There is no alternative to water. Our community of living beings needs it for our health and wellness and to survive. Des Moines Water Works plays a key role in providing WATER YOU CAN TRUST FOR LIFE. Supplying approximately 500,000 Central Iowans with safe, affordable and abundant drinking water is Des Moines Water Works’ mission.

As a regional water utility, Des Moines Water Works responsibly invests in maintenance and upgrades to critical infrastructure that supports or supplies water to the residents of Des Moines and surrounding communities. The job of Des Moines Water Works is even more important in providing the “Liquid Asset” that Central Iowa needs to survive and thrive as source water degradation continues to occur. That’s why Des Moines Water Works encourages all water users to Think Downstream about their actions and the effects they have on this vital natural resource.

In order to ensure drinking water is safe, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. This Consumer Confidence Report summarizes information regarding water sources used, any detected contaminants, compliance and educational information.
The Raccoon and Des Moines Rivers are used to provide drinking water to more than 500,000 central Iowans. Upstream land use practices – agricultural and urban – have a direct effect on water quality and quantity for downstream users. All Iowans should Think Downstream and consider how they can help make Iowa’s water safe for drinking and recreation.

Des Moines Water Works (DMWW) operates three water treatment plants in Central Iowa. Each treatment plant uses a multi-barrier approach to ensure the safety of your drinking water. This includes source water monitoring, riverbank filtration, treatment processes of softening, filtration and disinfection, as well as distribution system monitoring and maintenance.

The **L.D. McMullen Water Treatment Plant** at Maffitt Reservoir, located southwest of the metro area, treats up to 25 million gallons of water per day from six radial collector wells and one horizontal well along the Raccoon River, and serves customers in southwest Des Moines, Waukee and parts of Warren Water District, Clive, Urbandale and West Des Moines. The collection elements are located in the coarse sand and gravel formation beneath the river. The shallow groundwater receives natural filtration prior to entry into the wells.

The **Saylorville Water Treatment Plant**, located in northern Polk County, serves water to residents north of Des Moines. This facility treats up to 10 million gallons of water per day from two radial collector wells along the Des Moines River and utilizes ultra-filtration and reverse osmosis to soften and treat the water.

All other areas in Des Moines Water Works' service area receive water from the **Fleur Drive Treatment Plant**. This plant treats up to 75 million gallons of water per day pumped from one of three sources: Raccoon River, Des Moines River and an Infiltration Gallery (a series of underground pipes located throughout Water Works Park adjacent to the Raccoon River).

Once treated, 1,400 miles of underground pipe, 10,000 fire hydrants, 9,700 valves, 10 water storage tanks and 10 booster pumping stations distribute water to homes and businesses in Des Moines and surrounding communities.

**WHAT DO WE TEST FOR?**

Throughout the treatment process, DMWW’s state-certified laboratory performs 100-150 tests each day to ensure the highest quality water is produced. An additional series of 50-60 daily tests on the untreated water sources allows laboratory staff to identify any necessary changes in the treatment process before the water enters the treatment plants.

DMWW monitors and tests for emerging and unregulated contaminants to stay ahead of potential health risks, including cyanotoxins produced by cyanobacteria, Per- and Poly-fluoroalkyl Substances (PFAS), neonicotinoids, and pharmaceutical and personal care products (PPCP).
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring material and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or humans. Contaminants that may be present in source water include:

**Inorganic Contaminants** such as salts and metals, which can occur naturally or come from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

**Organic Chemicals** including synthetic and volatile organic chemicals, which are agriculture, industrial and petroleum process byproducts and can also come from gas stations, urban stormwater runoff and septic systems.

**Microorganisms** such as viruses and bacteria, which may come from agricultural livestock operations, sewage treatment plants, septic systems and wildlife.

**Pesticides and Herbicides** which may come from agriculture and urban stormwater runoff.

**Radioactive Contaminants** which can occur naturally or result from oil and gas production and mining activities.

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**DEFINITIONS AND ABBREVIATIONS**

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

**Coliform** Bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water.

**E.Coli** Bacteria whose presence indicates that the water may be contaminated with human or animal wastes.

**Level Found** The highest amount found in the water or the average of all samples analyzed, depending on the regulation. If multiple samples were tested in 2020, the lowest and highest detected values are listed under Range of Detections.

