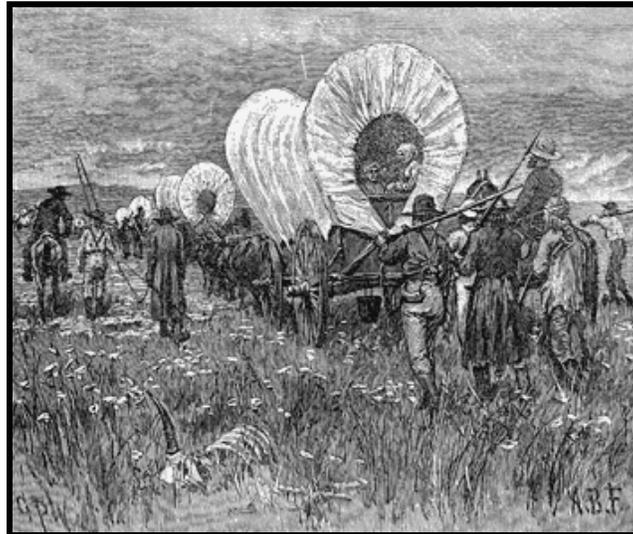


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**A History of the Pioneer Irrigation District, Idaho,
An Initial Report
1884-1938**

By Jennifer Stevens, Ph.D.

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A History of the Pioneer Irrigation District

While the author of this report verifies the accuracy of all facts and statements set forth herein, it is the intent to supplement this initial report with additional data, opinions, and photos or maps for purposes of expert witness disclosures and/or rebuttal of opinions not yet disclosed by the opposing party.

Expert Background

I obtained a Ph.D. in American History in 2008 from the University of California, Davis. Additionally, I obtained a Master of Arts in American History in 1995, and a Bachelor of Arts in both History and Political Science in 1993, both from the University of California, Santa Barbara. My graduate level coursework focused generally on American History in the late nineteenth and twentieth centuries, and more particularly the settlement of the American West. In addition, I took two historical methods courses, one at each University of California campus. In these courses, faculty helped students understand how to utilize archival resources and how to analyze historical documents. They also guided vigorous discussions over historical objectivity, which was the subject of much debate in seminar. My graduate level, pre-dissertation research and writing revolved around water and the history of water in the West. The subject of my M.A. research was the role of the agrarian myth in the passage of the 1902 Reclamation Act. I also wrote a history of water use and states' rights as they pertained to the Deschutes River in Oregon. My dissertation research focused on land use in the West during the twentieth century, with chapters on land use in Boise, Portland, Oregon, San Francisco, and Los Angeles. Having studied with Pulitzer Prize winning and other distinguished historians, I have been taught to thoroughly examine historical documents and to critically evaluate the validity of both primary and secondary materials.

The above described graduate work required a great deal of archival research. In addition to my academic training, I also have approximately fifteen years of experience conducting archival research as an independent scholar in a business capacity. My early professional years, 1995-1998, were spent as a research associate for a historian with a Ph.D. from the University of California, Los Angeles, and following that, for another Ph.D. historian. Both have environmental expertise, and were critical to my training. I have spent the past fifteen years developing my own expertise in land and water history, and have become an expert on the types of records that provide the background for the history of an irrigation district. In particular, I have worked extensively in the National Archives and Record Administration facilities across the country, studying records from Record Group Group 115, records of the Bureau of Reclamation; Record Group 49, records of the General Land Office; Record Group 57, records of the U.S. Geological Survey; and Record Group 48, records of the Secretary of the Interior, among others.

As part of my research and archival experience, I have conducted research in a large number of archival facilities and libraries, from National Archives noted above to various state archives including Arizona, California and Idaho, and special library collections such as the Bancroft Library and others in states across the West. My knowledge of western settlement provides me with an understanding of the federal government's role in that process, leading me to the most voluminous source of information about the American West.

Additionally, the vast amount of research that I have done has resulted in an understanding of archival organization, providing me with knowledge of how to access records that may not be explicitly identified in electronic catalogues or paper finding aids.

