

  
**Lewis & Clark**  
REGIONAL WATER SYSTEM

# Explorer

Summer 2021

## Administration Proposes \$9.22M for Lewis & Clark in FY22

### Senate Appropriations Committee Approves another \$21.914M

L&C officials were very pleased when it was announced on May 28 that the administration proposed \$9.22M for the project in its FY22 Budget! This is a significant increase over the \$100,000 that was proposed the last three years and is the highest level since \$15M was proposed in FY08. “This was great news and put us in a much better starting position than in the past. It still leaves us with work to do though to reach the \$17.5M and \$18M we received in FY20 and FY21,” said Executive Director Troy Larson.

Larson and lobbyist Jane Lucas have been working closely with the staffs of the 10-member tristate congressional delegation, as well as the staffs of the Senate and House committees, to try to secure additional funding.

There are still a lot of unknowns in regard to the FY22 appropriations process with the return of congressionally directed spending (CDS) requests – formerly known as earmarks – versus programmatic funding; not to mention the infrastructure bill (see page 2). Not knowing how the appropriations processes will play out, L&C has been taking an “all of the above approach” by requesting CDS, programmatic funding and infrastructure bill funding.

The House on July 27 passed a “minibus appropriations bill” that includes the Energy & Water Appropriations Bill. It includes an additional \$55.7M in programmatic funding for the five authorized water projects. This is in addition to the \$72.273M proposed by the administration, so a total of \$127.973M. Last year the House’s total was \$115.787M, so about \$12.2M higher!

L&C received more great news on August 4 that the Senate Appropriations Committee approved the FY22 Energy & Water Appropriations Bill, which in addition to the \$9.22M proposed by the administration also includes a \$21.914M CDS request by Senators John Thune, Amy Klobuchar, Mike Rounds and Tina Smith for a total of \$31.134M! L&C’s final FY22 funding is expected to be reconciled in an omnibus budget bill. “We cannot thank these senators enough, as well as the rest of our tristate congressional delegation, for continuing to go to bat for us! Although we still have a ways to go in the process, we are sitting much better than in previous years,” said Larson.

Director Brad Preheim (left) discussed FY22 funding and a possible infrastructure bill with Sen. Thune at the Centerville Rotary Club meeting on June 3



## Senate Infrastructure Bill Contains \$1 Billion for Rural Water Projects

— by Jane Lucas

On Aug. 10 the Senate passed a \$550B bipartisan infrastructure package that includes \$1B for Reclamation rural water projects, including L&C. Inclusion of funding to complete authorized Reclamation rural water projects comes after months of advocacy efforts with the committees of jurisdiction and, in particular, the SD, IA and MN Senators during the drafting of this legislation by a “gang” of 22 bipartisan Senators. The language does not specifically mention L&C, but Reclamation provided a chart that shows approximately \$1B is the total remaining federal ceiling for the all water projects in their portfolio, including L&C.

The House will consider the Infrastructure Investment and Jobs Act later this fall. No changes to this section providing \$1B for rural water projects are expected to be made by the House. However, Speaker Pelosi has said she will not allow the House to pass this bill until the “soft infrastructure” bill is passed, which will contain funding for paid leave, childcare, health care, and other priorities of the Speaker. After the Infrastructure Investment and Jobs Act is enacted into law, our lobbying efforts will

focus on Reclamation to request L&C’s remaining federal ceiling, which is approximately \$132M. The leadership of our delegations will play a critical role in this effort. This bill, which would be a game changer for L&C, comes after several years of discussion in Washington about potential infrastructure legislation.



Jane Lucas

*Lucas is originally from Brookings and has been L&C’s lobbyist since November 2019. Prior to joining Alston & Bird she worked in the White House for two years in Legislative Affairs and prior to that worked for Senator Thune for ten years, including serving as his Legislative Director. “Jane has been*

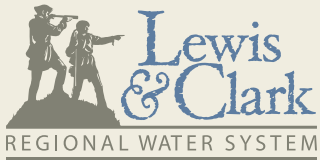
*doing a fantastic job being our eyes and ears in D.C. and advocating on our behalf. She is definitely an integral part of our team,” said Executive Director Troy Larson.*



Sheldon Public Works Director and L&C Director Todd Uhl, State Senator Jeff Taylor, Congressman Randy Feenstra, Sheldon City Manager Sam Kooiker and L&C Executive Director Troy Larson spoke with Feenstra about funding to complete L&C construction in the Senate-passed infrastructure bill at a Kiwanis luncheon in Sheldon on August 2. Feenstra, who served for seven years on the L&C Board, predicts passage in the House.



