IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER QUALITY

2018 ANNUAL DRINKING WATER QUALITY REPORT

FROM

NORTH MIDDLETON AUTHORITY
of

NORTH MIDDLETON TOWNSHIP

240 CLEARWATER DRIVE
CARLISLE, PA 17013
(717) 243-8269

PWSID No. 7210049

WATER CONSERVATION REMINDER

Please remember it is everyone's responsibility to do his or her part to conserve our most precious resource, WATER!

Water Conservation Tips for Everyone: The average person uses about 62 gallons of water every day; the majority of water is used for laundry, toilet flushing and showering, followed by faucet use and leaky fixtures.

Try these water conservation tips and save water and money:
Replace an old toilet with a new 1.6 gallon-per-flush model. This can save 7,900 to 21,700 gallons of water per year.
Repair dripping faucets and leaking toilets (flapper valves are usually the cause). Repairs can save 10 gallons of water per person per day. A faucet dripping at one drop per second wastes 2700 gallons of water per year.
Wash clothes and dishes only when you have a full load. When replacing an older machine, consider high efficiency models, which use an average of 30% less water and 40-50% less energy. Install low-flow, water-efficient showerheads and faucets and save 1-to-7.5 gallons per minute. Taking a quick shower can save an average of 20 gallons of water.
Turn off the water when brushing your teeth or shaving to save more than 5 gallons of water per day.

For more water conservation tips visit the DEP website at www.state.pa.us

Please do your part to help conserve our most precious resource, Water!!

2018 Annual Drinking Water Quality Report

North Middleton Authority
of
North Middleton Township

Public Water Supply Identification Number 7210049

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)

WATER SYSTEM INFORMATION:
This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact E. Lee Koch at 717-243-8269. Safe water is vital to our community. And we want our valued customers to be informed about their water supply. We have regular Water Authority meetings on the third Thursday of every month at the North Middleton Authority Administration Offices located at 240 Clearwater Drive, Carlisle, PA at 4;30 P.M. The public is welcome to attend.

This report contains information on the source water supply from North Middleton Authority PWSID#7210049, South Middleton Township Municipal Authority, PWSID#7210050, Middlesex Township Municipal Authority PWSID#7210063 and within the distribution system of North Middleton Authority PWSID#7210049.

North Middleton Authority Water Source:
The watershed or drainage area, providing our source water is the Conodoguinet Creek. The Conodoguinet Creek is the longest surface water stream in Cumberland County with a watershed, or drainage area of approximately 375 square miles extending to Fort Loudon, in Franklin County. The North Middleton Authority water plant is located along the Conodoguinet Creek in the eastern portion of North Middleton Township.

Excess nutrients and soil runoff from agricultural sources, construction, and urban runoff are some of the major factors affecting water quality in this watershed. Proper nutrient management and soil conservation practices can protect source water quality. Homeowners can also protect water quality by applying lawn care fertilizers, herbicides, and pesticides only when absolutely necessary and then only in the minimum quantity required. Everyone also needs to be aware that storm water catch basins in urban areas lead to streams that supply drinking water. Storm water inlets are only designed for storm water and not as a convenient disposal site for household chemicals or used motor oil. To learn more about protecting the source water quality in the watershed area you can contact a Department of Environmental Protection (DEP) regional watershed program at 717-705-4802. DEP staff protects water quality through the Source Water Assessment and Protection Program (SWAP).

A Source Water Assessment Program of the Conodoguinet Creek Intake, which supplies water to the North Middleton Authority Filtration Plant, was completed in 2003 by the Susquehanna River Basin Commission (SRBC). The Assessment has found that the Conodoguinet Creek Intake is potentially most susceptible to agricultural and urban runoff. Overall, the Conodoguinet Creek Watershed has a moderate risk of significant contamination. Summary reports of the Assessment are available on the Source Water Assessment & Protection Web page at http://www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/SrceProt/SourceAssessment/default.htm. Complete reports were distributed to municipalities, water supplier, local planning agencies and PA DEP offices. Copies of the complete report are available for review at the PA DEP South Central Regional Office, Records Management Unit at (717) 705-4732.

