

# Explorer Summer 2020

## Lewis & Clark Celebrates Authorization Anniversary!

By Troy Larson, Executive Director

L&C was incorporated in January 1990 so we are celebrating our 30 year anniversary. However, probably a more important milestone is the 20 year anniversary of our congressional authorization being signed into law by President Clinton on July 13, 2000. If the project had never been authorized, incorporation would not have mattered.

The anniversary conjured up a lot of memories of the many battles by those who were deeply involved in the authorization effort. There were countless people involved during the 10 year authorization process, but directors Gary Hanson of Sioux Falls, Charlie Kuehl of South Lincoln RWS, Red Arndt of Luverne, Randy Van Dyke of Iowa Lakes Regional Water, Don Habicht of Worthington and

Lyle Trautman of Lincoln Pipestone RWS, along with executive director Pam Bonrud, engineer Dave Odens and lobbyist Larry Kast, were the core group who stormed the halls of Capitol Hill.

In a key hearing of the Senate Energy & Natural Resources Committee's Water and Power Subcommittee in May 1999, two Bureau of Reclamation (BoR) officials were sitting in the hearing room ready to testify against L&C's authorization. Senator Majority Leader Tom Daschle contacted White House Chief of Staff Leon Panetta to make a last minute appeal to convince the administration to instead testify in support of the project. L&C officials fondly recall

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Anniversary cake is served! These officials were involved with their respective entities when the project was authorized 20 years ago (left to right): South Lincoln RWS's Ralph Hammer, Sioux Center's Murray Hulstein, Tea's Sid Munson, Sibley's Larry Pedley, Luverne's Red Arndt, Banner's Tim Conner, Rock Rapids' Jim Hoyer and Lincoln Pipestone RWS's Jerry Lonneman. Not pictured Worthington's Scott Hain.



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one BoR official receiving a telephone call and leaving the room. After returning they watched the two officials scramble to cross out much of the prepared testimony and write in the new testimony. They overheard the one official who was not on the telephone call asking the other, "Are you sure?!" There was great surprise in the room when BoR testified in support of L&C's authorization. In addition to Daschle, Senators Chuck Grassley, Tim Johnson and Rod Grams, as well as then-Congressman John Thune, also testified in support of L&C. Grassley remarked "This is the first time we have had the Hawkeyes, Jackrabbits and Gophers all in favor of one project!"

After the project was approved by the Senate in late 1999, which involved some maneuvering in the Military Construction Appropriations Bill, it was crunch time in the House the first half of 2000. Energy & Water Appropriations Subcommittee Chairman John Doolittle (R-CA) was firmly against the project. The turning point was a meeting the L&C delegation and Thune held with

Appropriations Committee Chairman Don Young (R-AK) in his office. Doolittle was also at the meeting. At the conclusion Young told Doolittle "John, I think you need to help these nice folks." And that was that. Doolittle had to offer the L&C provision on the House floor authorizing the project after doing everything in his power to undermine it. Priceless!

I was State Director for Congressman Thune at the time. Although not involved with the authorization, I had a front row seat to witness the remarkable persistence and tenacity by the local and federal officials to turn this pipe dream into a reality. We have experienced plenty of construction and funding challenges, but those pale in comparison to the Herculean effort it took to authorize the project. I often say we are standing on the shoulders of giants. A big thank you to everyone on the local and federal level who worked so incredibly hard for over ten years to secure congressional authorization! We could "dolittle" without it.



Van Dyke, Bonrud, Luverne Mayor Bill Weber and Hanson testify before a Senate Forest and Public Lands Management subcommittee hearing in 1996



Arndt, Bonrud, Chairman Young, Thune, Odens, Kuehl and Van Dyke in Young's office after a meeting that was the turning point for House authorization

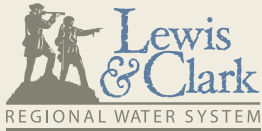
## Delegation Working to Increase FY21 Funding

For the third year in a row the administration only included \$100,000 for L&C in its proposed FY21 Budget. As they have done for the last decade, the tristate delegation is again working across state and party lines to increase funding for the Bureau of Reclamation's Rural Water Program. The House passed its Energy & Water Appropriations Bill on August 7, which includes an additional \$100M for the Program. The Senate has not yet acted on their version. Last year Congress approved

an additional \$117.3M for the Program, compared to \$98.7M in FY19 and \$66.5M in FY18. Not including reprogrammed funds, L&C ultimately received \$18M in FY20, \$15M in FY19 and \$14.8M in FY18. "We cannot thank our tristate delegation enough for continuing to go to bat for us! Their strong bipartisan support through the years is the main reason the project is as far along as it is," said Executive Director Troy Larson.



