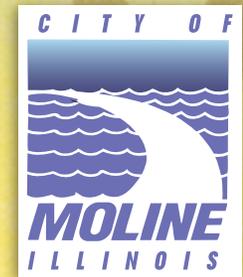


2012

# WATER

QUALITY  
REPORT



# STUDENT ARTISTS CELEBRATE MOLINE TAP WATER

Imaginative Moline third grade students explored the valuable role Moline tap water plays in their daily lives, as they participated in the *Water — Celebrate the Essential* Art Contest earlier this year. Each of these talented young people, who attend Moline's 12 elementary schools, created delightful and intriguing works of art relating to the *Water — Celebrate the Essential* contest theme.

The students employed colorful and imaginative imagery to illustrate and celebrate the importance of tap water and our community's public water supply system. The vibrant artwork created by these artistic young people depicted images of water infrastructure, a variety of water uses, and the spirit of water celebration. The students used an assortment of colors and techniques to achieve eye-catching results. Overall, the creativity of these young people bodes well for the future of our community.

After the creative process was complete, one finalist was selected from each elementary school. Moline Mayor Scott Raes and Assistant School

Superintendent Deb Singley recognized each of these art contest finalists at a special ceremony that was held on May 14, 2013. The ceremony, which was held in the Community Room of the new Moline Police Station and culminated in the unveiling of the contest winner, was well attended by City Council members and City Officials, along with family and friends of the contest finalists.

This is the seventh year that the City of Moline has enlisted the creative talents of Moline students to make its annual water quality report more interesting and appealing to those who rely on Moline's tap water every day. The winning artwork is featured on the cover of this report and the finalists' art work is featured on the back cover. We believe that the creative efforts of these young people serve to enhance Moline's annual water quality report. We hope that you enjoy the students' creative efforts, as you review this report, and that you choose to join the students in celebrating the essential, Moline tap water.



*The artwork designed by Leslie Mayorga, a third grader from Butterworth Elementary School, was chosen for the Tap Water Art Contest by the Moline Water Department's 7th annual contest. Leslie is joined here by Mayor Scott Raes and Assistant Superintendent Deb Singley.*



## Leslie Mayorga

Butterworth  
3rd Grade

### ART CONTEST WINNER

Leslie enjoys playing soccer, spending time with friends and singing. She likes pop music and aspires to be a singer someday.

Leslie's favorite subject is art class. She especially enjoys drawing, painting and using markers.



## MOLINE WATER DIVISION:

### Facts & Figures

- ◆ We treat about 2 billion gallons of Mississippi River water each year
- ◆ We use 10 processes to treat the water supply (screening, oxidation, adsorption, disinfection, clarification, softening, sedimentation, recarbonation, filtration and fluoridation)
- ◆ Our water distribution system consists of more than 230 miles of water main, 2,100 fire hydrants, 4,300 mainline valves, and 3 elevated water towers
- ◆ We have about 17,000 customers
- ◆ We have 32 employees who work in the following areas: water plant O&M; laboratory activities; distribution system O&M; metering & customer service; and water supply administration
- ◆ The water plant is staffed 24/7 and additional personnel are on emergency stand-by at all times
- ◆ We collect about 70,000 meter readings & complete 9,000 service calls each year
- ◆ We rely exclusively on the money from water bills to finance our operation (no tax \$)
- ◆ Our water costs less than ½ a penny per gallon

## BACK COVER ART

- 1 **Jacob Bogdan**  
Roosevelt, Grade 3
- 2 **Sheyla Mendoza**  
Ericcson, Grade 3
- 3 **Jacob Campbell**  
Garfield, Grade 3
- 4 **Regina Skalla**  
Hamilton, Grade 3
- 5 **Maliyah Reynolds**  
Logan, Grade 3
- 6 **Jasmine Horne**  
Willard, Grade 3
- 7 **Jace Harris**  
Bicentennial, Grade 3
- 8 **Kimberly Fuentes**  
Lincoln-Irving, Grade 3
- 9 **MacKenzie Wiemers**  
Franklin, Grade 3
- 10 **Evelyn Tacey**  
Jane Addams, Grade 3
- 11 **Alex Gorman**  
Washington, Grade 3