## 31st Annual Membership Meeting



The 31st Annual Membership Meeting was held in Tea on June 24. Eight of L&C's ten congressional offices were represented, as well as state legislators and several former directors. Chairman Murray Hulstein gave his report, which in part honored late Chairman Red Arndt. Executive Director Troy Larson provided an update on operations, construction and funding. In honor of his retirement, a photo slideshow of Banner's Tim Conner was shown and he made remarks about 30+ years working on L&C. Former directors Chad Comes of Madison and Trent Lubbers of Sioux Falls were each presented with the Spirit of Discovery Award for their dedicated service on the Board for 16 years and 7 years respectively. Chad was on hand to accept the award and made remarks. Trent was on vacation and later received the award in the office. Congrats to both on this well-deserved recognition!



Trent Lubbers



IA Rural Water's Scott Shover (left) and SD Rural Water's Kurt Pfeifle



Chad Comes (right) and Chairman Hulstein



# FROM THE PIPELINE



Twenty-three officials from Harrisburg, Lincoln Pipestone RWS, Luverne, Sioux Center and Worthington toured the treatment plant and collector well on June 25. Most had never been to the plant or wells before, so a great opportunity to see the system they own.



Wes Fopma from Rep. Randy Feenstra's district staff toured the treatment plant and wells on March 29. Fopma, who lives in Sioux Center, appreciated the opportunity to get up to speed on a project that he knows means a great deal to the congressman.



Senator Chuck Grassley's Chief of Staff Aaron Cummings met with L&C officials in Sioux Center on July 16 to discuss L&C's FY22 construction and funding priorities, as well as a possible infrastructure bill. Left to right: Sioux Center's Adam Fedders and Scott Wynja, Cummings, Chairman Murray Hulstein and Director Jim Collins of Hull. Not pictured Director Todd Uhl of Sheldon and L&C Executive Director Troy Larson.





JCG Land Service's JC Carmichael (left) and Mike Adams acquired the final easement for the Madison service line and all of SD on July 16. Easement acquisition started in 2004, so this milestone has been a long time coming. They started acquiring easements in July on the 17-mile segment between Hull and Sheldon and expect to be finished by the end of the year. The only remaining segment will then be the Sibley service line.



Twelve Banner engineers spent April 6 touring several parts of L&C's infrastructure, including the treatment plant. Half had never toured L&C before, so a good opportunity to see the project firsthand. Left to right: Cullen Kohles, Joe Munson, Gregg Jorgenson, Kristin Bisgard, Scott Vander Meulen, Ben Meyer, Bryan Lipp, Tim Conner, Kyla Diaz, Dennis Odens and Taylor Fauth. Not pictured Brad Wermers.



L&C officials met with Gov. Kim Reynolds and local legislators on February 23 to discuss a \$1.7M federal funding advance to be used toward the Sheldon water tower. IA Economic Development Authority's Debi Durham and Executive Director Troy Larson testified in support of the funding at a House committee hearing. The funding was not approved in the infrastructure budget, but efforts are still underway to secure the funding through a portion of the \$2.694B in CV-19 funding IA received. Left to right with Reynolds seated: Sheldon Councilman Wayne Barahona, Sheldon Economic Development Director Curt Strouth, Rep. John Wills, Sibley Utilities Superintendent Cory Dykstra, Rep. Jacob Bossman, Sibley City Administrator Glenn Anderson, Sheldon Mayor Greg Geels, Lt. Gov. Adam Gregg, Sheldon Public Works Director and L&C Director Todd Uhl, Sheldon Wastewater Superintendent Dean Paulsen, Sheldon Water Superintendent Keith Vaandrager and Larson. Not pictured Sen. Zach Whiting, Sen. Jeff Taylor, Rep. Skyler Wheeler and Rep. Dennis Bush.



## Pedestal Nearly Complete for Beresford Water Tower

The first of 40 lifts for the concrete pedestal was poured on May 24 and the final lift was poured on August 19. Each lift is four feet high, one foot thick, and requires 28 yards of concrete (three trucks). The ability to schedule consistent concrete deliveries on a regular basis was a big challenge that caused occasional scheduling delays, but otherwise everything went well.

