Utilities Section Newsletter

League of Nebraska Municipalities

September 2023

Do you know about decreased flow?

By Monte Dakan, Sales Manager, Johnson Service Company

If you have been in the wastewater industry for more than 10 years, you have seen an increase in the need for sanitary sewer maintenance. Is this just a trend? Over the past 30 years, we have seen a decline in water flow in our sanitary sewer systems. This is greatly due to the Energy Policy Act (EPAct) of 1992.

Here is a link for more information on the EPAct: https://www.usbr.gov/power/legislation/epa92.pdf.

The EPAct of 1992 required the installation of toilets that used no more than 1.6 gallons of water per flush, or 54 percent less water than the 3.5 gallons-per-flush toilets found prior to the legislation. These new requirements have saved an estimated **4.6 billion gallons of water each day** nationwide. The EPAct also set national water efficiency standards for faucets, showerheads, and high-efficiency standards on appliances like washing machines and dishwashers. New toilet designs are emerging, reducing these flows to 1.28 gallons-per-flush and even as low as 0.8 gallons-per-flush.

The minimum self-cleaning flow standard for an eight inch sanitary sewer pipe is two-feet-per-second. *(According to NDEE Title 123 - Rules and Regulations For The Design, Operation And Maintenance Of Wastewater Works, Chapter 5 - Design Standards)* If this minimum flow is not obtained, the materials flushed down our systems will not float and will settle to the bottom of the pipe.

So, here is the scenario we are in. Over the past 30 years, these standards have reduced the amount of water being used per household, business, etc. Even in the smallest communities in the Midwest, enough time has passed that most homes have upgraded their toilets, fixtures, and appliances so now we are experiencing the effect of this policy in our sanitary sewer systems. Don't get me wrong, these are all great efficiency standards for water usage but when it comes to our sanitary sewer systems, this reduction of water can cause an

increase in backups and other sewer issues. When you add in the use of wet wipes and other materials that do not process well through your sanitary sewer system, it increases these issues greatly.

Nearly all systems in use today in our state were installed prior to these efficiency standards. As a result, we must maintain our systems differently than we had in the past. The removal of debris from sanitary sewers has become the new standard. From small towns that have had a continued reduction in population to larger communities that continue to grow with new subdivisions and development, we are all dealing with a lack of flow in our sewer systems.

As we discussed in the May 2023 issue of the *Utilities Section Newsletter* (Look out Below), the evaluation of your system, whether that be a full CCTV pipe inspection or a manhole inspection program, will help you find these inefficiencies. Identifying and resolving these inefficiencies will make your system work more efficiently and help prevent issues due to today's decreased flows.

Credit hours reminder

The 2023 Snowball Conference and the 2023 Utilities/Public Works Section Annual Conference water and wastewater hours are posted on the League of Nebraska Municipalities website at www.lonm.org/utilities/water-and-wastewater-credit-hours.html.

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UTILITIES SECTION

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Nebraska Broadband Office invites comment on new statewide broadband map

The Nebraska Broadband Office recently announced the availability of the new Nebraska Broadband Availability Map. The GIS map represents all served, underserved, and unserved broadband serviceable locations across the state.

As part of the map availability, there will be ongoing public engagement across the state including a series of eight public meetings and an open comment period from Sept. 14 to Oct. 14. During the open comment period, the public will be asked to provide comments on the broadband map, including searching their addresses to verify level of highspeed internet access at their homes/businesses.

Opportunities are available to submit public comments online ndot.info/community or in-person at one of the following meetings hosted by the Nebraska Broadband Office:

- **Grand Island,** Sept. 27, 4-6 pm
  Bosselman Conference Center
  700 E Stolley Park Rd.
- **Lincoln,** Sept. 28, 4-6 pm
  NDOT Central Headquarters
  1500 Nebraska Pkwy.
- **Valentine,** Oct. 3, 4-6 pm
  Niobrara Lodge
  803 E Hwy 20
- **Gering,** Oct. 4, 4-6 pm
  NDOT District 5 Headquarters
  140375 Rundell Rd.
- **North Platte,** Oct. 9, 4-6 pm
  Holiday Inn Express
  300 Holiday Frontage Rd.
- **McCook,** Oct. 10, 5-7 pm
  Cobblestone Inn
  1301 US-83

Meetings are open to the public and will include a map-focused discussion, as well as provide an opportunity to learn about broadband programs and buildout across the state and provide input into digital access, affordability and need for technical skills to create equitable distribution of resources.

For those who are unable to attend the meetings or open comment periods and want to learn more about high-speed internet access in Nebraska, visit ndot.info/community to review information and provide feedback. **Contact:** Jeni Campana, 402-479-4416.

Utilities Section Executive Board

Nebraska utilities history – Milford

The Utilities Section Newsletter will continue to feature histories of both utilities and associate members. Any historical data and/or photos of your utilities, a specific facility, or articles already written are welcome, along with permission to print. If you have questions, contact Rob at 402-476-2829 or robp@lonm.org.

By Rob Pierce, Utilities Field Rep./Training Coordinator

Milford is located in Seward County. The county was initially called Greene County when formed March 16, 1855, from Cass and Pierce Counties. On Jan. 26, 1856, the county boundaries were redefined, gaining some from Pierce, York (Clay), and Saline Counties before those counties were relocated. Early settlers were in the area by 1856. A freight road from Nebraska City to Fort Kearney being located about 1858 and by 1860, was located to the south, crossing the Big Blue River near the settlement of Camden, which had a post office by September 1862.

Jonathan L. Davison discovered the future townsite while guiding a westward party. He initially located a road ranch/trading post west of the crossing at Camden (1862), but later moved to a site about five miles north where he established a post office April 24, 1864. By 1865, a bridge had been built over the Blue River which was near an early natural limestone river crossing. Seward County was beginning to organize in 1865, a mill was established by spring of 1866, and a townsite was platted. In October 1867, the first Seward County seat election was held with Milford winning over Seward (2nd) and Camden (3rd). The Quenchaqua Mill was built in 1867, the first store was built in 1868, and School District #1 was formed. By 1870, businesses included two general stores, a mill, a drug store, and the *Blue Valley Record* newspaper was established in December. Milford held the county seat until a special election was held Oct. 10, 1871, with Seward winning by 20 votes. In 1875, a group from Lincoln and Milford proposed a company to develop waterpower on the Blue River.

The Atchison & Nebraska Railroad was built from Lincoln to Columbus via Milford with the first train rolling out of the area Oct. 21, 1879. When the railroad built through the area, a settlement on the north side of the Big Blue River called Grover was platted by L.D. Chaddoch in 1879. A post office was established in 1884 and this area first known as East Milford (1885-86), filed a petition to change the name to Cleveland in honor of President Grover Cleveland. The government rejected the name thus becoming Grover and was connected to Milford by two bridges across the Big Blue River. The north/south streets in Grover were Currency Ave., Lincoln Ave., Edison Ave., Utica Ave., and Alimo Ave. The east/west streets were Sheppard, Congress, Reynolds, Davison, Randall, and Front Streets. The railroad depot was located in the southern part of the community.

Milford water tower. 2022 photo.

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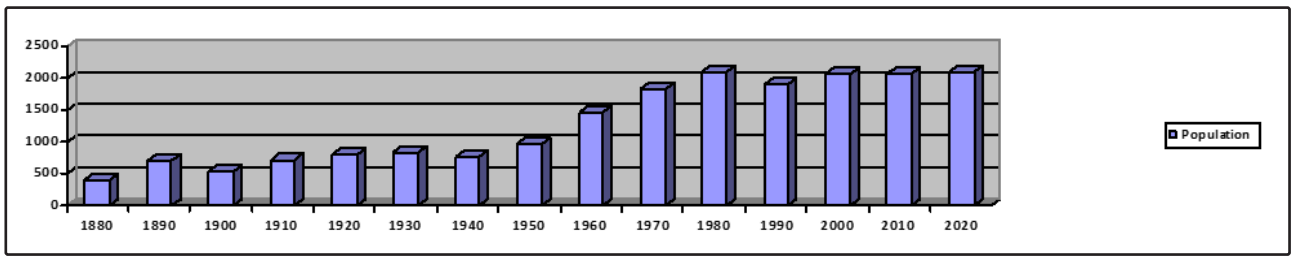

Nebraska utilities history – Milford

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By 1880, Milford's population was 402, the Saratoga Hotel was built, and there were about 40 businesses operating. In February 1882, the *Seward County Democrat* newspaper was started and in 1882, Milford was incorporated as a village. On Nov. 3, 1882, the mill that had been built in 1867 at the ford was destroyed by fire. The *Seward County Democrat* newspaper was sold in 1884 and the name was changed to the *Milford Ozone* newspaper, then shortly became the *Milford Nebraskan*. The first school building was erected in 1885 and the Quenohaque Flour Mill was operating with water wheel power of 100 horsepower (HP). The water system in 1885 consisted of a 26 foot (ft) elevated tank with a capacity of 1,500 barrels and three double hydrants on Main and 1st Streets. The Chicago Northwestern Railroad was built through Milford in 1887. The Nebraska State Bank of Milford was established in 1888, a sanatorium was built (1889), and the Nebraska Industrial Home for unwed mothers (located to the east of town on 40-acres) was built.