## Tap Water Supports Local Economy and Overall Quality of Life

Moline's tap water supply is central to the economic prosperity of our community. Moline businesses and commercial enterprises rely on tap water to sustain their day-to-day operations. Moline's water supply has sufficient capacity to support new commercial and residential developments that will help vitalize our local economy. Tap water is more than a convenience – it is vital to our everyday lives. Our use of tap water is intricately woven into our lives. We rely on tap water to prepare our meals, brush our teeth, do our laundry, and a myriad of everyday activities. Our schools, hospitals and medical facilities must have a safe and reliable supply of water to function. The high quality tap water provided to Moline homes and businesses protects our health and safety while enhancing our standard of living and overall enjoyment of life.

# MOLINE'S WATER SUPPLY INFRASTRUCTURE

Each and every day, the people of Moline open their faucets a countless number of times and access a safe continuous supply of high quality water. In fact, the homes and businesses of Moline require more than 5 million gallons of water each day. Moline's need for water increases during hot and dry weather, and fire fighting needs can create high water demand situations instantaneously. But where does this water come from? How is it purified and transported? Is water kept in storage for emergencies and, if so, where?



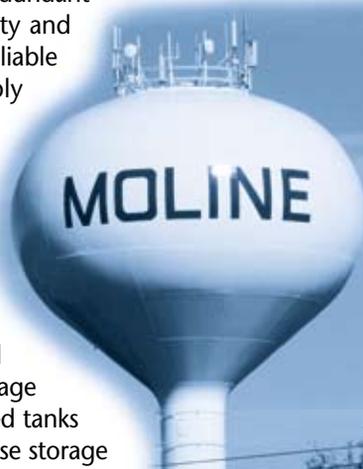
Moline owns and operates its own public water supply system. The following table provides an overview of the major components of this expansive complex system:

COMPONENT	QUANTITY	CAPACITY	GRADE	ESTIMATED REPLACEMENT COST
Treatment Plant	1	12 Million Gals/Day	A	\$35,000,000.00
Pump Station	1	30 Million Gals/Day	A	
Ground Storage Tanks	2	6.8 Million Gals	A	\$8,500,000.00
Elevated Storage Tanks	3	2.25 Million Gals	B	\$4,050,000.00
Miles of Water Main	236	N/A	C-	\$205,603,000.00
Water Meters	17,500	N/A	A	\$4,000,000.00
Fire Hydrants	2,500	N/A	B	\$5,584,000.00
<b>TOTAL:</b>				<b>\$262,737,000.00</b>

Moline's water supply is taken from the Mississippi River, which is an abundant and reliable source water. However, the Mississippi is subject to both natural and manmade contamination, along with seasonal variations in water quality. Our treatment plant must be extremely effective and reliable to ensure that that it can produce high quality finished water under all operating conditions. Prudently, the City of Moline completed a \$25 million upgrade and modernization project at our treatment plant in 2005. These improvements addressed outdated plant equipment and systems and allowed for enhanced water treatment. Please see pages eight and nine of this report for a general overview of this treatment process.

The raw and finished water pump station is located at the treatment plant site. The entire treatment and pumping facility features redundant systems and equipment to ensure the dependability and safety of the water flowing through your tap. A reliable supply of electricity is essential to water supply operations, as we must pump more than 40 million pounds of water each day. Accordingly, the facility is connected to two different segments of the electrical grid and a large electrical generator is installed onsite to provide additional back-up.

Moline's water supply system includes two ground storage tanks located at the treatment plant site and three elevated storage tanks situated at strategic locations on the bluff. The ground storage tanks hold 6.8 million gallons when full and elevated tanks hold a total of 2.25 million gallons. Collectively, these storage





tanks establish ample reserve water capacity to meet emergency needs such as firefighting and to meet peak hour water demands during warm weather. The City has invested more than \$2 million dollars in maintaining and upgrading these water storage tanks in the past 10 years.

