

HISTORY OF THE RED ROCK RURAL WATER SYSTEM – JEFFERS, MN

During the 1970's, continued drought conditions and rural water development in nearby South Dakota, Iowa, and Western Minnesota, prompted the initial interest in organizing a rural water system in Cottonwood, Murray, and Watonwan Counties of Southwest Minnesota. Through the dedicated efforts of a group of local individuals, interest grew and the public body named the Red Rock Rural Water System (RRRWS) was organized and established under Minnesota Statute 116A. This Multi-County System also grew to include portions of Brown, Jackson, Lyon, Martin, Nobles, and Redwood Counties. The original system included a small treatment plant, two wells, one water tower, a booster station, service to 285 customers, and three small cities. The cost of the original construction was just over 5 million dollars. Cost to each user was \$7,178. The system was operated and maintained by a manager, secretary-bookkeeper, and part time help headquartered from a small, rented, one room office in downtown Jeffers. The system pumped its first water in November 1985. From the beginning, the need for quality water in the area increased and the reputation of the RRRWS to provide it, spread to neighbors and other small cities. In 1987, the office was moved to a rented trailer house and in 1989 the system purchased land and built the office and equipment building at its current location at 305 West Whited, Jeffers.

During the first several years a modest growth took place. In 1990, the City of Wilder service was completed and the rural customers list had grown to 386. Most of the distribution work was completed by system personnel and equipment owned by the RRRWS. Scott Knudson was manager and he enjoyed the challenge of construction to serve the many requests that were presented. Filter additions, modifications, and a new well were also part of the 1990 construction season to meet the growing needs of the water resource.

In 1992 the system had grown to 480 rural connections. A Murray County expansion took place and a new growth area began around Lake Shetek. A once quiet vacation spot became home to a water demand that is still growing today. The demand for more water was answered by a water purchase agreement with the City of Balaton in the Northwest corner of the system. A booster station near Balaton was needed and its construction was started and later finished the following year.

During the spring of 1993, the system manager offered his resignation to pursue other construction opportunities. Dominic Jones was hired as manger and began work on July 1st. The Murray County expansion, booster station, and service to an additional 43 costumers were completed. A water purchase agreement was initiated with the Lincoln Pipestone Rural Water System to supplement the Balaton supply. The water is blended to give the system a good water quality and quantity.

Concerns on water resources and continued growth without supporting capital improvements became an important issue in 1994. It was decided to build new services only to house hold use customers until the capital improvements and further water resources could be obtained. The membership still grew to 560 and requests for service grew so fast that the Southeast Expansion Project was planned. Important issues on elevated storage, mainline capacity, water availability and funding had to be addressed. Discussions started with the City of Windom to provide the

possible water source. Windom was in the process of planning a new treatment plant and well field expansion. The RRRWS needed the same. A letter of intent turned into an important Water Purchase Agreement between the City of Windom and the RRRWS. High capacity mainlines and more elevated storage was needed as the most important improvement to the core system. During the 1996 Minnesota legislative session, the need was shown during testimony and the RRRWS was granted \$600,000 for the development of a new 500,000 gallon water tower, mainline, and connection with the City of Windom. This is just what the system needed to get the project underway. An application for funding with USDA Rural Development was considered and approved in part by the regionalization effort and the additional funding in place. A sign up of 261 new customers, each committing to the \$8,300 cost appropriation, would pay for the loan portion of the \$6,000,000 project. The Southeast Expansion Project, which included 240 miles of mainline and service to the cities of Odin and Ormsby, was funded in 1996 and built in 1997.

As part of an ongoing need for water resource protection, RRRWS has also developed another partnership to study the Des Moines River Aquifer. Participants include RRRWS, City of Windom, City of Jeffers, USGS, MN DNR, MN DOH and Cottonwood County. This is a \$450,000 project and the information will be used to develop well head protection plans and furnish valuable information for any further appropriations from this aquifer.

The City of Dundee requested service in 1998 and with the help of RRRWS, received a 75% grant on a \$600,000 project. Water service was completed by the installation of 15 miles of mainline and improvements to the treatment plant.

Lake Shetek area was again requesting more services in 1999. A Lake Shetek Project was developed and funded locally in the amount of \$340,000. This environmentally sensitive area was built with as much trench-less technology as possible and was completed in the summer of 2000.

