Lewis & Clark Rural Water System

EXPLORER

Fall, 1995

OFFICIALS TOUR PROPOSED WATER SYSTEM MEMBER FACILITIES

As the Lewis & Clark Rural Water System continues to move through the stages of Congressional approval and ultimately the funding and construction phase, an opportunity to showcase the system to elected officials and system administrators was set. Over thirty people representing congressmen, state legislators, mayors, and water system managers boarded a bus after a noon luncheon and orientation on Monday, August 28. The two-day tour started at the Sioux Falls Purification Plant where the idea for Lewis & Clark Rural Water System was first introduced.

In April of 1990, Lewis & Clark Rural Water System organized and since then has become the hope for many water system concerns over water quality and future water quantity. Mayor Gary Hanson of Sioux Falls was on hand to explain how the plan developed and why the Missouri River became the best solution for providing a future water supply.

The group heard testimony along the way about limited water supplies and poor water quality that is difficult to treat. The tour was an opportunity to explore the development of natural resources found within the Missouri River.

From Lennox, the bus made stops at South Lincoln Rural Water System, Centerville, and Mulberry Point–the area where water will be drawn from an aquifer near the Missouri River. This area is mainly farm land located a few miles South of Vermillion. On the way to the Missouri River it was pointed out how the pipeline would be placed further west of a flood plain area where the ground is stable.

—Dan Cook, Rock County Rural Water Manager, speaks to the tour group in Luverne, Minnesota.

The tour group left Mulberry Point and headed to the Quality Park Products Company in Beresford, then to a farm in Lincoln County. Our host farm family, the Swanstroms, talked about the effect of poor water quality on livestock production. For example, high nitrates cause problems with growth and other diseases in newborn pigs and cattle.

The final stop for the day was Sioux Center, Iowa. At Sioux Center, the tour group was welcomed by the City Council members and the Mayor.

Sioux Center is experiencing significant population growth. Its current water supply will not be able to keep up with the demand. Lewis & Clark will be Sioux Center's future drinking water supply.

The next stop was in Hull, Iowa where by even the most liberal standards, the water is very hard. Along with Sibley, Iowa, both cities have the hardest water in the membership group and highest sulfate levels.

Following a tour of the facilities in Sheldon, the group moved on to Sibley, Iowa where the discussion centered around water hardness and a limited supply of water. The City of Sibley explored the use of state of the art treatment technologies which proved to be too expensive. Lewis & Clark remains its least cost alternative.

The next stop on the tour was lunch and a presentation from the City of Worthington, Minnesota. Worthington officials presented a background of economic development efforts with a strong sector in food processing. This city of nearly 11,000 people has struggled for decades to find a reliable water source. Shallow wells and the constant threat of contamination has pushed the community to invest each year

—continued on page 4

CHAIRMAN'S REPORT

By Charlie Kuehl, Chairman LCRWS

WELCOME to our first issue of the Lewis and Clark Explorer. The Explorer will update you on a quarterly basis about the progress of the Lewis and Clark Rural Water System (LCRWS) as it works on becoming a Congressionally authorized project.

LCRWS developed in response to a need for a more reliable and better quality drinking water supply in southeastern South Dakota, northwestern Iowa and southwestern Minnesota. Twenty-two communities and rural water systems make-up the project's membership. Once construction is completed, over 200,000 people will be served treated drinking water from LCRWS.

LCRWS is a bulk, treated drinking water delivery system and will not serve individual homes or farms. Our membership will deliver water from LCRWS to individual farms or homes. Because the cost to build LCRWS exceeds the ability of its membership to pay for construction on their own, LCRWS is working to become a federally authorized project. We are convinced that once Congress learns about the merits of LCRWS, it will approve our federal legislation.

We need your help in educating Congress about the need for LCRWS. Please take a few minutes to call or write our Congressional delegation in support of LCRWS. By working together, we can make LCRWS a reality for the tri-state region.

TECH NOTES

By David Odens, Banner Associates, Inc.

The Lewis & Clark project is an exciting concept in cooperation among water utilities to achieve a common goal, an additional source of good quality potable water. The project is driven by a common need for water and a spirit of cooperation among the water utilities involved. The purpose of this column is to provide a brief look back at the development of the project.