Concrete samples from each lift are poured into a set of cylinders. After three, seven and 28 days, a “break test” is conducted on the cylinders from each lift to determine the strength of the concrete. The minimum strength requirement is 5,500 psi for the 28-day break test, but the engineers have been pleased that the results have been in the range of 7,000 to 9,000 psi.



Caldwell will now start placing the dome forms and then pour the roughly 100 yards of concrete for the pedestal dome. They expect to complete the dome by the end of August. In early September they will start constructing the 2.5 million gallon steel bowl on the ground and plan to complete it by Christmas. After painting the bowl this spring, they anticipate raising the bowl to the top in early July. The substantial completion deadline is March 2023, but Caldwell is hoping to reach that milestone by the end of 2022.



## Meter Buildings and Pumps Contract Awarded

L&C awarded a \$2,330,360 contract to D.W. Proehl of Sioux Falls on May 28 that includes three separate components – construction of the Sioux Center meter building, expansion and remodeling of the existing Hull meter building and adding four pumps to the Beresford pump station. Separate rooms are being added for the chemical feed and electrical components at the Hull meter building, which will double in size. By not having separate rooms, the chemical fumes caused severe corrosion of everything inside the building and the roof, which all needs to be replaced. The replacement cost is \$128,150 and will be covered by operations. Federal funds will be used for the remainder of the contract.

Work started in late June – the footings have been poured in Sioux Center (photo right), which is next to the City's water treatment plant, and the Hull meter building has been gutted and the roof is being removed. The substantial completion deadline is July 2022 to add the pumps and October 2022 for the Sioux Center and Hull meter buildings. This is the last contract L&C

needed to award to deliver water to Sioux Center and Hull! Depending on when the Beresford water tower is completed (see page 6), it is expected the communities will begin receiving water in late 2022 or early 2023.



## Regional Director Esplin and BoR Officials Tour Project

Seven BoR officials from Billings and Bismarck, including Regional Director Brent Esplin, toured the treatment plant, wells and revetment repairs on June 15. The next day Chairman Murray Hulstein and Executive Director Troy Larson reviewed with them L&C's FY22

construction and funding priorities. They then toured the Tea pump station, 85th Street water tower and Beresford water tower. "A big thanks to our Reclamation partners for the generous amount of time they spent gaining a better understanding of the project, as well as providing a great opportunity for us to get to know each other better", said Larson. Esplin commented, "This is an important partnership and I commend Lewis & Clark for its continued progress completing its important water infrastructure. Generations of families and communities will benefit from this water system. Reclamation is fully committed to continuing to work as a collaborative partner with Lewis & Clark to see the project through to full completion."



BoR's Mike Maroncelli (Billings), Area Manager Joe Hall (Bismarck), Water Resources Director Dani Fettig (Bismarck), Deputy Area Manager Scott Hettinger (Bismarck), Deputy Regional Director Marlon Duke (Billings), Deputy Regional Director Brian Hollis (Billings) and Regional Director Brent Esplin (Billings)





## Iowa – Segment 3 Construction Going Well

IA – Segment 3 is the middle 12.6-mile segment between Beresford and Sioux Center. Carstensen in July completed the last of 12 crossings of waterways, roads and railroads. Steel pipe was used for the crossings, but otherwise the rest of the project includes 24-inch zinc coated ductile iron pipe that is wrapped for additional corrosion protection. As of mid-August they have installed 10 miles of pipe and expect to have the remaining pipe in the ground by early September. Carstensen will then spend the next couple months completing the isolation valve vaults, blow off assemblies and others appurtenances. If all goes well they expect to reach substantial completion in mid-November. Carstensen is also working on restoration and other punch list items for SD – Segment 12 (11.2-mile segment starting at Beresford and heading east) and have reached final completion on IA – Segment 2 (10-mile segment starting at Sioux Center and heading west).







(Below): Front to back: L&C Operations Manager Jim Auen, Banner on-site rep Kevin Kuebler, L&C Construction Administrator Clint Koehn, Banner project engineer Scott Vander Meulen and Banner intern Noah Zacher





## Chairman's Report

– by Murray Hulstein

When I was elected Chairman in May, it was with mixed emotions. While I am honored and humbled, I certainly wish it was under different circumstances. We all still terribly miss our beloved Red. I have learned a lot from serving under three distinguished chairmen – Gary Hanson from Sioux Falls, Charlie Kuehl from South Lincoln RWS and Red Arndt from Luverne. Each were different in their leadership styles, but each knew the importance of listening more than speaking. Be assured I will continue that practice.

