



# Explorer

Spring 2022

## Lewis & Clark Receives Record \$97.4 Million!

Great news that L&C will receive a record \$97.4M in FY22 for ongoing construction -- \$75.5M from the Bipartisan Infrastructure Law (BIL) and \$21.914M from the FY22 Appropriations Bill! "This is a record amount of funding for Lewis & Clark and will allow us to move forward with a record amount of construction this year!" said Executive Director Troy Larson.

The FY22 Appropriations Bill was signed into law on March 11. The \$21.914M equals the congressionally directed spending requests made by Senators John Thune, Amy Klobuchar, Mike Rounds and Tina Smith, and is an increase from \$17.5M in FY21. Strong support for increased funding was also provided by Senators Chuck Grassley and Joni Ernst, as well as Representatives Dusty Johnson, Randy Feenstra, Michelle Fischbach and the late Jim Hagedorn. "We cannot thank these four senators enough for including Lewis & Clark in their congressional directed spending requests, as well as to the entire tristate congressional delegation for going to bat for us once again," said Larson.

The BIL approved last November includes \$1B for ongoing construction of seven rural water projects. It took much longer than expected, but on March 31 it was announced that L&C will receive \$75.5M. Depending on construction capabilities and how much of the \$1B remains, L&C is also eligible to receive BIL funding in FY23 and FY24.

Funding from both sources will allow L&C to move forward with construction of the remaining 32 miles of pipeline for the Madison service line, the 17 miles of pipeline between Hull and Sheldon, meter buildings at Sheldon and Sibley, a pump station near Hull, a ground storage reservoir near Madison and adding more lime

drying beds at the water treatment plant, as well as designing the Sibley service line and acquiring easements. "From FY11 through FY17 we received less than \$10 million each year; with a low point of \$1.996 million in FY12. We felt like we were wandering in the proverbial desert for several years, so the fantastic news about our robust FY22 funding is especially gratifying. This funding won't complete the project though. We will still need roughly \$70 million to complete the base system, but we can definitely see the light at the end of the tunnel," said Larson.



## Reynolds Announces \$12 Million for Lewis & Clark!

Governor Kim Reynolds announced at Sioux Center's water treatment plant on January 28 that L&C will receive \$12M in American Rescue Plan Act (ARPA) funding! The funds will be used for infrastructure in Iowa that is part of its expansion from 44.19 million gallons a day (MGD) to 60 MGD. She was joined by Lt. Governor Adam Gregg, state legislators and officials from Hull, Rock Rapids, Sheldon, Sibley and Sioux Center. "Today's announcement demonstrates Iowa's commitment to the project and the people it serves. This \$12 million award will enable a significant expansion of Lewis & Clark," said Reynolds. The funding brings Iowa's total financial commitment to just over \$19M.

Unlike the 44.19 MGD base system that is being constructed with a roughly 90% cost share from the federal government and three states, the 20 member cities and rural water systems are responsible for 100% of the cost for the 15.81 MGD expansion. All have agreed to participate in the expansion; in today's dollars estimated at just over \$100M. Chairman Murray Hulstein of Sioux Center remarked "Even though some members are not even connected yet, the drought the last two years has made it clear to all of us that we need more water for our long-term economic development and quality of life than what we reserved way back in 1993. This funding, as well as ARPA funding we hope to receive from South Dakota and Minnesota, will help offset a portion of the

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Left to right: Executive Director Troy Larson, Director Larry Pedley of Sibley, Director Jim Hoye of Rock Rapids, Director Todd Uhl of Sheldon, Gregg, State Rep. Skyler Wheeler, Reynolds, State Rep. Dennis Bush, State Senator Jeff Taylor, Hulstein and former Director Jim Collins of Hull



The \$12M will be used to construct two pump stations by Larchwood and Lebanon, a reservoir near Hull, add pumps to the existing Dove Avenue pump station northwest of Rock Rapids, and add pumps to the future pump station at Hull. L&C plans to award some of these projects this year.

expansion cost for the members. This directly benefits the homes and businesses who purchase water from our respective utilities. A big thank you to Governor Reynolds, Lt. Governor Gregg and Iowa Economic Development Authority's Debi Durham! This funding is just the latest example of their incredibly strong support and effective leadership."

Five members are not yet connected – Hull, Sioux Center, Sheldon, Sibley and Madison. It is expected that all members will be connected by 2025. Completion of the expansion is estimated to take another five to seven years beyond that. None of the additional 15.81 MGD can be delivered until 100% of the expansion is completed.

