WATER QUALITY
Is Your Business

Because water quality is your business the Lacey Municipal Utilities Authority is pleased to present our Annual Water Quality Report. This report is designed to keep you informed about the quality of your drinking water and the services we deliver to you every day. We are committed to providing you with a safe and dependable supply of drinking water and water pollution control services. We want you to understand the efforts we make to continually improve the water treatment process and protect your natural water resources.

The Water We Drink

Lacey Municipal Utilities Authority
Consumer Confidence Report

2020

Public Water Supply ID# NJ1512001

PEOPLE AND RESOURCES WORKING TOGETHER

Your Water Supply

Lacey Township's sole source of drinking water supply is groundwater (well water). Groundwater is formed when rain filters through the soil and creates a vast underground reservoir (aquifer). Lacey Township's water is drawn from the Kirkwood-Cohansey, Atlantic City 800-Foot Sand and Potomac-Raritan-Magothy Aquifers by seven supply wells, processed at three treatment plants and delivered to our customers through the Lacey MUA's 144 miles of distribution system. Some of the approximately 2 million gallons of water produced each day is temporarily stored in water towers. The water held in these storage towers helps maintain water pressure and serves as a back-up supply during periods of heavy water demand and emergencies.

Lacey Municipal Utilities Authority
34 R. Kennedy Blvd., P.O. Box 205
Forked River, New Jersey 08731

Monthly meetings are held
on the first Wednesday
of each month at 6:30 PM

An Explanation of the Water Quality Table

The adjoining table provides representative analytical results of the water samples routinely collected during the year 2019 from Lacey Township's water system. You may find many unfamiliar terms and abbreviations. To help you better understand these terms, we've provided the following definitions:

Parts per million (ppm) or ***Milligrams per liter*** (mg/l) **–** One part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or ***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.

Present or Absent (P/A) – The measure of bacteriological quality of a water sample taken from a specific location within the water system.

Picocuries per liter (pCi/L) – A measure of radioactivity in water.

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

Maximum Contaminant Level Goal – The "Goal" (MCLG) is 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 Contaminant Level – The "Maximum Allowed" (MCL) is 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.

Recommended Upper Limit (RUL) – The recommended maximum concentration of secondary contaminants. These reflect aesthetic qualities such as taste, odor and appearance. RULs are recommendations, not mandates.

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

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.

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

Contaminants That May Be Present In Source Water

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharge, oil and gas production, mining, or farming.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential users.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for Lacey Township's public water system, which is available at www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact the Lacey Municipal Utilities Authority at (609) 693-8188.

WATER QUALITY TABLE

The table below lists drinking water contaminants that were detected during the year 2019. The presence of contaminants in drinking water does not necessarily indicate that the water poses a health risk. The EPA and New Jersey DEP require monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not likely to change.

Contaminant	Violation Yes / No	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants						
Alpha emitters Gross Alpha-Particle Activity	No	Highest Annual Avg. = 2.67 Range = 1.09 – 2.67 Samples taken in February and June of 2017.	pCi/L	0	15	Erosion of natural deposits.
Combined Radium 226/228	No	Highest Annual Avg. = 2.28 Range = 0.88 – 2.28. Samples taken in February and June of 2017.	pCi/L	0	5	Erosion of natural deposits.
Inorganic Contaminants						
Barium (see footnote 1)	No	Plant 1 = 0.007 Plant 2 = 0.046 Samples taken in June of 2017.	ppm	2	2	Discharge of drilling waste; discharge from refineries; erosion of natural deposits.
Copper	No	90th percentile = 0.094 Highest level detected =0.177 Samples taken between July and September 2018.	ppm	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	No	90th percentile = 0.092 Highest level detected = 1.74 Samples taken between July and September 2018.	ppb	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits.
Volatile Organic Contaminants						
TTHM (total trihalomethanes)	No	Highest Locational Running Annual Avg. = 4.48 Range = 0 – 7.92	ppb	N/A	80	Byproduct of drinking water chlorination.
HAA5 (haloacetic acid)	No	Highest Locational Running Annual Avg. = 13.19 Range = 1.10 – 19.8	ppb	N/A	60	Byproduct of drinking water disinfection.
Disinfectant Residuals						
Regulated Disinfectant	**Violation Yes / No**	**Level Detected**	**Unit Measurement**	**MRDL**		**MRDLG**
Chlorine	No	Avg. = 1.03 Range = 0.58 – 1.37	ppm	4.0		4.0

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons, such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Footnote 1 – 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 our data, though representative, are more than one year old.

