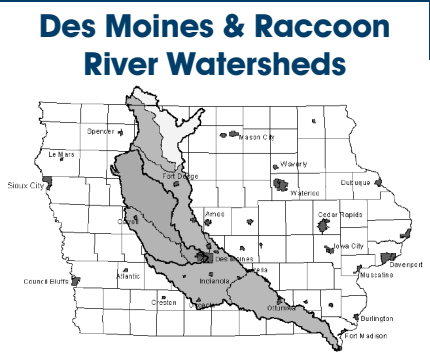


WATER TREATMENT
YOU CAN TRUST FOR LIFE

Water plays a key role in your health and Des Moines Water Works (DMWW) plays a key role in providing you with a safe, clean, healthy water supply. DMWW operates two water treatment plants in Central Iowa. The Treatment Plant at Fleur Drive treats water pumped from one of three sources: Raccoon River, Des Moines River and ground water collected through a series of underground pipes situated next to the Raccoon River (located throughout Water Works Park). The L.D. McMullen Treatment Facility at Maffitt Reservoir, located southwest of the metropolitan area, treats water from the Raccoon River. The water is obtained through radial collector wells located horizontally in the coarse sand and gravel formation beneath the river. The shallow groundwater receives natural filtration prior to entry into the wells. The groundwater is pumped to the treatment plant via a series of pipes and pumps that interconnect all six of the wells and the horizontally drilled well. This innovative horizontal well formation was designed and constructed by DMWW staff.

A third facility, Saylorville Water Treatment Plant, located at the 6500 block of NW 26th Street in Polk County, will be online summer 2011, providing water to residents north of Des Moines. This facility will utilize membrane technology to soften and purify the finished water. This will be DMWW's first membrane treatment plant and the largest such facility in Iowa. The Saylorville plant will have an initial capacity of 10.0 million gallons per day (mgd) and be expandable to 20.0 mgd. DMWW's chemists and microbiologist test the untreated water daily to determine the best source water. They also test the treated water every day to ensure that it is a healthy and safe product. The tests include bacterial analysis, softening levels and testing for other contaminants.

Once treated, there are more than 1,000 miles of underground water mains and pipe (iron, concrete and plastic) distributing the water to homes in Des Moines and surrounding communities.



DEFINITION OF TERMS

Coliform A bacteria originating in the digestive system of mammals. Its presence in water alerts lab staff that disease-causing agents may be present.

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 2010, the lowest and highest detected values are listed under Range of Detections.

mg/L milligrams per liter, or parts per million.

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.

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.

MRDLG The level of 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 contaminants.

N/A not applicable.

ND not detected.

NTU nephelometric turbidity units.

pCi/L picocuries per liter, a measure of radioactivity.

TT Treatment technology. 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.

ug/L micrograms per liter, or parts per billion.

SOURCE WATER REPORT

Des Moines Water Works obtains water from one or more surface waters. Surface water sources are susceptible to sources of contamination within the drainage basin.

Surface Water Name	Susceptibility
Crystal Lake	High
Des Moines River	High
Maffitt Lake	High
Raccoon River	High

Des Moines Water Works completed a **SOURCE WATER ASSESSMENT** (SWA) in 2001. To obtain a copy of the SWA, visit www.dmwv.com, or call (515) 283-8700 to request a printed copy.

2011
CONSUMER
CONFIDENCE
REPORT

A publication on quality water and quality service presented by
DES MOINES WATER WORKS

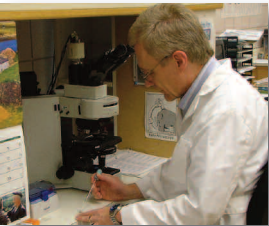
SOURCE



Supplying central Iowa with clean, safe drinking water is Des Moines Water Works' mission. In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. For more than 20 years, water supplied by Des Moines Water Works meets and surpasses all federal drinking water standards. This annual water quality report is your guide to the quality and safety of tap water provided by Des Moines Water Works.

Des Moines Water Works collaborates with local, national and international utilities and agencies by sharing information on monitoring, treatment and distribution methods. Des Moines Water Works' extensive monitoring program allows us to evaluate our ever-challenging source waters, treat it effectively and deliver **WATER YOU CAN TRUST FOR LIFE**.

TREATMENT



DISTRIBUTION



Des Moines Water Works encourages customers to stay informed on drinking water and watershed protection issues. Please contact us at (515) 283-8700 or visit www.dmwv.com if you have any questions about your drinking water.