The largest and most expensive component of Moline's water supply system is the water distribution system. This is the underground network of water mains that convey finished water from the treatment plant to all of the water users throughout the City. These water mains are constructed of cast iron and ductile iron, ranging in size from 4" to 24" in diameter. The oldest cast iron water mains date



back to 1883 and earlier. The most problematic water mains are those that were installed in the 1950's and 1960's, as these mains are frequently subject to failure and may cause discolored water, in some cases. The City has established an aggressive water main replacement program, which will allow us to systematically replace about 1.5 miles of water main each year. Fire hydrants are replaced as required in conjunction with water main replacements.



Water meters measure the amount of water used by each customer and all parties involved want to ensure their accuracy. Accordingly, the City completed a comprehensive meter replacement and upgrade project in 2010. The new meters surpass American Water Works Association accuracy requirements and feature digital registers and integrated radio transmitters. The integrated radio transmitters allow us to read the meters using a drive-by data collection method, which has greatly reduced meter reading man-hour requirements. The digital registers collect water use information for billing purposes and feature special functions that can be used to identify unusual water use events.



Moline's water system is funded exclusively from water rates and water related fees. No tax dollars are used to fund operations or infrastructure replacement. Currently about 60% of our annual budget is tied to operation and maintenance costs, and the remaining 40% is associated with infrastructure renewals and replacements. These expenditures are essential to Moline's future and ensuring the water supply system continues to provide a continuous supply of high quality water in the years to come.

# COMING ATTRACTION

The City of Moline is pleased to announce that a new enhanced utility bill format will be introduced over the next several months. The new utility bill format is designed to provide you with more detailed information regarding your City utility account. Key features of the new format include:

- A graph displaying recent water use history
- A table detailing various charges, including an itemized breakdown of water and sewer charges
- Specific information regarding payment options, payment policies and on-line accounts

The City issues these utility bills on a quarterly basis to customers that receive City services. Frequently, the utility bills are referred to as “water bills,” which is inaccurate, as the utility bills include charges and fees relating to a number of different services provided by the City. The most common City services included on the utility bills are listed below:

**Stormwater:** Fees associated with operating and maintaining the stormwater system

**Solid Waste & Recycling:** Fees associated with curbside recycling and garbage pick-up and disposal

**Water:** Charges associated with potable water supply and service

**Sewer:** Charges associated with wastewater service

It is important to note that Moline’s water and sewer rate structures include a number of individual charges that will be listed individually on the new utility bills. The most commonly used individual water and sewer charges are:

**Metering and Billing:** A flat charge that covers costs associated with metering and billing activities.

**Water Readiness to Serve:** A flat charge based on meter size that covers a portion of fixed water system costs, such as debt

service, regulatory compliance, system maintenance, and infrastructure replacement.

**Water Use:** A variable charge based on volume of water used that covers all of water production costs and a portion of fixed costs.

**Sewer Readiness to Serve:** A flat charge that covers a portion of fixed sewer system costs, such as debt service, regulatory compliance, system maintenance, and infrastructure replacement.

**Sewer Use:** A variable charge based on the volume of water used that covers all of sewer treatment costs and a portion of fixed costs.

The City sincerely hopes that our customers will find the enhanced format of the new utility bills to be helpful and informative. We also encourage our customers to establish on-line accounts, which will allow them to access detailed information regarding their account history. Additionally, several electronic payment options are available. Please contact us at (309) 524-2070 or visit our website, [www.moline.il.us](http://www.moline.il.us), to learn more about on-line accounts and payment alternatives. We would be happy to assist you.



# FROM THE MISSISSIPPI RIVER TO YOUR TAP A REMARKABLE TRANSFORMATION

Each day billions of gallons of water flow past the Moline shoreline, as the Mississippi River makes its way from America's heartland to the Gulf of Mexico. The "Father of Waters" is one of our nation's greatest natural resources and the source of Moline's drinking water. While the Mississippi River is a bountiful source, its ever-changing waters are a monumental treatment challenge. Our team must work around the clock to ensure that harmful contaminants are removed and a continuous supply of safe water flows from the taps of Moline homes and businesses.

