Rural Water News

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"To enhance the quality of life for the people in the southwest Minnesota area by acquiring and providing reliable, high quality, affordable water in an environmentally responsible manner through a publicly owned system."

Rural Water News is back!!!

We decided to try and go electronic in 2012 and did not publish our annual newsletter. This year we have decided to do both. We have completely updated our website and will continue to make improvements.

This newsletter includes are annual 2012 Drinking Water Report, also known as the *Consumer Confidence Report* to provide you with information concerning the quality of the water provided by Lincoln-Pipestone Rural Water.

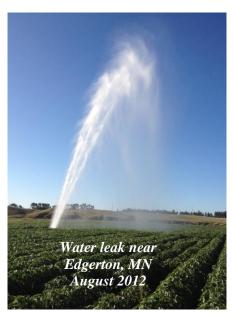
LPRW tests its water and submits reports to the Minnesota Department of Health on a schedule mandated by state and federal regulations. Water quality information provided within this document contains averages from all LPRW water sources.

The Board and staff of Lincoln-Pipestone Rural Water are very proud of our product and we hope that you – our members/customers – are very happy with the quality of our water and service provided.

Whatever you can't find in our newsletter you will be able to find on our website. Please feel free to contact us with comments, concerns or suggestions. We would love to hear from you!

If you think you have spotted a leak, please call the office at 1-800-462-0309 and let us know immediately. If it is a confirmed leak and you are the first to report it, you will receive a \$10 credit on your next water bill. You can spot a possible leak by identifying an area of land that has not retained water in the past that is now continuously saturated.

Thank you to everyone who has reported a leak in the past. With your help, we have limited our water losses which can add up to savings for all of our customers in the rural water system. *Water conservation pays and it's the wise thing to do.*



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Welcome LPRW's New CEO Mark Johnson

Hello, my name is Mark Johnson and I am the new CEO of Lincoln-Pipestone Rural Water (LPRW). My education is in Engineering and Law. More importantly to you, I have worked for a Water Utility in Tennessee. During my career, I began as operator at a water plant, became the Plant Manager, then I moved to being the Assistant General Manager. In that position I began to deal with the finances of the system and the distribution system (piping). From there I became the General Manager for some 22 years overseeing all aspects of that utility. Thus I bring directly transferable skills to LPRW.

However, every utility is different and there are many things to learn. My former utility is governed by a board like LPRW but there are only 3 members there, while here there are 11. The service area there is city and suburban and the area served about the size of one and a half townships versus rural here and over 3,000 square miles. Thus, growth patterns differ. Growth there meant more density and higher water demand stemming from developing more small parcels of land and large buildings. Here growth and rural water demand are not always so in sync. Development of land into larger crop parcels tends to lessen rural water demand while more large buildings and feed lots mean more rural water demand.

There the source of water, the Cumberland River, was plentiful, dependable, and of good water quality as the annual rainfall is 44 inches. Even in the two drought years I experienced there, the Cumberland as a reliable resource was never an issue. So it was easy for me to take this for granted and my planning revolved around better treatment and improving the distribution system. I have quickly found that the water resources are not so plentiful, dependable or of good water quality. And it takes numerous locations to supply LPRW with water.

Treatment here has the added factors of Hardness, Nitrates, Iron and Manganese to be dealt with that I did not have there. The Cumberland River has good water quality. But I had to deal with solids removal from erosion, more intense biological treatment to remove e-coli, giardia cysts, etc. that entered the river from human and animal by-products. The Distribution system was designed not only for domestic use but high commercial and industrial use and especially these two high fire demands.

I also bring with me a background in Farming and Rental Properties agricultural, domestic and commercial. My Tennessee and Kentucky farming revolves around a small operations cattle farming system. The farms were spread out and small in acreage when compared to here. However, I lease one farm part to a big-time row cropper and the other to a big-time state-of-the art dairy operator. Also, I have lots of family in South Dakota who farm big like here in Southwest Minnesota. They keep me informed of the farming issues you also face.

Common to both utilities was the need to be economically viable for the services rendered. And similar to both, the need was greater than the funding resources available. There I did a lot of long range planning so as to prioritize need and available resources while keeping water rates reasonable. I am beginning that process here.

Being aware of the differences and similarities of LPRW and my former utility as well as my other relational background, I am on the move to educate myself of how best "to enhance the quality of life for you, the people, in the southwest Minnesota area by acquiring and providing reliable, high quality, affordable water in an environmentally responsible manner through this publicly owned system." Your support in this endeavor is greatly needed and appreciated.