Des Moines :
Water Works

Water You Can Trust for Life

2201 George Flagg Parkway | Des Moines, IA 50321 | (515) 283-8700 | www.dmwv.com

Public Meeting & Utility **Contact Information**

- CITY OF ALLEMAN**
2nd Monday of the month at 7:00 pm
Alleman City Council
14000 NE 6th Street • Alleman, IA 50007
Mayor Bill Bodensteiner
(515) 685-3666
Des Moines Water Works Customer Service
(515) 283-8700 • customerservice@dmwv.com
- CITY OF ANKENY**
1st & 3rd Monday of each month at 5:30 pm
410 West 1st Street • Ankeny, IA 50023
Customer Service
220 West 1st Street • Ankeny, IA 50023
(515) 963-3565 • www.ankenyiowa.gov
- BERWICK WATER ASSOCIATION**
Annual meeting and as needed
5825 NE Berwick Drive • Berwick, IA 50032
Tom O'Donnell
PO Box 187 • Berwick, IA 50032
(515) 266-8668
- CITY OF BONDURANT**
1st & 3rd Monday of each month at 6:00 pm
Bondurant City Hall
200 2nd Street NE • Bondurant, IA 50035
Patrick F. Collison
(515) 971-6856 • pcollison@cityofbondurant.com
- CITY OF CLIVE**
1st & 3rd Thursday of each month at 7:00 pm & 5th Thursday at 6:00 pm
Clive City Hall
1900 NW 114th Street • Clive, IA 50325
Bart Weller, Public Works Director
2123 NW 111th Street • Clive, IA 50325
(515) 223-6231 • bweller@cityofclive.com
- CITY OF CUMMING**
2nd & 4th Monday each month
City Hall • Cumming, IA 50061
City Clerk
P.O. Box 100 • Cumming, IA 50061
(515) 981-9214 • cityclerk@cumming-iowa.com
Des Moines Water Works Customer Service
(515) 283-8700 • customerservice@dmwv.com
- DES MOINES WATER WORKS**
4th Tuesday each month at 3:30 pm
Des Moines Water Works
2201 George Flagg Parkway • Des Moines, IA 50321
Des Moines Water Works Customer Service
(515) 283-8700 • customerservice@dmwv.com
- CITY OF EARLHAM**
2nd Monday of each month at 7:00 pm
Earlham City Hall
140 South Chestnut Avenue • Earlham, IA 50072
Gary Coffman
(515) 758-2281 • earlhamcityhall@mchsi.com
- CITY OF JOHNSTON**
1st & 3rd Monday of each month at 7:00 pm
Johnston City Hall
6221 Merle Hay Road • Johnston, IA 50131
Lori Eden
P.O. Box 410 • Johnston, IA 50131
(515) 278-0822 • leden@ci.johnston.ia.us
- NEW VIRGINIA WATER WORKS**
1st Saturday of each month at 7:30 am
Fire Station meeting room • New Virginia, IA 50210
Brent Baughman
506 West Street • New Virginia, IA 50210
(641) 449-3492 • bjbaughman@iowatelecom.net
- CITY OF NORWALK**
1st & 3rd Thursday of each month at 6:30 pm
Norwalk City Hall
705 North Avenue • Norwalk, IA 50211
Tim Hoskins, Public Works Director
(515) 202-2540 • timhoskins@ci.norwalk.ia.us
- CITY OF PLEASANT HILL**
2nd & 4th Tuesday of each month at 6:30 pm
Pleasant Hill City Hall
5160 Maple Drive, Suite A • Pleasant Hill, IA 50317
Gary Patterson, Public Works Director
(515) 262-9465 • gpatterson@ci.pleasant-hill.ia.us
Des Moines Water Works Customer Service
(515) 283-8700 • customerservice@dmwv.com
- POLK COUNTY RURAL WATER DISTRICT #1**
Meetings as needed
660 NW 66th Avenue, Suite 4 • Des Moines, IA 50313
Clate Vanderpool
(515) 289-2643
- CITY OF RUNNELLS**
2nd Tuesday of each month at 7:00 pm
Runnells City Hall
Carol Elam, City Clerk
(515) 966-2042
Des Moines Water Works Customer Service
(515) 283-8700 • customerservice@dmwv.com
- CITY OF URBANDALE**
Meets monthly • Call 278-3940 for information
Urbandale Water Utility
3720 86th Street • Urbandale, IA 50322
Dale Acheson
(515) 278-3940 • dacheson@urbandalewater.org
- WARREN WATER DISTRICT**
3rd Monday each month at 7:00 pm
Warren Water District Office
1204 East 2nd Avenue • Indianola, IA 50125
Peggy Crabbs, Systems Manager
(515) 962-1200 • peggy@warrenwaterdistrict.com
- CITY OF WAUKEE**
1st & 3rd Monday each month at 5:30 pm
Waukee City Hall
230 Highway 6 • Waukee, IA 50263
John Gibson
(515) 987-4363 • jgibson@waukee.org
- CITY OF WINDSOR HEIGHTS**
1st & 3rd Monday each month at 6:00 pm
Windsor Heights City Hall
133 66th Street • Windsor Heights, IA 50324
Marketa George-Oliver, City Administrator
(515) 279-3662
Des Moines Water Works Customer Service
(515) 283-8700 • customerservice@dmwv.com
- XENIA RURAL WATER DISTRICT**
Thursday of 3rd full week of each month
2398 141st Street • Bouton, IA 50039
Mark Christianson, Supply & Treatment Manager
PO Box 39 • Bouton, Iowa 50039
(515) 676-2117 • mchristianson@xeniawater.org