Clean Water Doesn't Just Happen

The Lacey MUA takes great pride in its staff of trained professionals that continuously work to ensure that a safe supply of drinking water is available whenever you need it. The quality of your water supply depends on each of us making water-wise choices. Don't wait until it is too late to consider how small changes in your everyday water use can help preserve this resource.

Every day, as individuals, we make decisions that affect the future of our drinking water, whether it's simply turning off the tap while brushing our teeth, disposing of household toxins properly, or supporting land use practices that protect our natural water resources.

Each water-wise decision we make adds up to cleaner, safer drinking water. Single actions multiply into municipal, county and state-wide results when individuals, organizations and businesses work together to clean up our waterways, protect watersheds and curb pollution. We can no longer afford to take our water for granted.

Be water-wise, don't waste this life-supporting resource.

If you have any questions about this report or would like to learn more about your water supply and the services the Lacey MUA provides, please contact: ***Edward Woolf, Executive Director, at 609-693-8188.***

Additional 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 the water poses a health risk. More information about contaminants and their potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline at 1-800-426-4791.**

The Safe Drinking Water Act regulations allow waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals and synthetic organic chemicals. Based on test results of our water quality, Lacey Township has received monitoring waivers for asbestos and synthetic organic chemicals.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons, such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the **Safe Drinking Water Hotline at 1-800-426-4791.**

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. Lacey MUA is responsible for providing high quality drinking water, but cannot control the variety of materials used in 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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at *http*://www.epa/safewater/lead.

Water Conservation Tips

- ✓ Check your toilets for leaks. Put a few drops of food coloring in your toilet tank. Do not flush the toilet. If color begins to appear in the bowl, you have a leak that should be repaired immediately. Toilet leaks can cause elevated water usage, which will increase both your water and sewer bill.

- ✓ Take shorter showers. Long showers can waste five to ten gallons per minute. Install water–saving shower heads to reduce water consumption while showering.

- ✓ Don't allow water to run while brushing your teeth or shaving. Wet your toothbrush and fill a cup to rinse. Fill the sink a few inches to rinse your razor instead of letting the faucet run.

- ✓ Run full loads in your dishwasher and clothes washer. Partial loads waste water.

- ✓ Check faucets and pipes for leaks. Even small leaks over a long period of time can add up to large amounts of water wasted.

- ✓ Water your lawn in the early morning to prevent evaporation. Water your lawn long enough to soak down into the roots but less frequently. Watering your lawn frequently without soaking the roots will encourage a shallow root system. Watering your lawn in the evening may cause fungus growth.

- ✓ Plant drought resistant trees and plants. There are many beautiful trees and plants that require far less water than other species. Put a layer of mulch around your plants and trees. Mulch will slow evaporation of moisture and discourage weed growth.

- ✓ Don't allow your garden hose to run while washing your car. Use the hose only to wet and rinse the car.

- ✓ Use a broom to clean driveways and sidewalks. Using a hose to wash driveways and sidewalks will result in wasted water.

- ✓ Safe Drinking Water is a valuable resource. Encourage your family and friends to conserve. You may see significant savings in your water and sewer bills as a result of water conservation.

Call Lacey MUA First

If your main sewer line becomes blocked, call us before hiring a contractor. All first floor drains will be slow or blocked if your main sewer line is blocked. If only one drain is blocked and others are not, this would indicate an internal plumbing problem. The Authority is only responsible for the main sewer line from the curb to the main line in the street. The Authority will not be responsible for any expenses incurred by you to an outside company unless we are first given notice of a service problem and the opportunity to resolve it. Lacey MUA has service personnel on call 24 hours per day, 7 days per week. Please contact the Lacey Township Police Department at 693-6636 to request service for any water or sewer emergency after normal business hours.