For those who may not know, I am originally from Sioux Center. I began working for the city in 1989 and in 2006 was promoted to Utilities Manager. One of the first meetings I went to was an organizational meeting in Sheldon for what would eventually become Lewis & Clark. I have been attending Board meetings since the first one was held in April 1990 and have served on the Board since 1993. I was elected Vice-Chairman in 2006. Lewis & Clark has literally been my entire career.

## Interagency Environmental Review Team Meets

Reclamation (BoR), Banner, TRC and L&C officials held an Interagency Environmental Review Team (IERT) meeting on July 13 and 14. The meetings are headed up by BoR and give federal, state, local and tribal officials an opportunity to review proposed routes for pipeline construction, as well as look at construction underway and that has been completed. Only one Corps of Engineers official participated on the 13th and no agencies on the 14th. The lack of agency participation is seen as a good sign that everyone is pleased with how past construction has been going.

On the 13th the group drove the 32-mile Madison service line, toured the Beresford water tower, and then drove the 33-mile route between Beresford and Sioux Center. On the 14th the group drove the 17-mile route between Sheldon and Hull, as well



Hulstein touring the 85th Street water tower improvements

While I have worked on many projects that have a big impact on Sioux Center, there is no project that will have a more profound impact on the city or tristate region for generations to come. Even though our names will not be remembered in 100 years, this is truly a legacy type project. I am very proud of what we have accomplished since that organizational meeting 32 years ago, and will do my best to follow in the footsteps of Gary, Charlie and Red in providing the most effective leadership I can to finally get this project across the finish line.

as the 9-mile segment between Hull and Sioux Center. No problems or issues were identified. High marks were given for the reclamation efforts by the contractors. Only one future IERT meeting remains – a review of the Sibley service line.



BoR's Kyle Dworshak, Alicia Waters, Meg Claypool, Justin Hammer and Chris Haines. Hammer and Haines are out of Rapid City and the others are out of Bismarck.



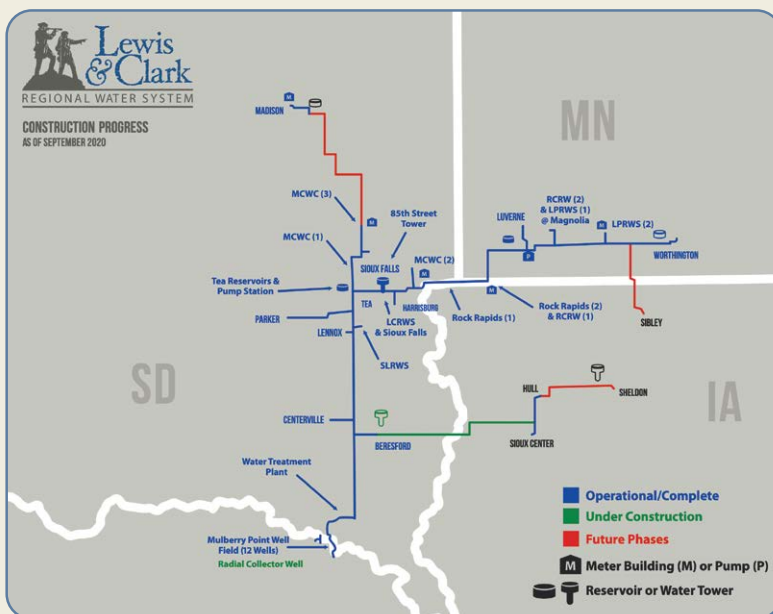
## Expansion Commitment Agreement Ready for Signature

In a late 2020 straw poll, all 20 members indicated a desire to participate in the voluntary 15.81 million gallons per day (MGD) expansion; bringing overall System capacity to 60 MGD. Efforts have since focused on drafting language for an Expansion Commitment Agreement, as well as updating the estimated expansion cost. In today's dollars the engineers estimate the expansion will cost \$97M, with each member

responsible for a proportional share of the cost and in return receiving a proportional share of the expansion capacity.

The Board finalized the agreement on July 22 and set a deadline of January 3, 2022 for the members to sign it, along with paying their non-refundable deposit for the estimated cost to design the first phase of the expansion

(sixth solids contact basin and second gravity thickener). In order to realize what the engineers describe as a “significant savings”, these two parts of the expansion will be constructed at the same time as the fifth solids contact basin, which is part of the base system. Based on recent federal funding levels, it is anticipated this construction will occur in 2028. The timeline to complete the rest of the expansion infrastructure is a future decision the Board will make based on the members’ water needs and financing. “Last winter we were thinking the expansion might be completed in 15 to 20 years. The drought and every member setting records for water usage this summer has changed everyone’s perspective on the timing. It could be much sooner,” said Executive Director Troy Larson.