The population by 1890 was 700 with 50 businesses operating which later included a creamery and a brick/tile factory by 1892. A two-story frame school was erected and fire protection included a 250 ft hose on a reel. A sanatorium was in operation, which become a state soldiers' and sailors' home in 1895. *Interesting note: In 1895, an apparent gold discovery north of town caused 228 people to come to mine*

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for gold. One farmer three miles east claimed sand assayed from $70 to $196 per ton. The Nebraska State Industrial Home was operating and the Grand Hotel was built (1899). In November 1899, the town hall building was located on B Street and streets were lit by gas oil lamps. The fire department consisted of 20 volunteer members using 600 ft of new two-and-one-half-inch cotton hose, 200 ft old hose, and seven ladders on a hook/ladder cart. The waterworks consisted of a 32 horsepower (HP) rotary No. 4 pump with a capacity of 437 gallons per minute (gpm). The pump was available for use at any time for fire purposes only. The distribution system had one mile of three-, four-, and six-inch water pipes, and nine double and two single fire hydrants. The Quenohaqua Roller Mill & Elevator had a water-powered rotary wheel/pumphouse at the dam along with a gas engine house which ran day and night with waterpower of 130 HP. *One source noted that the Aztec words, "Shogo" meant "the very best," and Quenchaqua, "Number One."*

In 1900, the population was 542, the post office became a money order office, and by 1905, the village maintained a park, a water works, fire department, and a town hall building. In 1906, a three-story Shogo Springs bottling plant facility was shipping water and Shogo Island, north of the dam, supported ice skating and a picnic area. In February 1908, the Atchison and Nebraska Railroad property was transferred to Burlington Railway. Due to low ground, the track was relocated to cross the Big Blue River into Milford before turning north to Seward. The post office called Grover was discontinued in October 1908.

The population in 1910 was 716 and on Aug. 5, application No. 1006 was approved to the Burdette Boyes for 200 second feet from Big Blue River. The plant was built about four miles southeast of Milford. The Big Blue River City Waterworks had a rotary pump for fire purposes, with a six-inch water line running from the plant and connecting to the distribution system. The plant operated with a turbine wheelhouse with three turbines, a 150-HP engine which was located next to F. J. Johnson & Company Cereal Mill (Quenchaque Roller Mill).

The Nebraska Gas & Electric Company's power plant was built over the millrace of the old J.L. Davisson mill. A reinforced concrete dam provided the falls for the power plant which had a capacity of 170 kilowatts. In 1915, the municipal water system wells were pumped by force at the mill. A 50,000-gallon capacity water storage standpipe was used along with one trip pump/engine (capacity 280 gpm) to three-and-one-half miles of three- to six-inch diameter water mains, and 24 fire hydrants. The fire department had a hook/ladder truck, two chemical hand extinguishers, and a hose cart with 1,100 ft of cotton/rubber lined hose. In 1915, the Milford plant, owned by the Big Blue River Company, had lighting rates between $0.10-$0.15 per kWh and in 1917, a new Village Hall building was constructed. A water tower was built about 1918 by the Chicago Iron Works.

The population in 1920 was 792 and some businesses included two hotels, three grain elevators, two banks, two restaurants and an Opera House. The municipal water system had rates of $0.25 per 1,000 gallons with a minimum of $1.50 per quarter for 3,000 gallons. *One source*

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Nebraska utilities history – Milford

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noted Milford as the only "town" in Seward County to have two post offices, one was located in the community area north of the river called Grover which was about one-half mile from the post office called Milford. By 1927, the village had a brick paved "First Street," several miles of cement sidewalks, a bakery, two lumberyards, two furniture stores, a feed store, four general merchandise stores, two hardware stores, two hospitals and a grocery store. The privately owned power plant had electric rates of between $0.05 and $0.15 per kW.

The Milford bank closed in 1929 and in 1930, the population was 832. The village was using natural gas by 1932 and was a member of the League of Nebraska Municipalities. A new water source was being sought and in 1939, became home of the nation's first "trade" school. The electric system in 1936 was operated by the Iowa Nebraska Light & Power Company, which had a capacity of 170 kilowatts (kW) of hydroelectric power generation. The population decreased to 759 by 1940 and by 1941, Milford became the first site in the nation of vocational education with the establishment of the Nebraska Trade School. *(One source noted established in 1939.)* In the spring of 1941, Consumers Public Power District purchased the electric properties of Iowa-Nebraska Light & Power Company.

By 1950, the population was 951, the fire department had 36 volunteer firefighters by 1956, and the water system had 405 meters in service with rates at a minimum of $1.50 quarterly 6,000 gallons (gals.) then $0.20 per 1,000 gals. over 6,000 gals. quarterly. The electric system was owned by the village and supplied by Consumers Public Power District at the kilowatt hour (kWh) wholesale rate of an average of $0.16 with a meter deposit of $10. Natural gas was supplied by the Central Electric and Gas Company. Solid waste was collected by a private firm who charged each patron a monthly fee. By 1958, the water system had 500 meters in service with a deposit of $15. In 1958, a sewer project included a sewer outfall line and disposal plant which was maintained by a sewer charge of $1 per quarter.

In 1960, the population was 1,462, the cemetery was maintained by a 1.0 mill levy and a perpetual care fund.

The sewer rates were a $1 minimum up to 6,000 gals. then at $0.05 per 1,000 gals.

The municipal electrical system was supplied by Consumers Public Power District at the kWh whole-

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Water Workshops scheduled

The fall Water Operator Training Workshops are scheduled for Oct. 17 in Norfolk, Oct. 18 in South Sioux City, Dec. 5 in Lincoln, and Dec. 6 in Auburn.

The topics include sampling requirements and plans, sampling techniques/procedures, evaluations of sample site plans with an emphasis on lead/copper issues, along with a regulatory and industry update.

Be sure to register early so meal accommodations can be made.

Operators in attendance will receive five hours toward water grades 1-4 licenses and five hours toward wastewater license renewal.

Work Zone Safety Training Workshops scheduled

A Work Zone Training Workshop was held Aug. 17 in Wayne. Three more workshops are scheduled for Oct. 18 in South Sioux City, Nov. 7 in Blair, and Jan. 23, 2024, the day before the Snowball Wastewater Conference, in Kearney.

These workshops are designed to benefit all departments that set up or work in the streets/roadways (water, wastewater, streets, natural gas, and electric departments).

Megan Patent-Nygren (Nebraska LTAP) will cover work zone practices such as the fundamentals of temporary traffic control, control devices, site evaluations, general safety, flagging, and an update on MUTCD requirements. The last hour will cover an update on regulatory and industry issues.

Operators in attendance receive four hours for water grades 1-4, five hours for grade 6, and five hours toward wastewater license renewal.

These workshops are sponsored by the League of Nebraska Municipalities Utilities Section and the Nebraska Section of the American Water Works Association.

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sale average of $0.16 with the cost of street lighting at $100. Rates were first 10 kWh at $0.10, next 20 kWh at $0.05, next 170 kWh at $0.035, next 200 at $0.03, next 200 at $0.025, and over 600 $0.02 with a $1 minimum fee. Water rates were a minimum $1.50 for 6,000 gal., then $0.20 per 1,000 gals. A new high school was built in 1961-62 and in 1964, Milford become a city of the second class. The fire department had 29 firefighters in 1960 and by 1965, was housed in the City Hall building along with the public library.