2001 Became a year of design and search for more water resources in Southwest Minnesota. The requests for service would come in almost daily and the need for another project had already been conceived. USDA Rural Development would be considered the primary funding source. Water Purchase Agreements and Feasibility Study Fees of \$350 were obtained from 340 rural residents. The City of Butterfield had water quality issues for many years and was now faced with radium results over the MCL. Butterfield received funding in 2001 and the RRRWS initiated an emergency early out project and provided water to the city by Christmas. During 2000 and 2001, the RRRWS split the project into 2 phases to help accommodate the funding scenario. The tragic 9-11 events delayed any funding announcements until 2002. During this time, another cooperative effort was finalized and the City of St. James agreed to furnish up to 65 million gallons a year to the RRRWS in order for the system to expand into the rural area around the city. A hook up fee of \$514,000 will be paid to St. James for the improvements needed to add RRRWS as a customer. They were also in the stage of well field development and treatment improvements.

In January of 2002, the system was funded by USDA Rural Development in the amount of \$1,765,000 loan and \$1,150,400 grant. The City of Butterfield will contribute \$745,000 for its

water source and its share of the water tower that will be built next to city limits. Local funds in the amount of \$375,000 are committed from the system. Total project costs have been trimmed by the use of value engineering to an estimated cost of \$4,035,000.

Phase 1 of the project will build service to 213 new customers; (all committed to pay \$8,300 each for repayment of the loan) install 140 miles of new mainline, construct a new water tower and booster station. Phase 2 will provide water to approximately 150 rural residents and is anticipated to cost nearly \$3,000,000.

Water research is being done at this time in Murray County. Test drilling is being conducted on behalf of and paid for by RRRWS, Lincoln Pipestone Rural Water and the City of Worthington. This is a partnering effort being done for the rural area of Southwest MN. The counties of Murray, Nobles and Jackson have been very supportive in this effort.

Current status of the RRRWS includes the following:

- Service to 910 rural customers
- Service to 8 cities - Delft, Dovray, Garvin, Wilder, Odin, Ormsby, Dundee, Butterfield
 - Emergency hook up with Jeffers
- 1,000 miles of mainline
- A service area of approximately 40 miles wide and 80 miles long
- Population served - 2,730 rural and 1,265 within the cities
- RRRWS treatment plant - 4 miles NW of Windom
- 5 water sources including - RRRWS, LPRW, City of Balaton, City of Windom, City of St. James
- 600,000 gallons of elevated storage
- 238,000 gallons of ground storage
- 8 above grade pressure reducing stations
- 4 booster stations
- 187,000,000 gallons pumped per year from all sources
- Less than 10% water loss and leak control of less than one per month on average.
- Operation and Maintenance budget of \$555,000 annually
- Manager and 6 full time employees
- 11 member Board of Commissioners
- Member of Minnesota Rural Water Association, AWWA, MN Ground Water Assn.

The Red Rock Rural Water System has been very fortunate to have had the leadership and long

term commitment of several of the original steering committee members. They include the Chairman, Jim Fredin of Comfrey, Vice-Chair Clair Baker of Walnut Grove, Treasurer Jay Takle of Westbrook, board member John Baerg of Butterfield, board member James Evers of Mountain Lake, and board member Marlow Nickel of Jeffers.

No less important are the rest of the board members consisting of Steve Iverson of Lamberton, Secretary Les Anderson of Trimont, Mike Curley of Windom and Curt Reinert of Tracy.

The system is also very fortunate to have long term employees which include:

- Manager Dominic Jones - 9 years
- Secretary Bookkeeper Deb Bunting - 17 years (start of system)
- Treatment Plant Operator Don Schettler - 7 years
- Certified Class B Operator Randy Kottke - 5 years
- Certified Class C Operator Doug Westerman - 5 years
- Billing Clerk Nicki Peterson - 4 ½ years
- Project Representative Bill Mielke - New Employee

The system retains DGR and Associates of Rock Rapids, Iowa for its engineering services. Gordon Krause and his water resource department have become a leader in rural water development.

Attorney Dan McDonald provides the legal council for the system. One of his assets is the knowledge and interpretation of MN Statute 116A.