**LRAA** Locational running annual average.

**mg/L** Milligrams per liter, or parts per million (ppm). Parts of contaminant per million parts of water. One part per million is equivalent to a single penny in ten thousand dollars.

**MCL** The maximum contaminant level, the highest level of a substance allowed in drinking water.

**MCLG** The MCL Goal, the level of a substance where there is no known or expected health risk. MCLGs allow for a margin of safety. MCLs are set as close to MCLGs as feasible using the best available treatment processes.

**ND** Not detected.

**N/A** Not applicable.

**ng/L** Nanogram per liter, or parts per trillion (ppt). Parts of contaminant per trillion parts of water. One part per trillion is equivalent to a single penny in ten billion dollars.

**pCi/L** Picocuries per liter, a measure of radioactivity.

**PPM** Parts per million.

**PPT** Parts per trillion.

**TT** Treatment Technique. Certain treatment processes are required to reduce the level of turbidity in the drinking water. Turbidity must not ever exceed 1 NTU, and must be less than 0.3 NTU 95% of the time.

**Turbidity** Turbidity is a measure of cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

**μg/L** Micrograms per liter, or parts per billion (ppb). Parts of contaminant per billion parts of water. One part per billion is equivalent to a single penny in ten million dollars.
Before water can be delivered to your home, it must first be analyzed by certified laboratories at Des Moines Water Works’ Fleur Drive Treatment Plant and the State Hygienic Laboratory. Results for 2020 in this report include samples taken as water leaves Des Moines Water Works’ three treatment plants and from samples obtained from the various water distribution systems supplied with water by Des Moines Water Works.

![Water Treatment Plant Monitoring](image)

**Water Distribution System Monitoring**

Once the water leaves Des Moines Water Works’ water treatment facilities, it is regularly monitored throughout the numerous distribution systems served by Des Moines Water Works for disinfectant, disinfection byproducts, bacteria, lead and copper. The table below shows the results of this monitoring.

### 2020 ASR LAB RESULTS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>MCLG</th>
<th>MCL</th>
<th>Tested</th>
<th>Found</th>
<th>Detections</th>
<th>Tested</th>
<th>Range</th>
<th>Found</th>
<th>Detections</th>
<th>Tested</th>
<th>Range</th>
<th>Found</th>
<th>Detections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Emitters</td>
<td>pCi/L</td>
<td></td>
<td>15</td>
<td>N/A</td>
<td>2020</td>
<td>6.20</td>
<td>N/A</td>
<td>2020</td>
<td>2.70</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arsenic</td>
<td>µg/L</td>
<td></td>
<td>10</td>
<td>N/A</td>
<td>2019</td>
<td>7.80</td>
<td>1.90-7.80</td>
<td>2019</td>
<td>7.80</td>
<td>1.90-7.80</td>
<td>2019</td>
<td>7.80</td>
<td>1.90-7.80</td>
</tr>
<tr>
<td>Sulfate</td>
<td>mg/L</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>2020</td>
<td>1.02</td>
<td>0.09-3.50</td>
<td>2020</td>
<td>1.02</td>
<td>0.09-3.50</td>
<td>2020</td>
<td>1.02</td>
<td>0.09-3.50</td>
</tr>
<tr>
<td>Nitrate [as N]</td>
<td>mg/L</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>2020</td>
<td>0.92</td>
<td>0.18-1.53</td>
<td>2020</td>
<td>0.92</td>
<td>0.18-1.53</td>
<td>2020</td>
<td>0.92</td>
<td>0.18-1.53</td>
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<tr>
<td>Chloride</td>
<td>mg/L</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
<td>2020</td>
<td>1.41</td>
<td>0.86-2.20</td>
<td>2020</td>
<td>1.41</td>
<td>0.86-2.20</td>
<td>2020</td>
<td>1.41</td>
<td>0.86-2.20</td>
</tr>
</tbody>
</table>

**Unregulated Contaminants**

The U.S. Environmental Protection Agency requires some cities to take samples in 2020 for an assessment monitoring program for the Unregulated Contaminant Monitoring (UCMR). The EPA will review the findings of this nationwide assessment to determine if any new regulations are needed.