In the 1970s, the Nebraska Game & Parks took over the old 100-150 ft hydroelectric dam (known as Hammond Dam), located three miles southeast of Milford, now called the Blue Bluffs Wildlife Management Area.

The council approved to lease the electrical distribution system to Nebraska Public Power District in 1971. The city would receive an annual lease payment of $21,200 plus 5 percent revenue tax payments and municipal discounts during the 25-year lease agreement. A new 3,750 kVA transformer was installed in the substation in 1971 for $32,800. The population increased from 1,846 in 1970 to 2,108 by 1980. The natural gas system in 1982 was operated/supplied by Minnegasco and the electric system was owned by the city and leased to Nebraska Public Power District.

A new senior center was dedicated in 1991 and by 1994, the natural gas system was operated/supplied by Peoples Natural Gas Company. A three-cell facultative controlled discharge lagoon system was completed in 1997 which was designed for 0.275 million gallons per day (MGD).

The population increased from 1,886 in 1990 to 2,070 in 2000 and the former bank building served as city hall and police office. In 2003, the natural gas system was operated/supplied by Aquila with propane supplied by Farmers Cooperative. A private company provided garbage collection service in 2003 and a new water tower was built in 2004-2005. Test wells were drilled in 2005 as the city was looking for a new well site. In 2006, the city hall building was found to have widespread water damage. Black Hills Energy began operating the natural gas system in 2009. The population in 2010 was 2,052 and Milford approved (323 to 162) a $800,000 bond issue to construct a new city hall/police station building in 2018. The water tower was repainted and the city maintained a City Park, a South City Park, and a Welch Park Ballfield Complex.

Today, Milford has a population of 2,086, has been incorporated for 140 years, and a member of the League of Nebraska Municipalities and Utilities Section.

References: Nebraska Directory of Municipal Officials, 1956, 1958, 1960, 1962, 1964-75, 1977-87, 1990-2023; Nebraska Municipal Review Magazine, 1925, 1928, 1931, 1934, 1946, 1960, 1964, 1967, 1971, 1972, 1982, 1986, 1989; Lincoln Journal Star Newspaper, 2005-2006, 2008, 2015, 2018-2020; General History of Seward County Nebraska, Sargent Leader Newspaper; Perkey's Nebraska Place Names, 1995; Water Resources of Nebraska, December 1936; Nebraska Traveler Magazine, 2003; Maps Tell Nebraska's History, 1991; NEDED Website, 2005; Wikipedia website, 2020; The Crete Democrat Newspaper, 1891-92; The History of Milford, Nebraska, 1964; Andrea's History of the State of Nebraska, 1882; History of Seward County Vol. VII, 1888; Electric Power Development in the United States, Dept. of Agriculture, January 1916; History of Seward County, Nebraska, 1888; History of Seward County, Nebraska and Reminiscences of Territorial History, Second Edition, 1905; Sanborn Maps, November 1892, November 1899, September 1910; Early days of Seward County, Nebraska, 1937; General History of Seward County, Nebraska, 1927; Directory of Electric Utilities in the United States, Federal Power Commission, 1941; and the Insurance Yearbook 1915-16 Fire and Marine 43rd Annual Issue, 1915.

Electric safety training

Upcoming electric safety training contracted through the Northeast Community College Job Training:

- **October/November 2023:** Use/Safety with Hand and Battery-Operated Tools, Pneumatic, and Hydraulic Energy Equipment Safety
- **December 2023/January 2024:** Grounding/Equipotential
- **February/March 2024:** Lock Out/Tag Out
- **April/May 2024:** Trenching, Boring, Shoring, and Confined Spaces

Additional topics may include CPR/First Aid, Nebraska Flagger Training, and Forklift Training.

Nebraska utilities history – Nebraska City

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By Rob Pierce, Utilities Field Rep./Training Coordinator

Nebraska City, located in Otoe County, saw the first steamboat recorded this far north on the Missouri River about 1819. The area was noted by the Lewis and Clark Expedition in 1804-06 and sited for a fort by Colonel Stephen Kearny and Nathan Boone in 1838. Ferry boats operated on the river in the 1840s and the military began constructing a fort in May 1846. Construction was suspended until September 1847 when five companies (477 men), known as the "Oregon Battalion," occupied the site. The establishment of Fort Kearny brought the hauling of freight to the area. Six miles to the south at Minersville, a cable ferry operated (1850) with rates as high as $20 per wagon to the normal rate of $1.50-$4 per trip. Soon after Fort Kearny was established, it was determined a protective fort was needed further west and the fort was moved by May 1848.

The Nebraska Territory was organized May 30, 1854, with the first election held in December. Otoe County was created in 1854 with the passage of the Kansas-Nebraska bill and Table Creek was named the county seat.

The settlement known as Table Creek included a trading post with a post office established Dec. 20, 1853.

In June, the first steam ferry boat arrived and the townsite was surveyed July 10, 1854, and platted as Nebraska City. The old Pierce County was created Nov. 23, 1854, and renamed Otoe County for the former residents, Otoe Indians (also spelled Ottoe and Oto) in 1855. On March 2, 1855, Nebraska City was incorporated as a village by the Nebraska Territorial Legislature and later amended March 16, 1855. *(Note: according to Our Towns Series Book, it listed Jan. 26, 1856, as the incorporated date. On Dec. 31, 1857, a reincorporation also was noted.)* On March 14, 1855, the post office name officially changed to Nebraska City, and in April, lots were being sold in the new community. On March 16, 1855, Kearney City was incorporated. It was located southeast of Nebraska City, commonly known as Kearney Hill. On Jan. 26, 1856, South Nebraska City was organized and a

Nebraska City water tower.

fire department was formed (likely a bucket brigade) that year. Otoe County was officially organized by the first meeting of its Commissioners on Dec. 1, 1856. Nebraska City included the consolidation of Table Creek, South Nebraska City, Greggsport, Kearney City, and Prairie City all incorporated by 1857, were later merged under one name. The street grids identify some of the early communities as the streets for one ran parallel and perpendicular

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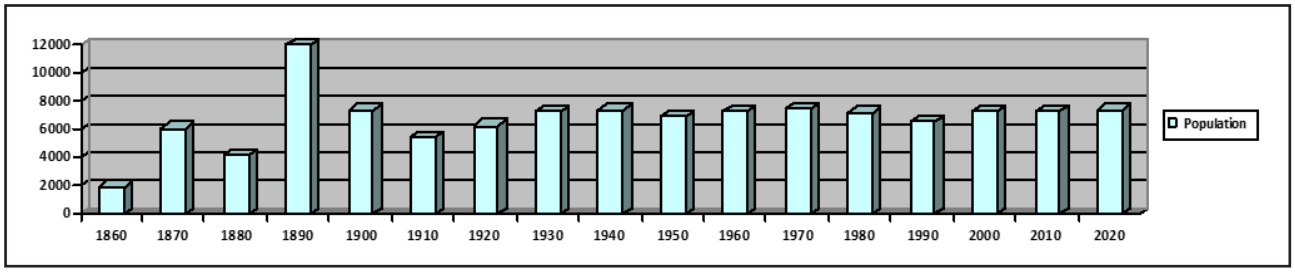

Nebraska utilities history – Nebraska City

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with the Missouri River. The Pioneer Brewery, located along South Table Creek, consisted of a main building (48 ft x 70 ft) to manufacture malt liquors and had a capacity of 20 barrels per day. In the spring of 1858, the outfitting business of Russell, Majors, and Waddell was located here (Western Wagon Train Transportation Operation). With the discovery of gold at Pikes Peak in 1859, a cutoff road was established in 1860 to the new Fort Kearny.

Otoe University was formed in 1859 and by 1860, the population was 1,922. In the spring of 1860, movement was made to establish a telegraph in the area and by September, a telegraph office opened. On Nov. 28, 1861, a Kearney Heights meeting was held to organize a Hook & Ladder Company. The Nebraska City Fire Company No. 1 was organized in 1865 and in 1867, contracted the purchase of a steam fire engine. A ladder wagon was in use by 1868 and in 1869, the Great Western Fire Company No. 1 was organized. The Roos Brewery was built in 1863, a sawmill was established in 1864, and a school was built for $31,000 (noted as the first such structure west of the Missouri River). The two-story Georgian style brick Otoe County Courthouse (82 ft x 46 ft) was built in 1864 or 1865 (the oldest public building in Nebraska). *Another source noted the courthouse was completed in December 1866 for $35,000.* The Wale's Iron Foundry moved to town in 1866 and operated until 1870. The cigar factory was established

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(1867) along with a flour mill in 1868. A bill was introduced in the Legislature in 1868 to establish a mail route from Nebraska City to Lincoln. In March 1869, the Nebraska City Gas Light Company was organized. The Missouri Valley Soap Works was established and Turner Hall was built. In the summer, the Third Ward School was erected ($10,000). By winter, a small carriage factory was started in connection with a livery and the freighting business began to fade in the 1860s. On March 1, 1867, Nebraska was created as the 37th state and in October, the Legislature appropriated $600 for the first fair held in Nebraska City. The Western Stage Company ran weekly from Nebraska City to Lincoln with about 25 passengers per week.