Methodology

For this report, which covers the history of irrigation and drainage facilities in the Pioneer Irrigation District from their construction beginning in the late 19th century through 1938, I deployed a typical methodology used by historians. To reliably write and make conclusions about history, one must depend upon a variety of sources, including trustworthy secondary sources together with an adequate volume of primary sources. In other words, a historian cannot credibly draw conclusions on any particular subject based on his or her use any single source. I began this research by studying any and all material already written about Pioneer Irrigation District, the City of Caldwell, the Boise Project, and irrigation in Idaho. Being quite familiar with most of those materials already, I then proceeded to look at primary source material, including the historical records of the Pioneer Irrigation District, to which I was provided unrestricted access, as well as archival collections located in the Idaho State Historical Society, Boise State University, and the National Archives and Record Administration's Rocky Mountain Branch in Denver, CO, where the records of the U.S. Bureau of Reclamation are housed. In addition to these archival sources, I also examined three historic newspapers published during the period in question, *The Idaho Statesman*, *The Idaho Leader*, and *The Caldwell Tribune*.

The History of the Pioneer Irrigation District Facilities, 1886-1899

When Robert and Carrie Strahorn drove a stake into the desert land that would become the town of Caldwell, Idaho in the spring of 1882, only sagebrush and greasewood marked the landscape. As Carrie Strahorn later wrote in her memoir *15,000 Miles by Stage*, “Not a tree, nor a sign of habitation on the townsite - only the white desolate glare and clouds of alkali dust –it looked like a place deserted by God himself.”¹ Indeed, prior to the development of irrigation in Caldwell, the local paper described the area as “a resort for jack rabbits and badgers.”² Nevertheless, Robert Strahorn, acting as the “advance man” for the Oregon Short Line, chose Caldwell to be the next stop for the railroad, thus bypassing Boise and making Caldwell a new “center of commerce.”³ Named for Robert Strahorn’s business partner, Alexander Caldwell, the railroad town’s first investor was Strahorn himself. As the manager-in-chief of The Idaho & Oregon Land Improvement Company, Strahorn set out to encourage merchants from nearby Middleton and Boise to set up shop in the new railroad town. By the fall of 1883, Caldwell was still a “town of tents” with only the depot finished.⁴ In order to transform this resort for badgers and jackrabbits into a thriving western town, Strahorn needed one essential element: water.

By early 1886, two irrigation canals – the Caldwell and Phyllis – were transforming the landscape of Caldwell. Robert Strahorn’s Idaho and Oregon Land Improvement Company financed the Caldwell Canal, which developed in two sections – the main canal (often referred to as the Caldwell or the Strahorn) and a “high line” extension located above the main canal and surveyed in the 1890s. In March of 1887, the *Caldwell Tribune* reported that the main canal, measuring twenty-four miles long, had already been in operation for “two or three seasons” with plans for a six mile expansion. “This canal has caused the growth of grain and vegetables where sage brush had held possession of the land from long before white men visited it,” wrote the newspaper, “and along the line of this canal the desert puts on a brighter and more pleasing aspect.” The canal had already reclaimed 10,000 acres of land and was designed to reclaim 15,000 more, “nearly all in sight of Caldwell.”⁵ By 1889, the Caldwell Canal was delivering water to the lower bench lands eighteen miles below Boise.⁶

¹ Carrie Strahorn as quoted in Elaine C. Leppert and Lorene B. Thurston, *Early Caldwell Through Photographs* (Caldwell, ID: The Caldwell Committee for the Idaho State Centennial, 1990), 2.

² *The Caldwell Tribune*, July 30, 1887.

³ Early Caldwell, 2.

⁴ Early Caldwell, 2.

⁵ *The Caldwell Tribune*, March 12, 1887. The cost for building the canal was estimated to be, at that point, 25,000; it also supplied Caldwell with water and power.

⁶ *Idaho Daily Statesman*, Aug. 21, 1889. The Caldwell Canal was described as running 15 miles long to the West, watering the lower bench lands, and measuring six feet wide on the bottom.

