

West Milford Municipal Utilities Authority

June 18, 2013

West Milford Township
Clerks Office
1480 Union Valley Road
West Milford NJ 07480

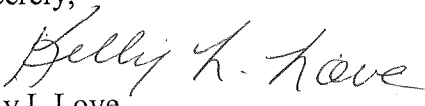
RE: Consumer Confidence Reports

To Whom It May Concern:

Please find enclosed copies of the West Milford MUA's 2012 Consumer Confidence Reports. Kindly post these notices after review on the public bulletin board for residents to review.

Should you have any questions please feel free to contact us. Thank you.

Sincerely,


Kelly L Love
Administrator

Cc; MUA Board of Commissioners
File

RECEIVED
JUL 2 2013
TOWNSHIP CLERK
TWP. OF WEST MILFORD

West Milford MUA – Olde Milford (PWSID#: NJ1615016) Year 2012 Annual Water Quality Report

What's The Quality of Your Water? West Milford MUA is pleased to share this water quality report with you. This report covers January 1 through December 31, 2012. Olde Milford surpassed the strict regulations of both the State of New Jersey and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to provide reports like this every year to each customer. *Olde Milford monitors for many substances both regulated and unregulated.*

Sources of Supply: Olde Milford draws its water from 4 groundwater wells. These wells utilize disinfection and iron removal in the treatment process. It has 571 service connections and serves approximately 1,622 people per day.

Results of Monitoring For Contaminants in Drinking Water

<u>Contaminant</u>	<u>Units</u>	<u>MCL</u>	<u>MCLG</u>	<u>Level Detected</u>	<u>Range</u>	<u>Potential Source</u>
Total Coliforms	Present/ Absent	0	0	<1	0 of 24 samples were positive	Leaking septic system, runoff from streams
Copper	ppm	1.3 (Action Level)	1.3	0.4 (90 th Percentile)	0 of 10 samples exceeded action limit	Corrosion of household plumbing.
Lead	ppb	15 (Action Level)	0	6 (90 th Percentile)	0 of 10 samples exceeded action limit	Corrosion of household plumbing.
Nitrate	ppm	10	10	1.3	6 Samples	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Chlorine Residual	ppm	MRDL 4	MRDLG 4	0.95	0.24 – 2.09	Water additive used to control microbes.
Gross Alpha	pCi/L	15	0	3.3	0.6 – 3.2	Erosion of Natural Deposits
Total Radium	pCi/L	1	0	0.8	0.03 – 1.09	Erosion of Natural Deposits
Uranium	ug/L	30	0	9	ND - 30	Erosion of Natural Deposits

Other Substances: These are considered Secondary Contaminants and are not considered a health risk. They can affect taste, odor or color of your drinking water.

<u>Contaminant</u>	<u>Units</u>	<u>Detected Limits</u>	<u>Range</u>	<u>Secondary MCL</u>
Sodium	ppm	18	8 - 23	50
Iron	ppm	<0.2	<0.2	0.3
Manganese	ppm	0.02	ND – 0.09	0.05
Sulfate	ppm	18	15 - 23	250
Chloride	ppm	78	45 - 122	250

Health Effects of Detected Contaminants:

Chloride: Chloride occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations chloride can cause Diarrhea in some people.

Chlorine: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Coliform Bacteria/E-Coli: Coliform Bacteria are common in the environment and are generally not harmful. The presence of these bacteria in drinking water is usually the result of a problem with the treatment system or the pipes that distribute the water, and indicates that the water may be contaminated with germs that may cause disease.

Copper: Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water that contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Gross Alpha: Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Iron: The recommended upper limit for iron is based on unpleasant taste of water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

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. West Milford MUA is responsible for providing high water quality, 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 drinking water, you may wish to have your water tested.

Manganese: The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from levels which would be encountered in drinking water.

Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Radium: Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Sodium: For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

Sulfate: Sulfate occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations sulfate can cause Diarrhea in some people.

Uranium: Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Other Vulnerable Population: 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 particularly at risk from infections. These people should seek advice from their health care providers. EPA/CDC guidelines on appropriate means to lesson the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

Source Water Assessment:

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the **Source Water Assessment Report and Summary** for this public water system, which is available at www.state.nj.us/dep/swap/ or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

The source water assessment performed on Olde Milford's well-water sources determined the following:

<u>Source Name</u>	<u>Pathogens</u>	<u>Nutrients</u>	<u>Pesticides</u>	<u>VOCs</u>	<u>Inorganics</u>	<u>Radio-nuclides</u>	<u>Radon</u>	<u>DBPs</u>
	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H
8 Wells*	7 / 1	3 / 5	8	8	4 / 4	1 / 7	8	8

*The numbers indicated represent the number of wells in that category's ratings.

Ratings: (L= Low, M= Medium, H = High)

A public water system's susceptibility rating (L for low, M for medium or H for high) is a combination of two factors. H, M, and L ratings are based on the potential for a contaminant to be at or above 50% of the Drinking Water Standard or MCL (H), between 10 and 50% of the standard (M) and less than 10% of the standard (L).

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination.

Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. NJDEP found the following **potential** contaminant sources within the source water assessment areas for your water: Nutrients, Pesticides, Inorganics, Radon, Radionuclides, and Disinfection Byproducts. Olde Milford does chlorinate the water from their well and therefore runs risk of Disinfection Byproducts. The System will test for Radionuclides, Pathogens, Nutrients, VOCs and lead/copper, as prescribed by the NJDEP. After reviewing the results, the NJDEP will make an assessment of water quality to determine if any additional testing or treatment is necessary. If you have questions regarding the source water assessment report or summary please contact the **Bureau of Safe Drinking Water at swap@dep.state.nj.us or 609-292-5550.**

Definitions:

The following is a list of the most common definitions used in Annual Water Quality Reports. Not all of the definitions apply to your report:

- **90th Percentile:** 90% of samples are equal to or less than the number in the chart.

- **Action Level:** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

- **MCL or Maximum Contaminant Level:** 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.

- **MCLG or Maximum Contaminant Level Goal:** 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.

- **RMCL or Recommended Maximum Contaminant Level:** recommended maximum level for secondary contaminants. Secondary contaminants are not believed to be a health risk.

- **ppb or parts per billion:** Micrograms per liter (ug/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

- **ppm or parts per million:** Milligrams per liter (mg/L). One part per million corresponds to one minute in two years, or a single penny in \$10,000.

- **pCi/L:** Picocuries per liter

- **NR:** Not regulated

- **NA:** Not applicable

- **ND:** Not detectable at testing limits

- **NJDEP:** New Jersey Department of Environmental Protection

- **EPA:** Environmental Protection Agency.

- **CDC:** Centers for Disease Control

Report prepared for WMMUA Olde Milford by:



Environmental & Laboratory Services

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West Milford MUA – Parkway System (PWSID#: NJ1615006) Year 2012 Annual Water Quality Report

What's The Quality of Your Water? West Milford MUA is pleased to share this water quality report with you. This report covers January 1 through December 31, 2012. Parkway System's drinking water surpassed the strict regulations of both the State of New Jersey and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to provide reports like this every year to each customer. *Parkway System monitors for many substances both regulated and unregulated.*

Sources of Supply: Parkway System draws its water from 1 groundwater well. This well utilizes disinfection in the treatment process. It has 32 service connections and serves approximately 115 people per day.

Results of Monitoring For Contaminants in Drinking Water

<u>Contaminant</u>	<u>Units</u>	<u>MCL</u>	<u>MCLG</u>	<u>Level Detected</u>	<u>Range</u>	<u>Potential Source</u>
Total Coliforms	Present/ Absent	0	0	<1	0 of 12 samples were positive	Leaking septic system, runoff from streams
Copper (2011)	ppm	1.3 (Action Level)	1.3	0.08 (90 th Percentile)	0 of 5 samples exceeded action limit	Corrosion of household plumbing.
Lead (2011)	ppb	15 (Action Level)	0	1.4 (90 th Percentile)	0 of 5 samples exceeded action limit	Corrosion of household plumbing.
Nitrate	ppm	10	10	1	1 Sample	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Trihalomethanes (THMs)	ppb	80	NA	0.8	1 Sample	Disinfectant Byproducts
Chlorine Residual	ppm	MRDL 4	MRDLG 4	0.43	0.01 – 1.75	Water additive used to control microbes.
48 Hr. Gross Alpha	pCi/L	15	0	4	1 Sample	Erosion of natural deposits
Combined Radium	pCi/L	5	0	1.1	1 Sample	Erosion of natural deposits
Uranium (ug/L)	ug/L	30	0	2	1 Sample	Erosion of natural deposits

Other Substances: These are considered Secondary Contaminants and are not considered a health risk. They can affect taste, odor or color of your drinking water.

<u>Contaminant</u>	<u>Units</u>	<u>Detected Limits</u>	<u>Range</u>	<u>Secondary MCL</u>
Sodium	ppm	16	NA	50
Sulfate	ppm	10	NA	250
Chloride	ppm	12	NA	250

Health Effects of Detected Contaminants:

Chloride: Chloride occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations chloride can cause Diarrhea in some people.

Chlorine: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Coliform Bacteria/E-Coli: Coliform Bacteria are common in the environment and are generally not harmful. The presence of these bacteria in drinking water is usually the result of a problem with the treatment system or the pipes that distribute the water, and indicates that the water may be contaminated with germs that may cause disease.

Copper: Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water that contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Gross Alpha: Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

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. West Milford MUA is responsible for providing high water quality, 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.

Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Radium: Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Sodium: For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

Sulfate: Sulfate occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations sulfate can cause Diarrhea in some people.

Trihalomethanes: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Uranium: Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Other Vulnerable Population: 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 particularly at risk from infections. These people should seek advice from their health care providers. EPA/CDC guidelines on appropriate means to lesson the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

Source Water Assessment:

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the **Source Water Assessment Report and Summary** for this public water system, which is available at www.state.nj.us/dep/swap/ or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

The source water assessment performed on the Parkway System's well-water sources determined the following:

<u>Source Name</u>	<u>Pathogens</u>	<u>Nutrients</u>	<u>Pesticides</u>	<u>VOCs</u>	<u>Inorganics</u>	<u>Radio-nuclides</u>	<u>Radon</u>	<u>DBPs</u>
	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H
1 Well*	1	1	1	1	1	1	1	1

*The numbers indicated represent the number of wells in that category's ratings.