Raw Mississippi River water contains a variety of pathogenic microorganisms, numerous natural and man-made contaminants, and a rich blend of complex organic matter. The concentrations of these materials and the physical characteristics of the raw water change with the seasons, weather conditions and activities in and along the river. Our team employs thoughtful application of scientific principles, rigorous water quality sampling and monitoring, and careful adjustments to our treatment process to contend with these changing conditions. Please see pages 8 and 9 of this report to gain a general understanding of the fundamentals of Moline's water treatment process.

Skillful operation and maintenance of the treatment plant equipment and systems serves to ensure that the water provided to our community meets and surpasses all current USEPA drinking water standards. We are committed to this goal. Should we ever fail to meet these drinking standards, we are legally required to issue public notice to our customers.

We are also committed to improving drinking water quality. One of the

greatest challenges encountered in treating Mississippi River water is ensuring the aesthetic quality of the finished water, so that it tastes and smells good in addition to being safe to drink. Generally, we are very successful in this area, but occasionally algae blooms and watershed run-off events create conditions where it is difficult to meet our taste and odor control goals. We currently are exploring potential treatment plant and process modifications to address these concerns and improve the aesthetic quality during such conditions.

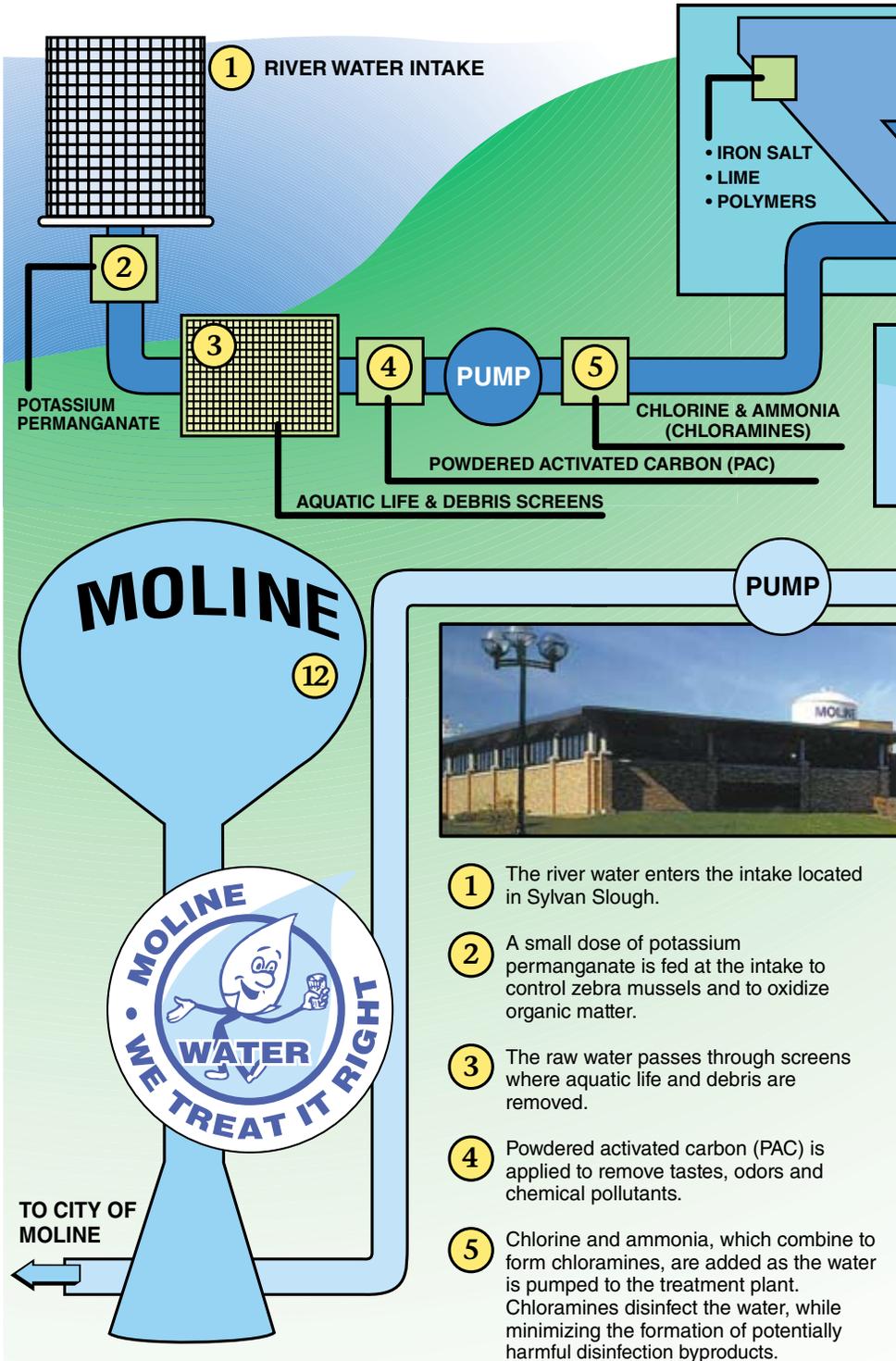
Our work does not stop there. As science and technology continue to advance, potential water quality concerns are revealed and technologies to address those concerns are developed. For example, we continue working towards our goal of installing ultraviolet (UV) disinfection to provide enhanced protection against waterborne disease. Additionally, we have partnered with the USEPA and other water professionals to better understand and develop treatment enhancements in regard to emerging water quality concerns.