In the fall of 1890, the Caldwell Canal was officially sold to the Caldwell Real Estate & Water Company, whose owners – Howard Sebree among them – undertook improvements to transform this “poor piece of property” into “one of the finest ditch properties in Idaho.” Repairs to the headgates, the reinforcement of the banks, and securing of the grade allowed the canal to “measure out ten inches to 50,000 inches of water with perfect ease” and deliver “three times as much water as in former years.”⁷ Under the ownership of the Caldwell Real Estate and Water Company, the High Line extension was surveyed for the first time.⁸ Designed to be 12 miles long, 12 feet wide on the bottom, 14 feet and three inches higher than the Strahorn, the owners hoped that the high line extension would reclaim an additional 3,000 acres of land surrounding Caldwell.⁹ But despite the company’s best efforts, by the spring of 1894, flood waters threatened to damage the canal and wash away the headgate at the Star Wagon Bridge.¹⁰ Although the Caldwell Real Estate & Water Company made efforts to improve the Strahorn and invest in the high line, farmers must nonetheless have been frustrated by the inconsistent delivery of water. In the summer of 1895 citizens made the first of three efforts to form an irrigation district in order to execute on the “high line extension” of the Strahorn Canal.¹¹ The situation, however, was not yet fit for such an organization, and the Caldwell Irrigation District died shortly after it was proposed.¹² [See Exhibit A.]

While the Caldwell Canal initially received consistent financing from an investment company, the Phyllis canal struggled with financial concerns from its inception. As a result, the farmers under the canal faced great hardship from the time they filed for their land. In August of 1886, the *Idaho Statesmen* reported that the Phyllis was “partly constructed” by the Oregon-based Phyllis Canal Company. But by October, construction had stopped as the owners looked for more investors in the Portland area.¹³ In July 1887, the lack of progress on the company’s ditch enterprises caused the *Idaho Tri-Weekly Statesman* to criticize the company as the “dog in the manger,” with only about \$500 worth of work done to date.¹⁴ By the 1888 irrigation season, the Phyllis Canal remained stalled with no prospects in sight. However, in August of 1888, the Phyllis Canal Company received an offer by Howard Sebree’s Idaho Irrigation and Colonization Company to purchase and resume work on the important project. Although the existing owners rejected Sebree’s offer, ownership rights to the Phyllis were sold to the Idaho Mining and Irrigation Company (sometimes referred to

⁷ *The Caldwell Tribune*, May 2, 1891; *Idaho Daily Statesman*, Sept. 28, 1890.

⁸ Alexander Caldwell was Secretary of this company, but he, like Robert Strahorn, was not himself a full-time resident of the area, instead residing in Leavenworth, Kansas and periodically inspecting the railroad’s interests for whom he worked. Sebree, on the other hand, did in fact permanently settle in the Caldwell area, becoming an important investor and patron of the fledgling town. *Idaho Daily Statesman*, Sept. 8, 1894.

⁹ *The Caldwell Tribune*, Oct. 31, 1891; Nov. 7, 1891.

¹⁰ *Idaho Daily Statesman*, April 20, 1894.

¹¹ *Idaho Daily Statesman*, June 13, 1895.

¹² *The Caldwell Tribune*, April 10, 1897.

¹³ *Idaho Tri-Weekly Statesman*, Aug. 21, 1886; *Idaho Tri-Weekly Statesman*, Oct. 30, 1886.

¹⁴ *Idaho Tri-Weekly Statesman*, July 23, 1887.

as the New York Canal Company) shortly thereafter.¹⁵ “It is believed by many that this ditch will now be pushed to completion,” wrote the *Caldwell Tribune* on September 22, 1888.