Other credits should be given to the USDA, State of Minnesota, Counties, Cities, townships, Minnesota Rural Water Association, DNR, DOH, and the other state and federal agencies that the RRRWS has appreciated through the first seventeen years.

Final Comments: The Red Rock Rural Water System should be proud of the job that it has done. The little system that started in a one room rented office has grown through the diversification, communication, regionalization, and demonstration of its willingness to participate in the ongoing need of supplying a good quality and quantity of water to Rural America.

Written by Dominic Jones
RRRWS Manager
2-27-02

HISTORY OF THE RED ROCK RURAL WATER SYSTEM – JEFFERS, MN CONTINUED

In March of 2002, Dominic Jones Manager, the RRRWS Board of Commissioners and the system staff, received the prestigious Henry Walraven Award at the Annual Minnesota Rural Water Conference. This award was appreciated by the system and created a renewed sense of determination to bring “Quality Water to Rural America”.

The system used much of 2002 to complete the authorized Phase I Project which built water service connections to 213 new members and the City of Butterfield, a new 200,000 gallon water tower that is shared with Butterfield, a booster station and a water purchase connection with the City of St. James. The project was completed on November 20, and most of the new members were drinking from its new water source by Christmas.

Water exploration also continued during the year. A potential water source was located at a site within 2 miles of the Jeffers Towers. An exploration agreement was signed with the owner of the property. This source was quickly tested by use of 2 irrigation wells that were located on the property and the 3 additional observation wells that were installed. This site is unique, as there is a man made Dedicated Trout Ditch running through its center. The MN Department of Natural Resources aided the project with their expertise and equipment. The test pump was done in January of 2003 and indicated a potential source of 200 million gallons per year available. A bonus to the project was the surprise announcement that the RRRWS was awarded \$125,000 by the State of Minnesota’s Bonding Bill for this regionalization effort. This finance bill was line item vetoed in 2002 but reintroduced in 2003.

In January 2003, USDA Rural Development announced that the Phase II Expansion Project had been funded in the amount of \$3,500,000. This project was originally set to deliver new water service to 150 new members. With a creative design and good bids, the project was able to serve 231 new members, build a new booster station south of Windom and install an additional 160 miles of pipe line. The project was built by Carstensen Contracting of Pipestone MN. Incidentally, most of the waterline installation was sub-contracted by C & K Construction (co-owner, Scott Knudson). This project was again completed within its contract time by the dedicated work of the contractor, RRRWS employees, federal, state, and local agencies, engineers and legal council.

This concluded two years of back to back major projects and it was time to take a look at the future. In November, 2003, the system started to develop a Long Range Strategic Plan. Six meetings were held and the priorities were set. Seven water source areas and a combined need was identified to serve approximately 1400 new members or double the size of the system within the next 10 years. Two main obstacles stand in the way, Water Source and Funding. The estimated cost to serve these new members is over \$35,000,000. The additional water needed to accomplish this task will be 300 to 400 Million Gallons Annually. The attached document demonstrates the demand by area.

The first priority was to complete an option to purchase easement on 182 acres of property within the documented Lake Augusta Aquifer Water Source Area. After a long negotiation, this was realized in February of 2004.

Throughout the past 2 years, a continuous waiting list for service was taken by the office staff. On some days, 5 or 6 interested potential members would call. As of April 2004, approximately 600 residents within the multi-county area have requested service. This list has been developed by strictly word of mouth. The RRRWS does very little advertising, the need speaks for itself.

The system has now applied for \$7,600,000 in funding through USDA Rural Development. This project would build a needed water treatment plant for the new water source, and serve an estimated 460 new members. The work starts now, in anticipation of USDA National Pooling Monies this fall.

Another consideration of importance is a technology update, valued at \$125,000, designed to help streamline operations, benefit the system economically, and insure good quality information to the system, agencies, and members.

We have also submitted a LCMR proposal to the State of Minnesota. This request is for \$2,000,000, to identify useable water resources in Southwest MN. As the demand for good quality water continues to grow, so must our creativity and ability to adjust.

In closing this update, we have taken a look at where the Red Rock Rural Water System has been, where it is now, but only a glimpse at the possible future. And to make it happen? A friend once told me "All it takes is money, and a bit of hard work."

Dominic Jones
RRRWS Manager
April 2004