The population by 1870 was 6,050, the city council passed an ordinance for street lighting and the Nebraska City Gas Light Company was incorporated. A project was started for gas street lighting on Main Street. The Burlington & Missouri River Railroad was constructed in 1871 and supplies also were freighted by barge/ferry businesses. Water mains were laid and the waterworks was completed. The Nebraska City Elevator Company was organized (spring 1871), a bakery and four other buildings were destroyed by fire in 1871. In 1872, the post office block was destroyed by fire. The Otoe Hook & Ladder Co. #1, the Nebraska City Fire Company No. 1, and the Great Western Fire Company No. 1 all provided protection in different parts of the city. Gas lights were turned on for the first time in 1872. A small ag implement dealer became the Wesner & Company (later Reed Plow Co. in 1874), and the Nebraska City Distillery was built in 1873. A high school was built (1874) and a second mill was established by 1875. The Third Ward School was destroyed by fire, a Babcock fire engine was purchased ($2,600) and on March 6, 1875, the plow factory building was destroyed by fire.

The population decreased to 4,183 by 1880, a third mill was started along with a Nebraska & Iowa Packing Company and Mutual Telephone & Telegraph Company by 1881. In April 1881, the Missouri River flood caused the shutting off of the coal supply thus the manufacture of gas was shut down. A wing was added to the courthouse in 1882 and the Morton House Hotel opened in 1884. The Merchants National Bank was operating by 1885 and the Farmers Bank & Trust building was erected in 1886. The Morton-James Library was located on 2nd and Corso Streets and in 1887, the Burlington and Missouri Railroad built a roundhouse. In 1887, the Nebraska Water Company built a water system under a 20-year franchise. It was rebuilt in 1890 and controlled by Debenture Guarantee & Assurance Company of Chicago, Illinois. Water was supplied by the Missouri River, filtered, and pumped to settling basins and then to a standpipe (capacity 90,000 gallons). The company owned and operated the waterworks in connection with an electric lighting plant. Businesses in 1888 included 16 boot/shoe shops, 35 cigar/tobacco businesses, 10 clothing stores, 16 dry goods, 29 grocery stores, five gun shops, three harness shops, five laundries, two livery, seven meat markets, five millinery shops, four restaurants, two breweries, four brickyards,

Nebraska City power plant.

a broom factory, a cereal mill, a marble works, two slaughterhouses, three tin manufacturers, a flouring mill, three foundries/machine shops, two bottlers, and two movie theaters. Steinhart Park was established and in 1888, Nebraska City had a mule-drawn streetcar system. The new Nebraska City Light & Power Company planned to enlarge the plant in 1889, install an incandescent system to the present arc light plant of (Thomson-Houston system), and reorganize the old City Water Company of Nebraska.

By 1890, the population was 7,500 and the Nebraska City Water & Light Company was operating a water works which cost $200,000. During 1890, a Worthington pump was added and two settling basins were built with a capacity of six million gals., each have puddled banks and are lined with concrete. Some of the businesses in 1890 included a cigar manufacturer, a grocery, a bakery, a general store, a brick manufacturer, a millinery, a harness maker, a blacksmith, a lumberyard, Consolidated Tank Line, Chicago Packing & Provision Co., a saloon, Farmers House, a clothing store, Florence House, restaurants, American & Wells Fargo Co., Exchange Hotel, Grand Pacific Hotel, a confectionery, Nebraska City Manufacturing Co., an ice dealer, Nebraska City Omnibus Line, a carriage maker, Merchants National Bank, a brick/tiles manu-

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Nebraska utilities history – Nebraska City

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facturer, The Morton, a Nebraska City Distillery Co., Nebraska City Elevator Co., Nebraska City Cereal Co., Opera House, Marble Works, Steam Laundry, Pacific Express Co., Barnum Hotel, Standard Theater, and Thorp House. Carl Morton bought an existing Starch Manufacturing Company and the name was changed in 1890 to the Argo Starch Company. The Nebraska Bell Telephone Company took over from Mutual Telephone & Telegraph Company. The State Institute for the Blind was operating (1890) and in 1891, plans were made for constructing a three-story Opera House (cost $35,000). The water system in 1891 had eight miles of mains, 521 taps, 37 meters, and 81 hydrants. The Alcohol Distiller Company in 1893 turned 600 bushels of corn per day into pure bug juice selling for $0.15 per drink or two for $0.25. A cob pipe factory was operating by 1895 and Col. Hayward claimed to have Nebraska's first automobile. By 1895, the population was noted at 11,494 and a library was opened along with telephone lines installed from Tecumseh in 1898. In 1899, the Argo Starch Company merged with three other companies to form the United Starch Company.

The population by 1900 was 7,380 and on Dec. 1, 1901, the City Hall was damaged by fire ($10,000 loss).

The three-story City Hall was remodeled (cost $3,500) in 1902, with upper floor council chambers and city offices, second floor firefighter rooms and feed storage, along with ground floor fire hall and jail in back. On Jan. 4, 1902, the city hospital was established, the privately owned gas works reopened and was renamed the Nebraska City Gas Company. The Nebraska City Electric Railway Company issued $100,000 in bonds for a 50-year low rate of interest in 1902. One-half of the track was laid in the fall with the remainder in the spring along with a powerhouse. The city council requested 16 arc lamps to be installed. The Water & Light Company owners were a private firm of the New York Banking Firm of Watson, Down & Anderson, then later E.A. Potter & Samuel Insull-Midwest Utilities then Central Power Consumers. The Arbor Lodge (52-room mansion) was built in 1903 and in the fall, Central Avenue was repaved. The street fund was $2,100 in 1904 and a number of sidewalks and crossings were laid. In 1905, a new fire hall was built for $1,095 and the electric system had 24 arc lamps in the system lit from twilight to 1:30 a.m. every night, except when a full moon was shining. On July 20, 1906, the Gregory Vinegar Company was incorporated and in 1907, the gas company moved to 1004 Central Avenue and renamed Citizens Gas Light Company. In the fall of 1908, an improvement project for a concrete bridge, spanning South Table Creek and First Street, was in progress. City Hall was destroyed by fire in 1909 and the Board of Public Works was appointed to install a sanitary sewer system in the western portion of District #3 at an estimated cost of $10,412. The contract was awarded to G.A. Dunlap of Tecumseh for $9,242, with work to be completed in six months. In 1909, H.H. Hanks and Walter McNamara formed a company and petitioned the council for an electric light franchise.

By 1910, the population was 5,488, horse or mule driven streetcar service ended, the Nebraska City Telephone purchased by Nebraska Bell Telephone, and the city contracted for construction of a sanitary sewer system.

From 1900-1910, the fire department responded to 183 alarms with volunteer firefighters, a horse drawn hook & ladder cart with a hose cart, equipped with firefighting chemicals. A brick works plant was operating in 1910 and a new 50 ft steel span bridge was erected in 1912. The Lincoln Telegraph & Telephone purchased the telephone system from Nebraska Bell Telephone (1912). The new Nebraska City Water & Light Company was reorganized to the City Water Company. The city in 1914 eliminated the park commissioner position (street commissioner assumed those duties) and by 1915, Nebraska City become a city of the first class. The city purchased its first motorized firefighting vehicle in 1916, several streets were paved in 1917, and sewer bonds of $52,000 were sold to the Lincoln Trust Co. of Lincoln, Nebraska in 1919.

In 1920, the population was 6,279, an electric light plant was operating, and the Keystone Pipe Company completed a sewer project on the south side of city. In the 1920s, the Nebraska City Water & Light & Gas Company became the Central Power Company. The private electric firm in 1925 had rates of $15 per kilowatt (kW) and the private water system had rates of $0.30 per 1,000 gallons. In 1927, the Gas Company was purchased by the Water and Light Company.