### DISTRIBUTION SYSTEM

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Level Found</th>
<th>Range</th>
<th>Level Found</th>
<th>Range</th>
<th>Level Found</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAA8b (µg/L)</td>
<td>16.00</td>
<td>4.80-16.00</td>
<td>7.70</td>
<td>2.58-7.65</td>
<td>17.45</td>
<td>16.12-17.45</td>
</tr>
<tr>
<td>Quinoline (µg/L)</td>
<td>0.014</td>
<td>ND</td>
<td>0.014</td>
<td>ND</td>
<td>0.014</td>
<td>ND</td>
</tr>
</tbody>
</table>

**PFAS Monitoring**

Because of reported perfluoroalkyl (PFAS) contamination in the area, Des Moines Water Works has begun to proactively monitor for a number of variety of PFAS compounds. PFAS is a category of man-made chemicals designed to resist heat, oil, stains and water in items. It is also found in certain firefighting foam used at airports and on military installations. During production and use, it can migrate into soil, water and air.

**Unextracted**

- Includes water supplied to Allamakee, Berwick, Cumming, Pleasant Hill, Unincorporated Polk County and Windsor Heights.
- Includes water supplied to Runnells and eastern portions of Pleasant Hill.
- One sample exceeded the Al of 15 µg/L. Sample tested positive for coliform bacteria. Repeat samples indicated bacteria were not present, and the water was determined to be safe for consumption.
Drinking Water and 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.

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 about drinking water. Information about contaminants and potential health effects can be obtained by contacting the Safe Drinking Water Hotline.

EPA Safe Drinking Water Hotline
(800) 426-4791 or http://water.epa.gov/drink

Nitrate
Nitrate in drinking water at levels above 10 parts per million (ppm) is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. If you are caring for an infant, you should ask for advice from your healthcare provider. Nitrate levels may rise quickly for short periods of time because of groundwater conditions and agricultural activity. Des Moines Water Works uses a variety of strategies to keep the treated tap water below 10 ppm. These strategies include source water blending, and if necessary, removal of nitrate using a treatment process known as ion exchange. Ion exchange is an expensive water treatment technology used only in extraordinary situations when nitrate or other pollution is particularly threatening. Despite frequently elevated nitrate levels in the Raccoon and Des Moines Rivers, Des Moines Water Works’ treated water has not exceeded the 10 ppm standard since nitrate removal was implemented in 1992.

Lead
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Des Moines Water Works minimizes the potential for exposure to lead in drinking water by following a corrosion control program approved by the Iowa Department of Natural Resources. Lead in drinking water is primarily from materials and components associated with private service lines and home plumbing. When your water has been sitting for several hours, you can further 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 are available from the Safe Drinking Water Hotline.

Cryptosporidium
Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. It finds its way into the watershed through animal and human wastes. Our monitoring indicates the presence of these organisms in our source water. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.
PUBLIC MEETING AND UTILITY CONTACT INFORMATION

Some public meetings have been moved to virtual formats. Check with the city/entity for the most up to date information.

CITY OF ALLEMAN
Public Meeting:
2nd Monday of the month at 7:00 pm
Alleman City Council
14000 NE 6th Street • Alleman, IA 50007
Contact Information:
Des Moines Water Works Customer Service
(515) 283-8700 • customerservice@dmww.com

CITY OF ANKENY
Public Meeting:
1st & 3rd Monday of each month at 5:30 pm
Kirkendall Library
1250 SW District Drive • Ankeny, IA 50023
Contact Information:
Customer Service
410 West 1st Street • Ankeny, IA 50023
(515) 963-3565 • customerservice@ankenyiowa.gov

BERWICK WATER ASSOCIATION
Public Meeting:
Annual meeting and as needed
5825 NE Berwick Drive • Berwick, IA 50032
Contact Information:
Des Moines Water Works Customer Service
(515) 283-8700 • customerservice@dmww.com

CITY OF BONDURANT
Public Meeting:
1st & 3rd Monday of each month at 6:00 pm
Bondurant City Hall
200 2nd Street NE • Bondurant, IA 50035
Contact Information:
Patrick F. Collison
(515) 971-6856 • pcollison@cityofbondurant.com