Ratings: (L= Low, M= Medium, H = High)

A public water system's susceptibility rating (L for low, M for medium or H for high) is a combination of two factors. H, M, and L ratings are based on the potential for a contaminant to be at or above 50% of the Drinking Water Standard or MCL (H), between 10 and 50% of the standard (M) and less than 10% of the standard (L).

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination.

Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. NJDEP found the following **potential** contaminant sources within the source water assessment areas for your water: Nutrients, Pesticides, Inorganics, Radon, Radionuclides, and Disinfection Byproducts. The Parkway System does chlorinate the water from their well and therefore runs risk of Disinfection Byproducts. The System will test for Radionuclides, Pathogens, Nutrients, VOCs and lead/copper, as prescribed by the NJDEP. After reviewing the results, the NJDEP will make an assessment of water quality to determine if any additional testing or treatment is necessary. If you have questions regarding the source water assessment report or summary please contact the **Bureau of Safe Drinking Water** at swap@dep.state.nj.us or 609-292-5550.

Definitions:

The following is a list of the most common definitions used in Annual Water Quality Reports. Not all of the definitions apply to your report:

- **90th Percentile:** 90% of samples are equal to or less than the number in the chart.

- **Action Level:** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

- **MCL or Maximum Contaminant Level:** 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.

- **MCLG or Maximum Contaminant Level Goal:** 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.

- **RMCL or Recommended Maximum Contaminant Level:** recommended maximum level for secondary contaminants. Secondary contaminants are not believed to be a health risk.

- **ppb or parts per billion:** Micrograms per liter (ug/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

- **ppm or parts per million:** Milligrams per liter (mg/L). One part per million corresponds to one minute in two years, or a single penny in \$10,000.

- **NR:** Not regulated

- **NA:** Not applicable

- **ND:** Not detectable at testing limits

- **NJDEP:** New Jersey Department of Environmental Protection

- **EPA:** Environmental Protection Agency.

- **CDC:** Centers for Disease Control

Report prepared for WMMUA Parkway System by:



Environmental & Laboratory Services

90 1/2 West Blackwell Street

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West Milford MUA – Greenbrook System (PWSID#: NJ1615002) Year 2012 Annual Water Quality Report

What's The Quality of Your Water? West Milford MUA is pleased to share this water quality report with you. This report covers January 1 through December 31, 2012. Greenbrook System's drinking water surpassed the strict regulations of both the State of New Jersey and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to provide reports like this every year to each customer. *Greenbrook System monitors for many substances both regulated and unregulated.*

Sources of Supply: Greenbrook System draws its water from 3 groundwater wells. These wells utilize corrosion control, disinfection, and iron & manganese removal in the treatment process. It has 188 service connections and serves approximately 600 people per day.

Results of Monitoring For Contaminants in Drinking Water

<u>Contaminant</u>	<u>Units</u>	<u>MCL</u>	<u>MCLG</u>	<u>Level Detected</u>	<u>Range</u>	<u>Potential Source</u>
Total Coliforms	Present/ Absent	0	0	<1	0 of 12 samples were positive	Leaking septic system, runoff from streams
Chlorine Residual	ppm	MRDL 4	MRDLG 4	0.43	0.11 – 1.16	Water additive used to control microbes.
Copper	ppm	1.3 (Action Level)	1.3	0.5 (90 th Percentile)	2 of 20 samples exceeded action limit	Corrosion of household plumbing.
Lead	ppb	15 (Action Level)	0	<2.0 (90 th Percentile)	0 of 20 samples exceeded action limit	Corrosion of household plumbing.
Nitrate	ppm	10	10	1	3 Samples	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Trihalomethanes (THMs)	ppb	80	NA	1	3 Samples	Disinfectant Byproducts
48 Hr. Gross Alpha	pCi/L	15	0	4.8	4.4 – 5.1	Erosion of natural deposits
Combined Radium	pCi/L	5	0	1.2	0.2 – 2.2	Erosion of natural deposits

Other Substances:

These are considered Secondary Contaminants and are not considered a health risk. They can affect taste, odor or color of your drinking water.

<u>Contaminant</u>	<u>Units</u>	<u>Detected Limits</u>	<u>Range</u>	<u>Secondary MCL</u>
Sodium	ppm	28	18 - 35	50
Sulfate	ppm	12	8 - 20	250
Chloride	ppm	43	30 - 58	250
Iron	ppm	<0.2	ND – 0.433	0.3
Manganese	ppm	0.09	ND – 0.26	0.05

Health Effects of Detected Contaminants:

Chlorine: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Coliform Bacteria/E-Coli: Coliform Bacteria are common in the environment and are generally not harmful. The presence of these bacteria in drinking water is usually the result of a problem with the treatment system or the pipes that distribute the water, and indicates that the water may be contaminated with germs that may cause disease.