North Middleton Authority, South Middleton Township Municipal Authority and Middlesex Township Municipal Authority have entered into agreements whereas, North Middleton Authority purchases water from both South Middleton Township Municipal Authority and Middlesex Township Municipal Authority to serve portions of North Middleton Township. You reside or work within one of several locations within North Middleton Township, which is provided drinking water from these intermunicipal cooperative agreements.

On May 29, 2018 the Authority Staff removed the water plant from service and expanded the purchasing of water from Middlesex Township Municipal Authority and South Middleton Township Municipal Authority for an additional portion of the Authority's service area. This move was taken as a precautionary step to review the condition of the filter beds and also to allow the Authority to evaluate the overall condition of existing treatment plant. It also has allowed us to evaluate the direction we wanted to undertake which could include rebuilding the existing water treatment plant or replacing the existing water plant.

South Middleton Township Source Water:
The water sources within the South Middleton Township Municipal Authority consist of three groundwater wells. Well No.1 draws from the Tomstown Aquifer, was developed in 1972 and is located across from Pittsburg Plate Glass (PPG), Well No. 2 draws from the Elbrook Aquifer, was developed in 1975 and is located one mile west of Boiling Springs, south of PA Route 174, and Well No. 3 draws from the Rockdale Run Aquifer, was developed in 1985 and is located across from the Forest Meadows development off Rockledge Drive, southwest of Carlisle.

Middlesex Township Municipal Authority Source Water:
In July of 2010 Middlesex Township Municipal Authority began using its own permitted groundwater supply.
Well No. 1 which is located west of South Middlesex Road draws from the Rockdale Run Aquifer Formation and was constructed in the spring of 2004.

MONITORING YOUR WATER:
North Middleton Authority, South Middleton Township Municipal Authority and Middlesex Township Municipal Authority routinely monitor the quality of drinking water in accordance with Federal and State laws. All sources of drinking water are subject to potential contamination by compounds that are naturally occurring or manmade. The compounds or contaminants can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminant and/or compounds. Their presence however, does not necessarily indicate that the water poses a health risk.
To help you understand this better we have prepared a series of tables to illustrate the detection levels of only the positive compounds and/or contaminants found throughout the monitoring period of January 1st to December 31st, 2018. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data is from prior years in accordance with the Safe Drinking Water Act. Data from prior years have been noted on the sampling results tables.

Action Level (AL) – The concentration of a contaminant that, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goals as feasible using the best available treatment technology.

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

Maximum Residual Disinfectant Level Goal (MRDLG) – The level of a 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 contamination.

Minimum Residual Disinfectant Level (MinRDL) – The minimum level of residual disinfectant required at the entry point to the distribution system.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water.

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part per billion or micrograms per liter.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million or milligrams per liter.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

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

NORTH MIDDLETON AUTHORITY SOURCE WATER @ TREATMENT PLANT
DETECTED SAMPLE RESULTS PWSID#7210049

Entry Point Disinfectant Residual							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date of lowest result	Violation Y/N	Sources of Contamination
Chlorine	**0.2**	**1.13**	**1.13-2.46**	**ppm**	**5/23/2018**	**No**	**Water additive used to control microbes.**

Chemical Contaminants							
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detection	Units	Sample Date	Violation Y/N	Sources of Contamination
Nitrate	**10**	**10**	**3.23**	**N/A**	**ppm**	**05/02/18**	**No**	**Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits**
Cadmium	**5**	**5**	**.4**	**N/A**	**ppb**	**4/4/18**	**No**	**Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints**

Total Organic Carbon (TOC)					
Contaminant	Range of % Removal Required	Range of percent removal achieved	Number of quarters out of compliance	Violation Y/N	Sources of Contamination
TOC	**15-25**	**17.9-56.6**	**0**	**No**	**Naturally present in the environment.**

Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Source of Contamination
Turbidity	**TT=1 NTU for a single measurement**	**0**	**0.13**	**2018**	**No**	**Soil runoff.**
	TT= at least 95% of monthly samples≤0.3 NTU		**100%**	**2018**	**No**	

Turbidity is a measurement of the cloudiness of the water. It is monitored because it is a good indicator of the treatment plant filtration system.