Following the ownership change, construction on the ditch steadily proceeded. In March of 1890, representatives of the Idaho Mining and Irrigation Company, A.D. Foote and C.H. Tompkins, Jr., signed a contract with W.C. Bradbury to complete the canal to the Snake River, giving the canal the capacity to irrigate 40,000 acres of land, much of it between Nampa and Caldwell.¹⁶ A flurry of construction occurred during 1890 under Bradbury’s contract.¹⁷ In May of 1890, the Phyllis reached all the way to Nampa and by June, water was turned on in the upper portions.¹⁸ In 1891, estimates of the length of the Phyllis in the local papers varied from 20-50 miles.¹⁹ Two years later in 1893, the U.S. Geological Survey provided a more picture of the canal, describing it as 54 miles in length, with a bottom of 12 feet at its head, depth of water 5 feet, and grade of 2 feet per mile.²⁰

Perhaps due to litigation between Bradbury and the Idaho Mining and Irrigation Company, the farmers under the canal began to suffer from an unreliable water supply even after the ditch was completed. In 1893, the *Idaho Daily Statesman* reported that the Phyllis had not carried water for more than a year and the canal had become damaged due to neglect.²¹ In March of 1893, Bradbury reached a settlement with the Idaho Mining and Irrigation Company that allowed him to begin repairs so that the Phyllis would deliver water for the upcoming irrigation season, but Bradbury himself remained obstinate and a source of great difficulty to the landowners.²² Water was again officially turned into the Phyllis in June of 1893, but the unwillingness of Bradbury to act in the best interest of the farmers led to unrest and anxiety.²³

Matters did not improve with Bradbury’s purchase of the Phyllis and New York Canals at a sheriff’s sale for \$184,000 in February of 1894.²⁴ When subcontractors who had worked on the ditch began to file claims against Bradbury, he was forced to file a petition with the courts to sell both the Phyllis and New York Canals in order to settle said claims against him.²⁵ During Bradbury’s ownership of the Phyllis – which continued until the Pioneer Irrigation District purchased it from him almost a decade

¹⁵ *The Caldwell Tribune*, Aug. 25, 1888; *The Caldwell Tribune*, Sept. 22, 1888. *Idaho Daily Statesman*, Aug. 22, 1889.

¹⁶ *Idaho Daily Statesman*, Feb. 23, 1890; March 2, 1890.

¹⁷ *Idaho Daily Statesman*, April 27, 1890.

¹⁸ *Idaho Daily Statesman*, May 20, 1890; *Idaho Daily Statesman*, June 1, 1890.

¹⁹ *Idaho Daily Statesman*, Jan. 1, 1891; *Idaho Daily Statesman*, May 13, 1891; *The Caldwell Tribune*, Jan. 9, 1892.

²⁰ *Thirteenth Annual Report of the United States Geological Society to the Secretary of the Interior 1891-1892, Part III-Irrigation* (Washington: GPO, 1893).

²¹ *Idaho Daily Statesman*, March 14, 1893.

²² *Idaho Daily Statesman*, March 26, 1893

²³ *Idaho Daily Statesman*, June 10, 1893.

²⁴ *Idaho Daily Statesman*, Feb. 9, 1894.

²⁵ *Idaho Daily Statesman*, Aug. 28, 1894; Aug. 14, 1895.

later – a three mile lateral to serve the south and west parts of Caldwell was under construction. Despite these improvements, the farmers who depended on water from the Phyllis struggled to obtain an adequate and reliable supply for the next few years.²⁶ In fact, the *Statesman* reported that the lack of water during the 1899 season had caused an “almost entire loss of crops to some and great damage to others.”²⁷ Without water, the landowners had nothing.

²⁶ *Idaho Daily Statesman*, July 9, 1900.

²⁷ *Idaho Daily Statesman*, July 9, 1900.