Copper: Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water that contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Gross Alpha: Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Iron: The recommended upper limit for iron is based on unpleasant taste of water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

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. West Milford MUA is responsible for providing high water quality, 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 drinking water, you may wish to have your water tested.

Manganese: The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from levels which would be encountered in drinking water.

Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Radium: Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Sodium: For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

Sulfate: Sulfate occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations sulfate can cause Diarrhea in some people.

THMs: Some people who drink water containing Trihalomethanes in excess of the MCL over many years may have an increased risk of getting cancer.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Other Vulnerable Population: 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 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 Hotline (800-426-4791)

Source Water Assessment:

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The source water assessment performed on the Greenbrook System's well-water sources determined the following:

<u>Source Name</u>	<u>Pathogens</u>	<u>Nutrients</u>	<u>Pesticides</u>	<u>VOCs</u>	<u>Inorganics</u>	<u>Radio-nuclides</u>	<u>Radon</u>	<u>DBPs</u>
	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>
3 Wells*	2 / 1	1 / 2	3	1 2	3	3	3	3

*The numbers indicated represent the number of wells in that category's ratings.

Ratings: (L= Low, M= Medium, H = High)

A public water system's susceptibility rating (L for low, M for medium or H for high) is a combination of two factors. H, M, and L ratings are based on the potential for a contaminant to be at or above 50% of the Drinking Water Standard or MCL (H), between 10 and 50% of the standard (M) and less than 10% of the standard (L).

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- **NR:** Not regulated

- **NA:** Not applicable

- **ND:** Not detectable at testing limits

- **NJDEP:** New Jersey Department of Environmental Protection

- **EPA:** Environmental Protection Agency.

- **CDC:** Centers for Disease Control

Report prepared for WMMUA Greenbrook System by:



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West Milford MUA – Crescent Park System (PWSID#: NJ1615014) Year 2012 Annual Water Quality Report

What's The Quality of Your Water? West Milford MUA is pleased to share this water quality report with you. This report covers January 1 through December 31, 2012. Crescent Park System's drinking water surpassed the strict regulations of both the State of New Jersey and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to provide reports like this every year to each customer. *Crescent Park System monitors for many substances both regulated and unregulated.*

Sources of Supply: Crescent Park draws its water from 2 groundwater wells. These wells utilize corrosion control and disinfection in the treatment process. It has 206 service connections and serves approximately 700 people per day.

Results of Monitoring For Contaminants in Drinking Water

<u>Contaminant</u>	<u>Units</u>	<u>MCL</u>	<u>MCLG</u>	<u>Level Detected</u>	<u>Range</u>	<u>Potential Source</u>
Total Coliforms	Present/ Absent	0	0	<1	0 of 12 samples were positive	Leaking septic system, runoff from streams
Copper	ppm	1.3 (Action Level)	1.3	0.9 (90 th Percentile)	0 of 10 samples exceeded action limit	Corrosion of household plumbing.
Lead	ppb	15 (Action Level)	0	<2.0 (90 th Percentile)	0 of 10 samples exceeded action limit	Corrosion of household plumbing.
Nitrate	ppm	10	10	ND	2 Samples	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Chlorine Residual	ppm	MRDL 4	MRDLG 4	0.59	0.01 – 2.20	Water additive used to control microbes.

Other Substances:

These are considered Secondary Contaminants and are not considered a health risk. They can affect taste, odor or color of your drinking water.

<u>Contaminant</u>	<u>Units</u>	<u>Detected Limits</u>	<u>Range</u>	<u>Secondary MCL</u>
Sulfate	ppm	7.3	7.3 – 7.3	250
Chloride	ppm	5.4	5.3 – 5.4	250

Health Effects of Detected Contaminants:

Chloride: Chloride occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations chloride can cause Diarrhea in some people.

Chlorine: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Coliform Bacteria/E-Coli: Coliform Bacteria are common in the environment and are generally not harmful. The presence of these bacteria in drinking water is usually the result of a problem with the treatment system or the pipes that distribute the water, and indicates that the water may be contaminated with germs that may cause disease.

Copper: Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water that contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

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. West Milford MUA is responsible for providing high water quality, 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 drinking water, you may wish to have your water tested.

Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Sulfate: Sulfate occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations sulfate can cause Diarrhea in some people.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Other Vulnerable Population: 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 particularly at risk from infections. These people should seek advice from their health care providers. EPA/CDC guidelines on appropriate means to lesson the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

Source Water Assessment:

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the **Source Water Assessment Report and Summary** for this public water system, which is available at www.state.nj.us/dep/swap/ or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

The source water assessment performed on the Crescent Park System's well-water sources determined the following:

<u>Source Name</u>	<u>Pathogens</u>	<u>Nutrients</u>	<u>Pesticides</u>	<u>VOCs</u>	<u>Inorganics</u>	<u>Radio-nuclides</u>	<u>Radon</u>	<u>DBPs</u>
	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H	<i>Ratings</i> L / M / H
2 Wells*	1 / 1	2	2	2	2	1 / 1	1 / 1	2

*The numbers indicated represent the number of wells in that category's ratings.

