


REGIONAL WATER SYSTEM

Explorer

Summer 2019

Water Flowing to Worthington and Lincoln Pipestone RWS!

MN – Segment 4 and Nobles County Reservoir Reach Substantial Completion

It took five months longer than expected due to contractor delays, but water finally started flowing to Worthington and Lincoln Pipestone RWS (LPRWS) on May 13! Worthington is the 15th connected member and for LPRWS the meter building just east of Adrian is their second connection point. Worthington has reserved 1.904 million gallons a day (MGD) of capacity and LPRWS can now access its full reserved capacity of 1.1 MGD. “Congratulations to both systems on this long-awaited milestone! This is a momentous day for them,” said Chairman Red Arndt.

S.J. Louis had all the pipe installed in late October, but then ran into repeated delays as finding and repairing an astounding 42 leaks on MN – Segment 4 (MN-4) turned into a major undertaking. The majority of leaks in the 15-mile segment between Adrian and Worthington were in the western five miles of 24 inch PVC pipe. Repairs involved cutting out the leaking joint and installing a new section of pipe and two ductile iron sleeves (photo at left). The significant increase in the number of sleeves unfortunately adds to the future operations and maintenance for L&C.



The delay in completing MN-4 in turn delayed Preload from completing the two-million gallon Nobles County reservoir west of Worthington (photo below), which needed water from the pipeline for leak testing. Final punch list items, such as site restoration, are still being completed on both projects.



Ribbon Cutting for Worthington Connection

Hain Honored with the Lewis & Clark Trailblazer Award

To celebrate Worthington finally getting water from L&C, what Mayor Mike Kuhle has described as a “game changer” for the community, a ribbon cutting ceremony with officials from Worthington Public Utilities and the city was held at the meter building on June 11. The meter building, which is where L&C water is delivered to Worthington, was dedicated in honor of Director Scott Hain and late Director Don Habicht. Don’s wife Beth was on hand and talked about how much this project meant to him and how he is looking down with pride. In addition to supplying the city with a consistent source of water, Hain said they are using a 50-50 blend of L&C water and their existing water sources, which has dropped the grains of hardness from about 25-26 to 16-17.

Chairman Red Arndt said, “Don often remarked that Worthington needed water 100 years ago. It took 30 years for Lewis & Clark to finally arrive. Better later

than never. There is no doubt it would have taken much longer were it not for the transformation of Scott into the superhero lobbyist that he turned out to be.” Arndt then surprised Hain with the Lewis & Clark Trailblazer Award, which is the organization’s highest honor. Hain led the charge in the four-year effort to secure over \$40M in federal funding advances from the state. He is also very active in federal efforts to secure funding. Hain serves on all five committees and has been a valued and respected leader on the Board of Directors for the last 13 years. Congratulations to Worthington on finally receiving water and to Scott Hain on this very well-deserved recognition!



Arndt presented Hain with the Lewis & Clark Trailblazer Award, which is a painting of explorers Meriwether Lewis and William Clark on Spirit Mound near the water treatment plant just north of Vermillion



Chairman Arndt (left) and Mayor Kuhle hold the ribbon for Beth Habicht and Scott Hain. In the back row are (left to right): Eric Roos, Chad Nixon, Deb Scheidt, Pam Hain, Elena Harmon, Mike Harmon, Amy Ernst, Alan Oberloh, Kathy Hayenga, Deb Weg, Lori Seten, Gary Hoffmann and Troy Larson.

Pump Station Dedicated in Arndt's Honor

A ribbon cutting ceremony was held on July 25 at the Rock County pump station southeast of Luverne. The facility was dedicated in honor of Chairman Red Arndt, who has served on the Board of Directors since the project was incorporated in 1990. Vice-Chairman Murray Hulstein of Sioux Center said, "When I think of Red, I think of the phrase 'whatever is needed'". Red has always been willing to do whatever is needed to help move the project forward. This single-minded focus has served Lewis & Clark very well through the years." Hulstein also presented Arndt with a memento of the occasion – a hand pump mounted on a rock representing the Rock County Pump Station.

Director Scott Hain of Worthington presented Arndt with a Certificate of Recognition from Governor Tim Walz, which read in part "in recognition of his 32 years of dedication, hard work and visionary leadership." Hain also jokingly noted "Red's vision, commitment, determination, dedication, perseverance, tenacity and incessant whining are obviously traits we can all aspire to."