DRINKING WATER AND HEALTH
INFORMATION **FROM THE EPA**

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

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. 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 an expensive treatment process known as ion exchange. Des Moines Water Works' treated water has not exceeded the 10 ppm standard since nitrate removal was implemented in 1992. If you are caring for an infant, you should ask for advice from your health care provider.

Many customers wish to know if bottled water is safer than regular tap water. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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. Research repeatedly shows bottled water to be no safer than conventional tap water provided by public water systems in the U.S.

More information about contaminants and potential health effects can be obtained by contacting the EPA's Safe Drinking Water Hotline at **(800) 426-4791** or <http://water.epa.gov/drink>.

2010 WATER QUALITY RESULTS

Water Treatment Plant Monitoring

Before water can be delivered to your home, it must first be analyzed by certified laboratories at Des Moines Water Works' Fleur Drive Plant and at the University of Iowa Hygienic Laboratory in Iowa City. Results for 2010 in this report include samples taken as water leaves Des Moines Water Works' two treatment plants and from samples obtained from the various water distribution systems supplied with water by Des Moines Water Works. The L.D. McMullen Water Treatment Facility at Maffitt Reservoir serves southwest Des Moines, parts of the Xenia and Warren Rural Water Systems, Waukee and parts of West Des Moines, Clive, and Urbandale west of I-35. All other areas receive water from the Fleur Drive Plant. Treated drinking water is tested for the following parameters:

- **Microorganisms** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **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.
- **Pesticides and Herbicides** which may come from agriculture, urban stormwater runoff and residential uses.
- **Organic chemicals** including synthetic and volatile organic chemicals, which are industrial and petroleum process byproducts and can also come from gas stations, urban stormwater runoff and septic systems.
- **Radioactive Contaminants** which can occur naturally or result from oil and gas production and mining activities.

2010 Lab Test RESULTS				Fleur Drive Treatment Plant		L.D. McMullen Water Treatment Facility		SOURCE OF CONTAMINANT
	YEAR TESTED	MCL	MCLG	LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS	
WATER CLARITY								
Turbidity (NTU)	2010	TT	NA	0.14	0.02-0.14	0.08	0.04-0.08	Soil runoff
INORGANIC SUBSTANCES								
Nitrate as Nitrogen (mg/L)	2010	10	10	6.38	2.78-6.38	7.11	4.62-7.11	Runoff from fertilizer; leaching from septic tanks; sewage; erosion of natural deposits Additive for strong teeth; erosion of natural deposits; fertilizer Erosion of natural deposits
Fluoride (mg/L)	2010	4	4	1.26	0.85-1.26	1.23	0.31-1.23	
Sodium(mg/L)	2010	NA	NA	12.6	NA	7.85	NA	
ORGANIC SUBSTANCES								
Atrazine (ug/L)	2010	3	3	<0.0001	NA	<0.0001	NA	Agriculture runoff
cis-1,2 Dichloroethylene (ppb)	2010	70	70	0.6	0-1	NA	NA	Discharge from industrial chemical factories
RADIOACTIVE SUBSTANCES								
Alpha Emitters (pCi/L)	2010	15	0	1.6	NA	NA	NA	Erosion of natural deposits

Definitions for terms and measure units can be found on the back page.

Total Organic Carbon RESULTS			
Treatment Plant	Year Tested	Annual Removal Ratio	Minimum Removal Requirement
Fleur Drive Plant	2010	1.32	1
McMullen Facility	2010	1.86	1

2010 Lab Test RESULTS				Louise P. Moon Well		L.D. McMullen Plant Well		Ankeny Well 1		SOURCE OF CONTAMINANT
	YEAR TESTED	MCL	MCLG	LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS	LEVEL FOUND	RANGE OF DETECTIONS	
PARAMETER										
Alpha Emitters (pCi/L)	2010	15	0	N/A	N/A	N/A	N/A	2.2	N/A	Erosion of natural deposits
Arsenic (ug/L)	2010	10	--	2	N/A	N/A	N/A	2	N/A	Erosion of natural deposits
Atrazine (ug/L)	2010	3	3	0.2	N/A	0.1	N/A	0.1	N/A	Runoff from fertilizer
Combined Radium (pCi/L)	2010	15	0	N/A	N/A	N/A	N/A	1.6	N/A	Discharge from rubber and chemical factories
Di(2-ethylhexyl)phthalate (ug/L)	2010	6	0	N/A	N/A	0.6	N/A	N/A	N/A	Discharge from rubber and chemical factories
Fluoride (mg/L)	2010	4	4	1.45	N/A	1.17	N/A	--	N/A	Water additive which promotes strong teeth; erosion of natural deposits
Nitrate (as N) (mg/L)	2010	10	10	6.72	4.63-6.72	6.06	4.23-6.06	3.85	1.71-3.85	Runoff from fertilizer; leaching from septic tanks; sewage; erosion of natural deposits
Sodium (mg/L)	2010	N/A	N/A	28	N/A	15	N/A	20.3	N/A	Erosion of natural deposits