On April 18, 1990 various public water supply utilities met in Sioux Falls to formally organize the Southeastern South Dakota Water Supply System, now known as the Lewis & Clark Rural Water System. The concept of a Missouri River pipeline had been studied previously by the City of Sioux Falls and the Corps of Engineers. The difference between those studies and the Lewis and Clark project was the cooperation among water utilities and the concept of serving the entire area.

The feasibility study process included a needs assessment, an evaluation of alternatives to meet those needs, and an evaluation of the feasibility of the selected alternatives. Upon the completion of the first draft of the feasibility study, individual members were asked to evaluate other alternatives for water supply and to make a decision regarding continued participation in the Lewis and Clark project.

In September of 1993, the Feasibility Evaluation was updated to reflect the water demands of the members committed to the project. The scope of work defined and estimates of probable project costs prepared at that time were used as the basis for the federal authorizing legislation introduced in Congress in May, 1994. This legislation did not see action on the floor of Congress prior to adjournment. It was reintroduced in early 1995 and is currently awaiting consideration.

The Lewis and Clark project is a unique opportunity to make a significant improvement to the water supply system of an entire region, solving serious water supply problems and making it possible for the region to continue to grow.

STATES PROVIDE FINANCIAL SUPPORT FOR LCRWS IN 1995

State support for Lewis and Clark continued during the 1995 legislative sessions in South Dakota, Iowa and Minnesota. Legislative approval of grants to LCRWS to assist the project in its efforts to become a federally authorized water supply system was accomplished in Iowa and South Dakota. The Minnesota Legislature approved a grant to continue well grid drilling efforts in the southwestern area of that state.

The South Dakota legislature approved $75,000 and the Iowa legislature provided $64,000 in grant funds for 1995 to help the membership secure federal authorization. Since 1990, the South Dakota legislature has provided over $500,000 to assist South Dakota members of LCRWS. The Iowa legislature has provided a total of $118,000 to LCRWS for Iowa's portion of the project costs since 1993. Prior to 1993, the IA membership paid the state grant share.

In Minnesota, the legislature has approved $128,000 for project related activities since 1993. A $50,000 grant to initiate well grid drilling efforts in southwestern MN was provided in both 1994 and 1995. LCRWS received a $28,000 grant in 1993 from MN for its portion to complete the engineering feasibility study and environmental enhancement proposal.

Grant dollars are matched on a dollar for dollar basis by the membership through in-kind and cash contributions. Cash match is generated through membership fees and peak demand fees. In-kind match is documented through services donated by the project membership that benefit the project but does not require direct reimbursement from LCRWS. The above funds were used for project costs related to completing the engineering feasibility study, developing an environmental enhancement proposal, creation of a project video, producing public education brochures, and for project administration. Our sincerest THANKS goes to the state legislatures in South Dakota, Iowa and Minnesota for their continued financial commitment and support of LCRWS.

FEATURE SYSTEM

WORTHINGTON, MINNESOTA

Worthington is the county seat of Nobles County. The 1990 Census showed Worthington had 9,977 people which accounted for nearly 50% of the total population of the county. In 1995, the city's population is estimated at approximately 11,000.

Worthington located in the state with 10,000 lakes has faced water problems since before the turn of the century. Drilling wells for potable water has long the been the focus of the city leaders for generations. Thirty foot wells have long the been the rule when locating water. During the 1950s and early 1960s, nearly 150 test wells were drilled at four different sites. The search culminated in 1963 with the development of a well field seven miles south of Worthington.

Worthington has spent an average of $50,000 per year for the past several years on local water exploration. In 1994, $107, 255 was spent on local exploration activities and nearly $67,000 has been spent to date in 1995. The average depth of the wells located in the well field is approximately 80 feet. At that level, the wells are susceptible to drought conditions. Due to the shallow nature of the aquifer, the potential for contamination is a very real concern.

As a result of the difficulties in securing additional water sources and the history of water shortages, conservation of water has been a priority in Worthington. Declining block rates (the more you use, the less your pay per gallon) were eliminated in Worthington. Presently, 100% of water deliveries are metered and billed on a monthly basis. Worthington Public Utilities has an aggressive meter maintenance and replacement program and also has an ongoing water leak detection program. These activities have enabled Worthington to achieve an average unaccounted water loss of only 6.9% since 1989. The national average for unaccounted loss is approximately 15-18%.

Worthington also has two ordinances in place pertaining to nonessential uses of water such as lawn and garden watering and car washing. Worthington's water treatment plant was renovated in 1992 and was constructed so that 90% of the water used to back wash the filters could be reclaimed and treated. The city has also implemented a public education effort through newspaper and radio. In addition, inserts have been sent out to city residents in monthly billing statements.