## High Service Pump Station Improvements

A contract for \$2,773,550 was awarded to PKG of Fargo on December 21 for improvements to the high service pump station. The contract includes adding two 1,250 h.p. pumps and variable frequency drives, more A/C units in the electrical room and a third carbon dioxide skid. These improvements are needed in order to deliver the base system capacity of 44.19 million gallons a day, and are part of the phased approach of adding infrastructure as needed to meet demand.

The contract includes \$341,500 to also add A/C units to the main pump room to replace the louvres, which is the equivalent of trying to cool your house by opening the windows. "The louvres have not been effective at cooling the main pump room, and when we add more pumps it will be even more of a challenge. Now is the time to make this change," said Operations Manager Jim Auen. These A/C units will be paid for by operations, whereas

federal funding will be used for the rest of the contract. April 2023 is the substantial completion deadline.



The louvres in the high service pump station have not been effective at keeping the main pump room cool and will be replaced with A/C units

# FROM THE PIPELINE



MCWC Chairman Lloyd Rave received the prestigious Carrol Anderson Memorial Award at the SD Association of Rural Water Systems' (SDARWS) Annual Technical Conference in Pierre on January 13. Lloyd started serving on MCWC's board in 1987 and became chairman in 2009. He has also served on SDARWS' board since 2009.



Also at SDARWS' Annual Technical Conference, Operations Manager Jim Auen was recognized for 25 years of rural water service; 11 years at MCWC and the last 14 years at L&C



Wes Fopma and Emily Schwickerath from Congressman Feenstra's state staff toured the treatment plant and wellfield on February 23

Iowa state legislators, legislative candidates and Sioux Center officials toured the water treatment plant and wellfield on January 4. Left to right: Rep.

Skyler Wheeler, Executive Director Troy Larson, candidate Tony Labruna, Rep. Jacob Bossman who also serves on Sen. Chuck Grassley's staff, Rep.

Dennis Bush, candidate Zach Dieken, candidate Bob Henderson who also serves on Grassley's staff, new Sioux Center Councilman John Branstsen, Sioux Center's Assistant Utilities Manager Adam Fedders and Chairman Murray Hulstein (Sioux Center's Utilities Manager).



D.W. Proehl is on schedule to meet the October 2022 substantial completion deadline for the Sioux Center and Hull meter buildings. Left to right at a progress meeting at the Sioux Center meter building on March 9: Construction Administrator Clint Koehn, Banner's onsite rep Jordan Nelson, Banner's lead project engineer Joe Munson, Operations Manager Jim Auen, Banner's Senior Project Manager Kristin Bisgard, Electronics Maintenance Technician Shain Becker and Dieter Proehl.

## Progress on Water Towers

Welding resumed in February on the 2.5 million gallon steel tank for the Beresford water tower. Caldwell Tanks' main construction crew will return in May. They anticipate raising the tank to the top of the concrete pedestal in July. Late February 2023 is the substantial completion deadline, but Caldwell is working hard to make it operational in November or December.

Caldwell Tanks is also the contractor for the one million gallon composite water tower a few miles east of Sheldon. The excavation for the foundation has been completed and next the steel H-beam pilings for the deep foundation will be driven. October 2023 is the substantial completion deadline.



Beresford Water Tower

Sheldon Water  
Tower Excavation



## Board of Director Changes

Director Jim Collins' last day as Hull's City Administrator was February 18. He accepted the position of City Administrator in Garner, IA, near his hometown of Mason City. Jim joined the Board in December 2017. "Best wishes to Jim and our thanks for

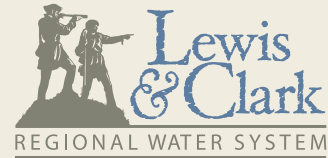
his service, including being the driving force behind our annual Investment Challenge," said Chairman Murray Hulstein. Hull Mayor Arlan Moss is serving on the Board on a short-term basis until a new City Administrator is hired.



Jim Collins



Mary McClung (left) and Nolan Meyer



Director Mary McClung's last day as Harrisburg's Director of Finance was on March 31. She and her husband are enjoying their well-deserved retirements. A Harrisburg native, Mary has served on the Board since 2003 and was attending meetings prior to that. "Mary has seen and helped usher in tremendous growth to the community through the years. Water has been a key part of that growth and we greatly appreciate her long-time commitment to helping see this project through. We wish her the very best," said Hulstein.

Harrisburg's Water Supervisor Nolan Meyer was appointed to the Board. Nolan is also a Harrisburg native and has worked for the City since 2020. He has been attending Board meetings the past year to prepare for the transition. Welcome aboard, Nolan!