By 1930, the population increased to 7,230 and the Central Power Company had rights to install natural gas in 1931. A library expansion project was underway in 1932, the Marcus Hotel was destroyed by

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Nebraska utilities history – Nebraska City

Continued from page 11

fire (1935), and by 1936 the Central Power Company had a capacity of 1,400 kW of steam power generation. The Apple Blossom Festival was celebrated in 1936 with an estimated 20,000-25,000 in attendance.

The population was 7,339 in 1940 and in 1941, the city purchased the gas & water systems from Consumers Public Power District for $250,000. Nebraska City established a municipal electric department (1944), and a Board of Public Works was created to operate the electric, gas, and water utilities. The city issued $950,000 in revenue bonds in 1945 to purchase the Consumers Public Power District properties in the Nebraska City district. By August, Nebraska City purchased the electric system from Consumers Public Power District along with electric systems in Bennett, Brock, Dunbar, Julian, Lorton, Otoe, Palmyra, and Unadilla for $918,868.

In 1950, a water project was started that consisted of a pumping plant and an elevated storage tank at a cost of $226,907. The power plant saw the initial operation of a 1.5-megawatt (MW) engine, followed by another 2.5 MW engine installed in 1955. By 1956, the city owned both diesel (cap. 5,500 kWh) and steam (cap. 2,500 kWh) electric plants with some current supplied by Consumers Public Power District at the wholesale cost of $0.01479 per kilowatt hour (kWh). The electric system consisted of 125.6 miles of lines with 4,175 meters in service. The cost of street lighting in 1956 was $11,061.81 and the cost of current for pumping water $9,278. Solid waste collection service was provided by a private collection service. In 1956, a water treatment plant was built, and the river water supply was discontinued and replaced by a well water. The water plant had a capacity of six million gallons per day (gpd) with 2,250 meters in service and a meter deposit of $3. Residential water rates were: first 1,000 gallons (gals.) at $0.0325 per 1,000 gals., next 2,000 gals. at $0.030 per 1,000, next 2,000 gals. at $0.025 per 1,000, next 3,000 gals. at $0.015 per 1,000 gals., next 40,000 gals. at $0.0125 per 1,000 gals., with an excess of 50,000 gals. at $0.095 per 1,000 gals. used per day with a minimum of $0.75 per month per meter. The cost of current for pumping water in 1958 was $9,278.

The population increased from 6,872 in 1950 to 7,252 in 1960 and the city auditorium was maintained from a one-half mill tax levy and income from rentals in 1962. A sewer disposal plant project was started in 1962 and the water plant had 2,477 meters in service with a meter deposit of $5 and a fire hydrant rental charge at $35 per year. In 1963, the city turned the operation of the sanitary sewer system to the Board of Public Works. In 1967-68, the 750,000-gallon elevated water storage tower was repainted along with a new water supply system and water treatment plant built. In November 1969,

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Crow Line: A line of positive communication that all can share

By Rob Pierce, Utilities Field Rep./Training Coordinator

Congratulations! Incorporation Anniversary Recognition: 110 years – Sprague (1913-village); 115 years – Maxwell (1908-village); 140 years – Guide Rock (1883-village); and 150 years – **North Platte** (1873-village).

Utilities Section members and associate members are bolded.

Do you, your department or facility have something to crow about – new hires, promotions, awards, certifications, anniversaries/milestones, accomplishments, grants/funding, or projects?

Let us help you celebrate events and accomplishments!

Please send information to any of the League/Utilities staff at info@lonm.org.

Nebraska utilities history – Nebraska City

Continued from page 12
bonds (about $20,000) were let for construction of a new swimming pool.

By 1970, the population was 7,441 and in 1972, a new addition was added to the 1956 water plant. Water was supplied by five one-million gpd wells located north of the city and there was a wastewater treatment plant project in 1979. An application to build another power plant was approved in 1974 with installation of a 6.5-megawatt dual fuel Enterprise engine by 1979. The population decreased from 7,127 in 1980 to 6,547 in 1990. The gas system in 1986 was operated by the city and supplied by Natural Gas Pipeline of America, Chicago, IL. In 1991, grant (bond) funded projects included a street improvement and storm sewer project. The Lied Lodge and Conference Center was built in 1994 and an airport project used federal and state money along with a $300,000 bond issue. The city in 1999 maintained over 300 acres of parks and has been a long-term member of Tree City USA. The city also operated a Rotating Bio-Contactor (RBC) sanitary sewer system designed for 2.11 mgd and used chlorine gas disinfection.

In 2000, the population was 7,228 and an airport improvement project included an expanded runway from 4,100-4,500 ft along with an automated weather system. A $1.8 million library expansion project was planned in 2000 to double the Morton-James Library from 6,395 square feet (sq ft) to 11,960 sq ft. The city operated two power plant facilities. Plant #1 had seven engines installed in 1953, 1955, 1957, 1964, 1970, 1974, and 1979 with a capacity of 24.60 megawatts. Plant #2 had three engines installed in 1998 with a capacity of about 13.8 megawatts. The electric system provided electric transmission and distribution service to Bennet, Brock, Douglas, Julian, Lorton, Nebraska City, Otoe, Palmyra, and Unadilla along with electric wholesale to Panama and Talmage. Two new municipal wells were drilled in 2001 for $400,000. In 2002, the city maintained five parks: Steinhart Park (54.4-acres), Wildwood Park (63.7-acres), Nuckolls's Square Park (1.7-acres), Kearney Hill Park (2-acres), and Greggsport Park (1.7-acres). There were three golf courses which include, Arbor Links, Table Creek, and Wildwood. The city in 2003 provided natural gas transmission and distribution service to Dunbar, Nebraska City, Syracuse, and Unadilla. In 2008, an entrance welcome sign was installed using the $2,400 Community Enhancement Program Funding grant.

The population was 7,289 in 2010 and the elevated water storage tower was cleaned and painted. About 2013, Tree Sculptures were provided by sponsors, painted by students about 2013, and were installed around town. Today, Nebraska City has a population of 7,322, has been incorporated since 1854, and is a League of Nebraska Municipalities and Utilities Section member.

References: Nebraska Directory of Municipal Officials, 1956-2023; Nebraska Municipal Review Magazine, 1925, 1950, 1971, 1972, 1982, 1988, 1991; Water Resources of Nebraska, December 1936; Nebraska Traveler Magazine, 2003; History of Nebraska City Nebraska 1900-1910, 1995; Nebraska City Internet Website, 2003-2004, 2010; Nebraska City News newspaper, 1905; Lincoln Journal Star Newspaper, 2003-2008, 2010-2011; Nebraska Forest Service Newsletter, April 2002; Public Power Magazine, Vol. 51, Number 1, January-February 1993; Department of Energy Website, 2004; Nebraska Our Towns... East Southeast, 1992; The Ansley Herald, 1931; Maps Tell Nebraska's History, 1991; NEDED Website, 2005; The Crete Democrat Newspaper, 1891; Municipal Journal and Engineering, 1909, 1912; Electrical Review Vol. 41, July 5 to December 27, 1902; Nebraska Gazetteer & Business Directory, 1890-91; The Electrical World, Technology & Engineering, Vol. 31, No. 1, January 1, 1889; Nebraska U. S. Census, 2010; Engineering & Contracting, Technology and Engineering, Habert Powers Gillette, 1917; The Electric World, Vol. 49, January 5 to June 29, 1907; Municipal Journal and Engineer, Vol. XXVII, No. 17, 1909; Public Power in Nebraska, 1962; and Nebraska Blue Book, 1924, 1928, 1936, 1946, 1978.

Nebraska City tree sculpture.

SAFETY/HEALTH CORNER

Proper lifting

By Rob Pierce, Utilities Field Rep./ Training Coordinator

Back injuries from lifting are one of the most common workplace injuries. About one quarter of all injuries include back injuries which resulted from improper or incorrect lifting techniques.

Get a good center of balance and lift by pushing/pulling with your legs. Knees should be bent, not your waist. Avoid reaching above your shoulders to lift – use a ladder. With bulky or heavy weights, seek assistance from another person or some type of mechanical aid, like a fork or scissor lift. Use your feet to turn, not your waist, and carry the load close to your body.

Often back injuries are slow to heal – if they do – so play it safe and follow proper lifting techniques!

