

Appendix E.1

History of Irrigation Districts and Canal Companies in the East Clear Creek Watershed

The following content is summarized from the Nebraska Department of Natural Resources' Biennial Reports, found online at <https://dnr.nebraska.gov/surface-water/nednr-biennial-reports>.

The first irrigation in Nebraska occurred in spring 1866 when John Burke built a four-mile-long ditch beginning about 16 miles east of present-day North Platte. He reportedly only irrigated a small area, raising vegetables and corn which he sold to immigrants moving westward and soldiers at Fort McPherson. Soldiers were said to have also used Mr. Burke's ditch to grow vegetables. The next noted timestep in the state's irrigation history came in 1871, at which time Josiah B. Clark and Guy C. Barton incorporated the first irrigation company in the state and built a canal from the north side of the South Platte River, beginning about three miles west of present-day North Platte. This canal was used for a few years, then was inactive for nearly a decade due to a few seasons of heavy rainfall. Also in 1871, soldiers at Fort Sidney reportedly built a dam across Lodge Pole Creek and dug a ditch that irrigated about 10 acres of gardens – apparently enough to provide produce sufficient for 250 enlisted men, officers, and their families as well as to sell in town. It was after this time that the Nebraska legislature passed the state's first irrigation law - in 1877 - which provided for the formation of canal corporations to acquire rights of way. Irrigation development occurred more widely in the state beginning in the late 1870s into the 1880s, with Isaac Dillon, T.J. Foley, and others credited with organizing the North Platte Land and Irrigation Company and building the North Platte Canal - "the first irrigation enterprise of any magnitude in the state" - in 1883 and 1884. In 1889, the legislature passed the Saint Raynor law, which provided for the appropriation of running waters for beneficial purposes by posting notice of appropriation at the point of diversion and filing a copy with the corresponding county clerk.

Almost all early attempts at irrigation were undertaken as private enterprises and, as larger ditches were built, farmers organized into mutual companies and partnerships with each party bearing their share of expense to build canals. Following this was an era of speculation, with many parties posting notices of appropriation and sometimes doing small amounts of construction work, then selling water contractsⁱ at high prices. The period of speculation was noted to have reached its height along the North Platte and Platte Rivers. In some cases, ditches were even constructed to force other ditches to certain terms over the prices of water contractsⁱ. Drought in 1894 led to widespread crop failure and, as a consequence, the need for a state irrigation code was a key legislative campaign issue that fall. The legislature then passed the Irrigation District Act – modeled on the Wright law of California – in 1895, providing for the creation of irrigation districts governed by elected boards with powers to issue bonds and levy taxes on lands within district boundaries. By 1914, the passage of the Irrigation District Law of 1895 was noted to be expected to result in better and settled communities.

The Irrigation Board secretary - W.R. Akers - remarked in the Board's first biennial report that, in his visit to the North Platte valley in the summer of 1896, he was "obliged to confess that (he) never in (his) life saw finer crops of wheat, oats, and corn, in fact, all kinds of farm products." Solidifying notions that early skepticism of crop irrigation would not last, undersecretary E.F. Seeberger foreshadowed: "That later undertakings in the line of irrigation are not doubtful or uncertain is demonstrated by the farms and orchards under (the North Platte Canal). It shows what a rich and prosperous country this will be when a few more years have added to the development and cultivation of lands under newer canals."

As Irrigation Board undersecretary H.O. Smith mused a decade later, only the future would determine the extent to which theories at the time of climatic cycles would prove true – perhaps a hint of a prophetic notion of how much the state's and, indeed, the region's growers would come to rely so strongly on irrigation to produce crops as reliably as possible, in light of the ever-increasing unpredictability of climate. Smith also reported that it was not unusual to have seen land values increase tenfold or more where

irrigation conditions were favorable, underscoring even in the early days of irrigation's growth the impact it had and would continue to have on the value of land.

In early reference to the currently known importance of the canals to local groundwater recharge, Smith also noted in the 1905-06 report that stream flows had been made more regular in recent years, reporting that "at no time during the past two years have the streams shrunk to the usual low water stage." He went on to explain that this was likely due in part to natural rainfall but to posit that "a very considerable part of this increase, and especially that part which has affected the flow at low stages, and has made it more regular and continuous, is attributable to the seepage from adjacent irrigated lands... and will become still more regular and increase further as with the passage of time the seepage from the more distant lands reaches the original stream." He cited tests made in Colorado that had demonstrated these facts.

