This information provided by the Monroe County Water Authority.						
Barium	mg/L	2	2	.019-.028	Erosion of natural deposits	No
Chloride	mg/L	NA	250	25-68	Naturally Occurring	No
Fluoride	mg/L	NA	2.2	.03-.93	Natural and additive-promotes strong teeth	No
Iron	ug/L	NA	300	ND	Naturally Occurring	No
Nitrate	mg/L	10	10	ND-.39	Erosion of natural deposits	No
Sodium	mg/L	NA	NS	15-17	Naturally Occurring	No
Sulfate	mg/L	NA	250	26-58	Naturally Occurring	No

Treatment Requirements – 95% of samples each month must be less than 0.3 NTU. Range and lowest monthly percentage are listed. Turbidity is a measure of water clarity and is used to gauge filtration performance.

This information provided by the Monroe County Water Authority, tested on .

Turbidity- Entry Point	NTU	NA	TT	NA	Soil runoff	No
Turbidity- Distribution	NTU	NA	S	.05-1.49 (avg .16)	Soil runoff	No

Microbial – No more than 5% of monthly samples can be positive. The highest monthly % positive is listed.

Total Coliform Bacteria	% Positive	0	5%	ND	Naturally Occurring	No
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Disinfectant and disinfectant by-products (DBPs) - Chlorine has a MRDL (Maximum Residual Disinfectant Level) and MRDLG (Maximum Residual Disinfectant Level Goal) rather than an MCL and MCLG (Average and range are listed).

For the DBPs (THMs and Haloacetic acids) the highest running annual average.

Chlorine residual	mg/L	4	4	.41 (.10-1.0)	Additive for control of microbes	No
Total THMs	ug/L	NA	80	39 (29-55)	By-product of water chlorination	No
Haloacetic acids (HAA5)	ug/L	NA	60	15 (9-21)	By-product of water chlorination	No

Lead and Copper - 90% of samples must be less than the Action Level (AL). The 90th Percentile, the number of samples exceeding the AL, and the range of results are listed.

Copper (Customer Tap Samples)	mg/L	1.3	AL=1.3	0.094 (None) 0.005 - 0.500 (2015)	Corrosion of household plumbing	No
Lead (Customer Tap Samples)	ug/L	0	AL=15	12 (Four) ND - 63 (2015)	Corrosion of household plumbing	No

Unregulated Contaminant Monitoring(UCMR3) Every few years the USEPA issues a new list of up to 30 unregulated contaminants for which public water systems must monitor. This provides baseline occurrence data that the EPA combines with toxicological research to make decisions about future drinking water regulations. MCWA completed monitoring for the third list (UCMR 3) in 2014. For more information on this process to www.drinktap.org/home/water-information/water-quality/ucmr3.aspx.

	<u>Units</u>	<u>MCL</u>	<u>At Entry Point to System</u>	<u>At end of System</u>
Chromium (total)	ug/L	100	ND-0.23	ND-0.44
Molybdenum	ug/L	NS	1.2-1.3	ND1.3
Strontium	ug/L	NS	160-190	130-210
Vanadium	ug/L	NS	ND-0.2	.24-.50
Chromium-6	ug/L	100	.074-.085	.16-.24
Chlorate	ug/L	NS	ND-130	120-350
Chloromethane	ug/L	5 (NYS)	ND	ND

Key Terms Used in Water Quality Table

MCL=Maximum contaminant Level, the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as possible.

MCLG= Maximum Contaminant Level Goal (MCLG), the level of a contaminant below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL=Maximum Residual Disinfectant Level, 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.

MRDLG=Maximum Residual Disinfectant Level Goal, the level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of use of disinfectants to control microbial contamination.

LRAA= Locational Running Annual Average - the annual average contaminant concentration at a monitoring site.

pCi/L= picoCuries per liter

TT=Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water.

AL=Action Level, the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

ND=Not Detected, absent or present at less than testing method detection level. All testing methods are EPA approved with detection limits much less than the MCL.

NA=Not applicable **NR**= Not required **NS**=No standard

mg/L=milligram (1/1,000 of a gram) per liter=**ppm**=parts per million

ug/L=microgram (1/1,000,000 of a gram) per liter=**ppb** per billion

ng/L=nanogram (1,000,000,000 per liter=**ppt** per trillion

NTU=Nephelometric Turbidity Unit, a measure of the clarity of water.

Statistics

Total water purchased from MCWA	151,464,000
Annual System Use	121,500,000
Non-billable water (maintenance, flushing, leaks)	29,964.000
Annual cost for average residential customer	\$243.00
Population served	6192
Number of accounts	1853