## 30th Annual Membership Meeting



Instead of a big to-do to celebrate L&C's 30th Annual Membership Meeting, COVID-19 forced L&C to

cancel its normally planned event. The annual meeting, which is required by the bylaws, only took five minutes as delegates joined by telephone and in-person at L&C's office on June 25 prior to the monthly board meeting to approve last year's annual meeting minutes.

While everyone looks forward to hopefully gathering together again next year, there were some silver linings. It obviously took virtually no planning and organizing for the five-minute meeting compared to the usual affair at the Tea Events Hall, which the staff did not mind, and the directors did not seem to mind Executive Director Troy Larson handing out his project update instead of giving a 20-minute presentation. 😊 Plus, nobody was asked to help sponsor the event. The 30th Annual Membership Meeting was one for the record books in more ways than one!

## Iowa Members & Legislators Discuss Upcoming Session

During the last legislative session L&C's request for a \$1.7M "federal funding advance" was a COVID-19 casualty; \$70M in projected revenue was removed from the Infrastructure Budget. Although Governor Kim Reynolds and local legislators advocated for keeping the L&C funding, the headwinds were too strong. Vice-Chairman Murray Hulstein of Sioux Center said, "Without the pandemic local legislators said we would have been in good shape. Thank you to the governor and legislators for going to bat for us! We know coming up short was not for lack of effort. Thanks as well to Senator Randy Feenstra and Rep. Dan Huseman for their long-time support and leadership!" This was their last session as the former runs for Congress and the latter retires.

Officials from Hull, Sheldon, Sibley and Sioux Center met on August 18 in Sheldon with four legislators and two legislators-elect (unopposed in the general election) to provide a project update and discuss whether to make another federal funding advance request this session. "They provided helpful feedback and reiterated their strong support for Lewis & Clark given the significant economic development and quality of life impacts to northwest Iowa. No final decisions were made as much could change prior to January, but for now they encouraged us to plan on making another federal funding advance request. We will continue to work with Governor Reynolds and our legislators as the session approaches" said Hulstein.



Participants in the Sheldon legislative meeting (left to right): Sioux Center's Murray Hulstein, Sheldon's Sam Kooiker, Sibley's Larry Pedley, Sibley's Susan Sembach, Sibley's Cory Dykstra, Sibley Mayor Jerry Johnson (purple shirt), Sioux Center's Scott Wynja, Senator-Elect Jeff Taylor, Sheldon's Todd Uhl, Rep.-Elect Dennis Bush, Sioux Center's Adam Fedders, Rep. Dan Huseman, Hull Mayor Arlan Moss, Rep. Skyler Wheeler, Hull's Jim Collins, Senator Zach Whiting, L&C's Troy Larson, Rep. Jacob Bossman, Katie Graham (gov't relations), Sibley's Glenn Anderson and Paula Dierenfeld (gov't relations). Not pictured Rep. John Wills.

## Members Consider System Expansion

It has long been understood by the members that the System could be expanded from 45 million gallons a day (MGD) to 60. Banner and HDR engineers completed their report on the infrastructure needed for the 15 MGD expansion, as well as each member's proportional share of the cost and capacity. This report was shared with the Board of Directors on February 27.

Participation is voluntary, with the members covering 100 percent of the estimated \$85M price tag. "Timing for the expansion has not yet been decided, but I believe a reasonable guess is within the next eight to ten years. The directors are encouraged to visit with their governing bodies in the months ahead to gauge possible interest. By the end of this year we expect to have straw poll results of who is tentatively in or out," said Executive Director Troy Larson.



Banner's Kristin Bisgard (center background) shares a report with the Board of Directors on expanding the System

Preliminary discussions have taken place on what is being called "Lewis & Clark II", an expansion of the System beyond 60 MGD. However, initial indications are such an expansion is not economically feasible without state and/or federal grants. One expansion at a time though...

## Easement Acquisition Update



Mike Adams

Easement acquisition recently began on the middle three segments of the Madison service line; a combined 32 miles. Based on the funding source, those easements need to be acquired by mid-spring. Easement acquisition is expected to start this fall on the 17 mile segment between Hull and Sheldon, including the purchase of a site for a water tower west of Sheldon.