Red said of the honor, "Thank you very much. This really means a lot. The journey has been a team effort. That's really all I can say."



Hain presenting Arndt with a Certificate of Recognition from Governor Walz (courtesy of Rock County Star Herald)

Hulstein presenting Arndt with a memento to mark the occasion (courtesy of Rock County Star Herald)



Ribbon cutting inside the pump station (courtesy of Rock County Star Herald). Larson and Hulstein are holding the ribbon for Arndt. Left to right are: L&C's Lori Seten, Banner's Tim Conner, Sibley's Glenn Anderson, Hull's Jim Collins, Sibley's Larry Pedley, South Lincoln RWS's Ralph Hammer, Lincoln County RWS's Robin Dykstra, MCWC's Scott Buss, Tea's Sid Munson, Sheldon's Todd Uhl, Rock Rapids' Jim Hoyer, Hain, L&C's Clint Koehn, Lincoln Pipestone RWS's Jerry Lonneman, Banner's Kristin Bisgard and L&C's Jim Auen.

Pipeline Construction Gets Late Start

A wet spring and summer delayed the start of pipe installation for Carstensen Contracting on SD – Segment 12, 11.2 miles of 24 inch pipe starting at Beresford and heading east. The \$9.2M contract was awarded in August 2018 and the first section of pipe was finally installed on July 23. Rain has also caused problems with the eight bores under roads and waterways. Six bores have been completed but the contractor will need to circle back to the final two bores after they dry out.

Despite the delays, Carstensen's most recent schedule has them reaching substantial completion in mid-November 2019. The current substantial completion deadline is mid-December 2019, but it is anticipated this date will be pushed back to adjust for weather days.

Carstensen is also the contractor on IA – Segment 2, a 10 mile stretch of 24 inch pipeline starting at Sioux Center and heading west. This \$8.2M contract was awarded in January 2019. Bore work recently started and pipe installation is anticipated to begin this fall. The substantial completion deadline is August 2020.



Isolation valve vault and pipeline construction

Pipeline Contract Awarded

A \$19,156,946 contract was awarded on June 27 to Carstensen for the middle 12.6 mile segment of 24 inch pipeline between Beresford and Sioux Center. Designated as IA – Segment 3 (IA-3), this is the third and final segment of pipeline needed to connect the two communities. "For reasons that were not unexpected, the low bid for IA – 3 unfortunately was significantly over budget. However, the other two segments of pipeline between Beresford and Sioux Center came in significantly under budget. Combined these three contracts came in \$1.1M under budget," said Executive Director Troy Larson.

The IA-3 contract includes two separate parts – pipe installation and pigging and disinfecting the entire 33.8 miles of 24 inch pipeline between Beresford and Sioux Center. Construction on IA-3, which includes the Big Sioux River crossing, is anticipated to begin in the summer of 2020. July 2021 is the substantial completion deadline for pipe installation, but the substantial completion deadline for the pigging and disinfection is not until July 2022. "Our current goal is to deliver water to Sioux Center and Hull by late 2022. We want to disinfect the pipeline as close as reasonably possible to when we put it into service," said Operations Manager Jim Auen.



When several sections of PVC pipe have been fused together, it is referred to as "fusible PVC pipe" and is used for going through areas that have been directionally drilled or where restrained joints are needed to provide thrust restraint (i.e. preventing the pipe from moving and coming apart)

Settlement Reached on Two Lawsuits

After months of legal maneuvering and working with a mediator, a confidential financial settlement was reached in July on the protective corrosion coating that does not adhere to the exterior of the steel pipe as strongly as required in the specifications. The settlement involves a ten-mile segment of 24 inch pipe installed in 2017 between Magnolia and Adrian, but the portion in question is the western most nine miles. The pipe was manufactured by AMERON, which was acquired by Northwest Pipe last summer.

In August, a confidential financial settlement was reached with Sika Sarnafil on the roof membrane covering at the treatment plant. This stemmed from two wind events that blew off portions of the roof; the most recent on Christmas Day 2016. Executive Director Troy Larson said, "Neither settlement makes us whole, but we are pleased to have both matters behind us. We did our best to make the most of bad circumstances."