We remain dedicated to meeting the challenge of transforming Mississippi river water into high quality drinking water to meet our community's needs today and in the years ahead. Should you have any questions or concerns regarding Moline's water supply, you may contact Greg Swanson, Utilities General Manager, at (309) 524-2301 or [gswanson@moline.il.us](mailto:gswanson@moline.il.us).



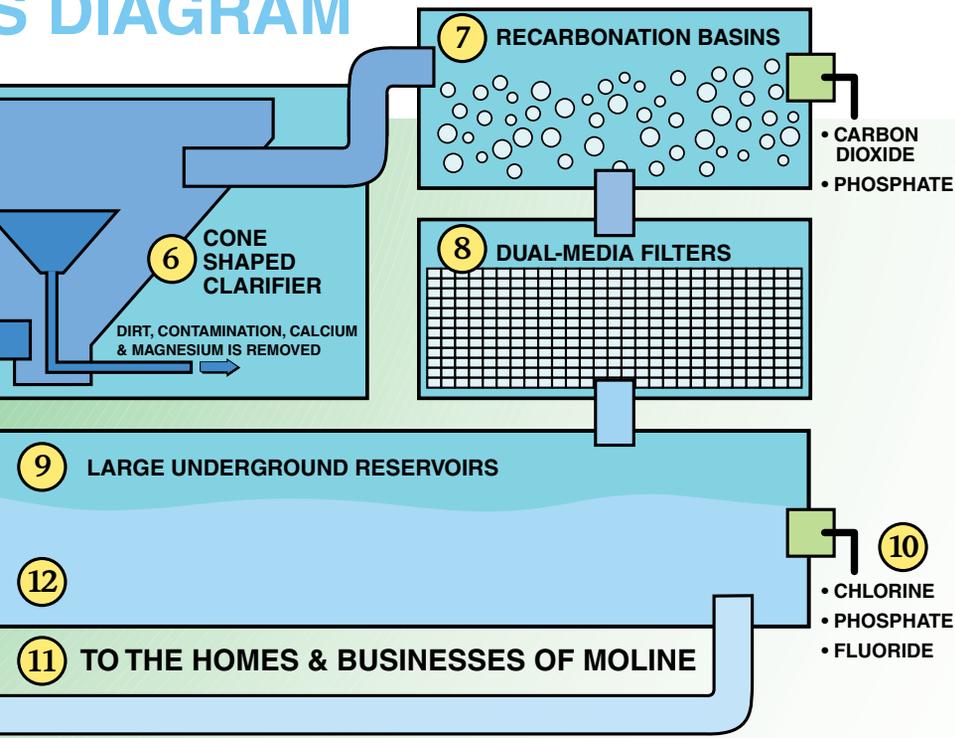
# MOLINE WATER TREATMENT PLANT

## KEY TO TREATMENT PROCESS



- 1 The river water enters the intake located in Sylvan Slough.
- 2 A small dose of potassium permanganate is fed at the intake to control zebra mussels and to oxidize organic matter.
- 3 The raw water passes through screens where aquatic life and debris are removed.
- 4 Powdered activated carbon (PAC) is applied to remove tastes, odors and chemical pollutants.
- 5 Chlorine and ammonia, which combine to form chloramines, are added as the water is pumped to the treatment plant. Chloramines disinfect the water, while minimizing the formation of potentially harmful disinfection byproducts.

# TREATMENT PLANT DIAGRAM



**6** The water is pumped to large cone-shaped clarifiers, where ferric sulfate (iron salt), lime and chemicals called polymers are added to the water. These chemicals work together to remove most of the dirt and contamination present in the river water. The water also is softened, as nearly half of the dissolved calcium and magnesium is removed.

**7** The water flows to recarbonation basins where carbon dioxide is applied to lower the pH and stabilize the water. At the same time, a small dose of phosphate is applied to improve water filtration.

**8** The clarified and stabilized water passes through dual-media filters, where remaining particles are removed.

**9** As the water flows from the filters into large underground reservoirs, some

additional chlorine is added. The water is stored in the reservoirs for a period of time to ensure that any remaining micro-organisms are inactivated.