L&C could not construct a pipeline without purchasing easements for the pipeline and fee title sites for water storage, pump stations and meter buildings from cooperative landowners. That starts with having an

effective land agent. Mike Adams from JCG Land Services, headquartered in Nevada, IA near Ames, has been acquiring easements for L&C since 2004. He has acquired approximately 90% of all L&C's easements, which is roughly 1,200 easements and fee title sites. "Mike is one of the best in the business. He has overcome more seemingly insurmountable challenges than we can count. We have many people who play important roles behind the scenes and do not get a lot of credit. However, it is hard to imagine someone who fits that bill more than Mike. He just flat out gets the job done and we cannot thank him enough!", said Executive Director Troy Larson.

Mike is originally from Colorado and has worked for JCG for 20 years. In his younger days he rode bulls and saddle broncs. Good practice for easement acquisition!



## Iowa Transmission Line Construction Progressing

The close to 34 miles of transmission line between Beresford and Sioux Center was divided into three contracts. Carstensen Contracting of Dell Rapids, SD was the low bidder on all three; combined just over \$37M. Construction has been progressing very well thanks to favorable weather conditions.

**South Dakota – Segment 12:** Carstensen is nearing completion on this \$9.84M contract for 11.2 miles of 24 inch diameter PVC pipe. They skipped over several low areas that were too wet last year. In late July they resumed work on the approximately 10,000 feet of pipe left to construct. They anticipate reaching substantial completion in October.

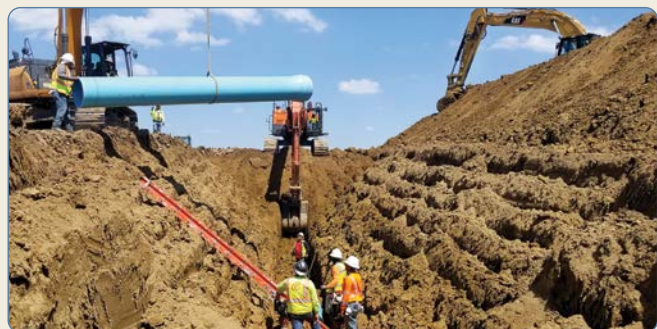
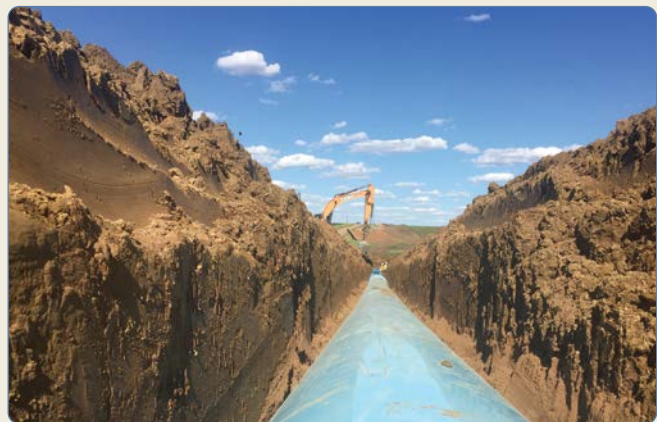
**Iowa – Segment 2:** Construction started in early June on this \$8.25M contract for 10 miles of 24 inch diameter PVC pipe. Carstensen started at Sioux Center and is working westward. As of mid-August they have constructed seven miles. December 2021 is the substantial completion deadline.

**Iowa – Segment 3:** Construction is expected to begin in October on the middle 12.6 miles between Beresford and Sioux Center. Carstensen will start with the Big Sioux River crossing. Because of the higher operating pressures in this segment, instead of PVC the 24 inch diameter pipe is mainly ductile iron, with steel being used for the road, railroad track, and river/creek crossings. December 2021 is the substantial completion deadline on this \$18.98M contract.

In addition to the pipeline, Union County water tower (page 6) and collector well (page 7), three other projects need to be completed before L&C can deliver water to Sioux Center and Hull – the Sioux Center meter building, add an electrical room and a chemical feed room to the Hull meter building, and add pumps to the Beresford pump station. These three projects will be combined into one contract and bid as soon as the federal FY21 budget is approved. Based on recent federal funding levels, it is estimated water should be flowing to Sioux Center and Hull by late spring of 2023.



