

DALLASTOWN-YOE WATER AUTHORITY
2018 CONSUMER CONFIDENCE REPORT
PUBLIC WATER SUPPLIER ID #7670085

**ESTE INFORME CONTIENE INFORMACIOU MUY IMPORTANTE. TRADUZCALO O
HABLE CON ALGUIEN QUE LO ENTIENDA BIEN.**

The purpose of this report is to inform you of the quality of the drinking water produced and delivered to each of you, our consumers. It is our intent to give you a better understanding of the quality of water and service provided to you. We strive to deliver a dependable, potable supply of water through our efforts of continually evaluating our processes. Since Red Lion Municipal Authority supplies all of the water for Dallastown-Yoe Water Authority, this report is inclusive of their system.

WATER SOURCES

Red Lion Municipal Authority utilizes surface water as our raw water supply source. They own and operate two impounding dams, one at Cabin Creek in Windsor Township and the other at Beaver Creek in Chanceford and Lower Windsor Townships. Red Lion Municipal Authority also has a raw water pumping station on the confluence of Greenbranch Stream and the Susquehanna River in Chanceford Township.

Under normal conditions, the primary source of raw water is Cabin Creek. Under high demand conditions a combination of Cabin Creek and Beaver Creek is utilized and, under drought conditions it may become necessary to draw water from all three sources.

A Source Water Assessment of Red Lion Municipal Authority sources was completed in 2002 by the PA Department of Environmental Protection (PADEP). The Assessment found that the sources that are potentially most susceptible to accidental spills along roads, leaks in underground storage tanks, urban storm water runoff and agricultural activities. Overall, there is little to moderate risk of significant contamination. Summary reports of the Assessment are available on the PADEP Web site at www.depweb.state.pa.us (Keyword: "source water"). Complete reports were distributed to municipalities, water suppliers, local planning agencies and PADEP offices. Copies of the complete report are available for review at PADEP Southcentral Regional Office, Records Management Unit at (717)705-4708.

Red Lion Municipal Authority has completed the project of developing a comprehensive Source Water Protection Plan to protect the high quality drinking water that they supply to all customers. The Source Water Protection Plan was submitted to PADEP in April, 2008 and received approval in May, 2008. Copies of the plan are available for review at Red Lion Municipal Offices, Kaltreider-Benfer Library (in Red Lion), York County Planning Commission, York County Conservation District, Municipal Offices of Windsor Township, Lower Windsor Township and Chanceford Township, Collinsville Library and Windsor Borough Office.

Everyone Lives Downstream

The Red Lion Area Source Water Protection Plan focuses on protecting the Cabin Creek and Beaver Creek watersheds as well as the Susquehanna River from potential sources of pollution such as excess sediments and harmful chemicals through public education, physical protection and emergency response procedures.

It is very important that residents and consumers understand that everyday activities can affect the quality of our drinking water, even if you do not live directly within a watershed.

There are four things that you can do to help protect our drinking water:

1. Properly dispose of unwanted chemicals and medicines. Unwanted chemicals should never be flushed down a toilet or dumped down a storm drain. Instead, please take unwanted chemicals to a community hazardous waste program. Unwanted or expired medicines should be placed in the trash.

2. Use lawn care products according to the direction on the package. Lawn and garden herbicides, pesticides and fertilizers are safe and effective when applied according to the directions on the package. In particular, never apply these chemicals when rain is in the immediate weather forecast.
3. Wash your car responsibly. Washing your car on a grassy area instead of the driveway or in the street minimizes the amount of dirty water that flows down the storm drain and then the nearest stream. Washing your car only when it is really dirty conserves water, minimizes runoff and saves you money.
4. Learn more about watershed protection and get personally involved. Check PA DEP's website at <http://www.dep.state.pa.us/dep/deputate/watermgmt/wc/Subjects/SrceProt/SourceAssessment/default.htm> and US EPA's website at <http://www.epa.gov/ebtpages/watedrinkiprotection.html>.