Ratings: (L= Low, M= Medium, H = High)

A public water system's susceptibility rating (L for low, M for medium or H for high) is a combination of two factors. H, M, and L ratings are based on the potential for a contaminant to be at or above 50% of the Drinking Water Standard or MCL (H), between 10 and 50% of the standard (M) and less than 10% of the standard (L).

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination.

Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels. NJDEP found the following **potential** contaminant sources within the source water assessment areas for your water: Nutrients, Pesticides, Inorganics, Radon, Radionuclides, and Disinfection Byproducts. Crescent Park System does chlorinate the water from their well and therefore runs risk of Disinfection Byproducts. The System will test for Radionuclides, Pathogens, Nutrients, VOCs and lead/copper, as prescribed by the NJDEP. After reviewing the results, the NJDEP will make an assessment of water quality to determine if any additional testing or treatment is necessary. If you have questions regarding the source water assessment report or summary please contact the **Bureau of Safe Drinking Water** at swap@dep.state.nj.us or 609-292-5550.

Definitions:

The following is a list of the most common definitions used in Annual Water Quality Reports. Not all of the definitions apply to your report:

- **90th Percentile:** 90% of samples are equal to or less than the number in the chart.

- **Action Level:** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

- **MCL or Maximum Contaminant Level:** 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.

- **MCLG or Maximum Contaminant Level Goal:** 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.

- **RMCL or Recommended Maximum Contaminant Level:** recommended maximum level for secondary contaminants. Secondary contaminants are not believed to be a health risk.

- **ppb or parts per billion:** Micrograms per liter (ug/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

- **ppm or parts per million:** Milligrams per liter (mg/L). One part per million corresponds to one minute in two years, or a single penny in \$10,000.

- **NR:** Not regulated

- **NA:** Not applicable

- **ND:** Not detectable at testing limits

- **NJDEP:** New Jersey Department of Environmental Protection

- **EPA:** Environmental Protection Agency.

- **CDC:** Centers for Disease Control

Report prepared for WMMUA Crescent Park System by:



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West Milford MUA – Birch Hill Park (PWSID#: NJ1615001) Year 2012 Annual Water Quality Report

What's The Quality of Your Water? West Milford MUA is pleased to share this water quality report with you. This report covers January 1 through December 31, 2012. Birch Hill Park's drinking water surpassed the strict regulations of both the State of New Jersey and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to provide reports like this every year to each customer. *Birch Hill Park monitors for many substances both regulated and unregulated.*

Sources of Supply: Birch Hill Park draws its water from 4 groundwater wells. These wells utilize corrosion control, Radionuclides removal, and disinfection in the treatment process. It has 52 service connections and serves approximately 180 people per day.

Results of Monitoring For Contaminants in Drinking Water

<u>Contaminant</u>	<u>Units</u>	<u>MCL</u>	<u>MCLG</u>	<u>Level Detected</u>	<u>Range</u>	<u>Potential Source</u>
Total Coliforms	Present/ Absent	0	0	<1	0 of 12 samples were positive	Leaking septic system, runoff from streams
Chlorine Residual	ppm	MRDL 4	MRDLG 4	0.57	0.31 – 0.99	Water additive used to control microbes.
Copper	ppm	1.3 (Action Level)	1.3	0.3 (90 th Percentile)	0 of 5 samples exceeded action limit	Corrosion of household plumbing.
Lead	ppb	15 (Action Level)	0	<2.0 (90 th Percentile)	0 of 5 samples exceeded action limit	Corrosion of household plumbing.
Nitrate	ppm	10	10	0.7	1 Sample	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Trihalomethanes (THMs)	ppb	80	NA	7	1 Sample	Disinfectant Byproducts
48 Hr. Gross Alpha	pCi/L	15	0	2.2	ND – 3.6	Erosion of natural deposits
Combined Radium	pCi/L	5	0	0.85	0.34 – 1.65	Erosion of natural deposits

Other Substances:

These are considered Secondary Contaminants and are not considered a health risk. They can affect taste, odor or color of your drinking water.

<u>Contaminant</u>	<u>Units</u>	<u>Detected Limits</u>	<u>Range</u>	<u>Secondary MCL</u>
Sodium	ppm	46	NA	50
Sulfate	ppm	20	NA	250
Chloride	ppm	196	NA	250

Health Effects of Detected Contaminants:

Chlorine: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Coliform Bacteria/E-Coli: Coliform Bacteria are common in the environment and are generally not harmful. The presence of these bacteria in drinking water is usually the result of a problem with the treatment system or the pipes that distribute the water, and indicates that the water may be contaminated with germs that may cause disease.

Copper: Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water that contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Gross Alpha: Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Haloacetic Acids: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

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. West Milford MUA is responsible for providing high water quality, 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 drinking water, you may wish to have your water tested.

Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Radium: Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Sodium: For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

Sulfate: Sulfate occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations sulfate can cause Diarrhea in some people.