June 2013

Lincoln-Pipestone RWS Board of Commissioners

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Board Attorney

Rod Spronk Norris Peterson Janice Moen Frank Engels Earl DeWilde Joe Weber Mitch Kling Bill Ufkin Ken Buysse Jerry Lonneman Brent Feikema



LPRW Staff

CEO

- Field Superintendent Field Superintendent Maintenance Tech. Water Resource Tech. Water Resource Tech. Water System Clerk Water System Clerk Enterprise Technician
- Mark Johnson Tom Muller Shawn Nelson Ron Carr Jason Overby Don Drietz Connie Bressler Karen Petersen Jodi Greer

Water Operator Roger Rasmussen Jay Stuefen Pat McCarthy Jeremy Rost Steve Lovre Jared Beck Glen Grant

2013 Water Rates Effective June 1, 2013

Monthly retail water rates are as follows:

- ♦ \$20.53 for 0 gallons
- \$2.15 per thousand 0-5,000
- \$2.20 per thousand 5,001 to 10,000
- \$2.25 per thousand 10,001 to 20,000
- \$2.30 per thousand 20,001 to 50,000

◆ \$2.35 per thousand for ever thousand above 50,000 Please refer to the Retail Water Rates card in your billing packet for further information or look on our website at <u>www.lprw.com</u> under the billings tab, or call the LPRW office if you have any questions.

More Payment Options Coming Soon!

We are still in the developing stages but we are getting closer to providing more payment options. We have a new program that is being designed specifically for our system and will be available in 2014. We will be contacting anyone that provides an email address expressing interest in more payment options. If that is you and you have not already provided your email address please write it on your billing card and send it in with your monthly bill.

Lincoln-Pipestone Rural Water System 2012 Drinking Water Report PWSID: 141007

The Lincoln-Pipestone Rural Water System is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2012. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources.

The Source of Your LPRW Drinking Water

The Lincoln-Pipestone Rural Water System provides drinking water to its residents from the following groundwater sources: purchased treated water from Osceola Rural Water System-North; and from 23 wells ranging from 32 to 453 feet deep that draws water from the Quaternary Buried Artesian and Quaternary Water Table aquifers.

The water provided to customers may meet drinking water standards, but the Minnesota Department of Health has also made a determination as to how vulnerable the source of water may be to future contamination incidents. If you wish to obtain the entire source water assessment regarding your drinking water, please call 651-201-4700 or 1-800-818-9318 during normal business hours. Also, you can view this information online at www.health.state.mn.us/divs/eh/water/swp/swa.

Call 800-462-0309 if you have any questions about Lincoln-Pipestone Rural Water System drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water.

Key to abbreviations:

MCLG—*Maximum Contaminant Level Goal: 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.*

MCL—Maximum Contaminant Level: 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.

MRDL-Maximum Residual Disinfectant Level.

MRDLG-Maximum Residual Disinfectant Level Goal.

AL—*Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.*

90th Percentile Level—This is the value obtained after disregarding 10 percent of the samples taken that had the highest levels. (For example, in a situation in which 10 samples were taken, the 90th percentile level is determined by disregarding the highest result, which represents 10 percent of the samples.) Note: In situations in which only 5 samples are taken, the average of the two with the highest levels is taken to determine the 90th percentile level.

ppm—Parts per million, which can also be expressed as milligrams per liter (mg/l).

ppb–Parts per billion, which can also be expressed as micrograms per liter ($\mu g/l$).

nd-No Detection.

N/A—*Not Applicable (does not apply).*

This is very important information about <u>your</u> <u>water!</u>

Spanish: Informacion importante. Si no la entiende, haga que alguien se la traduzca ahora.

Hmong: Nov yog ntaub ntawv tseem ceeb. Yog koy tsi to taub, nrhiav beeg pab txhais rau koh kom sai sai.

Results of Monitoring

No contaminants were detected at levels that violated federal drinking water standards. However, some contaminants were detected in trace amounts that were below legal limits. The table that follows shows the contaminants that were detected in trace amounts last year. (Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for in 2012. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.)

