

[www.lrwd1.com](http://www.lrwd1.com)

## RURAL WATER DISTRICT NO. 1 LANCASTER COUNTY, NE

310 Fir Street  
PO Box 98  
Bennet, Ne 68317  
(402) 782-3495

### Meet the Board

Randy Kempkes, Chairman  
Dallas Svoboda, Vice Chairman  
Warren Cheney, Treasurer  
Jill Heng, Secretary  
Ken Mueller, Director  
Rick Hotdwalker, Director  
Jeff Hartman, Director

### Meet the Staff

Jordon Bang, District Manager  
Jasmine Mach, Office Manager  
Phil Goering, Construction  
Dan Bartels, Water Operator  
Debbie Frandsen, Office Assistant

### This Issue

- P.1 Voluntary Water Conservation, Meter Pit Maintenance
- P.2 Annual Quality Report
- P.3 Backflow Prevention
- P.4 Emergency Phone Numbers, Automatic Payment Form

### VOLUNTARY WATER CONSERVATION SUMMER 2017

Please participate in our Voluntary Water Conservation this summer by observing the odd and even schedule. While most of us enjoy having a lush green landscape, filling pools and outside washing, large water use at the same time by our customers can cause stress on the water distribution system as well as cause low pressure for some of our users. Alternating our outdoor watering days helps conserve valuable water resources and assists your water utility in meeting peak summer demands.

#### ODD ADDRESSES

Addresses ending with an odd number  
water and irrigate outdoors on:

**TUESDAY, THURSDAY & SATURDAY**

#### EVEN ADDRESSES

Addresses ending with an even number  
water and irrigate outdoors on:

**WEDNESDAY, FRIDAY & SUNDAY**

\*\*\*\*\*NO WATERING ON MONDAYS\*\*\*\*\*

**THANK YOU FOR OBESERVING THIS SCHEDULE**

#### WATER CONSERVATION TIPS

- ◆ Water in the morning or late evening to avoid evaporation during the hot hours
- ◆ Collect rain water in a barrel to use for watering plants and trees
- ◆ Use mulch around plants and trees to keep the moisture in
- ◆ Wash vehicles using a bucket instead of letting the hose run
- ◆ Use a broom to sweep, clean off sidewalks/driveways instead of a hose

**THERE ARE A NUMBER OF WAYS TO SAVE WATER! BE WATER SMART, EVERY DROP COUNTS!**



### WATER METER PIT MAINTENANCE TIPS

The District routinely inspects water meters and pits for usage, repairs and maintenance. Please do not cover or obstruct the meter pit; we must be able to access it at any time. Also check for ground settling around the cover; the ground should be level with the top of the cover. Make sure your pit lid is secured tightly to the meter pit. This will help prevent your meter from freezing in the winter and will avert small animals. **Please let us know if the meter pit/lid or post are damaged.**



Water Meter Cover

# ANNUAL WATER QUALITY REPORT

## FOR THE PERIOD OF JANUARY 1 TO DECEMBER 31, 2016

This report is intended to provide you with important information about your drinking water and the efforts made by the Lancaster Co. RWD #1 water system to provide safe drinking water.

**Para Clientes Que Hablan Espanol:**  
Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo o hable con alguien que lo entienda bien.

**For more information regarding this report contact:**  
**Phil Goering**  
**402-430-9079**

If you would like to observe the decision-making processes that affect drinking water quality, please attend the regularly scheduled meeting of the Board of Directors. If you would like to participate in the process please contact the above name to be placed on the agenda of the Board of Directors of Lancaster Co. RWD #1.

Drinking water, including bottled water, may reasonably be expected to contain at least small amount of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

**Source Water Assessment Availability**

The Nebraska Department of Environmental Quality (NDEQ) has completed the Source Water Assessment. Included in the assessment is a Wellhead Protection Area Map, potential contaminant source inventory, vulnerability rating, and source water protection information. To view the Source Water Assessment or for more information please contact the person named above on this report or NDEQ at (402) 471-6988 or go to [www.deq.state.ne.us](http://www.deq.state.ne.us)

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.

**Sources of Drinking Water**

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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

The source of drinking water used by the Lancaster Co. RWD #1 is ground-

water. This water is pumped from wells maintained by Lancaster Co. RWD #1.

**Contaminants that may be present in source water include:**

- \* Microbial contaminants, 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 be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- \* Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- \* Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- \* Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

**Drinking Water Health Notes**

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline: (800-426-4791).

Infants, young children and pregnant women are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flushing your tap for 30 seconds to 2 minutes before using your tap water will clear the line of any lead that may have leached into the water while the line was idle. Additional information is available from the Safe Drinking Water Hotline: (800-426-4791) or the Department of Drinking Water (402-471-2541).