Candy Van Dam of Insight Marketing Design has been a key part of L&C's team since 2005. Insight hosts L&C's website, does the layout for the quarterly newsletter and designed L&C's explorer logo. Candy also retired on March 31. "Insight has been fantastic to work with through the years, and Candy has been a big part of that. Our thanks and appreciation to Candy for her great work behind the scenes," said Executive Director Troy Larson.



Candy Van Dam

## Easement Acquisition Nearing Conclusion

Change Made to Sibley's Connection



Mike Adams and JC Carmichael, JCG Land Acquisition land agents, completed easement acquisition on the middle 32-miles of the Madison service line last fall and this spring completed easement acquisition on the 17-miles between Hull and Sheldon. "The team at JCG has done a remarkable job through the years and deserve a lot of credit for helping us get to where we are today," said Executive Director Troy Larson.

Banner engineers recently started preliminary design work on the Sibley service line, which extends south from the Minnesota Transmission Line. Land agents should be in a position to start acquiring easements this summer. **The Sibley service line is the last segment for easement acquisition in the entire project. To date just over \$21.5M has been spent on the purchase of easements and fee title sites since work began in 2004.**



Left to right: Operations Manager Jim Auen and Banner's Scott Vander Meulen, Kristin Bisgard and Tim Conner at the base of the Sibley water tower, which was to be the connection point but has now been moved to the northeast part of town

The engineers and staff drove the Sibley service line on November 8. A few minor changes were made to the route to avoid wetlands, but a significant cost-saving change was made based on feedback from Sibley officials. Instead of connecting to their water tower in the southeast part of town as originally planned, Sibley officials have recently made improvements to their infrastructure that will allow them to connect to L&C on the northeast part of town. "This will save a lot of money by eliminating the need to go through town, as well as under railroad tracks. Our thanks to Sibley officials for identifying this change." said Larson.

## Adrian Meter Pump Station

Director Larry Pedley of Sibley took this sunset photo of the meter building/pump station east of Adrian that serves as a connection point for Lincoln Pipestone RWS



## Collector Well Facing Delays

The Site B collector well is really taking shape. After completing the buttresses and grade beams for the floor of the pump house, the underground piping and electrical conduit were installed and the floor was poured. The 24 prefabricated wall panels for the pump house were then erected and Welfl is now working on the roof. They will then shift their focus to installing the interior piping, electrical and controls. Next they will install the pumps and then commence startup operations.

Commencing startup operations though on the 22 million gallon per day collector well will unfortunately take longer than expected. Staff and engineers were advised on April 7 by Welfl that an unexpected delay in the delivery of the surge tank will significantly delay them reaching substantial completion. The best case scenario is the collector well is fully operational by early August, but that could be pushed into September.

As a temporary solution to help meet summer demands, the engineers are modeling how much water the well can produce, without the surge tank, if one or two of the four pumps are operational. The risk of not having the surge tank online during a power outage will be evaluated as part of the model. It is anticipated around five million gallons of much-needed capacity could be pumped with minimal risk, but modeling is required to confirm this. The best case scenario is having one or two pumps operational by late June, but delays with other components could push this into July.

On June 8 of last year L&C hit a record 32 million gallons (MG) with only 32.2 MG of well capacity. “After that close call members did a good job of urging conservation to their customers, as well as relying more on other sources of water for those who had that option. We likely will be counting on them to take those measures again this summer until the collector well comes online,” said Auen.



## Three More Lime Drying Beds Planned

A byproduct of the treatment process is lime sludge, which is pumped into one of three drying beds (the bed used alternates each year). The cost to remove it is based on weight, so the dryer the lime sludge the less costly it is to remove. Based on the recently approved contract with Gacke Enterprises of Canton, SD, it costs L&C \$13.50



Banner's design and construction team standing next to one of the drying beds includes (left to right): Weston Blasius, Kristin Bisgard, Cullen Kohles, Sara Pankonin and Alex Welbig. Sara is the lead engineer for the lime drying beds.

per ton to remove it. Gacke in turn sells it to farmers and various agriculture industries. In 2021 L&C produced an estimated 25,000 tons of "dried" lime sludge, which is directly tied to the amount of water produced. More water, more lime sludge.