NORTH MIDDLETON AUTHORITY DISTRIBUTION SYSTEM ANALYSIS PWSID#7210049

Lead and Copper							
Contaminant	Action Level (AL)	MCLG	90th Percentile Value (a)	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	**15**	**0**	**9.0**	**ppb**	**0 of 20**	**No**	**Corrosion of household plumbing.**
Copper	**1.3**	**1.3**	**0.191**	**ppm**	**0 of 20**	**No**	**Corrosion of household plumbing.**

Chemical Contaminants								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Total Haloacetic Acids Five	**60**	**N/A**	**36.46**	**6.53-70.7**	**ppb**	**2018**	**No**	**By-product of drinking water chlorination**
Total Trihalomethanes	**80**	**N/A**	**44.48**	**16.4-55.5**	**ppb**	**2018**	**No**	**By-product of drinking water chlorination**
Chlorine (Distribution)	**MRDL=4**	**MRDLG =4**	**.23**	**0.23-2.2**	**ppm**	**2018**	**No**	**Water additive used to control microbes.**

Footnotes:

(a) Lead and Copper values from 2016. Next testing cycle is 2019

North Middleton Authority staff took the February 2018 quarterly samples for Trihalomethanes and Haloacetic Acids on the incorrect date the sampling plan calls for, which resulted in a failure to meet the sampling plan. The quarterly samples were taken within several days of the sampling plan and within the correct quarter. The results of the samples were within normal tolerances for Trihalomethanes and Haloacetic Acids. None of these actions were considered emergencies, and you do not need to do anything, however as our customers you have the right to know this occurred. This note was also included within the CCR for 2017.

SOUTH MIDDLETON TOWNSHIP MUNICIPAL AUTHORITY SOURCE WATER PWSID #7210050 DETECTED SAMPLE RESULTS

Chemical Contaminants								
Contaminant	**MCL in CCR Units**	**MCLG**	**Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Barium	**2**	**2**	**.054**	**0.046-0.054**	**ppm**	**2018**	**No**	**Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits**
Chromium	**100**	**100**	**3.0**	**1.0 – 3.0**	**ppb**	**2018**	**No**	**Discharge from steel and pulp mills; erosion of natural deposits.**

South Middleton Township Municipal Authority Source Water PWSID #7210050
Detected Sample Results Continued

Chemical Contaminants								
Contaminant	**MCL in CCR Units**	**MCLG**	**Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Radium-228	**5.0**	**0**	**1.2**	**N/A**	**Pci/L**	**2014**	**N**	Erosion of natural deposits
Nitrite	**1**	**1**	**0.75**	**0 – 0.75**	**ppm**	**2013**	**N**	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate	**10**	**10**	**5.57**	**3.02 - 5.57**	**ppm**	**2018**	**N**	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Entry Point Disinfectant Residual							
Contaminant	**Minimum Disinfectant Residual**	**Lowest Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Chlorine	**0.40**	**0.62**	**0.62- 2.1**	**ppm**	**2018**	**No**	**Water additive used to control microbes.**

Microbial (related to Assessments/Corrective Actions regarding TC positive results)					
Contaminants	**TT**	**MCLG**	**Assessments/ Corrective Actions**	**Violation Y/N**	**Sources of Contamination**
Total Coliform Bacteria	**Any system that has failed to complete all the required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement**	**N/A**	**See detailed description under "Detected Contaminants Health Effects Language and Corrective Actions" section**	**N**	**Naturally present in the environment.**

SOUTH MIDDLETON TOWNSHIP MUNICIPAL AUTHORITY
HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS (2018)

About our Level 1 Assessment: During the past year, we were required to conduct a Level 1 Assessment because we had a confirmed positive total coliform result on September 21, 2018 and a second positive result on September 24, 2018. The Level 1 Assessment was completed on time. A complete review of our water treatment and distribution system did not reveal any sanitary defects and all subsequent tests have been satisfactory. No corrective action was required.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

Unregulated Contaminant Monitoring Rule #3- Starting in 2014 SMTMA tested for unregulated contaminants that don't yet have a drinking water standard set by EPA. The purpose of monitoring for them is to help EPA decide whether the contaminants should have a standard.