Remember to recognize your employees' anniversary milestones. The Utilities Section provides certificates for 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60 and 65.

You can request them by contacting the League office by email brendah@lonm.org, fax 402-476-7052 or call 402-476-2829.

Water Workshop held in Grand Island

A Water Operator Training Workshop was held in Grand Island on Aug. 24. The workshop focused heavily on sampling programs, procedures with an emphasis on representative sampling procedures to ensure good quality drinking water.

Operators in attendance received five hours toward water grades 1-4 licenses and five hours toward wastewater license renewal.

This workshop was sponsored by the League of Nebraska Municipalities Utilities Section and the Nebraska Section of the American Water Works Association.

Classifieds: Job openings, items for sale

Apprentice Lineman. City of Benkelman is accepting applications for the position of Apprentice Lineman in the Electric Department. This position's responsibilities include, but aren't limited to: Construction and maintenance of overhead and underground electric distribution systems, operate a high lift bucket truck, digger derrick, and other equipment, assists other city operations, and perform other duties as required, available for 24-hour emergency calls. Requirements include high school graduation, ability to obtain a CDL license issued by the State of Nebraska within one year of hire. Excellent benefits package is included. Employment is contingent upon successful completion of a post-offer physical and drug test. Applications can be picked up at the City of Benkelman Office located at 126 7th Ave E, Benkelman, NE 69021 or by calling 308-423-2540. The City of Benkelman is an EOE.

Journeyman Lineman. Village of Morrill (Population 934) is accepting applications for the position of full-time Electric Journeyman Line Worker with a pay range of $22-$30 per hour DOQ. This individual will perform skilled line work in the operation, construction, maintenance and repair of overhead and underground electric distribution and transmission systems. A Class B CDL with Airbrakes is required. Applications, with resumes, will be accepted until the position is filled. A complete job description for this position and an application is available at www.villageofmorrill.com or at the Village Office located at 118 S Center Avenue, Morrill, NE. This position includes an excellent benefit package including health insurance, retirement, vacation, sick leave, and paid holidays.

Public Works Director. Gretna, is a booming City of the First Class located in Sarpy County and the Omaha Metro. With the expansion of the City's corporate limits and the opening of Gretna Crossing Park, the City is seeking a highly skilled person to oversee all aspects of the Gretna Public Works Department on a day-to-day basis. The Public Works Director is directly responsible for supervision of staff, functionality of all aspects of the department, and performance of senior-level professional work. This

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Backflow/Cross Connection Workshops held

Backflow Workshops were held Aug. 15 in Beatrice, Aug. 16 in Wayne, Aug. 22 in Ogallala and Aug. 23 in Grand Island with 140 in attendance. These workshops covered a historical backflow timeline, cross connection control program requirements, operating practices/procedures, troubleshooting, testing recordkeeping procedures, and safety. Instructors included: Fred Baumert, Greg Brekel, Tony Martinez, Jeff Edmondson, Tim Thares, and Rob Pierce. Operators in attendance received four hours for water grades 1-4, five hours for grade 6, and five hours toward wastewater license renewal. These workshops are sponsored by the League of Nebraska Municipalities Utilities Section and the Nebraska Section of the American Water Works Association. The next AWWA/LNM Backflow Workshops are scheduled for August 2024.

Operators who need grade 6 hours can still get up to five hours with the online webinars offered by the League. To access these webinars, contact the League office at 402-476-2829. Once registered, links will be sent to access the webinars. After viewing, a verification form, answers to the questions, and payment must be sent back to the League office in order for recertification credit to be turned in to NDEE. If you have questions, contact Rob at 402-432-9172.

Nebraska Breaktime Trivia "Just For Fun"

Q-1. What Nebraska community distributed pure "Shogo Lithia" bottled spring water throughout Nebraska?

Q-2. What Nebraska Railroad was known as the "Cowboy Line?"

Q-3. When was the last Nebraska State fair held in Omaha?

Q-4. Where in Nebraska is this auditorium located?

Answers on page 19.

September: Monthly celebration acknowledgments

National Preparedness Month www.ready.gov

Other Events recognized in September include Concussion Awareness Day (Sept. 15) and National Farm Safety and Health Week (Sept. 17-23).

Go to www.calendarr.com/united-states/observances-2023/ for a list of celebrations or events for every day of the year.

Nebraska utilities history – Fort Calhoun

The Utilities Section Newsletter will continue to feature histories of both utilities and associate members. Any historical data and/or photos of your utilities, a specific facility, or articles already written are welcome, along with permission to print. If you have questions, contact Rob at 402-476-2829 or robp@lonm.org.

By Rob Pierce, Utilities Field Rep./Training Coordinator

Fort Calhoun is located in Washington County and was one of the earliest settlements in Nebraska. Lewis & Clark held a council with members of the Oto and Missouria Native American Tribes on Aug. 3, 1804, on a bluff above the Missouri River. William Clark apparently recommended the high bluff overlooking the Missouri River to the U.S. Government as a suitable location to build a fort. In 1806, a trading post was founded and about 13 years later, President James Monroe dispatched a military expedition (the Yellowstone Expedition), led by Colonel Henry Atkinson, to establish a series of forts along the Missouri River. The purpose of these forts was to support the American fur trade and counteract British influence on the northern plains. The 6th U.S. Infantry and 1st Rifle Regiments made up the military portion of the expedition which arrived at the "Council Bluff" site Sept. 19 with a cantonment setup on the river bottoms below the bluffs. In the spring of 1820, the Missouri River flooded the cantonment, and the soldiers built a permanent camp atop "Council Bluff," which was named Fort Atkinson. This was the first major American fort west of the Missouri River in the unorganized region of the Louisiana Purchase of the United States. The fort had more than 1,000 residents along with a brickyard, lime kiln, stone quarry, grist mill, sawmill, cooper shop, and a school. Two trading posts were located to the south, Fort Lisa (1812) and Cabanne's Trading Post (1922), both were private fur trading establishments operated by major traders based in St. Louis, Missouri. The harsh winter of 1819-20 and insufficient supplies took a toll on the soldiers and the plans to establish more forts upstream were abandoned. *One source noted that the name "Fort Calhoun" first appeared on a map made by Major Long (1819-20), designating the fort ordered by Secretary of War, John Calhoun, to protect the fur trade. It does not appear on military records.* The camp instead was named "Fort Atkinson" in 1821 in honor of the first commander. Located just east of present-day Fort Calhoun, the fort was established in 1819-20 was abandoned by 1827, as

Fort Calhoun welcome sign.

soldiers were moved down river to Fort Leavenworth.

In 1847-48, Mormon farmers from "Winter Quarters" at Florence, were sent to the area and later to DeSoto to supply grain for their westbound caravans. They used brick and stone from the fort for some of their buildings.

The Nebraska Territory was organized May 30, 1854, and on Nov. 23, 1854, eight (original) counties were created. They were Burt, Cass, Dodge, Douglas, Otoe, Nemaha, Richardson, and Washington. In the summer of 1854, the Nebraska Territory was opened for settlement. *Note: Early maps show 24 counties in 1855, 31 by 1856, and 41 in 1860.*

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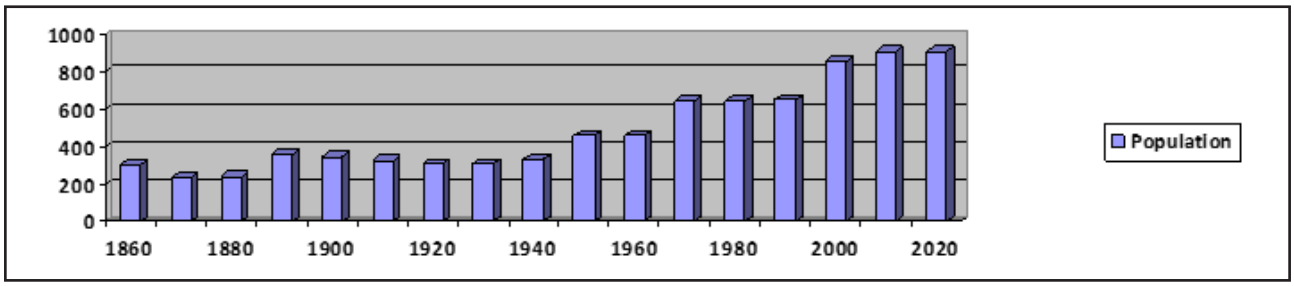