Bob Bezek (left) and Joe Hall with the Bureau of Reclamation in Bismarck toured the water treatment plant, wells and Tea pump station and reservoirs on June 27. Bezek is the Rural Water Division Manager and Hall is the Deputy Area Manager. They are shown in front of the 1,250 h.p. motors and pumps in the high service pump station at the plant, and they later attended the Annual Meeting. "Reclamation has been a critical partner in this journey, so we always appreciate it when agency officials tour the facilities and attend the annual meetings to gain an even better understanding of the project," said Executive Director Troy Larson.

Delegation Working to Increase FY20 Funding

The Administration's proposed FY20 Budget was released in March and for the second consecutive year only included \$100,000 for L&C; not enough to even cover the Bureau of Reclamation's (BoR) oversight costs. Proposed funding for the five authorized rural water projects is a combined \$14.66M.

L&C's tristate delegation is working hard to try to increase funding for BoR's Rural Water Program. The House Appropriations Committee in May approved the Energy & Water funding bill, which includes an additional

\$121.368M for BoR's Rural Water Program. In July, the bill was approved by the House. However, a short time later Congress and the President agreed to set spending caps for the next two years. Because the House bill was completed before the budget agreement, they must adjust their funding numbers according to the budget deal.

Senate Appropriations Committee Chairman Richard Shelby has indicated the Energy & Water funding bill will be one of the first appropriation bills addressed in September.



"In the FY19 Budget overall funding for the Rural Water Program totaled \$112.535M – \$13.795M proposed by the Administration and an additional \$98.74M approved by Congress. We are incredibly thankful for the strong support and effective leadership of our tristate delegation. They go to bat for us year after year. We will continue to partner with them in their efforts to do everything possible to increase overall rural water funding in the FY20 Budget," said Executive Director Troy Larson.

Two Replacement Wells On-Line; Two Under Construction

Welfl and their subcontractor Layne are drilling four vertical wells to replace four angle wells being abandoned at Sites C and D on Mulberry Point. The \$1.9M contract was awarded in June 2018. Two of the wells are now operational, a third is nearing completion, and the drilling portion of the fourth was completed in early August. The depth of the four wells vary from 117 feet to 136 feet. Welfl anticipates reaching substantial completion in mid-October. January 2020 is the deadline.

Due to problems L&C has encountered with its wells quickly losing capacity after rehabilitation, the decision has been made from a well sustainability standpoint to run the four new wells and seven existing vertical wells at a lower screen inlet velocity. Running the older wells at their originally designed velocity has resulted in more fine sands being sucked onto and into the screens, which reduces well capacity and lifespan. **Changing the operating parameters going forward will likely result in the need for more wells than originally planned.**

“The diameter of the screens on the four replacement vertical wells are 36 inches compared to 18 inches for the angle wells, so even though we are running the wells at

a lower screen inlet velocity we are still getting roughly the same capacity. This is not true of the seven existing vertical wells with smaller screens. The variable frequency drives on the new wells have been programmed to not exceed 2,000 to 2,300 gallons per minute depending on the well. The wells can actually produce more if needed, but again our focus is on sustainability,” said Operations Manager Jim Auen.



Above: Concrete being poured for a new vertical well vault, which utilizes the adjacent vault from an abandoned angle well. The circle in the center is the temporary cover for the new well.

Below: Vertical well being drilled. The adjacent angle well being replaced is in the lower right hand corner.