South Middleton Township Municipal Authority Detected Unregulated Contaminants

Contaminant	MCL in CCR Units	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Hexavalent Chromium	NA	0.53	0.18-0.53	ppb	2014	NA	Odorless and tasteless metallic element, found naturally in rocks, plants, soil and volcanic dust.
Strontium	1500	440	74-440	ppb	2014	NA	Alkaline earth metal similar to calcium and barium
Vanadium	NA	0.25	0.20-0.25	ppb	2014	NA	Found in small quantities in soils and rocks

UCMR4 Analysis – Unregulated Contaminants							
Contaminant	MCL in CCR Units	Result	Range	Units	Sample Date	Violation Y/N	Sources of Contamination
Bromochloroacetic Acid	N/A	1.61	1.61 to 2.14	ug/l	2018	N/A	By-product of drinking water chlorination
Bromodichloroacetic Acid	N/A	1.07	0.853 to 1.07	ug/l	2018	N/A	By-product of drinking water chlorination
Chlorodi-bromoacetic Acid	N/A	0.441	0.408 to 0.441	ug/l	2018	N/A	By-product of drinking water chlorination
Dichloroacetic Acid	N/A	6.69	4.34 to 6.69	ug/l	2018	N/A	Dichloroacetic Acid is colorless with a pungent odor; it is used as a fungicide or a chemical component of pharmaceuticals.

MIDDLESEX TOWNSHIP MUNICIPAL AUTHORITY SOURCE WATER PWSID NO. 7210063

Chemical Contaminant	MCL in CCR units	MCLG	Level Detected	Range of Detection	Units	Violation	Sources of Contamination
Nitrate (2018)	10	10	8.6	7.2-8.6	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion from natural deposits.
Barium (2018)	2	2	0.038	N/A	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (2018)	100	100	2.5	N/A	ppb	No	Erosion of natural deposits
Fluoride (2015)	2	2	0.1	N/A	ppm	No	Erosion of natural deposits

Entry Point Disinfectant Residual							
Contaminant	**Minimum residual required**	**Lowest Level Detected**	**Range Of Detection**	**Units**	**Sample Date**	**Violation Y/N**	**Source of Contamination**
Chlorine (Site 102)	0.60	1.05	1.05-1.19	mg/l	2018	N	Water additive used to control microbes.

Violations: In February 2018 Middlesex Township Municipal Authority had a Tier 3 Violation due to our contracted lab not testing for Chlorine Residual prior to collecting a routine bacteria sample. Notices were mailed to all customers.

EDUCATIONAL INFORMATION:

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 800-426-4791.

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 radioactive material, and can pick-up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
(B) 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.
(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban stormwater runoff and septic systems.
(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Water Hardness

Dissolved harmless minerals in water, such as calcium or magnesium, are responsible for that white residue in your coffeepot or on your showerhead. North Middleton Authority's water source as well as South Middleton Township Municipal Authority and Middlesex Township Municipal Authority are considered hard due to the amount of dissolved calcium and magnesium in the water sources.

Why does the water sometimes taste or smell "funny"? Some people do not like the taste of chlorine that is added to the water supply to kill germs. Also, as algae grow in surface water, such as the Conodoguinet Creek, they give off harmless, smelly chemicals that can cause unpleasant tastes in drinking water. This is more common during periods of drought. If you do not like the taste of the drinking water, store some in closed glass containers in the refrigerator. Warm drinking water has more "taste" than cold water.