Nebraska utilities history – Fort Calhoun

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On Feb. 22, 1855, the legislature passed an act reorganizing Washington County, making Fort Calhoun the county seat. In March 1855, a town site was platted/surveyed near the old fort site and was named Fort Calhoun in honor of John C. Calhoun, a U.S. politician. A post office was established as Fort Calhoun on June 15, 1855, and immigration to the area increased with several families settling on claims. A hotel was contracted to be built by the town company and a new (24 ft x 48 ft) hotel was started in the summer and completed the next spring. A (16 ft x 20 ft) courthouse was built in 1856 on one of the public squares and the first district court in the county was held in June. A steam sawmill was erected, and a grocery was operating by 1856. *Confusion on my part as the incorporation date differs depending on which source is correct as dates noted include 1854, 1855, and January 1856 with the first board elected in 1857. My guess is on the January 1856 date as another source listed a town company incorporated (entered at the land office) in August 1857 and one listing 1858 as incorporated as a village by the Nebraska Territory Legislature.* The steamboat port of DeSoto, which established a post office March 2, 1855 and was a station on the Chicago & North Western Railroad line (named for Hernando De Soto), was named the Washington County seat in 1858. The Fort Calhoun flouring mills were erected in 1858 and put in operation (the Old Fort Calhoun steam mill was still in operation in 1828). In 1866, the county seat was moved back to Fort Calhoun and the population was 306 in the 1860 (first Nebraska) census. Fort Calhoun again lost the county seat in 1869 by popular vote to Blair, where it remains. The population remained steady at 236 in 1870 to 240 in 1880, although one source listed about 400. The flour mill was converted to a roller mill in 1883. The Washington County Bank was established in Fort Calhoun in 1889 and the population was 300 in 1890. Some of the other businesses included a blacksmith, a saloon, a general store, an ag implement business, and a railroad station. By 1900, the population was 346 and a two-story frame school was built. A Washington County Bank building was erected in 1905 for $20,000.

In 1910, the population was 324 and on Dec. 18, 1913, a fire department was organized with 20 members. In 1914, the department purchased a cart, ladder, and water buckets. The *Chronicle* newspaper was established and an electric light plant was constructed for $7,000. On Oct. 30, 1916, an application was made by the village to construct a transmission line from Florence to Fort Calhoun connecting with the Omaha Light & Power Company. By January 1917, electric lighting was provided via connection with the City of Omaha.

The population in 1920 was 309, the village had a two-story frame schoolhouse, and the 12th grade had been added. Businesses included a general merchandise, two banks, a meat market, a garage, two hotels, a milling business, and a lumberyard. In March 1920, the railroad was destroyed by fire and a new depot was built in the fall of 1928. The village sold the electric power plant in 1927 to the Nebraska Power Company. Electric current was provided via transmission lines in 1928 with rates of $0.13 per kilowatt hour (kWh). The public water plant had rates of $0.35 per 1,000 gallons (gals.).

In the 1930s, a hose cart was purchased for fire protection and a siren to replace the bell. The museum was established in 1938 and by 1940, the population increased slightly to 329. By 1946, the village purchased its first motorized Chevrolet fire truck for $3,611. The Omaha Public Power District (OPPD) which was created Dec. 2, 1946, acquired the property from the Nebraska Power Company (American Light & Power and subsidiary) on Oct. 19, 1946, for $42 million. The electric distribution system was now operated/supplied by OPPD.

The population increased to 458 in 1950 and in 1956, the cost of street lighting was $56.20 per month and the cost of current for pumping water was $58 per month. The water system had 120 meters in service with rates of $1.50 per 3,000 gals. and $0.30 per 1,000 gals. after 3,000 gallons. The fire department had 16 firefighters and in 1958, the rural fire department purchased a tanker truck.

The sewer system was under construction in 1960 and by 1962, was maintained by a tax levy and a sewer charge of $1.50 per month. A new elementary school was built (1962) along with gymnasium improvements.

The cost of street lighting in 1962 was $86.20 per month with the cost of current for pumping water at $73.30 per month. In 1964, construction started on a water improvement project (cost $36,000) with system improve-

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Nebraska utilities history – Fort Calhoun

Continued from page 17
ments consisting of a new 250,000 gallon water storage tank and new feeder lines. A new City/Fire Hall was built in 1965 for $25,000. A Class "A" pumper was purchased by the rural fire department in 1966 and in 1969, a rescue squad vehicle was purchased. Groundbreaking for the Fort Calhoun Nuclear Power Plant was held in February 1968. By 1970, the population was 642 and a new high school was built by 1972. Work on the wastewater treatment facility was underway in 1981 and the village soon was operating an activated sludge oxidation ditch system designed for 0.106 million gallons per day (mgd) using chlorine gas disinfection.

The population increased from 648 in 1990 to 856 in 2000 and the water system had a ground level water storage tank on the hill. The Metropolitan Utilities District (MUD) in 2004 provided drinking water to more than 183,454 customers/owners in Omaha, Bellevue, Elkhorn, Waterloo, Bennington, La Vista, Ralston, Carter Lake, and the Papio-Missouri Natural Resources District, which sells water to Fort Calhoun. Natural gas basic rates in 2006 were $11 per month plus $1.03 per therm. The base water rate was $8 plus $2.90 per 1,000 gallons and the sewer rate was $7 and $1.55 per 1,000 gallons after the first 1,000. The population reached 904 by 2010 and in 2018, water was provided by Washington County Rural Water #1 and Washington County Rural Water #2, which is also connected to the City of Blair water system. The water system had 42 commercial and 363 residential customers, all metered (2018). Electric distribution service was provided by OPPD.

Today, the city has a population of 1,110, has been incorporated for 164 years, and is a member of the League of Nebraska Municipalities and the Utilities Section.

References: Nebraska Directory of Municipal Officials, 1956, 1960, 1962, 1964-75, 1977-87, 1990-2019; Nebraska Municipal Review Magazine, 1928; Perkey's Nebraska Place Names, 1995; Nebraska Place Names, 1925, 1960; The Sod-House Frontier 1854-1890, 1879; Washington County Progress 2006; Washington County Nebraska History, 1980; Water Resources of Nebraska, Dec. 1936; Lincoln Journal Star Newspaper, 2004; Maps Tell A Story, 1991; NEDED Website, 2005; Wikipedia website, 2018-2019; Atlas of Nebraska, 1895; Nebraska Blue Book, 1920, 1928, 1936, 1942, 1946, 1978; Johnson's History of Nebraska, 1880 and the 15th Annual Report of Nebraska State Railway Commission to the Governor, Issue 15, 1922.

Check out the League's Facebook page at www.facebook.com/leaguene. Be sure to* "Like" *us.

Classifieds: Job openings, items for sale

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person is accountable for various administrative and managerial duties including evaluating projects to maintain budgetary compliance, ensuring adherence to all City policies, procedures and codes, and coordinating the department's Capital Improvement Program. Candidates should have working knowledge of all municipal public works and utilities activities including streets, storm sewer, traffic control, water and wastewater operations, building and asset management systems, and engineering principles. Specific responsibilities for this full-time, salaried position are identified in the job description. This is an exciting time to join the City of Gretna team to aid in visioning and implementing the Great Life. The Public Works Director position's initial starting salary is $100,568 DOQ, with excellent benefits. Application and Job Description are available from the Gretna City Clerk, 204 N. McKenna Avenue, PO Box 69, Gretna, NE 68028-0069 or at www.gretnane.org. This position remains open until filled with initial review of applications beginning Oct. 16, 2023.

For Sale. City of Friend has Sensus Series B Electrical meters for sale. $5 each. Contact John R. Schwab, City Clerk/Treasurer, 235 Maple Street, Friend, NE 68359; phone: 402-947-2711.

Electric Rubber Gloving Workshop held

The Western Nebraska Rubber Gloving School was held Aug. 29-31 at the Don Winkelman Training Field, the Wheatbelt Public Power District's training field north of Sidney. A total of 62 linemen were in attendance with 24 from municipalities and 38 from the rural electric systems. Municipal systems that participated included: Alliance, Belleville Light Dept. (KS), Chappell, Cozad, David City, Haxton (Colo.), Hemingford, Kimball, North Platte, Schuyler, and Valentine.