The Lancaster Co. RWD#1 is required to test for the following contaminants: Coliform Bacteria, Antimony, Arsenic, Asbestos, Barium, Beryllium, Cadmium, Chromium, Copper, Cyanide, Fluoride, Lead, Mercury, Nickel, Nitrate, Nitrite, Selenium, Sodium,

Thallium, Alachlor, Atrazine, Benzo(a)pyrene, Carbofuran, Chlordane, Dalapon, Di(2-ethylhexyl)adipate, Dibromochloropropane, Dinoseb, Di(2-ethylhexyl)-phthalate, Diquat, 2, 4-D, Endothal, Endrin, Ethylene dibromide, Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxamyl (Vydate), Pentachlorophenol, Picloram, Polychlorinated biphenyls, Simazine, Toxaphene, Dioxin, Silvex, Benzene, Carbon Tetrachloride, o-Dichlorobenzene, Para-Dichlorobenzene, 1,2 Dichloroethane, 1,1 Dichloroethylene, Cis-1,2, Dichloroethylene, Trans-1,2- Dichloroethylene, Dichloromethane, 1,2, Dichloropropane, Ethylbenzene, Monochlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, Styrene, Tetrachloroethylene, Toluene, Xylenes (total), Gross Alpha (minus Uranium & Radium226) Radium 226 plus Radium 228, Sulfate, Chloroform, Bromodichloromethane, Chlorodibromomethane, Bromoform, Chlorobenzene, m-Dichlorobenzene, 1,1 Dichloropropane, 1,1 Dichloroethane, 1,1,2,2-Tetrachloroethane, 1,2-Dichloropropane, Chloromethane, Bromomethane, 1,2,3-Trichloropropane, 1,1,1,2-Tetrachloroethane, Chloroethane, 2,2 Dichloropropane, o-Chlorotoluene, p-Chlorotoluene, Bromobenzene, 1,3-Dichloropropane, Aldrin, Butachlor, Carbaryl, Dicamba, Dieldrin, 3-Hydroxycarbofuran, Methomyl, Metolachlor, Metribuzin, Propachlor.

**How to Read the Water Quality Data Table:**

The EPA and State Drinking Water Program establish the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to the regulatory limits.

*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. MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology. MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety. AL (Action Level): The concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow. Units in the Table: ND— not detectable. ppm: parts per million = mg/L milligrams per liter—One ppm or one mg/L corresponds to 1 gallons of water in 1,000,000 gallons of water. ppb: parts per billion— One ppb corresponds to 1 gallon in 1,000,000,000 gallons of water. pCi/L picocuries per liter—radioactivity concentration unit. Ug/L—micrograms per liter—measurement of radioactivity. RAA—running annual average— an ongoing annual average calculation of data from the most recent four quarters. 90th Percentile—Represents the highest value found out of 90% of the samples taken in a representative group. If the 90th percentile is greater than the action level, it will trigger a treatment or other requirements that a water system must follow. TT—Treatment Technique— A required process intended to reduce the level of a contaminant in drinking water.*

Lancaster Co. RWD #1					TEST RESULTS			Date Printed 3/9/2017	NE3110909	
Microbiological	Highest No. of Positive Samples				MCL: Systems that Collect Less than 40 Samples			MCLG	Likely Source of Contamination	Violations Present
COLIFORM (TCR)	In the month of October, 3 samples were positive				per month—No more than 1 Positive monthly sample			0	Naturally present in the environment	No-RTCR Assessment
<b>Lead and Copper</b>	<b>Monitoring Period</b>	<b>90th Percentile</b>	<b>Range</b>	<b>Unit</b>	<b>AL</b>	<b>Sites Over AL</b>	<b>Likely Source of Contamination</b>			
COPPER, FREE	2014-2016	.608	0.119-0.675	PPM	1.3	0	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of Household plumbing.			
LEAD	2014-2016	1.9	.59-2.48	PPB	15	0	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of Household plumbing.			
<b>Regulated Contaminants</b>	<b>Collection Date</b>	<b>Highest Value</b>	<b>Range</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Likely Source of Contamination</b>			
ARSENIC	6/15/2015	3.64	2.8-3.64	PPB	10	0	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes			
BARUIM	7/11/2016	0.172	0.172	PPM	2	2	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits			
FLOURIDE	7/11/2016	0.245	0.245	PPM	4	4	Erosion of natural deposits; water additive which promotes strong teeth; Fertilizer discharge			
NITRATE-NITRITE	11/14/2016	0.104	0.104	PPM	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits			
<b>Radiological Contaminants</b>	<b>Collection Date</b>	<b>Highest Value</b>	<b>Range</b>	<b>Unit</b>	<b>MCL</b>	<b>MCLG</b>	<b>Likely Source of Contamination</b>			
Combined Radium (-226 & -228)	10/3/2016	3.41	0.993-3.41	pCi/L	5	0	Erosion of natural deposits			
Gross Alpha, Incl. Radon & U	1/15/2016	4.95	2.98-4.95	pCi/L	15	0	Erosion of natural deposits			
Radium-226	4/8/2016	1.19	1.15-1.19	pCi/L		0	Erosion of natural deposits			
Radium-228	10/3/2016	2.26	0.822-2.26	pCi/L		0	Erosion of natural deposits			
<b>Unregulated Water Quality Data</b>	<b>Collection Date</b>	<b>Highest Value</b>	<b>Range</b>	<b>Unit</b>	<b>Secondary MCL</b>					
NICKEL	4/19/2016	0.00262	0.00262	MG/L	0.1					
SULFATE	4/19/2106	81.9	81.9	MG/L	250					