Keith-Lincoln County Irrigation District

Priority Date: February 2, 1894 (North Platte River)

Recognized as three of Lincoln County's progressive farmers, David Hunter, Alexander Neilson, and John Conway built what was known in 1894 as the Sutherland and Paxton Canal. With a total length of approximately 30 miles, it was noted upon completion as having first-class diversion and distributing works, covering over 30,000 acres of "especially fine land", which produced a "magnificent" crop in 1895 and 1896. At the time of the state Irrigation Board's 1905-1906 report, the canal became known as the Sutherland and Paxton Land and Irrigation Canal; its ownership would be listed as the Keith and Lincoln County Irrigation District by the time of the Board's report covering the period of 1910-12. As explained in the Board's 1912-1914 report, this was because the canal was turned over to water users in 1905, as specified in the contractsⁱ sold by the original company during the canal's construction and first use. These landowners/water users then organized as the Keith and Lincoln Counties Irrigation Company, after which 41 landowners petitioned the Lincoln County commissioners for the organization of an irrigation district. In its 1912-1914 report, the Irrigation Board noted roughly 6,450 acres were being irrigated under the canal, including the 40-acre Hunter orchard – the only commercial orchard at that time in the North Platte valley.

Platte Valley Irrigation District

Priority Date: May 31, 1884 (North Platte River)

The North Platte Canal was constructed in 1883 and 1884 through land that the North Platte Irrigation and Land Company originally purchased from the Union Pacific Railroad. Initially, this land consisted of just over 6,300 acres, with approximately another 7,300 acres purchased later in 1886. The canal was initially intended to irrigate all of the land between the canal and the river. Early frustrations grew among landowners due to the prices of water contractsⁱ (raising more than double from \$6 per acre to \$12.50 per acre) and, later, the inconsistent delivery of water due to the growing number of farmers constructing other canals between the North Platte Canal and the river. Following a split in early 1892 into two distinct companies separately managing the land and the water, the system enjoyed successful operation for the next 10-12 years. In the summer of 1911, a petition signed by 33 landowners was filed with the Lincoln County commissioners, requesting organization of an irrigation district, which was approved in December of that year. The canal was transferred to the Platte Valley Irrigation District in February 1912.

Paxton-Hershey Water Company

Priority Date: February 12, 1894 (North Platte River)

What is presently known as the Paxton-Hershey Canal was constructed by the Paxton and Hershey Irrigating Canal and Land Company in 1894; at that time, it was noted that about 9,000 acres of land were "being put into a high state of cultivation" under it. The company had also built approximately 40 houses on their lands, occupied by "a thrifty and progressive people." The canal had a large headgate, approximately 125 feet wide, located about 24 miles west of North Platte with the canal spanning 16 miles. All land sold by the company, as first organized, had a water contractⁱ attached with a clause stating that the canal would be turned over to water users within a specific amount of time. In 1907, these water users organized into a mutual stock company and assumed management of the canal.

Birdwood Irrigation District

Priority Date: October 21, 1893 (Birdwood Creek)

While irrigation from the North Platte River was consistently noted - even early in its development - as inconsistently reliable, Birdwood Creek was noted throughout early reports as a perennial stream with reliable flow of roughly 150 cfs, owing to its spring-fed headwaters. On October 21, 1893, the Equitable Farm and Stock Improvement Company posted its notice of appropriation on Birdwood Creek and constructed its canal - extending 20 miles - over the next two years. Notably, the lower eight miles of the canal were hard to maintain, and delivery of water in this stretch was uncertain; thus, the company was not considered to be financially successful. In November 1905, a petition signed by 20 landowners came before the board of commissioners of Lincoln County to request the organization of an irrigation district; the district was declared duly organized in February 1906. Following this, the company cancelled all water contractsⁱ under the lower eight miles of the canal. While the irrigation district covered 5,680 acres, only 600 of these were noted as having been irrigated in 1914, with much of the land under the canal being subirrigated and not in need of flooding.

Suburban Irrigation District

Priority Date: May 22, 1894 (North Platte River; Lincoln County Drainage District 1, Ditch 2)

Two days after the posting of a notice of appropriation on the south bank of the North Platte River on May 22, 1894, the Farmers and Merchants Irrigation and Land Company filed articles of incorporation. In 1894-1895, 18 miles of canal were constructed with diversion works located approximately 14 miles west of North Platte serving to intercept surface drainage from the west. In early 1896, a petition was filed with Lincoln County commissioners to request organization of an irrigation district, with the request being approved in April of that year.

Cody-Dillon Ditch Company

Priority Date: December 29, 1893 (North Platte River)

The Cody and Dillon Canal Company posted its notice of appropriation on the south bank of the North Platte River on December 29, 1893. The canal consisted of 13 miles, only nine of which were noted as being in operation as of 1914, irrigating roughly 2,500 acres. The Cody and Dillon Canal Company was a partnership between Col. W.F. Cody and Mr. Isaac Dillon, with the canal's construction being completed in 1894, covering the Cody and Dillon ranches and then extending along the north side of the city of North Platte and east to the North Platte River's confluence with the South Platte River.

ⁱ While the Irrigation Board's early reports refer to "water rights", it should be noted that – in this context – what is meant would presently be called "water contracts"; water rights, as we call them today, refer to the right to appropriate water owned by the state of Nebraska which are granted to water users.