**10** Some additional phosphate is added, as the water enters the reservoirs, to improve corrosion control in the water distribution system. Fluoride is added to help reduce the occurrence of dental cavities among those drinking Moline's water.

**11** The finished water is pumped to the homes and businesses of Moline via the distribution system, which is a network of large-diameter pipes located beneath the streets of the city.

**12** Finished water is stored in the reservoirs at the treatment plant and in elevated tanks at several locations in the city.

# 2012

## WATER QUALITY REPORT

REGULATED CONTAMINANTS DETECTED IN 2012 (COLLECTED IN 2012 UNLESS NOTED)

**NOTE:** The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

REGULATED CONTAMINANTS	COLLECTION DATE	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCLG	MCL	UNITS OF MEASUREMENT	VIOLATION (?)	LIKELY SOURCE OF CONTAMINATION
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DISINFECTANTS & DISINFECTION BY-PRODUCTS								
Chloramines	(1)	3.3	3.0779 - 3.4039	MRDLG = 4	MRDL = 4	ppm	NO	Water additive used to control microbes.
Haloacetic Acids (HAA5)	(1)	21	11 - 43	No goal for the total	60	ppb	NO	By-product of drinking water chlorination.
Total Trihalomethanes (TThm)	(1)	13	5.9 - 21.3	No goal for the total	80	ppb	NO	By-product of drinking water chlorination.

INORGANIC CONTAMINANTS								
Barium	(1)	0.007	0.007 - 0.007	2	2	ppm	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	(1)	1	0.952 - 0.952	4	4	ppm	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	(1)	1	1.1 - 1.1	10	10	ppm	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

RADIOACTIVE CONTAMINANTS								
Combined Radium 226 / 228	2009	0.58	0.58 - 0.58	0	5	pCi/L	NO	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2009	0.3	0.3 - 0.3	0	15	pCi/L	NO	Erosion of natural deposits.

STATE REGULATED CONTAMINANTS								
Sodium (2)	(1)	19	19 - 21	N/A	N/A	ppm	NO	Erosion from naturally occurring deposits; Used in water softener regeneration.

(1) – All samples were collected during 2012

(2) – This contaminant is not currently regulated by the USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1,000 or more.