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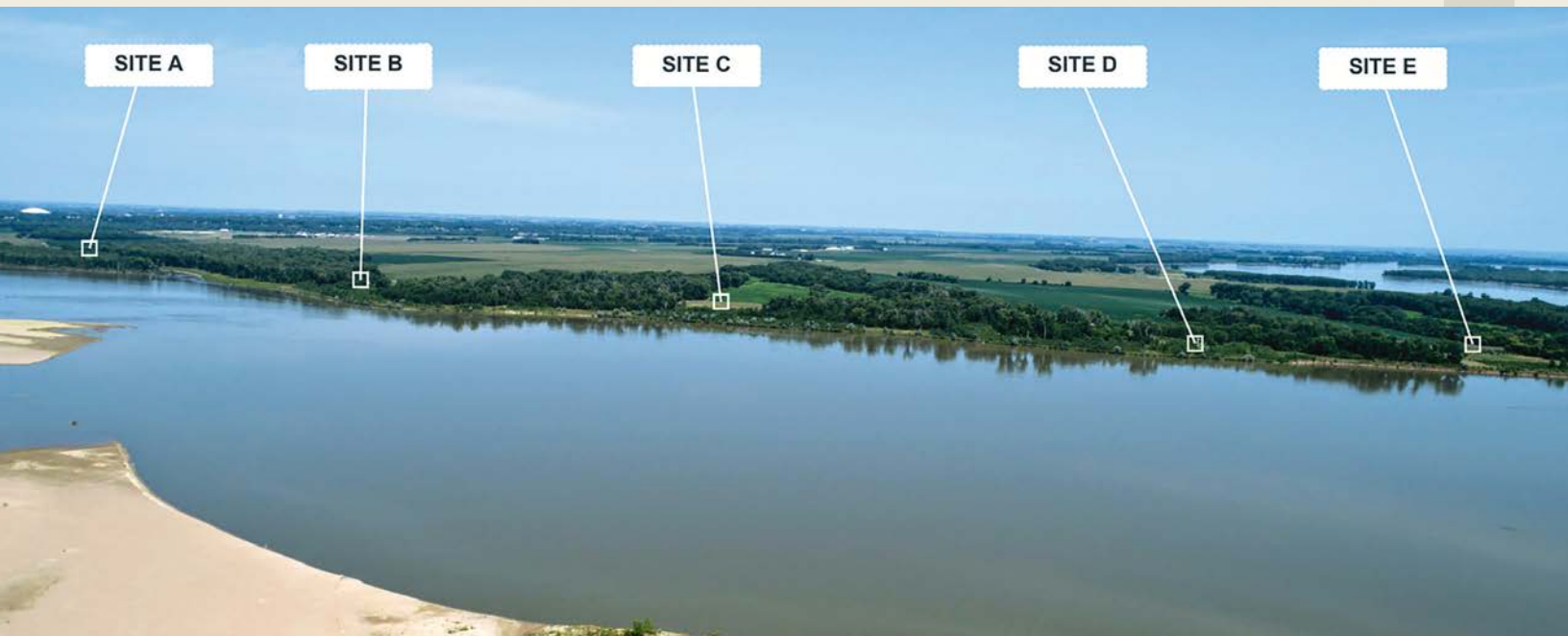


(Left and right): 36 inch screen being lowered into wells

Design Underway on Five Projects

The engineers are currently in the design phase for five projects: radial collector well at Site B on Mulberry Point (see photo below); 2.5M gallon water tower on the east side of Beresford; Sioux Center meter building; expansion of the existing Hull meter building; and adding pumps to the Beresford pump station. Construction needs to

be completed on all five projects before water can be delivered through the “Iowa Transmission Line” to Sioux Center and Hull, and eventually Sheldon. The plan is to award the contract for the radial collector well as soon as the FY20 federal funding is approved, but the timeline to award the other contracts will depend on federal funding levels the next couple years, as well as whether another federal funding advance is approved by the Iowa Legislature during the upcoming session (see story on page 8). The goal is to deliver water to Sioux Center and Hull by the end of 2022.



Iowa “Federal Funding Advances” Come Up Just Short

Members and Local Legislators Trying Again in 2020

During the 2019 legislative session, Governor Kim Reynolds included \$3.5M in “federal funding advances” for L&C in her proposed infrastructure budget to keep construction moving forward in IA. This would have included \$1.8M in FY20 and \$1.7M in FY21. “The federal funding advances enjoyed strong support from local legislators and Sen. Craig Johnson, who chaired the Transportation, Infrastructure and Capitals Appropriations Subcommittee. Unfortunately, opposition late in the process from Rep. Gary Mohr, who chaired the House side, ultimately derailed us. Chairman Mohr stressed he believes in the merits of the project, but because a combined \$7M in advances were approved for L&C in FY18 and FY19 he felt, for this year anyway, funding should go to other projects. We were so close,” said Executive Director Troy Larson.

Instead of getting water to Sioux Center and Hull by the end of 2021 as hoped, the revised goal is the end of 2022. In order to achieve this schedule, officials from Hull, Sheldon, Sibley and Sioux Center met in Sheldon on August 6 with Sen. Randy Feenstra, Sen. Zach Whiting, Rep. Dan Huseman and Rep. John Wills to plan for making another run at trying to secure federal funding advances during the upcoming session. The request will again be for \$1.8M in FY21 and \$1.7M in FY22. The legislators expressed their strong support for trying again. Rep. Skyler Wheeler was not present but pledged his continued support. “We will now start working with Governor Reynolds and her staff to hopefully again get included in her proposed infrastructure budget,” said Larson.



