

In the midst of the Great Depression, word came to Columbus that the Public Works Administration awarded \$7.3 million to Loup Power for construction of a power canal.

"Happy days are here," announced the Columbus Daily Telegram on Nov. 15, 1933.

It was indeed a happy day for a group of Columbus businessmen who had worked for months on the plan. They wanted to reverse the effects of the Depression and provide a power source at the same time.

In April of that year, the Nebraska Legislature passed the Enabling Act, which established public power and irrigation districts as political subdivisions of the state.

The Loup River Public Power District was the first to form in the state of Nebraska. Its founders went on to apply for the PWA funds that would be used to build the Loup Power canal and two powerhouses.

But Loup's story isn't just about Loup. It is a story about public power throughout the state and nation. Loup helped create Cornhusker Public Power District and companies that are now known as Nebraska Public Power District. It also helped Omaha Public Power District get up and running.

Harold Kramer, Loup's first general manager, was given leave to work full-time in Washington, D.C., to help start the American Public Power Association.

Max Kiburz, who later served as general manager, headed a legislative study group that eventually became the Nebraska Power Association and he served as its first president.

The District also powered economic development efforts throughout its history. Columbus claims to have the first industrial site in the United States and several Fortune 500 companies are now located on land that once belonged to Loup Power District.

Today, Loup and its employees provide retail service to customers in Platte, Colfax, Boone, and Nance Counties, and part of Madison County.

It also continues to generate electricity with a canal and powerhouses that have been meticulously maintained for nearly a century.







In 1933, the Nebraska Legislature passed a law allowing the formation of public power districts. Loup River Public Power District organized in June that year and became the first public power district in the state.

LOAN & GRANT

The Public Works Administration (PWA) approved a \$7.3 million loan and grant for the Loup Project on November 15, 1933.

This was a tremendous boost to Columbus and Genoa. The announcement spurred spontaneous celebrations. Businesses closed and residents held torchlight parades.

Before the project could begin, the District needed to acquire property. Some landowners were eager to sell. One farmer sold 26 acres of his 192-acre farm and cut his \$14,000 mortgage in half.

Only 10 percent of land was obtained through condemnation proceedings. In the end, the Loup Project purchased \$1 million in land and saved some family farms from foreclosure.



The project required a

35-MILE STRIP

of land that ranged

from 250-500 feet wide.

THE BEGINNING

Civil Engineer H.E. Babcock was the first to envision using the Loup River for power and irrigation. Construction on a 600-horsepower plant and canal began in 1912 near Genoa. Electricity flowed to Genoa for the first time in March 1913. The plant operated for one year before financial difficulties forced its abandonment.

On Sept. 15, 1932, Phil Hockenberger and Harold Kramer invited 36 Columbus businessmen to a meeting to revisit the idea of building a power canal near Columbus.

That afternoon, they traveled to Lincoln to file for water rights to the Loup River, Shell Creek, Cedar River and Beaver Creek.



... the Loup river is one of the most reliable and constant flowing streams in the state of Nebraska for water power purposes. It is one of the most constant streams known among the flowing rivers of the U.S.... We hope to see this great power canal built, with power carrying wires radiating in every direction, carrying heat for our dwellings, light for our houses, stores, and factories, and power for street car lines and manufacturing plants... Much has been written and said about this great power canal. There are many who scoff at the idea that this enterprise will ever be developed. There are many who believe in the feasability of the scheme and will help to put it through."





BABCOCK



HOCKENBERGER

CONSTRUCTION

\$1 MILLION

in land purchases

Laws governing water rights required construction to begin within a certain time frame or water rights would be lost. Loup did not have the needed construction equipment when its rights were approved in 1934. Several tractor- and horse-led plows began disking soil to protect those rights.

In 1935, the PWA increased Loup's loan and grant allotment to **\$8,700,000**.





Rural Electrification Division

In early 1936, Loup's Directors drew up plans for a rural electrification system and applied for a federal loan. In 1937, Loup received \$391,000 from the Rural Electrification Administration to build 355 miles of rural lines to serve 815 rural customers in Platte County.

ECONOMIC IMPACT

The Loup Project employed more than 1,000 people during its construction.