Protecting Our Water Supply

Pollution on streets, parking lots and lawns is washed by rain into storm drains, then directly to our drinking water supplies and the lakes and oceans our children play in. Fertilizer, oil, pesticides, detergents, pet waste, grass clippings and other pollutants end up in our water. Sharing the responsibility and making small, easy changes in our lives, we can keep pollutants out of storm water.

As a resident or business owner in Lacey Township, it is important to know the following things you can do every day to protect our water:

- ✓ Limit your use of fertilizers and pesticides. If you use fertilizers and pesticides, follow the instructions on the label on how to correctly apply them. Never apply fertilizers if heavy rains are predicted. Do not over apply fertilizers and pesticides.

- ✓ Properly use and dispose of hazardous products. Hazardous products such as household cleaning products, used motor oil, lawn and garden products, antifreeze and paints must be used and disposed of properly. Never dispose of hazardous products on the ground or in storm drains. Contact the Township of Lacey on how and where you can properly dispose of hazardous products.

- ✓ Clean up after your pet. Use a plastic bag or pooper-scooper to clean up after your pet. Dispose of wrapped pet waste in the garbage. Never dispose of pet waste in storm drains.

- ✓ Dispose of yard waste properly. Keep leaves and grass clippings out of storm drains. Take advantage of Lacey Township's services for disposal of leaves and other yard wastes. Use a mulching mower to recycle grass clippings into your lawn.

Lacey MUA – PWSID #1512001

Lacey MUA owns and operates a public community water system consisting of 7 well(s), 0 wells under the influence of surface water, 0 surface water intake(s), 0 purchased groundwater source(s) and 0 purchased surface water source(s).

This system's source water comes from the following aquifer(s) and/or surface body(s): Kirkwood-Cohansey water-table aquifer system, Atlantic City "800-foot" sand aquifer.

Susceptibility Ratings for Lacey MUA Sources

The table below illustrates the susceptibility ratings for the seven contaminant categories (and radon) for each source in the system. The table provides the number of wells and intakes that rated high (H), medium (M) or low (L) for each contaminant category. For susceptibility ratings of purchased water, refer to the specific water system's source water assessment report.

The seven contaminant categories are defined at the bottom of this page. The NJDEP considered all surface water highly susceptible to pathogens; therefore, all intakes received a high rating for the pathogen category. For the purpose of the Source Water Assessment Program, radionuclides are more of a concern for groundwater than surface water. As a result, surface water intakes' susceptibility to radionuclides was not determined and they all received a low rating.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated 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. As a result of the assessments, the NJDEP may customize (change existing) monitoring schedules based on the susceptibility ratings.

	Pathogens			**Nutrients**			**Pesticides**			**Volatile Organic Compounds**			**Inorganics**			**Radio-nuclides**			**Radon**			**Disinfection Byproduct Precursors**		
Sources	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Wells – 7			7	5		2			7	5		2	7			5	2			2	5		7	

- **Pathogens:** Disease-causing organisms such as bacteria and viruses. Common sources are animal and human fecal wastes.
- **Nutrients:** Compounds, minerals and elements that aid growth, that are both naturally occurring and man-made. Examples include nitrogen and phosphorus.
- **Volatile Organic Compounds:** Man-made chemicals used as solvents, degreasers and gasoline components. Examples include benzene, methyl tertiary butyl ether (MTBE), and vinyl chloride.
- **Pesticides:** Man-made chemicals used to control pests, weeds and fungus. Common sources include land application and manufacturing centers of pesticides. Examples include herbicides such as atrazine, and insecticides such as chlordane.
- **Inorganics:** Mineral-based compounds that are both naturally occurring and man-made. Examples include arsenic, asbestos, copper, lead and nitrate.
- **Radionuclides:** Radioactive substances that are both naturally occurring and man-made. Examples include radium and uranium.
- **Radon:** Colorless, odorless, cancer-causing gas that occurs naturally in the environment. For more information go to http://www.nj.gov/dep/rpp/radon/index.htm or call (800) 648-0394.
- **Disinfection Byproduct Precursors:** A common source is naturally occurring organic matter in surface water. Disinfection byproducts are formed when disinfectants (usually chlorine) used to kill pathogens react with dissolved organic material (for example leaves) present in surface water.