Trihalomethanes: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Other Vulnerable Population: 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 particularly at risk from infections. These people should seek advice from their health care providers. EPA/CDC guidelines on appropriate means to lesson the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

Source Water Assessment:

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the **Source Water Assessment Report and Summary** for this public water system, which is available at www.state.nj.us/dep/swap/ or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

The source water assessment performed on Birch Hill Park's well-water sources determined the following:

<u>Source Name</u>	<u>Pathogens</u>	<u>Nutrients</u>	<u>Pesticides</u>	<u>VOCs</u>	<u>Inorganics</u>	<u>Radio-nuclides</u>	<u>Radon</u>	<u>DBPs</u>
	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>
4 Wells*	4	3 / 1	4	4	4	4	2 / 2	4

*The numbers indicated represent the number of wells in that category's ratings.

Ratings: (L= Low, M= Medium, H = High)

A public water system's susceptibility rating (L for low, M for medium or H for high) is a combination of two factors. H, M, and L ratings are based on the potential for a contaminant to be at or above 50% of the Drinking Water Standard or MCL (H), between 10 and 50% of the standard (M) and less than 10% of the standard (L).

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination.

Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels.

NJDEP found the following **potential** contaminant sources within the source water assessment areas for your water: Nutrients, Pesticides, Inorganics, Radon, Radionuclides, and Disinfection Byproducts. Birch Hill Park does chlorinate the water from their well and therefore runs risk of Disinfection Byproducts. The System will test for Radionuclides, Pathogens, Nutrients, VOCs and lead/copper, as prescribed by the NJDEP. After reviewing the results, the NJDEP will make an assessment of water quality to determine if any additional testing or treatment is necessary. If you have questions regarding the source water assessment report or summary please contact the **Bureau of Safe Drinking Water** at swap@dep.state.nj.us or 609-292-5550.

Definitions:

The following is a list of the most common definitions used in Annual Water Quality Reports. Not all of the definitions apply to your report:

- **90th Percentile:** 90% of samples are equal to or less than the number in the chart.

- **Action Level:** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

- **MCL or Maximum Contaminant Level:** 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.

- **MCLG or Maximum Contaminant Level Goal:** 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.

- **RMCL or Recommended Maximum Contaminant Level:** recommended maximum level for secondary contaminants. Secondary contaminants are not believed to be a health risk.

- **ppb or parts per billion:** Micrograms per liter (ug/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

- **ppm or parts per million:** Milligrams per liter (mg/L). One part per million corresponds to one minute in two years, or a single penny in \$10,000.

- **NR:** Not regulated

- **NA:** Not applicable

- **ND:** Not detectable at testing limits

- **NJDEP:** New Jersey Department of Environmental Protection

- **EPA:** Environmental Protection Agency.

- **CDC:** Centers for Disease Control

- **VOC:** Volatile Organic Contaminant

Report prepared for WMMUA Birch Hill Park by:



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West Milford MUA – Bald Eagle Village (PWSID#: NJ1615018) Year 2012 Annual Water Quality Report

What's The Quality of Your Water? West Milford MUA is pleased to share this water quality report with you. This report covers January 1 through December 31, 2012. Bald Eagle Village's drinking water surpassed the strict regulations of both the State of New Jersey and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to provide reports like this every year to each customer. *Bald Eagle Village monitors for many substances both regulated and unregulated.*

Sources of Supply: Bald Eagle Village draws its water from 2 groundwater wells. These wells utilize iron & manganese removal and disinfection in the treatment process. It has 443 service connections and serves approximately 1,258 people per day.

Results of Monitoring For Contaminants in Drinking Water

<u>Contaminant</u>	<u>Units</u>	<u>MCL</u>	<u>MCLG</u>	<u>Level Detected</u>	<u>Range</u>	<u>Potential Source</u>
Total Coliforms	Present/ Absent	0	0	<1	0 of 24 samples were positive	Leaking septic system, runoff from streams
Copper (2010)	ppm	1.3 (Action Level)	1.3	0.8 (90 th Percentile)	1 of 19 samples exceeded action limit	Corrosion of household plumbing.
Lead (2010)	ppb	15 (Action Level)	0	5 (90 th Percentile)	0 of 19 samples exceeded action limit	Corrosion of household plumbing.
Nitrate	ppm	10	10	ND	1 Sample	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Chlorine Residual	ppm	MRDL 4	MRDLG 4	0.17	ND – 1.33	Water additive used to control microbes.
48 Hr. Gross Alpha	pCi/L	15	0	3.75	1 Sample	Erosion of natural deposits

Other Substances:

These are considered Secondary Contaminants and are not considered a health risk. They can affect taste, odor or color of your drinking water.

<u>Contaminant</u>	<u>Units</u>	<u>Detected Limits</u>	<u>Range</u>	<u>Secondary MCL</u>
Sodium	ppm	49	NA	50
Iron	ppm	0.21	NA	0.3
Manganese	ppm	0.23	NA	0.05
Sulfate	ppm	27	NA	250
Chloride	ppm	97	NA	250

Health Effects of Detected Contaminants:

Chloride: Chloride occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations chloride can cause Diarrhea in some people.