Construction on IA-Segment 2 near Sioux Center



## Work Halted on Union County Water Tower

Construction started in early June on the 2.5 million gallon water tower on the southeast side of Beresford. When completed the tower will be 220 feet at its peak. According to officials from Caldwell Tanks of Louisville, it will be the tallest 2.5 million gallon water tower in the nation. This \$6,773,000 contract was awarded in February, work started on the foundation in early June, and work was halted on July 7.

L&C will need to switch to a driven steel H-pile system for the foundation, instead of the planned auger cast pile system. The Board approved a \$1,039,188 change order and seven month time extension on August 14. Work will resume in late August. "Sioux Center and Hull were expecting to be connected by late 2022, but this delay will push the schedule back to late spring 2023. Very disappointing but fortunately the winter and spring are not high water usage times for those communities so the delay is not expected to have an adverse impact. Much more concerning is the price tag for the change order, but we had no choice" said Executive Director Troy Larson.

The glacial till at this location can be described as the two hard pieces of an Oreo cookie. In the middle is a soft filling called glacial fluvial. Based on three test bores, which is more than normal for a parcel this size, the firmness of the glacial fluvial was deemed satisfactory by GeoTek to hold the grout in place for the auger cast pile system, which involves drilling a hole and then filling the

hole with concrete as the drill is slowly pulled out to form a concrete column that is roughly 100 feet deep.

In what is being called a "phenomenon" by GeoTek and is not something they have seen in the past, the firmness of the glacial fluvial is not consistent. In some spots the auger cast pilings were constructed just fine, but in other places the grout was basically spilling into the layer of glacial fluvial and not holding its column shape. This in turn made it nearly impossible for adjacent pilings to be drilled because of the seepage of grout into those areas. Subsequent geotechnical testing confirmed inconsistencies of the glacial fluvial that were not discovered in the test bores. Shifting the tower on the current site was ruled out as an option, and moving to an entirely different site is not an option because of the elevation changes.

The driven steel H-pile system involves driving steel pilings 100 feet into the ground. Of the 177 auger cast pilings that were needed, 31 were successfully completed before work was halted (12 failed). "Those 31 pilings unfortunately cannot be incorporated into the revised plan because the two systems work entirely different. "If we knew then what we know now we would have still selected this location and specified the driven steel H-pile system, so the net effect of this change order is a seven month delay and the loss of an estimated \$488,000 that was spent on the failed auger cast pile system. Blame it on the glaciers," said Larson.



Drilling a piling outside of Beresford using the auger cast system before work was halted



## Collector Well Construction Underway

A \$10.4M contract was awarded on March 26 to Welfl Construction of Yankton, SD for a radial collector well that is estimated to produce 16 million gallons a day. By comparison L&C's 11 vertical wells each produce in the range of 3 million gallons a day. Added capacity is needed as more members are connected, as well as the connected members utilizing more of their reserved capacity. The current substantial completion deadline is April 2022.

Construction started in early June and is going well, with the exception of hitting and removing about 16 feet of buried logs and stumps that were part of the Highway 19 construction many years ago. The collector well will be 100 feet deep and include 12 ports for the horizontal laterals. Ten laterals will be constructed and the other two ports will be left empty for future expansion as needed. Each lateral will be 20 inches in diameter and extend horizontally 185 feet from the caisson, which is the middle vertical shaft. The caisson is approximately

120 feet from the river. Three of the ten laterals will extend under the riverbed to varying lengths.

There will be three 350 h.p. vertical turbine pumps in the well house, with space to add a fourth in the future. L&C's various well sites along the riverbank are designated by the letters A (northernmost) through E (southernmost near the Vermillion-Newcastle Bridge). Site B is the location of the collector well.

Below and Right:  
The circles are the lateral ports



Below: One of many stumps removed during excavation





46986 Monty Street  
Tea, SD 57064

## Operations Update

June 17 set a daily demand record of 25.1 million gallons. The previous record of 23.7 million gallons was set in July 2019, which was beaten on four consecutive days the first week in June before the most recent record. Water demand is up 2.5% from January 1 to July 31 when compared to the same period last year.

Lime sludge is a byproduct of the treatment process and it has various agricultural applications. Improvements were made in previous years to the north and south drying beds to ensure they dry the sludge more

effectively so it can be removed from the beds. The same improvements still need to be made to the middle drying bed. "Gacke Enterprises of Canton has been working the last couple years to remove an estimated 62,000 tons of sludge from the middle drying bed as conditions have allowed. They have about 16,000 tons to go as of mid-August. We are hopeful the weather will allow them to remove the last of the lime in the next month or two so we can award the contract for the improvements," said Operations Manager Jim Auen.