During the 2016 calendar year, we had the below noted violation(s) of drinking water regulations.

Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2016			

**Additional Required Health Effects Language:** Coliforms are 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 distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments(s) to identify problems and to correct any problems that were found during these assessments. During the past year we were required to conduct one Level 1 assessment. One Level 1 assessment was completed. In addition, we were required to take one corrective action and we completed one action. There are no additional required health effects violation notices.

# CROSS CONTAMINATION BACKFLOW PREVENTION

## Let's Work Together For Safe Drinking Water

Public health officials have always been concerned about cross connections and backflow in plumbing systems and in public drinking water supply distribution systems. People have utmost confidence in the water they drink. Open a faucet and we drink what comes out. If, however, the water is contaminated, sickness and even death can be the result. There are documented cases where cross connections have been responsible for contamination of drinking water. Many cross connections have resulted in the spread of disease; some cases have even resulted in death.

### WHAT IS CROSS CONNECTION?

A plumbing cross connection is defined as the actual or potential connection between a public water supply and a source of contamination or pollution.

In other words, a cross connection is the link through which it is possible for a contaminating material to enter the drinking water supply system. Such links or possible links, pose a serious public health hazard. Because of the hazards of cross connections, you and every other customer of the public water supply system have a responsibility to help safeguard your system and the public water supply system (city or rural water districts) from cross connections.

### HOW DOES CONTAMINATION OCCUR?

When a cross connection exists, it is possible for a contaminant to enter the drinking water system when the pressure of the polluted source exceeds the pressure of the potable source. This may result in either a backsiphonage or backflow. Basically, either is a reversal in the normal direction of the water flow. Such situations can be produced through a variety of circumstances within plumbing systems, generally a drop in water pressure.

### An example of backflow backsiphonage:

A. *Contact point:* A submerged inlet in the second floor bathtub.

B. *Cause of Reverse Flow:* An automobile breaks a nearby fire hydrant, causing a negative pressure in the service line to the house, sucking dirty water out of the bathtub.

C. *Suggested Correction:* The hot and cold water inlets to the bathtub should be above the rim of the tub.

### HOW CAN YOU BE AFFECTED?

“Stomach flu” (gastroenteritis) is perhaps the most common ailment suffered by those drinking contaminated water. The Centers for Disease Control in Atlanta, Georgia and the U.S. Environmental Protection Agency have documented many cases directly attributing the following illnesses and others to contaminated drinking water:

Brucellosis; Campylobacter; Chemical Poisoning; Cholera; Diarrhea Enteritis; Dysentery; Giardiasis; Hepatitis; Hookworm; Paratyphoid Fever; Typhoid; Polio.

### SOURCES OF CONTAMINATION WHICH REQUIRE ATTENTION IN THE HOME:

#### Any area with plumbing fixtures...

**Kitchen:** sink, dishwasher, garbage disposal

**Bathroom:** toilet, wash basin, bathtub, shower

**Basement & Outdoors:** hose bibb (faucet to which a hose may be attached or buried yard hydrants.)

#### AT WORK:

Industrial, commercial and health facilities are subject to many types of cross-connections:

Bottling Plants; Fire Systems; Heating and Cooling Systems; Mixing Tanks; Paint and Ink Mills; Plating Works; Mortuaries; Printing Plants; Vet Clinics; Hydraulically Operated Equipment.

#### AT LEISURE AREAS:

Many recreational facilities have separate water systems and plumbing connections which also may be improperly installed and maintained. Some of these locations include:

Campgrounds; County Fairgrounds; Parks and Playgrounds; Golf Courses; Swimming Pools; Fountains; Recreational Waterfront Areas; Travel Trailer Connections.