Contaminant (units)	MCLG	MCL	Level Found		
			Range (2012)	Average/ Result*	Typical Source of Contaminant
Fluoride (ppm)	4	4	1-1.3	1.15	State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
Haloacetic Acids (HAA5) (ppb)	0	60	N/A	2	By-product of drinking water disinfection.
Nitrate (as Nitrogen) (ppm)	10.4	10.4	nd-5.3	5.3	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
TTHM (Total trihalomethanes) (ppb)	0	80	N/A	1.7	By-product of drinking water disinfection.

*This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

Nitrate in drinking water at levels above 10 parts per million 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. If you are caring for an infant, you should ask advice from your health care provider.

The Minnesota Department of Health (MDH) is the agency responsible for the implementation and enforcement of the federal Safe Drinking Water Act. First passes by Congress in 1974, the Safe Drinking Water Act sets health and safety standards for public drinking water in the United States. Even prior to action at the national level, however, Minnesota had stringent requirements in place for public water systems in the state. Learn more about water quality by visiting the MDH website at www.health.state.mn.us/water/.

Contaminant (units)	MRDLG	MRDL	***	****	Typical Source of Contaminant
Chlorine (ppm)	4	4	1.1-1.7	1.44	Water additive used to control microbes.

****Highest and Lowest Monthly Average.

*****Highest Quarterly Average.

Contaminant (units)	MCLG	AL	90% Level	# sites over AL	Typical Source of Contaminant
Copper (ppm) (07/16/2010)	1.3	1.3	.98	0 out of 20	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb) (07/16/2010)	0	15	3.7	1 out of 20	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. Lincoln-Pipestone Rural Water System 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 is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Monitoring may have been done for additional contaminants that do not have MCLs established for them and are not required to be monitored under the Safe Drinking Water Act. Results may be available by calling 651-201-4700 or 1-800-818-9318 during normal business hours.

Lincoln-Pipestone Rural Water System..... Working to conserve and protect your water supplies. Groundwater is a limited resource – please help us protect it for future generations.

Compliance with National Primary Drinking Water Regulations

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 minerals and, in some cases, 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:

- 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 stormwater 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 stormwater 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 stormwater
 runoff, and septic systems.
- *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, the U. S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 at 1-800-426-4791.

From the Mainline:

Written by Shawn Nelson



LPRW has spent that past few years in an expansion phase in the Northeast and the Southern part of our system. With these new expansions we are currently at 17.4 million feet of pipe, or roughly 3,300 miles. Just to give you an idea of how big an area we serve, our system is 100 miles long, by 60 miles wide, as a crow fly's. Our system serves portions of 10 counties. Our staff has a large area to cover.

LPRW is also in the process of adding two more communities, Round Lake and Wilmont, in the South end of our system. This will bring LPRW's total communities served to 36. Because of our vast system LPRW is expanding our staff. We have been at a field staff of 11 and will be adding two new employees to the South end of our system.



LPRW'S NEWEST FIELD SUPERINTENDENT



Shawn Nelson has been with LPRW since 1999. Recently, Shawn was promoted to Field Superintendent for the North half of our system. His supervisory role will include system operations and maintenance, as well as internal growth in the North. Shawn resides with his family in rural Tyler.

June 2013



Dennis Healy welcoming his replacement Mark Johnson.



Dennis Healy receiving his retirement gift from Chairman Rod Spronk

Dennis Healy's Retirement

Dennis Healy has been with LPRW since 1999. In those 13 years Dennis has helped build this water system from 2800 to the over 4300 customers it is today.

Dennis has worked hard to bring quality drinking water to many individual people and many small communities in southwestern Minnesota. He led the water system through several major expansions, keeping in mind the mission of the system– enhancing the quality of life for people of SW Minnesota.

Dennis has worked with many government officials, such as the DNR, Dept. of Health, MPCA, and local county commissioners. His ability to work with these governmental agencies has been a great asset to the water system.

We wish him all the best on his retirement!



Dennis receiving the Henry Walraven Award at the MRW Annual Water Conference in St. Cloud. 2012





DROUGHT ALERT

Written by former CEO, Dennis Healy

Projected Drought Status: As we all know Southwest Minnesota is currently in a "Moderate to Severe Drought" condition, and as of this writing the weather experts are predicting continuing drought conditions in 2013. While we all hope for improved conditions, we must prepare for the worst so we can survive without undue hardship or losses. At Lincoln Pipestone Rural Water (LPRW) we are preparing by planning ahead, protecting our aquifers to the extent possible, and most importantly asking for your help.