In the depths of the Great Depression, the prospect of steady work drew the attention of job seekers from the surrounding area. The influx of workers brought prosperity to cafés, restaurants, hotels and rooming houses.

All lines of retail trade improved, rentals increased and property values recovered. A leading Columbus real estate office did not know of a single house for rent in the city in July of 1936.

The project also supported other industries. Factory workers helped produce materials used in the project and railroad employees had a part in transporting those materials.



1936 PWA MINIMUM WAGE RATES

Concrete Mixer	\$1.20
Cement Finisher	\$1.20
Carpenter	\$1.20
Pile Driver	\$1.20

Form Builder	\$0.80
Painter & Steel Men.	\$0.90
Trucker	\$0.70
Unskilled Labor	\$0.50

1,782 applicants

1,352 employed

in November 1933

in October 1936

In 1936, Loup received a **\$2.314 million** supplemental loan and grant for the construction of transmission lines

The first shovel of dirt was moved at the Charles Wright farm near Genoa on Aug. 21, 1934.

The first dragline excavation was Oct. 16, 1934, at the James Donoghue farm seven miles northwest of Columbus.







THE MONIGHAN CRANE One of the largest in the world at the time

365 176' tons boom

12 million cubic yards of soil

Twenty train cars hauled the Monighan Crane from Memphis, Tenn., to Columbus, where it took one month to assemble.

The unique crane walked like a duck and sounded like a freight train. It had a 12-yard bucket and moved dirt at a rate of 1 million cubic yards per month.

The crane fascinated people from around the state and the operators became local celebrities.

If we placed all of the excavated soil on Dodge Street between the curb lines and piled it nine feet high . . . the pile would extend 95 miles."

-J.D. Evans

State Engineering Inspector for the Public Works Administration, on Omaha's WOW radio program in February of 1935

THE POWERHOUSES

The hydroelectric powerhouses in Monroe and Columbus really began to take shape in 1936. The work was done without safety equipment. Surprisingly, there were only a few accidents during construction.

The Columbus site became a small community during construction. Some workers lived in tar paper shacks and kitchen houses were established for them.

Special railroad tracks were built to carry materials to the Columbus Powerhouse. Around 2,500 carloads of freight worth \$750,000 crossed those tracks.







Leo Daly, Sr., of Omaha designed the exterior finish of both powerhouses. His total salary was \$1,000.

The Columbus Powerhouse received a Nebraska historical marker in October of 2016.

GENERATION BEGINS

The Monroe Powerhouse began generating electricity on March 5, 1937.

The District had to finish the project and test the system, so the first commercial sales were not until the following spring.



Omaha Company Builds Barge for Loup River Project



The Pawnee Dredge

The District needed a unique dredge to clean its two-mile settling basin at the Genoa Headworks. Omaha Steel Works designed and built the Pawnee dredge, which was then dismantled for shipment and reassembled at the Headworks.

The barge was 110 feet long and 30 feet wide. It was designed to draw in 172,000 tons of mixture daily. That original dredge was used until 2012, when a new dredge, the Pawnee II, was commissioned.

\$186,000 140 TONS 75 YEARS to build per minute in use



OCTOBER 1938 official project completion

56 BRIDGES

built to cross the canal

S8.9 MILLION

total cost to build the two powerhouses and reservoir lake

COMPLETION & CUSTOMERS

The Omaha World-Herald announced that the Loup Power Plant had four customers in its Aug. 22, 1938, edition. Construction of the project was almost complete. Transmission lines from Omaha to Lincoln, Grand Island to Lincoln, and Hastings to Lincoln were all under construction — funded in part by an additional \$2.3 million loan and grant.

The District switched from its construction period to operation on September 1. The plant's output was approximately 4,000 kW. Electricity was transmitted to the North Loup and Middle Loup Power Districts, Howard, Southern Nebraska, Platte, Cuming and Lancaster rural electrification districts, Western Public Service Company, the Platte Valley District powerhouse at North Platte, and Tri-County's substation at Hastings.

The District continued to build infrastructure, but first it needed waivers from farm-owned mutual telephone companies because the power lines could cause interference to the grounded phone systems. The Rural Electrification Administration would not loan funds to metallicize the phone lines to eliminate the interference.