### EXAMPLES OF RESIDENTIAL CONTAMINATION

Occasional water pressure disorders can occur in the public water supply distribution system or within your own residence. These disorders can be caused by high uses of water such as occurs when fire or flush hydrants are opened or when a line breaks or when there are equipment failures. Because of reduced pressure, the flow of the water in the system may be reversed. As a result, contaminants may flow backwards or be sucked into

your plumbing system and the municipal or rural water system through unprotected hoses or other possible cross connections. Approved cross connection controls devices are available which will prevent backflow or back siphonage.

Some water customers may also have private wells. If an old well remains in operation, with valves to allow it use in the customers water supply system, the potential exists for backpressure from that well water in to the municipal or rural water distribution system. The private well must be completely and permanently disconnected from the public water supply system.

### PREVENTING ENTRY CONTAMINATION

When the hazard of contamination exists, effective steps should be taken to correct the condition. *If the condition cannot be corrected, then an appropriate backflow prevention device must be installed on the internal plumbing system.* This is generally the responsibility of the water user. Everyone should want to eliminate possible cross connections. Those who drink water on your premises will likely be the first to be injured if water becomes contaminated in your system.

An awareness of how contamination can enter a system is important. We must work together to keep everyone's water safe.

The people who are in charge of your public water supply system has adopted a policy on cross connection control to comply with Nebraska regulations.

One of the most effective and the most inexpensive controls is to always keep an air gap between any potential contaminant and the water system. Don't allow garden hoses or other hoses connected to the water system to drop in to sources of contamination. Hydrants drain back even when shut off and contaminants can be siphoned into the hose or hydrant.

If you need further information or need assistance in determining what devices are appropriate, contact your public water supply system.

**RURAL WATER DISTRICT NO. 1  
LANCASTER COUNTY, NE  
(402) 782-3495**

*This Institution is an Equal Opportunity  
Provider and Employer*

LANCASTER RURAL WATER  
DISTRICT NO. 1

310 FIR STREET • P.O. BOX 98  
BENNET, NEBRASKA 68317-0098

Presorted  
1st Class Mail  
U.S. Postage PD  
Bennet, NE  
Permit # 5

**EMERGENCY**

**PHONE NUMBERS**

If you have a water  
emergency to report  
after office hours  
please call below  
for assistance.

**Phil Goering**

**402-430-9079**

**Dan Bartels**

**402-432-3640**

**Jordon Bang**

**402-720-6379**

**Office Hours**

**7:30 am to 4:00 pm**

---Cut out & Save---

**"AUTOMATIC PAYMENTS FOR CUSTOMERS"**

If you are interested in signing up for this service please fill the form out below and return it to our office. The meters will be read as normal at the end of the month and the bills sent out at the first of the following month. If you miss the deadline for this month you may still fill out the form and send it to our office and we will add you on in the next month. **We will make deductions on or after the 10<sup>th</sup> of each month.** If you do not receive a bill for reasons beyond our control, your deduction will still come out of your checking/savings/credit/debit card. Please call us if you do not receive your bill and we can let you know the amount that will be deducted. Please no faxed or e-mailed forms can be accepted.

**BANK/CREDIT CARD COLLECTION AUTHORIZATION - CHECKING/SAVINGS/CREDIT** I HEREBY AUTHORIZE LANCASTER RURAL WATER DISTRICT NO. 1 TO COLLECT PAYMENT OF MY WATER BILL FROM THE STATED FINANCIAL INSTITUTION UNTIL SUCH TIME THAT I CANCEL THIS AGREEMENT. IT IS UNDERSTOOD THAT IN CASE OF A BILLING ERROR, AN ADJUSTMENT WILL BE MADE BETWEEN LANCASTER RURAL WATER DISTRICT NO. 1 AND MYSELF. WE KEEP ALL RECORDS CONFIDENTIAL.

**PLEASE INCLUDE A VOIDED CHECK OR SAVINGS DEPOSIT SLIP**

Checking

Savings

Name: \_\_\_\_\_ Customer Acct #(s): \_\_\_\_\_

(PLEASE PRINT)

(IF MORE THAN 1 PLEASE LIST ALL ACCT #'S)

Service Address: \_\_\_\_\_

9- Digit Routing # \_\_\_\_\_ Acct # \_\_\_\_\_

**CREDIT/DEBIT CARD 4% FEE**

Visa

MasterCard

Discover

16 digit #: \_\_\_\_\_ Exp: \_\_\_\_\_ 3digit code \_\_\_\_\_

(on the back of card)

Customers Signature: \_\_\_\_\_

(Please sign for either option)

**FOR OFFICE USE ONLY**

LRWD ACCT # \_\_\_\_\_

DATE \_\_\_\_\_

TRANSIT # \_\_\_\_\_

APPROVED BY \_\_\_\_\_