## Graverson and Hegg Appointed to Board

Sioux Falls’ Gavin Graverson and Madison’s Ryan Hegg were appointed to the L&C Board on May 27. They take over for Trent Lubbers and Chad Comes respectively. Gavin has been with the city for 28 years, the last two as Water Superintendent. He is originally from Beresford and his passion is competitive trap shooting. Ryan has been with the city for 15 years and is their Engineering Technician/Building Official. He is originally from Miller, SD and his passion is competitive taxidermy. Both Gavin and Ryan have won at the state level. Welcome aboard, guys!



Gavin Graverson (left) and Ryan Hegg



## Hammer, MCWC and Harrisburg Receive Honors

The South Dakota Association of Rural Water Systems (SDARWS) in February recognized Director Ralph Hammer with the Spirit of Rural Water Award for his over 36 years serving on the South Lincoln RWS board! He has also served on the L&C board the last 2 ½ years. Congratulations, Ralph, and thank you for your dedicated service!

Minnehaha Community Water Corporation (MCWC) was presented with the System of the Year Award by the SDARWS! Congratulations to Manager and L&C Director Scott Buss, Chairman Lloyd Rave and the rest of the MCWC staff and board members for their outstanding work!

Late L&C Chairman Red Arndt was presented with his 30-year service certificate and pin and Business Manager Lori Seten was similarly recognized for 25 years of rural water service. L&C officials presented Red's family with his certificate and pin following the Celebration of Life ceremony that was held in Luverne on May 1, on what would have been his 72nd birthday.

Harrisburg won the SDARWS's Best Tasting Water Award in April! Harrisburg also won the award in 2018 and 2020. Water produced by L&C has won five of the last six years and was runner-up the other year. Congratulations and kudos to the operation teams for Harrisburg and L&C!



Left to right: City Administrator Andrew Pietrus, Water Reclamation Supervisor/Asst. Public Works Director Dustin Preheim, City Finance Officer and L&C Director Mary McClung (holding 2021 trophy), Public Works Director Toby Huizenga and City Engineer Joe Stonesifer



Director Ralph Hammer



With Red's urn made out of L&C pipe in the foreground, L&C officials presented his family with his 30-year service certificate. Left to right: L&C's Troy Larson, Worthington's Scott Hain, Joshua Arndt, Jacob Arndt, Lisa Arndt, Justin Arndt and Lincoln Pipestone RWS's Jerry Lonneman.



## Revetment Repairs Completed

L&C has a one-mile stretch of bank stabilization that protects its wells. The original revetment used rocks averaging 27-inches. Subsequent revetment repairs and extensions in the northern one-third stretch used rocks averaging 34-inches, which have held up much better against the brunt of the current at this bend in the river.

An ice flow in February redirected the brunt of the river's current to a middle section of the revetment, which had the smaller rock. This resulted in extensive erosion damage to a 1,700-foot stretch that needed to be repaired as quickly as possible.

The L&C Board awarded an \$877,517 contract to Rounds Construction on April 1. They started work on April 21 and reached final completion on June 21. The extent of the damage was unknown when the contract was awarded. A total of 14,551 tons of rock was used for the repairs. Quantity adjustments mainly for rock added \$100,867 to the final price tag.



For aesthetic reasons required by the National Park Service, the large rock closest to the river was covered with field stone and then all the rock was covered with top soil and planted with native grass. It is anticipated the top soil will erode from future flooding, so what will be visible when that happens is the field stone, which is deemed more desirable for this stretch of recreational river.

"Our wells are critical infrastructure that need to be protected. Hopefully these repairs will last for a very long time. The engineers and staff were very impressed with both the speed and quality of Rounds' work," said Operations Manager Jim Auen.





## Conner Retires; Bisgard New Lead Engineer

Tim Conner retired on June 4 after a very distinguished 45-year career at Banner Associates. Thirty of those years were spent working extensively on L&C, including the last eight years as the project's lead engineer. He still plans to work part-time on L&C as a consultant to Banner for a while to help with the transition.