Drought Management: LPRW will meet the necessary water needs of all of its customers this summer, but if "Extreme Drought" conditions continue we will need to find ways to conserve water and become more efficient in how we use our water resources. There are only two areas in which we can affect the amount of water we consume: a) water lost in the production and delivery of water to you, the customer, and b) water consumed by you, the customer. In the first instance, LPRW has some control over the amount of water lost in the production and delivery of water, and examples of what we are doing include:

- We have established a "Drought Management Plan" Committee charged with monitoring our well fields, identifying and correcting water losses within the System, and working with customers to encourage conservation of water.
- We have made improvements within the System to allow us to move more water between areas within the System so drought tolerant water sources can be used to supplement sources that may be affected by drought conditions.
- We have added interconnections with other large water producers to provide more flexibility to deal with emergency conditions if they arise.
- We are planning improvements at the Holland and Verdi water sources (the sources most affected by drought) to use them more efficiently.

There are also a number of things you can do to decrease the amount of water you use. For instance:

- Look for and eliminate wasted water around your home. Dripping faucets and leaking toilets are common water wasters.
- Check livestock watering equipment to make sure it is working properly, and not running over.
- If you notice unusual wet areas in fields or along roads that might be a water main leak, notify LPRW at 1-800-462-0309. If it is a leak LPRW will pay a \$10 reward for your assistance.
- Monitor your water use and if it is unusually high check for leaks in your yard or around your home.
- Look for ways to conserve water around your home or farm, and eliminate or reduce unnecessary water use.
- Consider eliminating or at least drastically reduce lawn irrigation.
- For more information and tips on how to conserve water visit the National Rural Water Association or Minnesota Rural Water Association websites, or search WATER CONSERVATION on the internet.

In the "Land of 10,000 Lakes" it seems unlikely that water would be in short supply, but the reality is that water shortages do happen. LPRW water supplies are adequate now, but community and private well owners around the region are reporting declining water levels or well failures. Regardless of where you get your water supply, IT'S YOUR WATER – USE IT WISELY.

June 2013



Voyageurs National Park in northern Minnesota is the largest water-based park in the National Park System.

Minnesota's waters flow outward in three directions: North to Hudson Bay in Canada East to the Atlantic Ocean South to the Gulf of Mexico

Ten largest lakes (entire lake within borders of Minnesota):

- 1. Red Lake (both "Upper" and "Lower") 288,800 acres
- 2. Mille Lacs Lake 132,516 acres
- 3. Leech Lake 111,527 acres
- 4. Lake Winnibigoshish 58,544 acres
- 5. Lake Vermilion 40,557 acres
- 6. Lake Kabetogama 25,760 acres
- 7. Mud Lake (Marshall County) 23,700 acres
- 8. Cass Lake 15,596
- 9. Lake Minnetonka 14,004 acres
- 10. Otter Tail Lake 13,725 acres

Ten most common lake names:

Mud, Long, Rice, Bass, Round, Horseshoe, Twin, Island, Johnson, Spring

By the numbers

Counties with no natural lakes: Mower, Olmsted, Pipestone, Rock

Number of lakes: 11,842 (10+ acres)

Number of natural rivers and streams: 6,564 (69,200 miles)

Wetlands acreage present in 1850: 18.6 million acres

Wetlands acreage present in 2008: 10.6 million acres

Longest shoreline:

Lake Vermilion, St. Louis County (290 miles of shoreline)

Minnesota River length: 370 miles

Mississippi River length in Minnesota: 680 miles

State and national Wild and Scenic Rivers: 589 miles

Largest border lakes:

Lake Superior (20,364,800 acres total with 962,700 acres in Minnesota) Lake of the Woods (950,400 acres total with 307,010 acres in Minnesota)

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Exploring New Treatment Processes



Historically, the Lincoln Pipestone Rural Water (LPRW) Holland Water Treatment Plant has used reverse osmosis (RO) to remove nitrate from groundwater. However, handling the RO concentrate stream (i.e., the portion of treated water that is rejected by the RO membranes) has become challenging, thereby driving LPRW to look for nitrate treatment alternatives that don't generate concentrate. On March 1st, demonstration testing of such a process began at the Holland Plant. The process, called BIOTTTATM (www.carollo.com/BIOTTTA), uses a two-stage filtration system and naturally-occurring bacteria to convert nitrate to harmless nitrogen gas. The main benefits of BIOTTTATM are that it eliminates nitrate from the environment and requires little energy to operate. Demonstration testing will continue over the next several months to develop full-scale design criteria specific to the Holland Wellfield groundwater.