PUBLIC POWER EXPANSION

Loup Power District initially distributed the power it generated to private and public power companies. By 1939, there were two other hydropower districts in the state — Platte Valley Public Power and Irrigation District and Central Nebraska (Tri-County) Public Power and Irrigation District.

The districts were all generating power but needed to expand their markets. They had been contemplating the purchase of private power companies for some time for that purpose. Loup had debt obligations to the Public Works Administration, posing a funding problem.

On Aug. 5, the same men who organized the Loup project helped create Consumers Public Power District to facilitate the purchase of those facilities. Loup River Public Power District's President C.B. Fricke was named president of the debt-free Consumers.

In October, Consumers assumed operation of the Columbus division of the Northwestern Public Service Company through a lease-purchase agreement. It purchased the company in July 1940 with \$1.2 million in bonds. It was the first acquisition of a private utility by a public power district through bond issue.

The hydro facilities continued to sell power to private companies. But that would soon change. By the end of 1943, Consumers Public Power District acquired all generation and distribution facilities across the state except for Nebraska Power Company in Omaha. The cost was more than \$40 million paid for by revenue bonds. This change to public power caused much controversy throughout the state with some comparing it to socialism and communism.

New Power District **Functions**

Fricke Chosen President. Boettcher Secretary, at **Organization Meeting**

Consumers' Public Power district of Columbus began functioning last night when four of the five directors named in the petitions on which the district was created perfected organ-ization of the board of directors at meeting at Loup district offices by lecting the following officers: President-C. B. Fricke, First Vice President-Phil R. Hock-



FRICKE



\$9.268.000 PWA BONDS + \$761,520 DEFAULTED INTEREST

refinanced by Loup Power District in 1940

The American Public Power Association formed in 1940 to represent the common interest of community-owned utilities. Harold Kramer, Loup's General Manager, served as the first secretary-manager for about six months. Today, the Association serves not-for-profit, public utilities that power 2,000 towns and cities nationwide.

PUBLIC POWER SYSTEM

In 1940, the three hydro districts that formed Consumers — Loup, Platte Valley and Tri-County — signed an agreement to pool their generation and revenue. This would provide stability, prevent competition and allow them to finance growth. The agreement created the Nebraska Public Power System (NPPS), a wholesale marketing and transmission agency. Its three-member board consisted of the three district managers.

The three unified districts also refinanced nearly \$38 million in debt. The new bonds reduced both the interest and bond payments to give the districts an opportunity to pay off obligations while building revenues.

Consumers leased its generating facilities to NPPS which began coordinating power generation and transmission. Rural public power districts continued to form across the state and purchased power from NPPS.



By Associated Press.

Nebraska's three big hydroelectric districts consolidated their operations Thursday into a single system expected ultimately to provide two-thirds as much power as the whole state generated last year.

Central withdrew from NPPS in 1949 to focus on irrigation.



Nebraska's three big hydroelectric districts consolidated their operations today into a single, \$60-million system . . . The action culminated nearly five years of struggle, often bitter, for some sort of unit operation."

Associated Press, Aug. 1, 1940

PUBLIC POWER BUILDINGS



In 1940, Columbus was home to four public power entities - Loup Power District, Loup's Rural **Electrification Division, Consumers Public Power** District, and the Nebraska Public Power System. Their management and administrative offices were scattered in rented facilities, mostly along 13th Street in downtown Columbus. It was time to bring all four under one roof.

The new, modern "Public Power Building" on the corner of 14th Street and 25th Avenue opened to the public in May 1941. It cost \$100,000.

> Consumers and NPPS leased office space from Loup.



broke ground on a \$35,000 garage,

storehouse, and machine shop at 14th Street and 12th Avenue in Columbus.

Fifteen members of the National Youth Administration constructed the building by the end of the year.

The NYA was a New Deal agency designed to provide work and education for young men and women between the ages of 16 and 25.

The building housed Loup's hydro employees.



NEBRASKANS OWN ELECTRIC POWER

By the end of the decade, Nebraska was the first and only state where public power replaced all private utilities. It remains the only state served completely by public power.