L&C's three lead engineers through the years – Dave Odens (Aug. 1990 – Jan. 2013), Tim Conner (Jan. 2013 – June 2021) and Kristin Bisgard (June 2021 – present)

Tim loves to golf, so at his final Board meeting L&C officials gave him an Austad's gift certificate as a small token of appreciation. At Tim's retirement party earlier in the month, Executive Director Troy Larson gave Tim a bottle of tequila to help erase the memory of his "87,000 phone calls and emails". Sounds like it will take a lot more than one bottle.... "Tim's contributions to helping bring L&C to where it is today are truly immeasurable. As challenging and difficult as our journey has been, I cringe to think what it would have been like without him. His level of dedication and commitment to getting the job done are without equal. Tim is a professional to the core and a genuinely great guy. He is a very humble person who will go out of his way to give credit to everyone else, but at the end of the day Tim is a straight up legend. He now even has a t-shirt to prove it," said Larson.

Kristin Bisgard now takes over the lead engineer role for L&C. She is originally from Waubay, SD and started with Banner in Jan. 1998. Kristin has Bachelor's and Master's engineering degrees from SDSU. She started working closely on L&C projects in 2010 and in anticipation of this transition has been attending L&C meetings since February 2019. "Kristin is a top-notch engineer who has been great to work with these last eleven years. She is very familiar with the project, directors and staff. Kristin has very big shoes to fill, but we know she will go above and beyond to ensure the transition is as seamless as possible", said Larson.



Conner (seated) at his last Board meeting on June 24



## 22 Million Gallon Collector Well Far Exceeds Expectations

After the ten lateral screens were installed and developed, a 72-hour constant flow test was conducted on the Site B collector well on July 12 – 14. The final report has not been finalized, but all indications from Layne (subcontractor) is the well will produce a maximum of 22 million gallons a day (MGD). This far exceeds the original design capacity of 16 MGD. Welfl (contractor) started constructing the pump house in early August. June 2022 is the substantial completion deadline.

This welcome increase in capacity is mainly because Layne was able to extend the lateral screens further than designed. The design average for each of the ten lateral screens was 175 feet for a design total of 1,750 feet. Eight of the lateral screens reached the maximum length of 240 feet, and the two other screens hit 220 and 210 respectively for an actual total screen length of 2,350 feet.

Another reason for the increased capacity is the material around the laterals was coarser than expected; meaning the gaps in the screens could be widened allowing more flow. The total designed screen gaps was 332,500 square inches, but the actual amount was 453,701 square inches.

### Collector Well Summary:

- 6 MGD more capacity than designed (37.5% increase)
- 600 feet more screen than designed (34.3% increase)
- Additional screen length cost \$622,000 (6% increase)
- 121,201 square inches more screen gap than designed (36.5% increase)
- A fourth pump will need to be added to the pump house to accommodate the increased capacity, but overall the price increase is expected to be less than 10%; a great value when compared to the increased capacity.



Ten-foot section of screen being lowered into the collector well caisson



Above and right: 72-hour constant flow test







46986 Monty Street  
Tea, SD 57064

## Operations Update

Keeping up with demand has been a big challenge this summer. Since late May all 11 vertical wells are being run as hard as they can 24/7. On June 8 a record 32 million gallons (MG) was delivered to the 15 connected members. One well had to be throttled back to prevent it from sucking air, so well capacity that day was 32.2 MG. Too close for comfort. In June a record 837.6 MG was delivered for a daily average of 27.9 MG. By comparison the highest month in 2020 was 707.9 MG in August. To help, the members who have other water sources have relied more heavily on those and all members have urged conservation measures. In July the daily average dropped to 25.2 MG. "We are still pushing the system pretty hard, but we have a little more breathing room than we did in June," said Operations Manager Jim Auen.



The 85th Street water tower is a connection point for Sioux Falls and Lincoln County RWS. To address an internal bottle neck for Sioux Falls, L&C staff assisted in upsizing their piping, meter and valve in the 85th Street water tower in February (photo at bottom left). These improvements took three days and were paid for by Sioux Falls. The staff proactively used the piping, meter and valve removed from Sioux Falls to upsize the connection for Lincoln County RWS. This will prevent a future bottle neck for them.

Rounds Construction is making good progress on improvements to the middle lime drying bed at the plant to ensure it works more effectively at drying down the lime sludge (photo at bottom right). Improvements were previously made on the two other drying beds and have been working very well. The work is expected to be completed by September.