For various reasons L&C is producing more lime sludge per 1,000 gallons than anticipated when the first three drying beds were constructed. Banner engineers have indicated two more drying beds are needed in order to handle the base capacity of 44.19 million gallons a day (MGD). In addition, a sixth bed is needed when the System is expanded to 60 MGD. The fourth and fifth beds will be paid for using federal funding, but the cost of the sixth bed will be covered by non-federal funds. Banner has indicated there will be "considerable savings" on the sixth drying bed if it is constructed at the same time as the other two beds. L&C is moving forward with plans to include the sixth drying bed as a bid alternate to the contract. Design is underway and the plan is to award the contract this fall.



## Additional Ground Water Rights Sought

L&C has a three part process it is pursuing to increase its **ground** water rights. The first part is to exercise its existing permits for additional ground water rights. The second part is to secure an additional 6.14 million gallons a day (MGD) of ground water rights in order to be able to deliver the 44.19 MGD of firm capacity as part of the base system. “Firm capacity” means well capacity with the largest vertical well out of service. The third part is to secure an additional 17.07 MGD of ground water rights in order to be able to deliver 60 MGD of firm capacity when the System is expanded. An application was submitted to the SD Water Rights Division (SDWRD) in March for the first two steps. An application for the third step will be submitted this summer and will require approval from the SD Legislature during the next session.

The SD Geological Survey (SDGS) held a video meeting on February 15 with L&C’s engineers and staff. They reviewed their recently completed modeling report of

the available ground water in the Missouri-Elk Point Aquifer, which is L&C’s water source. Their previous estimates indicated an average of 30% of the water for L&C’s wells was induced from the river, but their revised estimate from the new data shows an average of 75% induced from the river. SDGS’s report now goes to the SDWRD for approval. “If approved as anticipated, it means more ground water is available in the aquifer to be reserved, which hopefully bodes well for our request to secure additional **ground** water rights,” said Operations Manager Jim Auen.

As an insurance policy, L&C has a **surface** water right of 46.82 MGD that is being transferred from the East Dakota Water Development District. “Modifying our system to use surface water would be an expensive proposition, so hopefully we do not have to go down that road but good to know we have it in our back pocket just in case,” said Auen.



Data from the Site B collector well pump test is being used by SDGS in their analysis of how much of the well water is induced from the river

## Legislature Approves Noem's \$600 Million Water Proposal!

Lewis & Clark Anticipates Receiving \$15 Million



Governor Noem signs SB62 into law.

Without a single nay vote for final passage in either chamber, the Legislature passed Governor Kristi Noem's proposal to use \$600M of the state's American Rescue Plan Act (ARPA) funding for water projects! She signed the bill into law on March 22.

The SD Board of Water & Natural Resources will meet on April 12 and 13 to determine how much funding each applicant will receive. "Based on conversations with state officials, it is anticipated Lewis & Clark will be eligible to receive \$15M over two years. As with the Iowa ARPA funding, if South Dakota approves this funding it will help offset a portion of the estimated \$100M for the members to expand the System to 60 million gallons a day. This would directly benefit the households and businesses who purchase water from our 20 member cities and rural water systems. Our sincere thanks and appreciation to Governor Noem and the Legislature for making this funding available!" said Executive Director Troy Larson.

If approved an estimated \$1.5M would be used to construct the sixth lime drying bed (see page 9).

The remaining funds would go toward covering most of the estimated \$18.3M to add two more 1,250 h.p. pumps to the high service pump station and construct a second three million gallon clearwell. The existing three million gallon clearwell is circled below and shows where the second clearwell will be located to the south of the high service pump station.





46986 Monty Street  
Tea, SD 57064

## Operations Update

On Thanksgiving Day the power generator unit in one of the three backup generators went out. After getting quotes to refurbish the power generator unit at the CAT factory or purchase a new one, in March the decision was made to have it refurbished. "We fully expect the refurbished unit will be as good as a new one," said Operations Manager Jim Auen. The cost to refurbish is \$118,880 and will take six to eight weeks. A new unit would have cost close to double that and taken six months.



Power generator unit being removed from the backup generator

In March the staff drained and inspected the underground storage reservoir below the high service pump station at the plant. Previous inspections revealed significant corrosion on some of the piping and that has worsened. Banner's Adam Hanson was on hand to inspect the painted surfaces and is preparing a report detailing the degradation and possible mitigation. Sacrificial anodes were previously placed on some of the piping that is continuously submerged and that has helped slow the corrosion. The four high service pumps and two filter backwash pumps have significant corrosion on the piping sections above the water line, as seen circled in the photo to the right. "These six pumps will need to be pulled and refurbished one at a time once the two new ones are installed next year," said Auen.