—Worthington officials State Rep. Ted Winter; Don Habicht, General Mgr., Worthington Public Utilities; Greg DeGroot, President, Worthington Water & Light Commission.

Worthington's two major employers are in the food processing industry. Swift and Company and Campbells Soup employ over 2,000 employees. Each company relies on water for the processing, packing and cleaning of the facilities. Both companies have gone through recent renovations and additions. However, future expansion and growth by both companies is dependant on an adequate water supply.

In addition, the Mayor's office and Utilities Department have curtailed recruiting new businesses to Worthington who have above average needs for water. Recruiting businesses at any level is difficult, but when restricted by water limitations, the recruiting effort becomes very difficult.

Worthington will grow with the availability of clean water. Lewis & Clark Rural Water would be the salvation to the decades of problems for the city. The investment in Lewis & Clark Rural Water will allow cities like Worthington to flourish without continually seeking out new wells which has been a large investment each year.

DIRECTOR'S REPORT

By Pam Bonrud, Exec. Director, LCRWS

I, too, join Chairman Kuehl in welcoming you to our first issue of the Lewis and Clark Explorer. Regular features will include updates on our interaction with the state legislatures, federal and state agencies, and public education efforts. We will also be letting you know about our successes in Washington, DC as LCRWS works toward federal authorization.

One exciting attraction of our quarterly newsletter will be the "Feature System" section. In each issue of the Explorer we will put the "spotlight" on one member system of LCRWS. This feature will give you a better understanding of the water quality and quantity issues that made Lewis and Clark the least costly and most effective solution for each individual member.

We were pleased to see the high interest shown in the project by those who attended the project tour. LCRWS enjoyed the participation of Congressional staff from Washington, DC and district offices representing the tri-state delegations and locally elected officials from all three states. Without the support of these individuals, LCRWS would not be where it is today....on the verge of becoming the fourth federally authorized water supply system in South Dakota and the first one for Iowa and Minnesota. I hope you enjoy your first issue of the Explorer.

If you have any questions or comments, please call me at (605) 336-8688.

Lewis & Clark Rural Water System
300 N. Dakota Avenue, Suite 200A
Sioux Falls, South Dakota 57102
Tel. No. (605) 336-8688

*** Please Recycle This Newsletter!**
Pass it on to a Colleague.

Printed on recycled paper with Soy Ink.

LEWIS & CLARK RURAL WATER SYSTEM Q&A CORNER

QUESTION: What impact will Lewis and Clark have on the flows of the Missouri River?

ANSWER: None. It should be clarified that LCRWS will not be withdrawing water directly from the Missouri River as originally planned. LCRWS's water source will be an aquifer located next to the Missouri River near Vermillion, SD.

Even so, LCRWS looked at what impact it may or may not have on the Missouri River. Based on data collected by the Corps of Engineers, on the average, LCRWS will use less than two tenths of one percent (0.2%) of the flows of the Missouri River measured at Yankton, SD. In a worst case scenario, using the lowest river flow ever recorded and a peak demand from LCRWS, the system will use less than one half of one percent (0.5%) of the flows.

Nearly all of the water used by LCRWS will return to the Missouri River through the natural drainage basins of the James River, Vermillion River, Big Sioux River, Little Sioux River, Rock River, and Floyd River. More water evaporates off from the Missouri River in one year than LCRWS will use in a year's time.

QUESTION: So, just how many miles of pipeline will be laid for this project?

ANSWER: About 400 miles of pipe will be laid for the project connecting 22 member communities and rural water systems.

—continued from page 1

in developing a new water source. They are convinced that the most cost effective, long-term solution is the Lewis & Clark Rural Water System.

The next and last stop on the tour was in Luverne, Minnesota. Luverne has seventeen shallow wells that are susceptible to contamination and droughts. The City of Luverne has all but exhausted their search for water. Lewis & Clark is needed to maintain a viable water supply for Luverne's future.

The day and half tour of the members of Lewis & Clark gave the tour group a clear picture of the challenges facing these many rural water systems and communities. The point was made very clear that these water systems have sought out alternatives to provide safe drinking water to their customers. Collectively, the water systems agree that the best solution for a stable and reliable water system is to pump water in through the Lewis & Clark Rural Water project.