DES MOINES WATER WORKS AND THE CITY OF ANKENY operate wells known as an Aquifer Storage and Recovery (ASR). Treated drinking water is injected into the well during cold-weather months, and recovered for use during warm-weather months. Testing data unique to this water can be seen on the chart to the left.

Distribution System Monitoring

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

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. Des Moines Water Works is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure are available from the Safe Drinking Water Hotline at **(800) 426-4791** or <http://water.epa.gov/drink>.

2010 Distribution RESULTS	Total Trihalomethanes (ug/L)		Haloacetic Acids (ug/L)		Lead (ug/L)		Copper (mg/L)		Coliform Bacteria (positive)		Chlorine Disinfectant (mg/L)	
	Byproducts of chlorination MCL=80 ug/L MCLG=no limit set		Byproducts of chlorination MCL=60 ug/L MCLG=no limit set		From plumbing corrosion 90% of all samples must be below Action Level of 15 ug/L		From plumbing corrosion 90% of all samples must be below Action Level of 1.3 mg/L		Naturally present in the environment No more than 5% of monthly samples can be positive		Added to prevent bacterial growth Maximum limit for annual average: 4.0 mg/L	
SYSTEM	Level Found	Range of Detections	Level Found	Range of Detections	90% of Samples Below Action Level	Range of Detections	90% of Samples Below Action Level	Range of Detections	Monthly Samples	Positive Samples	Running Annual Average	Range
Des Moines ¹	35	10-72	6	ND-14	ND	ND	ND	ND-0.03	150	1 ²	0.9	0.74-1.12
Ankeny	43	21-46	8	ND-14	ND	ND	ND	ND	40	1 ²	.8	0.39-1.12
Ankeny ASR	50	ND-55	5	ND-11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Berwick	49	27-73	9	7-12	ND	ND	0.06	ND-0.12	1	0	0.7	0.43-0.91
Bondurant	44	33-65	14	9-26	3	ND-3	0.01	ND-0.03	6	1	2.4	2.1-2.7
Clive	46	23-72	10	7-15	ND	ND-69	ND	ND-0.03	15	0	0.8	0.29-1.22
Cumming	63	N/A	8	N/A	15	ND-22	0.02	ND-0.03	1	0	0.59	0.35-0.89
East Dallas Water	30	N/A	N/A	N/A	ND	ND	ND	ND	1	0	1.87	0.77-2.2
Earlham	20	14-30	5	ND-89	7	ND-26	ND	ND-0.25	2	0	2.2	1.6-2.78
Johnston	50	27-79	12	9-22	ND	ND-11	0.02	ND-0.03	15	0	0.6	0.07-1.22
New Virginia	42	23-66	14	9-21	5	ND-10	ND-5	ND-0.03	1	0	1.8	1.47-1.92
Norwalk	59	46-67	13	9-17	ND	ND	ND	ND	12	1	0.9	0.11-1.07
Polk Co. Rural Water #1	44	22-69	10	6-3	ND	ND	ND	ND-0.03	2	0	0.8	0.23-1.06
SE Polk Rural Water ³	48	27-73	11	7-17	ND	ND	ND	ND-0.04	10	0	2.76 ⁴	0.45-3.38
Urbandale	48	22-80	10	7-14	ND	ND-12	ND	ND-0.03	40	0	0.9	0.46-1.27
Warren Water District	33	13-66	8	ND-18	ND	ND-31	ND	ND-0.03	16	0	1.9 ⁵	3.1
Waukee	58	42-75	10	9-11	7	ND-12	ND	ND-0.06	9	0	0.8	0.26-1.06
Xenia Rural Water District	34	10-70	14	8-25	11	ND-23	0.05	ND-0.19	15	0	2.8	0.8-3.8

¹ Includes Windsor Heights & Pleasant Hill. ² One sample tested positive for total coliforms. Repeat samples indicated coliform bacteria were not present, and the water was determined to be safe for consumption. ³ Includes water supplied to Alleman & Runnells. ⁴ A chlorine record keeping violation was received for the period of 7/01/10 to 7/31/10. ⁵ A chlorine record keeping violation was received for the period of 4/01/10 to 4/30/10.