### Abbreviations:

**N/A:** Not Applicable

**TT:** Treatment Technique

**ppm:** parts per million, or milligrams per liter (mg/l)

**pCi/L:** Picocuries per liter, used to measure radiation

**AL:** Action Level

**NTU:** Nephelometric Turbidity Units

**ppb:** parts per billion, or micrograms per liter (ug/l)





## REGULATED CONTAMINANTS

LEAD & COPPER	YEAR SAMPLED	MCLG	ACTION LEVEL (AL)	90TH PERCENTILE	# SITES OVER AL	UNITS OF MEASUREMENT	VIOLATION (?)	LIKELY SOURCE OF CONTAMINATION
Copper	2011	1.3	1.3	0.076	0	ppm	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2011	0	15	3.8	0	ppb	NO	Corrosion of household plumbing systems; Erosion of natural deposits.

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. The Moline Water Division is responsible for providing high-quality drinking water, but cannot control the variety of materials used for 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 on the Safe Drinking Water Hotline or at <http://epa.gov/safewater/lead>.

Turbidity	LIMIT (TREATMENT TECHNIQUE)	LEVEL DETECTED	VIOLATION (?)	LIKELY SOURCE OF CONTAMINATION
HIGHEST SINGLE MEASUREMENT	1 NTU	0.21 NTU	NO	Soil runoff.
LOWEST MONTHLY % MEETING LIMIT	0.3 NTU	100%	NO	Soil runoff.

**Information Statement:** Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

## Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA.

### Definitions:

**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 Contaminant Level (MCL):** 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.

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

**Action Level (AL):** The concentration of a contaminant that triggers treatment or other required actions by the water supply.

**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 use of disinfectants to control microbial contaminants.

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



# 2012 SOURCE-WATER ASSESSMENT SUMMARY

## MORE ABOUT OUR SOURCE

Drinking water for the City of Moline (Facility No. 1610450) is supplied by the Moline community water supply (CWS). The Mississippi River serves as the primary source of this water. This facility draws water from the Mississippi River through one surface-water intake. The supply provides an average of 5.2 million gallons per day to an estimated population of 43,500 persons in Rock Island County. Facilities purchasing water from Moline include Clover Leaf Village MHP. In addition, Moline is interconnected with the cities of East Moline and Rock Island to allow for mutual aid in the event of a water-supply emergency.

Illinois EPA considers all surface-water sources of a community's water supply to be susceptible to potential pollution problems, hence the reason for mandatory treatment for all surface-water supplies in Illinois.

Mandatory treatment includes coagulation, sedimentation, filtration and disinfection. We also soften the water, removing approximately one-half the hardness found in river water. After treatment, disinfection and testing, the water is stored until it is pumped to the city via the distribution system. These operations are continuously controlled and monitored with more than 61,000 individual analyses performed each year.



Mississippi River surface-water intake



Further information on our community water supply's source-water assessment is available on the USGS Web site at <http://www.epa.state.il.us/water/groundwater/source-water-assessment/index.html> or by calling the City of Moline Water Treatment Plant at (309) 524-2300.

# ADDITIONAL HEALTH 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 USEPA'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 groundwater 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 from human activity. Contaminants that may be present in source water include:

- (A) Microbial contaminants such as viruses and bacteria which 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming
- (C) Pesticides and herbicides, which might come from a variety of sources such as agriculture, urban stormwater runoff and residential uses
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can 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

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Some people might be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline at (800) 426-4791.

# USEFUL TAP WATER TIPS

**Be prepared for plumbing problems:**

Identify the location of the main water shut-off valve in your home or business, so that you can turn off the water quickly if a leak or other plumbing problem occurs. The main shut-off valve is typically located in the basement where the water service pipe enters the building.

**Prevent unnecessary water loss and damage:**

Failed washing machine hoses cause more than \$100 million in property damages each year. Inspect your washing machine hoses on a routine basis. Look for seepage at the hose ends and bulges, cracks or frays along the length of the hoses. Replace your hoses if you find a defect or problem, or every three to five years as part of a proactive maintenance program. You may want to consider turning off the water to your washing machine when going on vacation, as an added margin of safety.