CITY OF CLIVE
Public Meeting:
2nd & 4th Thursday of each month at 6:00 pm
Clive City Hall
1900 NW 114th Street • Clive, IA 50325
Contact Information:
Jeff May, Public Works Director
2123 NW 111th Street • Clive, IA 50325
(515) 223-6231 • jmay@cityofclive.com

CITY OF CUMMING
Public Meeting:
2nd & 4th Monday each month at 7:00 pm
Cumming City Hall
649 N 43rd Street • Cumming, IA 50032
Contact Information:
Cumming City Hall
(515) 981-9214 • deputycityclerk@cumming-iowa.com
Des Moines Water Works Customer Service
(515) 283-8700 • customerservice@dmww.com

CITY OF EARLHAM
Public Meeting:
2nd Monday of each month at 7:00 pm
Earham City Hall
140 South Chestnut Avenue • Earlham, IA 50072
Contact Information:
Gary Coffman, Public Works Supervisor
(515) 758-2281 • earlhamcityhall@mchsi.com

CITY OF JOHNSTON
Public Meeting:
1st & 3rd Monday of each month at 7:00 pm
Johnston City Hall
6221 Merle Hay Road • Johnston, IA 50131
Contact Information:
Shane Kinsey
6400 NW Beaver Drive • Johnston, IA 50131
(515) 278-0822 • skinsey@cityofjohnston.com

NEW VIRGINIA WATER WORKS
Public Meeting:
1st Saturday of each month at 7:30 am
Fire Station meeting room
506 West Street • New Virginia, IA 50210
Contact Information:
Brent Baughman, City Clerk
6400 NW Beaver Drive • Johnston, IA 50131
(515) 278-0822 • skinsey@cityofjohnston.com

CITY OF NORWALK
Public Meeting:
1st & 3rd Thursday of each month at 6:00 pm
Norwalk City Hall
705 North Avenue • Norwalk, IA 50211
Contact Information:
Wayne Schwartz, P.E., Public Works Director
(515) 981-9527 • wschwartz@norwalk.iowa.gov

CITY OF PLEASANT HILL
Public Meeting:
2nd & 4th Tuesday of each month at 6:00 pm
Pleasant Hill City Hall
5160 Maple Drive, Suite A • Pleasant Hill, IA 50317
Contact Information:
Pleasant Hill Public Works
(515) 262-9465 • Pleasant Hill City Hall
Des Moines Water Works Customer Service
(515) 283-8700 • customerservice@dmww.com

CITY OF RUNNELLS
Public Meeting:
2nd Tuesday of each month at 7:00 pm
Runnells City Hall
108 Brown Street • Runnells, IA 50237
Contact Information:
Runnells City Hall
(515) 966-2042
Des Moines Water Works Customer Service
(515) 283-8700 • customerservice@dmww.com

URBANDALE WATER UTILITY
Public Meeting:
Meets monthly • Call 278-3940 for information
Urbandale Water Utility
3720 86th Street • Urbandale, IA 50322
Contact Information:
Urbandale Water Utility
(515) 278-3940 • dacheson@urbandalewater.org

WARREN WATER DISTRICT
Public Meeting:
3rd Monday of each month at 6:00 or 7:00 pm, as posted
Warren Water District
1204 East 2nd Avenue • Indianola, IA 50125
Contact Information:
Stan Ripperger, System Manager
(515) 962-1200 • wwd@warrenwaterdistrict.com

CITY OF WAUKEE
Public Meeting:
1st & 3rd Monday each month at 5:30 pm
Waukee City Hall
230 W. Hickman Road • Waukee, IA 50263
Contact Information:
Rudy Koester Public Works Director
(515) 978-7920 • rkoester@waukee.org
Waukee Utility Customer Service
(515) 978-5502 • waukeeutilities@waukee.org

CITY OF WINDSOR HEIGHTS
Public Meeting:
1st & 3rd Monday each month at 6:00 pm
Windsor Heights City Hall
133 66th Street • Windsor Heights, IA 50324
Contact Information:
515) 981-9214 • waukeeutilities@waukee.org

Des Moines Water Works
2201 George Flagg Parkway • Des Moines, IA 50321 • (515) 283-8700 • www.dmww.com • dsmh2o.com

Des Moines Water Works
Water You Can Trust for Life