L&C officials meeting with Sen. Feenstra at the Capitol on April 4. Feenstra, who is from Hull and previously served on the L&C Board, championed the L&C funding in the Senate. Left to right: Sibley’s Larry Pedley, Hull’s Jim Collins, Sibley’s Glenn Anderson, Hull’s Roger Buys, Feenstra, Sioux Center’s Scott Wynja, Sioux Center’s Murray Hulstein, Sheldon’s Todd Uhl and Larson.



Participants in the August 6 legislative meeting in Sheldon included (left to right): Sen. Feenstra, Wynja, Rep. Huseman, Sheldon’s Sam Kooiker, Rep. Wills, Hulstein, Sioux Center’s Adam Fedders, Uhl, Pedley, Anderson, Sen. Whiting, Collins and Larson

Senator Smith Tours Lewis & Clark

Senator Tina Smith of Minnesota held a roundtable discussion with project officials at the L&C office and then toured the Tea pump station and reservoirs on May 31. The size of the reservoirs, pumps and motors really put the scope and scale of the project into perspective for her, and she indicated a desire to tour the treatment plant in the future.

Smith stressed L&C's importance to expanding economic development opportunities in the tristate region during the roundtable discussion with officials



Auen providing Smith with a tour of the Tea pump station

from Worthington, Luverne, Lincoln Pipestone RWS, Harrisburg, Tea and Sioux Center. She also reiterated her commitment to continuing to work with the tristate senators to secure the necessary funding to finish the project and ensure the states are repaid for their federal funding advances. "The taxpayers in SD, MN and IA have done their part and really filled the gap that the federal government is supposed to be filling, so now we have to make sure the federal government steps in to fulfill its promises," said Smith. Even though all the MN members are now connected, Smith said of the non-connected members, "We literally will not leave you high and dry. It is all for one and one for all."

L&C officials expressed their thanks and appreciation to Smith for taking the time to meet and for her strong support. "Senator Smith has been a strong supporter and advocate of the project ever since her days as Lieutenant Governor and we greatly appreciate how she has continued to do whatever she can to help us in the Senate," said Chairman Red Arndt.



In the front row (left to right) are Director Scott Hain of Worthington, Senator Tina Smith, Chairman Red Arndt of Luverne, Director Sid Munson of Tea and Director Mary McClung of Harrisburg, and in the back row are Operations Manager Jim Auen, Lincoln Pipestone RWS manager Jason Overby, Director Jerry Lonneman of Lincoln Pipestone RWS, Vice-Chairman Murray Hulstein of Sioux Center, Executive Director Troy Larson and Harlan Kruid of Sioux Center

Planning Begins for 15 MGD Expansion

Feasibility of "Lewis & Clark II" Also Being Discussed

When completed, L&C will be able to deliver 45 million gallons a day (MGD) with the ability to expand to 60 MGD in the future. It is not known yet when this 15 MGD expansion will occur, but when it does all costs associated with the expansion need to be paid by the members who wish to participate because it is not part of the authorized system.

Banner Associates started working in July on a service order to identify the components needed for the expansion and an estimated cost. "This work is not part of the authorized project, so the members would have needed to cover the cost of this service order. However, Banner has generously agreed to donate the work. Banner and HDR also generously agreed to donate the work for a service order to determine whether Site J, 19 acres of land L&C owns upstream from its main wellfield, is conducive for a future collector well. Our deepest thanks and appreciation to Banner and HDR for being such great partners!", said Executive Director Troy Larson.

It is expected this fall members will be asked to start the process of considering whether they want to participate in their proportional share of the 15 MGD expansion and

cost. If there are members who do not wish to participate, then the participating members will have an opportunity to secure additional capacity and the associated cost.

This expansion in turn will set the stage for what is needed to address the members' water needs beyond 60 MGD. How long L&C will adequately address the members' water needs varies by member depending on the amount of capacity each has reserved. Some members, like Harrisburg, already know they will need more water and have started planning for what to do next and whether L&C will play a role. To start the discussions on the feasibility of an expansion of L&C beyond 60 MGD – what is tentatively being called "Lewis & Clark II" – a kick-off meeting was held with interested members on May 23.

"The discussions for Lewis & Clark started in the late 80's and we are not done yet. Even though it will probably be a decade before we finish the current project, knowing how long something like this can take, we felt it was important to start the discussions now on the feasibility to expand the system beyond 60 MGD. We had a very productive kick-off meeting," said Larson.