The Red Lion Area Source Protection Plan will be a comprehensive program to protect and improve the quality of the water in the watersheds that supply water to the Red Lion System. Components of the plan will include public education, emergency management, identification of source of pollution, municipal cooperation and security upgrades to the water treatment system.

In 1988, a new treatment plant was constructed at Cabin Creek, replacing the 1925 plant at the same location. All raw water passes through the treatment plant for purification. The treatment process consists of aeration, oxidation, coagulation, clarification, filtration, corrosion control, disinfection and fluoridation. Upon completion of the treatment process, the purified water is pumped into the distribution system.

The Red Lion Municipal Authority supplies water to Red Lion Borough, portions of Chanceford Township, Windsor Township and York Township. In addition, Red Lion Municipal Authority provides all potable water to Windsor Borough Authority and Dallastown-Yoe Water Authority via written sales agreements with each Authority. Windsor Borough Authority owns and operates a distribution system, which serves Windsor Borough. The Dallastown-Yoe Water Authority owns and operates a water distribution system, which serves Dallastown Borough, Yoe Borough and portions of York Township.

It is our constant goal to provide all consumers with potable water and we are pleased to inform you that for the period of January 1, 2018 to December 31, 2018, the water supplied from the Dallastown-Yoe water system met or exceeded all federal and state requirements under the federal Safe Drinking Water Act. As mandated by federal and state regulations, the water you consume is monitored routinely.

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.

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 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 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, 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 consume, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration 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, which 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 Hot Line (800-426-4791)**

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 microbial contaminants are available from the Safe Drinking Water Hot Line (800-426-4791).

The following pages contain tables indicating detected levels of contaminants found in drinking water from the Red Lion and Dallastown-Yoe Systems, and unless otherwise noted, the data presented is from testing done January 1, 2018 – December 31, 2018.

Indicated in the following tables, the Red Lion and Dallastown-Yoe water systems were below the Action Level for lead and copper content. Although, corrosion control treatment to prevent lead in drinking water continues, the following is being provided to you for informational purposes.

Lead – “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. Dallastown-Yoe Water Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in 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 <http://www.epa.gov/safewater/lead>.”

Nitrate – if nitrate in drinking water exceeds levels above 10ppm, it is a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Below is an explanation of abbreviations found in the tables.

KEY

AL	=	Action Level (The concentration of a contaminant which, if exceeded, triggers treatment techniques or requirements that water system must follow.)
MCL	=	Maximum Contaminate Level (The maximum level of contaminate that is allowed in drinking water.)
MCLG	=	Maximum Contaminate Level Goal (The level of contaminate in drinking water below which there is no known health risk.)
MDR	=	Minimum Disinfectant Residual
MFL	=	Million Fibers/Liter
MRDL	=	Maximum Residual Disinfection Level
MRDLG	=	Maximum Residual Disinfection Level Goal
NTU	=	Nephelometric Turbidity Units (A measure of the clarity of water)

- Ppm = Parts Per Million or milligrams per liter (mg/L) (A measurement used for the determination of the concentration of many constituents found in water. One Part Per Million would be equal to one pound in 119,904 gallons of water.)
- ppb = Parts Per Billion or micrograms per liter (ug/L) (Same as above except smaller. 1 part per billion is equal to one pound in 119,904,077 gallons of water.)
- TT = Treatment Technique (A treatment process that is designed to reduce the level of contaminate in drinking water.)
- CFU = Colony Forming Units (A means of determining the number of colonies within the sample)
- pCi/l = picocuries per liter (A measure of radioactivity)
- PWSID = Public Water Supply Identification Number

**RED LION
CABIN CREEK WATER TREATMENT PLANT PERFORMANCE**

Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Likely Source of Contamination
Turbidity	TT=1 NTU for a single Measurement	0	0.05	8/27/18	N	Soil Runoff
	TT=at least 95% of Monthly samples ≤ 0.3 NTU		100%	2018	N	

Chemical Contaminants

DETECTED SAMPLE RESULTS:

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Fluoride	2	2	0.86	N/A	ppm	2018	N	Erosion of natural deposits; Water additive which promotes strong teeth
Nitrate	10	10	5.79	4.90-5.79	ppm	2018	N	Runoff from fertilizer use; Leaching from septic tanks; Sewage; erosion of natural deposits
Barium	2	2	0.00	N/A	ppm	2018	N	Discharge of drilling wastes; Discharge from metal refineries; erosion of natural deposits

EPA's MCL for fluoride is 4ppm. However, PA has set a lower MCL to better protect human health.