Chlorine: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Coliform Bacteria/E-Coli: Coliform Bacteria are common in the environment and are generally not harmful. The presence of these bacteria in drinking water is usually the result of a problem with the treatment system or the pipes that distribute the water, and indicates that the water may be contaminated with germs that may cause disease.

Copper: Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water that contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Gross Alpha: Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Iron: The recommended upper limit for iron is based on unpleasant taste of water and staining of laundry. Iron is an essential nutrient, but some people who drink water with iron levels well above the recommended upper limit could develop deposits of iron in a number of organs of the body.

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. West Milford MUA is responsible for providing high water quality, 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 drinking water, you may wish to have your water tested.

Manganese: The recommended upper limit for manganese is based on staining of laundry. Manganese is an essential nutrient, and toxicity is not expected from levels which would be encountered in drinking water.

Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Sodium: For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

Sulfate: Sulfate occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations sulfate can cause Diarrhea in some people.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Other Vulnerable Population: 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 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 Hotline (800-426-4791)

Source Water Assessment:

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the **Source Water Assessment Report and Summary** for this public water system, which is available at www.state.nj.us/dep/swap/ or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

The source water assessment performed on Bald Eagle Village's well-water sources determined the following:

<u>Source Name</u>	<u>Pathogens</u>	<u>Nutrients</u>	<u>Pesticides</u>	<u>VOCs</u>	<u>Inorganics</u>	<u>Radio-nuclides</u>	<u>Radon</u>	<u>DBPs</u>
	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>
2 Wells*	1 / 1	2	2	2	2	1 / 1	1 / 1	2

*The numbers indicated represent the number of wells in that category's ratings.

Ratings: (L= Low, M= Medium, H = High)

A public water system's susceptibility rating (L for low, M for medium or H for high) is a combination of two factors. H, M, and L ratings are based on the potential for a contaminant to be at or above 50% of the Drinking Water Standard or MCL (H), between 10 and 50% of the standard (M) and less than 10% of the standard (L).

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination.

Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels.

NJDEP found the following **potential** contaminant sources within the source water assessment areas for your water: Nutrients, Pesticides, Inorganics, Radon, Radionuclides, and Disinfection Byproducts. Bald Eagle Village does chlorinate the water from their well and therefore runs risk of Disinfection Byproducts. The System will test for Radionuclides, Pathogens, Nutrients, VOCs and lead/copper, as prescribed by the NJDEP. After reviewing the results, the NJDEP will make an assessment of water quality to determine if any additional testing or treatment is necessary. If you have questions regarding the source water assessment report or summary please contact the **Bureau of Safe Drinking Water at swap@dep.state.nj.us or 609-292-5550.**

Definitions:

The following is a list of the most common definitions used in Annual Water Quality Reports. Not all of the definitions apply to your report:

- **90th Percentile:** 90% of samples are equal to or less than the number in the chart.

- **Action Level:** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

- **MCL or Maximum Contaminant Level:** 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.

- **MCLG or Maximum Contaminant Level Goal:** 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.

- **RMCL or Recommended Maximum Contaminant Level:** recommended maximum level for secondary contaminants. Secondary contaminants are not believed to be a health risk.

- **ppb or parts per billion:** Micrograms per liter (ug/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

- **ppm or parts per million:** Milligrams per liter (mg/L). One part per million corresponds to one minute in two years, or a single penny in \$10,000.

- **NR:** Not regulated

- **NA:** Not applicable

- **ND:** Not detectable at testing limits

- **NJDEP:** New Jersey Department of Environmental Protection

- **EPA:** Environmental Protection Agency.

- **CDC:** Centers for Disease Control

Report prepared for WMMUA Bald Eagle Village by:



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West Milford MUA – Awosting System (PWSID#: NJ1615012) Year 2012 Annual Water Quality Report

What's The Quality of Your Water? West Milford MUA is pleased to share this water quality report with you. This report covers January 1 through December 31, 2012. Although Total Coliform Bacteria was detected at the Awosting Water System in 1 sample out of 12, this is not a violation and the water did not pose a health risk to the general population. Awosting System's drinking water surpassed the strict regulations of both the State of New Jersey and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to provide reports like this every year to each customer.

Sources of Supply: Awosting System draws its water from 4 groundwater wells. One pair of wells utilizes corrosion control and disinfection in the treatment process, and the other pair uses iron removal and disinfection in the treatment process. It has 185 service connections and serves approximately 633 people per day.