In order to ensure that tap water is safe to drink, EPA and DEP prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The FDA and DEP regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

INFORMATION ABOUT 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. North Middleton 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 800-426-4791 or at http://www.epa.gov/safewater/lead.

OTHER INFORMATION:

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six 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 advice from your health care provider.

Special Notice To At Risk Populations

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 from the Safe Drinking Water Hotline (800-426-4791).

We encourage you to share this report with others, especially those who drink this water and may not have received this report. You may do so by making copies or posting in a common area.

If you have questions or would like additional information regarding this report please call our office at (717) 243-8269.

Source Water Assessment Summary
North Middleton Authority
Conodoguinet Creek Watershed

Introduction

Pennsylvania Department of Environmental Protection (Pa. DEP) is required by the 1996 Safe Drinking Water Act to complete assessments of potential contaminants that may degrade the raw water quality of public drinking water sources. This Source Water Assessment and Protection (SWAP) Summary provides information to support local and state efforts to preserve raw water quality within the Conodoguinet Creek Watershed. The assessment covers the intake operated by the North Middleton Authority (NMA). The assessment addresses raw water quality only, not the finished drinking water distributed by the water suppliers.

Drinking Water Sources

The NMA intake is located on the Conodoguinet Creek, North Middleton Township, Cumberland County. Land use in the watershed is approximately 62% agriculture, 33% forested, and 5% developed lands. The remaining less than 1% are water and transitional land. An average of .3 million gallons of water is withdrawn from the intake daily. The population served by the intake exceeds 9,500 people. The communities served by the water supplier include North Middleton Authority and surrounding areas.

Water Quality and Water Treatment Information

Raw water is filtered and treated with chlorine for disinfection, prior to being distributed to the customers. Additional information about treated water quality can be obtained from the water supplier's Annual Water Supply Report.

Evaluation of Significant Potential Sources of Contamination

The assessment addresses contaminants that may enter the water drawn from the Conodoguinet Creek. The contaminants evaluated in the assessment include regulated discharges and nonpoint sources of pollution. The table below describes the significant potential sources of contamination. Each source has been given a qualitative susceptibility rating according to its potential to impact the water supply source. An "A" rating represents the highest priority rating. An "F" rating is considered to be the lowest priority contaminant issue. The complete matrix analyses can be found in the full SWAP report.

Table 1. – Contaminant Priority Listing for the Conodoguinet Creek Watershed

Source of Contaminants	Protection Priority
Agriculture - crops	A
Agriculture - livestock	A
Urban Runoff	A
Industrial Discharges	B
Transportation Corridors	C
Sewage Treatment Facilities	C
Residential / Golf Courses	C
On-Lot Septic	D
Petroleum Storage Tanks, Gas/Service Stations	D
Landfills	E

As indicated above, agricultural activities, urban runoff, and potential for spills from industrial sites and transportation corridors are the most significant potential sources of contamination to Conodoguinet Creek. Increasing residential development also poses some threat to raw water quality. Lawn care chemicals, septic systems and increased runoff from these areas contribute to water quality degradation. However, no contaminants are found in concentrations that require the water supplier to significantly alter their treatment procedures.

Ongoing Watershed Protection Activities

Industrial and municipal discharges into the Conodoguinet Creek and its tributaries are controlled by state and federal regulations. Several efforts are also currently addressing problems associated with nonpoint source pollution. Several grant projects are focused on reducing agricultural runoff to selected tributaries in the Conodoguinet Creek Watershed.

Source Water Protection Needs

Based on the assessment, several critical areas within the watershed require attention to reduce agricultural runoff. Best Management Practices would greatly diminish nutrient runoff from agricultural fields and help to filter contaminants flushed from developed areas. Emergency response plans should be available in the event of an accidental spill into the Conodoguinet Creek from a roadway or industrial facility.

Additional Information

The final SWAP Report for the North Middleton Authority is available from PA DEP.