CORNHUSKER & OPPD

In late 1942, a group filed a petition with the State Engineer asking for authority to form Cornhusker Rural Public Power District.

The petition was approved and Loup's directors approved the sale of its Rural Electrification Division to Cornhusker in early 1943. The sale included 625 miles of rural lines in Platte and Colfax counties serving about 927 customers. Directors of the Boone-Nance Rural Public Power District also held a special meeting and also voted to sell its property to Cornhusker. The cost was \$1 and the assumption of the federal loans that were used to build the rural lines and facilities.

Consolidation of the rural properties under one management would result in more economical and efficient service. In 1944, a group of Omaha citizens formed the Omaha Electric Committee, Inc., a non-profit corporation to obtain public ownership of Nebraska Power Company. That December, Loup created an Eastern Division and issued revenue bonds to finance a \$15.6 million loan to the committee for its purchase of Nebraska Power.

Loup Helps Omaha Public Power Move

Supplies Funds Under Contract With Non-Profit Corporation

Concention of Loup River Public Power district with members

Two years later, Omaha Public Power District closed its purchase of the Nebraska Power Company from the committee at a price of \$42 million, financed by revenue bonds.

Included in the purchase price was \$12.5 million that was used to repay Loup in full for the money it loaned the committee.

LAKE NORTH

In the early 1960s, Loup began to study the feasibility of enlarging the 900-acre Lake Babcock storage reservoir.

Loup officials decided additional water storage was needed to provide the necessary electricity at peak requirement times. Building a new lake was less costly than dredging out Lake Babcock, which was heavily silted in.

Construction of Lake North began in 1962. Gerhold Construction took on the project, moving about 660,000 cubic yards of earth to form a 200-acre bowl.

More than 5,000 people attended the grand opening August 5, 1963. The following Sunday, the lake had visitors from 33 counties and 13 states. Loup employees counted 1,122 cars between 12:30 p.m. and 5 p.m.

> The lake captivated local crowds hosting ski shows and other large events. It was one of the largest lakes in Nebraska at the time.





Mrs. Arthur Wilson won a 19-inch TV for her winning entry in a 1963 contest to name Loup's new lake. While Lake North is indeed north of Columbus, she picked the name to honor the North brothers who led the Pawnee Scouts in the 1860s and 70s.

100,000+

visitors to Loup's recreational areas each year according to a 1968 survey



129,000 cubic feet per second

1966 flood peak at Genoa, beating previous record of 90,000 cfs in 1947

more than \$500,000

in damage to Loup property

FLOODING AT THE HEADWORKS

On August 12, 1966, the Loup River began to rise following a period of heavy rain throughout the area. Forty employees began sandbagging, but they could not hold it back. The raging Loup broke through the diversion weir and headgates, broke through several thousand feet of canal, and washed out two bridges and roadways. Thirty-five of the men were rescued by helicopter while the other five volunteered to stay overnight to continue working, despite the loss of telephone service and roads.

The District's dredge, the Pawnee, was in dry-dock undergoing repairs. The flood lifted it and washed it downstream until it hit a tractor. The crew had to build a dike around the dredge, fill it with water and float it back to the dry dock.

Despite the damage, Loup continued to generate electricity and met peak using the storage water in Lake Babcock and Lake North. The diversion weir was back in operation in less than two weeks.

The flood caused widespread damage throughout the area, especially in Fullerton, Cedar Rapids, St. Edward, and Columbus.



A RETAIL SERVICE AREA & NPPD

In 1967, Loup and Consumers Public Power Districts signed a realignment agreement. Loup traded its interest in NPPS to Consumers in exchange for distribution properties in Platte, Colfax, Nance, and Boone Counties.

More changes to Nebraska's unique public power model were still to come.

In 1969, directors of NPPS, Consumers, and Platte Valley Public Power and Irrigation District voted to merge into one new company.

The merger followed years of negotiations and unified all the electric generation and transmission facilities in the state outside of Omaha Public Power District.

It brought together about 1,400 employees and \$420 million of generation, transmission, distribution, and irrigation properties.