Attendees at the kick off meeting to discuss "Lewis & Clark II". Front row (left to right): Madison's Chad Comes, Harrisburg's Mary McClung, Luverne's Red Arndt, East Dakota Water Development District's Jay Gilbertson, MCWC's Scott Buss, Rock County RWD's Ryan Holtz, Lennox's Jeremy Gulbranson; Lincoln Pipestone RWS's Jason Overby, Lincoln Pipestone RWS's Jerry Lonneman and South Lincoln RWS's Ralph Hammer. Back row (left to right): L&C's Troy Larson, L&C's Jim Auen, Worthington's Scott Hain, L&C's Mike Duchscher, Banner's Kristin Bisgard, Sioux Falls' Nick Borns, L&C's Todd Giffin, Tea's Sid Munson, Sioux Falls' Trent Lubbers, Sibley's Glenn Anderson, Banner's Tim Conner, South Lincoln RWS's Tom Rausch, South Lincoln RWS's Lloyd Poppens, Lincoln County RWS's Merlyn Smeenk and Lincoln County RWS's Robin Dykstra.

Operations Update

In less than one year the operations team has seen a dramatic increase in the amount of infrastructure they are now responsible for operating and maintaining. Infrastructure that has recently come on-line includes: 27 miles of pipeline between Magnolia and Worthington, Rock County reservoir, Rock County pump station, Nobles County reservoir, Adrian pump station/meter building, Worthington meter building, MCWC-East service line and meter building and the addition of pumps at the Rock Rapids-Rock County RWD pump station/meter building. Not including engineering or installation of the SCADA control systems, the combined construction cost for these projects is just over \$34M. "This is a tremendous amount of infrastructure to add in such a short period. There are no plans to add more staff at this time, so we will just need to work harder to cover the additional ground. However, we anticipate adding two more employees – a distribution operator and a maintenance mechanic – before we start delivering water to Sioux Center and Hull," said Operations Manager Jim Auen.

L&C staff have been pleased with how well the north and south lime drying beds are working after the improvements made to them last year. Gacke Enterprises continues to remove lime sludge from the middle drying bed as conditions allow (photo below). They have removed close to 9,600 tons; roughly 15% of the total. December 2020 is the deadline for Gacke to finish the job. A contract will then be awarded to make the same improvements to the middle drying bed that were made to the other two.

A vertical well at Site A collapsed in October 2018 during the rehabilitation process. It was repaired and finally went back into service in May.



Distribution Operator Justin "JD" Walsh calibrates a pH analyzer at the MCWC-East meter building



Distribution Operator Jay Nelson (right) and Bill Spickelmire from RustNot, Banner's corrosion consultant, testing the continuity of the tracer wires on the pipeline between Adrian and Worthington. Tracer wires are used whenever the pipe needs to be located.





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29th Annual Membership Meeting

The 29th Annual Membership Meeting was held at the Tea Events Hall on June 27. Over 100 were in attendance. Staff members were present from Senators Chuck Grassley, John Thune, Amy Klobuchar, Joni Ernst and Mike Rounds, as well as Congressmen Collin Peterson, Steve King and Dusty Johnson. Chairman Red Arndt was presented with statements that Thune and Klobuchar entered into the Congressional Record in honor of his over 30 years of hard work and dedication on behalf of L&C.

As the project continues to be a vision for the future, Arndt talked about how discussions are now underway for Lewis & Clark II (see article on page 10). Executive Director Troy Larson provided updates on construction,

operations and funding. He presented Banner's Tim Conner with an "87" t-shirt. Based on the punch line of a Dilbert cartoon, the phrase "just give me an 87 number" is frequently used, which is the equivalent of a "wild ass guess". "Tim is the king of 87 numbers," said Larson.



Conner with his "87" t-shirt



As noted on page 2, the Lewis & Clark Trailblazer Award was presented to Director Scott Hain at the ribbon cutting in Worthington on June 11, but to give him the double-barrel treatment it was presented to him again at the annual meeting. Lastly, Chairman Arndt was surprised with the announcement that the Rock County pump station southeast of Luverne is being dedicated in his honor (see story on page 3).

Ben Ready (left) and Chuck Ackman from the offices of Senators Thune and Klobuchar respectively presented Arndt with Congressional Record statements honoring his over 30 years of hard work and dedication