**Avoid unnecessarily high water and sewer usage:** Leaky and defective

toilets are the top cause of wasted water. You can check your toilets for leaks by placing a few drops of food coloring, or some laundry-bluening agent in the water tank. Do not flush the toilet. If you see color in the toilet bowl after 15 to 45 minutes, you have a leak. Prompt repair of dripping and leaking faucets can also reduce water waste.

**Save money on soaps, softeners and detergents:**

Moline tap water is softened at our water treatment plant and its hardness (level of dissolved minerals) is significantly lower than the non-softened tap water in other communities. Moline's softened tap water can allow our water users to reduce the amounts of soap, detergent and similar products used by 25% to 75% while achieving the same (or even better) results. Water users are encouraged to experiment systematically to determine how much soap and detergent use reduction is possible in their homes and businesses.



## HOW TO GET INVOLVED WITH YOUR WATER SUPPLY OR SCHEDULE A TOUR

We encourage public interest and participation in decisions affecting Moline's drinking water. Water issues are discussed by the City Council at Committee of the Whole meetings, which are held at 6:30 PM on most Tuesday evenings in City Hall. The public is welcome to attend these meetings and agendas are posted on the City's web site, [www.moline.il.us](http://www.moline.il.us). If you would like to have a specific water-related item brought up for

discussion, contact Greg Swanson, Utilities General Manager, at (309) 524-2301. Mr. Swanson can assist you and provide specific detailed information regarding the City's water supply and its operation. The City offers individual and group tours to those interested in visiting the Moline Water Treatment Plant. Contact Mr. Swanson, who will be happy to schedule a tour for you or your group.

## Repair leaks promptly whenever they occur

Dripping faucets & leaky fixtures can waste thousands of gallons of water per day

### Gallons lost through continuous leak at 60 psi water pressure

Diameter of stream	Daily	Quarterly	Annually
○ 1/4"	12,950	1,118,500	4,726,000
○ 3/16"	7,295	666,000	2,664,000
○ 1/8"	3,240	296,000	1,184,000
○ 1/16"	810	74,000	296,000

# Water. We treat it right.

## Typical Moline Water Characteristics in 2012

PARAMETER	AVERAGE (in ppm unless otherwise noted)
pH (in pH units)	9.4
Total Alkalinity	64
Total Hardness	80

## THE BOTTOM LINE

Our water met or surpassed all regulations. No drinking water violations were recorded during 2012.

In addition to tests we are required to perform, we voluntarily test our water system for additional substances and microscopic organisms to make certain our water is safe and of high quality.

The City of Moline is proud of the fine drinking water it provides to its consumers. This annual water quality report shows the source of our water, lists the results of our tests and contains important information about water and health. City of Moline Water will notify you immediately if there is any reason for concern about our water. We are happy to show you how we have surpassed water quality standards.



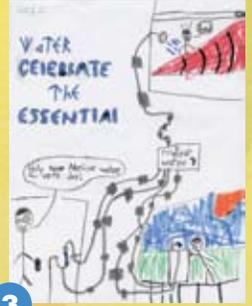
Este informe contiene información importante sobre la calidad de el agua en su comunidad. Traduzcalo o hable con alguien que lo entienda bien.



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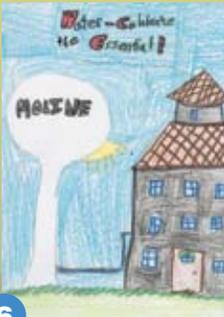


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List of artists' names on page 3.



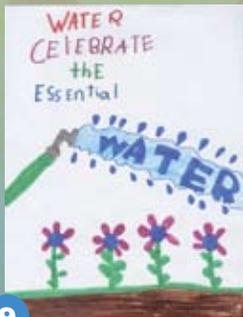
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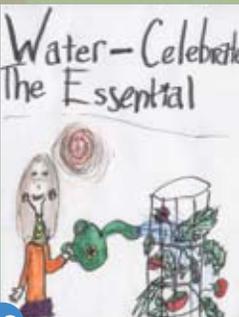
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