Nebraska Public Power District (NPPD) became official on January 1, 1970. In a joint statement, the





In December of 1970, NPPD's board authorized the sale of two revenue bond issues totaling \$151 million. Of that, \$103 million was used to complete Cooper Nuclear Station and construct high voltage transmission lines. The \$48 million issue retired outstanding indebtedness of Platte Valley and Loup. Loup held a bond burning ceremony in 1970 to celebrate being debt free.

Under this reorganization, Loup will return to the basic reason for its creation — the development of the area it serves, and will also make it a District that is large enough for efficient operation in providing reliable service to the people it serves, but small enough to be responsible to the needs and desires of the people that it serves."

— Max Kiburz, Loup General Manager December 1970

Nebraska Public Power District, sharing the block with City Hall, has been growing out of its skin at regular intervals and constantly needs more office space."

- Columbus Telegram, February 26, 1974

NEW GENERAL OFFICE

The rapid growth of the public power system in Columbus caused a lot of office space headaches. Consumers built a new headquarters across from the public power building in 1952. Both Loup and Consumers added on to their buildings in the 1950s and 60s.

In 1972, NPPD's general office was across the street in the



former Consumers building. Space was still at a premium so it purchased Loup's building in 1972 for \$120,000.

Loup had 90 days to vacate and moved to a temporary location on 11th Street and 23rd Avenue in Columbus. In 1974, the new general office on 15th Street and 24th Avenue was complete. The building was 17,600 square feet and cost \$555,900.

In early 1974, Loup's operations departments were operating out of two service centers — hydro on the 12th Avenue building and retail out of a service center on 11th Street and 27th Avenue.

In 1974, Loup remodeled the service center on 12th Avenue, adding a transformer shop and line truck garage.

This facilitated the consolidation of the District's hydro and retail operations in one building.

NPA

Leaders of Nebraska's public power industry form the Nebraska Power Association (NPA) to address the industry's interests.

Loup General Manager Max



KIRLIR7

Kiburz was instrumental in its creation and served as the NPA's first president. The NPA's objectives included communication,

joint planning, and cooperation among the state's electric service providers. The group also began monitoring legislation that could affect the state's public power model.

In 1982, Kiburz received the Distinguished Service Award from the American Public Power Association for his outstanding contributions to public power systems locally and across the nation.

LICENSE APPLICATION

Loup's original 50-year federal license was approved in 1934. Renewal work began in 1980.

First, Loup applied for a renewal of its state water lease from the State of Nebraska. That lease was approved and expires in 2030.

With the water lease renewed, Loup was able to finish its application to the Federal Energy Regulatory Commission (FERC) in 1981. The 180page application was approved in 1983, and Loup received a 30-year extension on its license, which expired in 2014.

\$4.175 million loan

tax-exempt bonds issued to Loup in May 1981 to finance a three-year construction program

\$3 million sale

Loup transfers ownership of all 115kV transmission lines and switching equipment to NPPD in November 1981

\$5 million sale

In 1985, Columbus purchases distribution facilities in the area between the city's 1972 and 1985 city limits; Loup agrees to pay Columbus a 10 percent lease payment



1974: NPPD purchases property on 15th Streeet for the construction of a new headquarters building.

1976: The City of Columbus purchases the former public power building and the former Consumers building from NPPD for a library and city offices.





CANAL INSPECTION

For the first time since construction, Loup lowered the water level in the 35-mile canal for inspections and repairs.

Work began on August 29, when the water in Lake North was sealed off. On Sept. 1, employees stopped the diversion of water by closing and sandbagging the headgates.

Water dropped about 12 feet below the normal level at the Monroe Powerhouse and 19 feet below normal at the 916 siphon west of Monroe. The depth of the canal is 14.3 feet for the first seven miles east of the Genoa Headworks and 19.5 feet for the remaining 28 miles.

The canal was in amazing shape for its age.

MORE THAN \$5.8 MILLION

total amount of sand payments to Loup since 2007

PREFERRED SANDS

Sand at the Genoa Headworks was piling up after nearly 70 years of dredging between one and two million cubic yards of sand every year.

It covered 600 acres piled more than 100 feet high in spots. The Guinness Book of World Records even listed it as the world's largest man-made sand pile.

