

Rural Water District No. 1 Lancaster County, Ne

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

Meet the Board

- Mike Stewart, Chairman
- Ken Mueller, Vice Chairman
- Kipp Haight, Secretary
- Warren Cheney, Treasurer
- Randy Kempkes, Director
- Ivan Bruss, Director
- Rick Hodtwalker, Director

Meet the Staff

- Ken Halvorsen, District Manager
- Jasmine Mach, Office Manager
- Phil Goering, Construction Coordinator
- Dan Bartels, Water Operator
- Erin Mach, Office Assistant

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WATER SURVEY RESULTS

March 2012 Rural Water sent out a district wide survey asking our customers if you are satisfied with your water and if you wanted treated water. We received 60% of the surveys back with your opinions.

The Board of Directors agree with the results and the District will not invest in a water treatment plant. Please see the chart below for results.

| | | | |
|--|----------------------------|----------------------------|---------------------|
| 1. How satisfied are you with your water quality? | Very 43% | Ok 49% | Poor 8% |
| 2. How often do you experience colored/dirty water? | Never/Rarely 60% | Occasionally 38% | Always 2% |
| 3. Do you use a house filter? | Yes 42% | No 58% | |
| 4. Do you use a water softener? | Yes 78% | No 22% | |
| 5. Would you like treated water if it raised rates? | Yes 6% | Maybe 16% | No 78% |

As the results show most customers are satisfied with the current water quality received with the understanding of disturbed water at times of repair and new installations. These results also give us an insight for those that have poor quality and to see what areas are affected more than others so we can work to find a solution. Also note that about half of the customers use a whole house filter and nearly 80% use water softeners. Customers felt the cost of the treatment plant is too substantial for having water that is currently safe and they have no complaints or concerns.

Below are some frequent questions that came from the surveys:

1. **Q.** Is using a house filter/water softener recommended? **A.** A *particulate* (not charcoal) house filter is solely up to the customer it does help capture the iron and manganese but does not eliminate anything and must be installed and changed by factory directions. A water softener does help soften the water, the hardness in our water is 23.40 grains per gallon.
2. **Q.** Is the District water testing within the guide lines by the Department of Health and what are the results of these? **A.** Each year we are required to notify our customers with a Quality Water Report. You will find this in our newsletter each year and it explains our tests and results. These are in addition to the weekly samples we are also required to take and submit to the lab.
3. **Q.** Would treatment remove the rotten egg smell, iron and manganese? **A.** Not immediately, it eventually can reduce it but it could take a few years before the water would become "clear" treated water. There are too many miles of lines and the age of some have built up iron and manganese.

We greatly appreciate the responses we received, we value your opinion and though we can't accommodate everyone with the outcome we are striving to make all our customers satisfied. If you have an issue with colored/dirty water please notify us and we will respond and help you get it cleared out! If you have more questions or we didn't cover your concerns we encourage you to call us we will be happy to speak with you.

ANNUAL WATER QUALITY REPORT FOR THE PERIOD OF JANUARY 1 TO DECEMBER 31, 2011

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 ó hable con alguien que lo entienda bien.

For more information regarding this report contact:
KEN HALVORSEN
Phone: 402-782-3495

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 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 on the cover of this report or NDEQ at (402) 471-6988.

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 ground-

water 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 groundwater. 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 and young children 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 Dichloropropene, 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.

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. ppm: parts per million-ppb: parts per billion-ppt: parts per trillion-pCi/l:picoCuries per liter-ug/l micrograms per liter (measurement of radioactivity)

| Lancaster Co. RWD #1 | | TEST RESULTS | | | | | Date Printed 3/8/2012 | | NE3110909 | |
|---|---------------------------------|-----------------|--------------|-------|---------------|--------------------------------|--|--|--------------------|--|
| Microbiological | Highest No. of Positive Samples | MCL | | | MCLG | Likely Source of Contamination | | | Violations Present | |
| No Detected Results were Found in the Calendar Year of 2011 | | | | | | | | | | |
| Lead and Copper | Monitoring Period | 90th Percentile | Range | Unit | AL | Sites Over AL | Likely Source of Contamination | | | |
| COPPER, FREE | 2008-2010 | 0.482 | 0.0244-0.602 | PPM | 1.3 | 0 | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of Household plumbing. | | | |
| LEAD | 2008-2010 | 6.76 | 1.5 - 8.46 | PPB | 15 | 0 | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of Household plumbing. | | | |
| Regulated Contaminants | Collection Date | Highest Value | Range | Unit | MCL | MCLG | Likely Source of Contamination | | | |
| ARSENIC | 4/27/2009 | 2.21 | 2.21 | PPB | 10 | 0 | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes | | | |
| BARUIM | 8/23/2010 | 0.189 | 0.189 | PPM | 2 | 2 | Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits | | | |
| CHROMIUM | 8/23/2010 | 14 | 14 | PPB | 100 | 100 | Discharge from steel and pulp mills; Erosion of natural deposits | | | |
| FLOURIDE | 7/19/2010 | 0.255 | 0.255 | PPM | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; Fertilizer discharge | | | |
| NITRATE-NITRITE | 6/06/2011 | 0.384 | 0.137-0.384 | PPM | 10 | 10 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits | | | |
| Radiological Contaminants | Collection Date | Highest Value | Range | Unit | MCL | MCLG | Likely Source of Contamination | | | |
| Combined Radium (-226 & -228) | 4/26/2011 | 2.7 | 2.7 | pCi/l | 5 | 0 | Erosion of natural deposits | | | |
| Radium-226 | 4/26/2011 | 0.9 | 0.9 | pCi/l | 5 | 0 | Erosion of natural deposits | | | |
| Radium-228 | 4/26/2011 | 1.8 | 1.8 | pCi/l | 5 | 0 | Erosion of natural deposits | | | |
| Unregulated Water Quality Data | Collection Date | Highest Value | Range | Unit | Secondary MCL | | | | | |
| NICKEL | 5/2/2010 | 0.00287 | 0.00287 | MG/L | 0.1 | | | | | |
| SULFATE | 5/2/2010 | 82.9 | 82.9 | MG/L | 250 | | | | | |

During the 2011 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 2011 | | | |

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

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U.S. Postage PD
Bennet, NE
Permit # 5

EMERGENCY

PHONE NUMBERS

If you have a water emergency to report after office hours please call the following servicemen they will assist you.

Phil Goering

430-9079

Dan Bartels

432-3640

Ken Halvorsen

430-9078

PLEASE UPDATE US WITH YOUR CURRENT PHONE NUMBERS!!

WE WOULD LIKE TO BE ABLE TO CONTACT YOU IN THE EVENT OF AN EMERGENCY SHUT OFF AND/OR TO MAKE REPAIRS - SUBMIT WITH YOUR BILL OR CALL US!! THANK YOU!!



-----Cut out & Save-----

"FREE 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 10th 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

Visa

MasterCard

Discover

16 digit #: _____ Exp: _____ 3digit code _____

(on the back of card)

Customers Signature: _____ Phone: _____

(Please sign for either option)

FOR OFFICE USE ONLY

LRWD ACCT # _____

DATE _____

TRANSIT # _____

APPROVED BY _____