Contaminant	Range of % Removed Req	Range of % Removed Achieved	Violation	Number of Quarters Out of Compliance	Likely Source of Contamination
Total Organic Carbon (TOC)	N/A	33.3 – 41.7	N	0	Naturally Present in the Environment

**DALLASTOWN WATER SYSTEM
DISINFECTION RESIDUAL**

Contaminant	Violation Yes/No	Level Detected	Range	Unit Measurement	MRDLG	MRDL	Likely Source of Contamination
Chlorine	N	.24	.24 - 2.16	PPM	4	4	Water Additive used to control Microbes

CONTAMINANTS

Contaminant	Violation Y/N	90 th Percentile Results	Unit Measurement	MCLG	AL	Likely Source of Contamination
Copper- from 2016 Monitoring	N	.89	PPM	1.3	AL= 1.3	Corrosion of household plumbing systems; Erosions of natural deposits; Leaching from wood preservatives 0 Samples over AL
Lead-from 2016 Monitoring	N	0.0	PPB	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits 0 Samples over AL

ORGANIC CONTAMINANTS

Contaminant	Violation Y/N	Level Detected	Range	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids 2018	N	30.9	16.3 – 40.3	PPB	0	60	By-product of drinking water chlorination
Total Trihalomethanes 2018	N	53.8	15.9 – 75.9	PPB	0	80	By-product of drinking water chlorination

MICROBIOLOGICAL ANALYSIS RESULTS

Contaminant	Violation Y/N	# of Positive Samples & Month of Occurrence	MCL	MCLG	Sources of Contamination
Total Coliform Bacteria(TC) 2018	N	NO SAMPLES WERE POSITIVE FOR TOTAL COLIFORM	0	0	Naturally occurring in the environment
Contaminant	Violation	# of Positive Samples & Month of Occurrence	MCL	MCLG	Sources of Contamination
Fecal Coliform Bacteria(FC) or E-coli – 2018	N	NO SAMPLES WERE POSITIVE FOR FECAL COLIFORM	0	0	Human and animal fecal waste

VIOLATION

*** 2018-1st - quarter Haloacetic Acids and Trihalomethanes were taken 2/13/18; they should have been taken 2/5/18 thru 2/11/18; the samples were late, but the samples were good

DALLASTOWN-YOE WATER AUTHORITY

Dallastown-Yoe Water Authority consists of five members, and a manager. Regularly scheduled meetings are held the second Wednesday of each month at 7:00pm, in the Dallastown Borough Office Building, 175 East Broad St, Dallastown PA. Your attendance and participation is welcomed and encouraged. Inquires concerning Dallastown-Yoe Authority should be addressed to the Dallastown Borough Office, Attention Connie L. Stokes, telephone (717) 244-6626.

AUTHORITY MEMBERS

Patricia Myers – Chairman
Steve Malesker – Vice-Chairman
Pat Callahan– Treasurer
Susan Sprague
Mike McGonagle

Connie L. Stokes – Manager

If you have any questions about this report or concerning your water utility, for Dallastown-Yoe Water, please contact Connie Stokes by calling (717)244-6626. We want our valued customers and residents to be informed about their water utility. If you want to learn more, you are welcome to attend the monthly Water Authority meetings, which are the 2nd Wednesday of every month @ 175 E. Broad Street, Dallastown, PA.

WATER SUPPLY FLOW CHART