The workshop started with vendor introductions which included brief discussions on the various equipment, vehicles, and other related electrical material that was provided for use and display by the various companies. The participants then were divided into hands-on work groups or stations. Stations included pole transformer changeout using belt/hooks, crossarm changeout, proper truck inspection setup and changes to ANSI 92.2, classroom station on regulators and breakers, transformer testing, and trouble-shooting using the hands-on transformer trainer trailer.

Some of the workstation jobs included a bucket rescue while using a tree on a three-phase structure, arm changeout using layout arms, changeout of cutout/arrester on three phase bank (primary line energized), repair a downed conductor using equipotential grounding, arm changeout on an angle pole, and a mid-span splicing and repair.

The basic groups were split into three work groups which did a variety of hands-on stations depending on the participants' level of experience. Some of the beginner tasks available were basic use of tie wire and equipment, an insulator changeout (pole top and crossarm), cross-arm change out on single phase dead-ends (pole and arm), single phase pole changeout, and changing out a transformer on an energized pole.

A special thanks to the instructors and their respective companies for their expertise and participation. The 2023 instructors were: Abe Young, Northwest Rural PPD; Seth Cockerill, Midwest; Myles Mills, PREMA; Colt Witaker, Roosevelt PPD; Steve Salas, McCook PPD; Owen Madden, Southwest PPD; Justin Huston, Niobrara Electric Association (NEA); Travis Gaukel, Wyulec; Joel Duffield, Chimney Rock PPD; Rich Little, Tom Kelly, Mike Gilley of Altec; Mark Pojan, Sonetics, Jay Wilt, Adam Nelson of JSI; and the crew from Tri-State. The following provided bucket trucks: Midwest, Southwest, McCook, PREMA, Wheatbelt, Roosevelt, Chimney Rock, Niobrara, Northwest, Wyrulec, Altec (3), and a digger truck from Wheatbelt PPD.

On behalf of the Utilities Section and the Rural Electric Association, a special thanks to the following companies that provided trucks, demo trailers, material, and their knowledge when performing rubber gloving techniques (listed alphabetically): Altec, Dutton Lainson, ESI, Moehn Sales, Sonetics, and Utility Solutions. The next Rubber Gloving Workshop is scheduled for May 2024 at Northeast Community College in Norfolk.

"Just For Fun" Answers

A-1. Milford. The bottled water company also supplied water to the construction of the Panama Canal.

A-2. Chicago & North Western Line, which in Nebraska, ran from Dakota Junction to the Chadron Railyard (2013/2017 purchased properties of the Nebkota Railway Line).

A-3. 1897.

A-4. North Bend.

(Utilities Section members noted in bold.)

Apply to receive assistance through C2C

The U.S. Department of Energy's Clean Energy to Communities (C2C) program offers support to local governments, tribes, municipal utilities, and community-based organizations to help them set and reach their clean energy goals.

C2C Peer-Learning Cohorts convene groups of up to 15 communities to explore a common clean energy topic. Applications will remain open until Oct. 31 at 11:59 p.m. ET. Visit the C2C Peer-Learning Cohorts webpage to apply.

C2C Expert Match pairs communities with national laboratory energy experts to address time-sensitive energy goals through 40-60 hours of custom strategic support. Expert Match accepts applications at any time. Visit the C2C Expert Match webpage to submit a request.

2023/2024 Training calendar

Visit our website at lonm.org/education-events/
for a complete list of workshops and conferences.

September
Sept. 27-29 .....League Annual Conference..... Cornhusker Marriott Hotel, Lincoln

October
Oct. 17.....Water Operator Training Workshop ..... Public Library, Norfolk
Oct. 18.....Water Operator Training Workshop ..... Fire Hall, South Sioux City
Oct. 19.....Work Zone Safety Training Workshop ..... Fire Hall, South Sioux City

November
Nov. 7.....Work Zone Safety Training Workshop ..... Library, Blair

December
Dec. 5 .....Water Operator Training Workshop ..... Theresa Street Facility Training Room, Lincoln
Dec. 6 .....Water Operator Training Workshop ..... City Hall, Auburn

January
Jan. 10-12.....Utilities/Public Works Section Annual Conference ..... Embassy Suites, Lincoln
Jan. 23 .....Work Zone Safety Training Workshop ..... Holiday Inn, Kearney
Jan. 24-25.....Snowball Conference ..... Holiday Inn, Kearney

February
Feb. 13-14 .....Meter Conference..... Holiday Inn, Kearney
Feb. 26-27 .....League Midwinter Conference ..... Cornhusker Marriott Hotel, Lincoln

Utilities Section Webinars

(Credit hours for water 1-4, 6, and wastewater available where listed)

Email info@lonm.org to request a webinar.

Safety Committees by speakers Rob Pierce and Lash Chaffin, LNM; covers requirements, liabilities, financial benefits, unions, etc.
(Approved for 1 hour grades 1-4 and 1 hour wastewater)
Members $0 (free), non-members $35

Safety Session Series (If you purchase all five sessions as a bundle, the cost for members is $140 and for non-members is $180.)

Implementing an Effective Safety Meeting by speaker Rob Pierce, LNM; covers requirements, topics selection, how and when to present, safety focus, and building a safety culture.
(Approved for 1 hour grades 1-4 and 1 hour wastewater)
Members $35, non-members $45

Safety: Lockout/Tagout Programs (Practices and Procedures) by speaker Rob Pierce, LNM.
(Approved for 1 hour grades 1-4 and 1 hour wastewater)
Members $35, non-members $45

Safety: Personal Protective Equipment (PPE) by speaker Rob Pierce, LNM.
(Approved for 1 hour grades 1-4 and 1 hour wastewater)
Members $35, non-members $45

Safety: General Roundtable Discussion by speaker Rob Pierce, LNM; covers safety programs, injury/near miss issues, and hot topics.
(Approved for 1 hour grades 1-4 and 1 hour wastewater)
Members $35, non-members $45

Safety: Slips, Trips & Falls by Speaker Rob Pierce, LNM.
(Approved for 1 hour grades 1-4 and 1 hour wastewater)
Members $35, non-members $45

Water/Wastewater Sessions

Asset Management by speaker Shelly Rekte, DHHS; covers a general overview on asset management and associated recordkeeping options.
(Approved for 1 hour grades 1-4 and 1 hour wastewater)
Members $35, non-members $45

Pump Application, Operations & Maintenance by speaker Brad Harris, Layne Christensen.
(Approved for 1 hour grades 1-4 and 1 hour wastewater)
Members $35, non-members $45

Well Rehabilitation and Relining by speaker Brad Harris, Layne Christensen.
(Approved for 1.5 hours grades 1-4 and 1.5 hours wastewater)
Members $35, non-members $45

Steps and Guidelines to Drilling a New Water Well by speaker Brad Harris, Layne Christensen.
(Approved for 1.5 hours grades 1-4 and 1.5 hours wastewater)
Members $35, non-members $45

Water Storage Tank: Operation/Maintenance by speaker Jake Dugger, Maguire Iron.
(Approved for 1.5 hours grades 1-4 and 1.5 hours wastewater)
Members $35, non-members $45

Utilities Section Webinars

Backflow Sessions (If you purchase all four sessions as a bundle, the cost for members is $60 and for non-members is $100.)

Cross Connection Control Programs: Past & Present by speaker Mike Wentink, DHHS.
(Approved for 1 hour grades 1-4, 1 hour grade 6 and 1 hour wastewater)
Members $35, non-members $45

Cross Connection/Backflow Safety: Confined Space by speaker Rob Pierce, LNM; covers a variety of confined space issues.
(Approved for 1.5 hours grades 1-4, 1.5 hours grade 6 and 1.5 hours wastewater)
Members $35, non-members $45

Basic Requirements of a Cross Connection Control Program by speaker Rich Koenig, DHHS; covers requirements and regulations in a summary overview.
(Approved for 1 hour grades 1-4, 1 hour grade 6, and 1 hour wastewater)
Members $35, non-members $45

Public Education concerning a Cross Connection Control Program by speaker Rob Pierce, LNM; covers options for educations, communication options, monitoring, feedback, etc.
(Approved for 1.5 hours grades 1-4, 1.5 hours grade 6, and 1.5 hours wastewater)
Members $35, non-members $45

Landfill/Transfer Station Session

Hazardous Waste Identification and Random Load Inspections by speaker Rob Pierce, LNM.
Members $35, non-members $45