Results of Monitoring For Contaminants in Drinking Water

<u>Contaminant</u>	<u>Units</u>	<u>MCL</u>	<u>MCLG</u>	<u>Level Detected</u>	<u>Range</u>	<u>Potential Source</u>
Total Coliforms	Present/ Absent	0	0	1	1 of 12 samples were positive	Leaking septic system, runoff from streams
E. Coli	Present/ Absent 100ml	0	0	<1	0 of 12 samples were positive	Animal or Human Waste.
Chlorine Residual	ppm	MRDL 4	MRDLG 4	0.36	ND – 1.07	Water additive used to control microbes.
Copper	ppm	1.3 (Action Level)	1.3	0.5 (90 th Percentile)	0 of 10 samples exceeded action limit	Corrosion of household plumbing.
Lead	ppb	15 (Action Level)	0	<2.0 (90 th Percentile)	0 of 10 samples exceeded action limit	Corrosion of household plumbing.
Nitrate	ppm	10	10	ND	2 Samples	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Trihalomethanes (THMs)	ppb	80	NA	3	2 Samples	Disinfectant Byproducts
48 Hr. Gross Alpha	pCi/L	15	0	3.3	3.1 - 3.5	Erosion of natural deposits
Combined Radium	pCi/L	5	0	1.2	0.9 – 1.5	Erosion of natural deposits
Uranium (ug/L)	ug/L	30	0	1.63	1.60 – 1.66	Erosion of natural deposits

Other Substances: These are Secondary Contaminants and are not considered a health risk. They can affect taste, odor or color of your drinking water.

<u>Contaminant</u>	<u>Units</u>	<u>Detected Limits</u>	<u>Range</u>	<u>Secondary MCL</u>
Sodium	ppm	15	12-18	50
Sulfate	ppm	10.9	10.8-10.9	250
Chloride	ppm	56	41-71	250

Health Effects of Detected Contaminants:

Chloride: Chloride occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations chloride can cause Diarrhea in some people.

Chlorine: Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Coliform Bacteria/E-Coli: Coliform Bacteria are common in the environment and are generally not harmful. The presence of these bacteria in drinking water is usually the result of a problem with the treatment system or the pipes that distribute the water, and indicates that the water may be contaminated with germs that may cause disease.

Copper: Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water that contains copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Gross Alpha: Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

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. West Milford MUA is responsible for providing high water quality, 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 drinking water, you may wish to have your water tested.

Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Radium: Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Sodium: For healthy individuals, the sodium intake from water is not important, because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

Sulfate: Sulfate occurs naturally in water and is monitored as a secondary contaminant. Secondary contaminants are aesthetic (taste and odor) rather than health risks; however, in high concentrations sulfate can cause Diarrhea in some people.

Trihalomethanes: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Uranium: Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

Special Considerations Regarding Children, Pregnant Women, Nursing Mothers, and Other Vulnerable Population: 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 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 Hotline (800-426-4791)

Source Water Assessment:

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the **Source Water Assessment Report and Summary** for this public water system, which is available at www.state.nj.us/dep/swap/ or by contacting the NJDEP, Bureau of Safe Drinking Water at 609-292-5550.

The source water assessment performed on the Awosting System well-water sources determined the following:

<u>Source Name</u>	<u>Pathogens</u>	<u>Nutrients</u>	<u>Pesticides</u>	<u>VOCs</u>	<u>Inorganics</u>	<u>Radio-nuclides</u>	<u>Radon</u>	<u>DBPs</u>
	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>	<i>Ratings L / M / H</i>
4 Wells*	2 / 2	2 / 1 / 1	4	4	4	4	4	4

*The numbers indicated represent the number of wells in that category's ratings.

Ratings: (L= Low, M= Medium, H = High)

A public water system's susceptibility rating (L for low, M for medium or H for high) is a combination of two factors. H, M, and L ratings are based on the potential for a contaminant to be at or above 50% of the Drinking Water Standard or MCL (H), between 10 and 50% of the standard (M) and less than 10% of the standard (L).

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination.

Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentrations above allowable levels.

NJDEP found the following **potential** contaminant sources within the source water assessment areas for your water: Nutrients, Pesticides, Inorganics, Radon, Radionuclides, and Disinfection Byproducts. Awosting System does chlorinate the water from their well and therefore runs risk of Disinfection Byproducts. The System will test for Radionuclides, Pathogens, Nutrients, VOCs and lead/copper, as prescribed by the NJDEP. After reviewing the results, the NJDEP will make an assessment of water quality to determine if any additional testing or treatment is necessary. If you have questions regarding the source water assessment report or summary please contact the **Bureau of Safe Drinking Water** at swap@dep.state.nj.us or 609-292-5550.

Definitions:

The following is a list of the most common definitions used in Annual Water Quality Reports. Not all of the definitions apply to your report:

- **90th Percentile:** 90% of samples are equal to or less than the number in the chart.

- **Action Level:** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

- **MCL or Maximum Contaminant Level:** 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.

- **MCLG or Maximum Contaminant Level Goal:** 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.

- **RMCL or Recommended Maximum Contaminant Level:** recommended maximum level for secondary contaminants. Secondary contaminants are not believed to be a health risk.

- **ppb or parts per billion:** Micrograms per liter (ug/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

- **ppm or parts per million:** Milligrams per liter (mg/L). One part per million corresponds to one minute in two years, or a single penny in \$10,000.

- **NR:** Not regulated

- **NA:** Not applicable

- **ND:** Not detectable at testing limits

- **NJDEP:** New Jersey Department of Environmental Protection

- **EPA:** Environmental Protection Agency.

- **CDC:** Centers for Disease Control

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