In 2006, Legacy Resources approached Loup about using the north-side sand for hydraulic fracking. Loup saw the proposal as a win-win: it would alleviate the excess sand problem while also generating additional revenue.

The company — now Preferred Sands began building a processing facility. In 2007, it began processing sand and giving Loup a per-ton royalty payment.



HYDRO UPGRADE

Loup issues \$17 million in bonds to begin a three-year hydropower upgrade project. The powerhouses at Monroe and Columbus had been in operation for nearly 70 years. Maintenance was becoming difficult due to the scarcity of Depression-era parts.

At the time, the Monroe Powerhouse had generated more than 1.7 million megawatt hours and the Columbus Powerhouse had surpassed 6.8 million megawatt hours.

The refurbishment increased efficiency, allowing Loup to generate more power with the same amount of water.





Thousands of fish die in canal

'Very significant' fish kill caused by order stopping water flow

tes several thousand and Parks "It was a very significant kill," said Jeff Schuckman, a regional

hcial estimates several thousand and Parks employees have over a several the Astronov event and the Astronov event and the kill extended east to Cast-after water flow from the Loup mile canal over the past week. ner's Crossing along 48th Avenue River was shut off.

water at the Monroe Powerhouse, and drum, which aren't favority and the kill extended east to Cast- among anglers, but there we

among anglers, but there were some walleye and large catfish impacted.

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HYDRO LICENSE & FISH KILL

Loup began the process for renewing its third license in 2008 — a full six years before it was set to expire in 2014. That year came and went without a new license. The Federal Energy Regulatory Commission (FERC) authorized continued operation while finalizing its environmental assessments.

After a decade and \$8 million, the District received a new license in May 2017. The new license had several water flow restrictions that concerned Loup officials — including one that required Loup to cease water diversion into the canal if the water temperature in the Platte River reaches 93 degrees at the Louisville gauge.

Loup's board and management issued an unsuccessful Emergency Motion for Stay to halt the order, believing that this provision would not benefit protected species as intended. High water temperatures on July 15, 2017, forced the District to cease diversion of water into the canal. Fish began to die due to lack of oxygen in the canal water.

Two days after ceasing diversion, FERC notified Loup that it was suspending the water temperature provision based on a recommendation from the U.S. Fish and Wildlife Service (USFWS). Loup continues to work with FERC, USFWS, and the Nebraska Game and Parks Commission for a final resolution.

PAWNEE II

Headworks crews kept the Pawnee Dredge running for 75 years, often making repairs and replacement parts on their own. But maintenance was becoming difficult on the archaic machine.

The District commissioned a new, custom dustpan dredge, the Pawnee II, in 2012. It features a 3,000-horesepower motor to power the 35,000 gallon-per-minute pump. The spray nozzles stir up sediment in the settling basin before sucking silt and sand up and out of the canal.

NEW SERVICE CENTER

The City of Columbus began construction on the 12th Avenue viaduct in 2018. A couple of the support columns were placed right in the middle of Loup's service center yard.

This prompted Loup to begin building a new service center along the Lost Creek Parkway north of Columbus.

The Columbus hydro and retail employees moved into the new building in January of 2020. The modern building is much better equipped to house the District's large trucks and other equipment.

The District budgeted \$5.5 million for the 54,540-square-foot building and paid for it with cash reserves.



Loup can divert **2,000 cfs** according to our federal license The canal was designed for **3,500 cfs** in the 1930s **5,000 cfs** — the last reading before the gauge was lost





February and early March 2019 were unusually cold.

Then, on March 13, the forecast called for highs around 60° F with heavy rain. The combination caused ice jams and rising water that eventually washed away the intake structure approach and breached the canal in six places.

The Headgates Operator's house and a 2016 addition to the Headworks shop were washed away. The weir bridge was also destroyed. The Nebraska National Guard dropped 280 massive sandbags in the inaccessible south breach to stop the flow of water.

The damage estimate is more than \$15 million. Repairs are nearing completion after more than four years.





2 Black Hawk helicopters and 18 National Guard soldiers dropped 280 1,500-pound sandbags to close a breach on the south side of the canal