**Figure 1 Phyllis Canal Pipeline, c. 1890 Compliments of A.D. Foote
Courtesy of Brigham Young University, Idaho Mining and Irrigation Co., Photo Collection**



Figure 2 Phyllis Line, 13-foot Drop at Nampa, c. 1890
Courtesy of Brigham Young University, Idaho Mining and Irrigation Co. Photo Collection



Figure 3 Phyllis Canal, Side Hill Work, c. 1890
Courtesy of Brigham Young University, Idaho Mining and Irrigation Co. Photo Collection



Figure 4 Phyllis Canal, Crossing, Five Mile Creek, c. 1890
 Courtesy of Brigham Young University, Idaho Mining and Irrigation Co. Photo Collection



Figure 5 Phyllis Canal, Gutter of Pipeline, c. 1890
 Courtesy of Yale University Library Special Collections

Formation of the Pioneer Irrigation District 1899-1901

By the turn of the twentieth century, the farmers living on the land south of the Boise River had begun to realize that their fates were largely in the hands of absentee businessmen and faceless corporations who owned the canals and the water rights. The farmers suffered great losses by said owners' seemingly arbitrary decisions about when or even if to repair canals or other irrigation works. Those decisions, which determined whether or not water was delivered, meant the difference between a good crop that could sustain the family and be sold at market or a bad crop that would necessitate the head of the family obtaining other work that took him away from his homestead. Without a reliable source of water, the lands south of the river were wasteland, barely able to support a farming population.

The farmers, who were angered by the lack of reliable water under the Phyllis Canal during the 1899 season, attempted to organize under the Idaho Irrigation District law which the state legislature passed March 6, 1899. Creating a district would provide the farmers with some degree of self-control over their water and give them the flexibility to operate and maintain the canal as they wished. Two districts were conceived in the fall of 1899. The first, called the Phyllis and Caldwell Irrigation District, was proposed to include lands lying under both the Phyllis and the Caldwell Canals. The other, smaller district would have covered lands lying only under the Caldwell.²⁸ The former comprised approximately 22,000 acres, the latter 12,000.²⁹ The Canyon County Board of Commissioners met in January 1900 and approved the larger district, which embraced lands lying under the Phyllis Canal and above the Riverside Canal from the head of the Phyllis as far west as the Pipe Line Gulch, 35 miles from the head, with the exception of lowlands of the river bottom and adjacent to Dixie Slough along with other lands already having water rights from another source. The total acreage was 32, 515, only about 4000 acres of which was already being irrigated.³⁰ Following a February vote in which landowners approved the district by a large margin, the new district elected a Board of Directors in early March.³¹

The petitioners, upon meeting with State Engineer D.W. Ross, immediately hired Engineer A.J. Wiley to conduct surveys for them and to report on the potential viability of an irrigation district in the areas proposed. The newly elected Board of Directors designated Wiley to draft "such plans, maps, estimates, etc. as are required by law in the preliminary work of perfecting the system whereby the distribution of water for the district is to be effected."³² In another early action, the board also began

²⁸ *The Caldwell Tribune*, Nov. 11, 1899.

²⁹ *The Caldwell Tribune*, Dec. 23, 1899.

³⁰ *Idaho Daily Statesman*, Jan. 5, 1900; *The Idaho Leader*, Jan. 6, 1900; PID Minutes, May 15, 1900.

³¹ Pioneer Irrigation District Board of Directors Minutes, May 15, 1900, Pioneer Irrigation District offices, Caldwell, ID. Hereafter "PID Minutes."; *The Idaho Leader*, March 3, 1900.

³² *The Caldwell Tribune*, March 10, 1900; PID Minutes, March 8, 1900.

negotiations with Mr. Bradbury, the Phyllis's existing owner, who offered to sell the Phyllis Canal for \$75,000. The board took the offer under advisement and directed the Secretary to communicate and negotiate with Bradbury so as to obtain control over the critical canal.³³ The local paper speculated correctly that similar negotiations were ongoing with Mr. Sebree regarding the purchase of the Strahorn, or Caldwell, Canal as well.³⁴ Acting in his role as the engineer, Wiley offered preliminary opinions in the fall of 1899 on the work to be done to the Phyllis to make it fully functional. In reporting on the events, the *Idaho Daily Statesman* described the Phyllis Canal as 35 miles long. However, according to Wiley, it was no longer carrying its original capacity of water. At original construction, the canal had been 12 feet wide on the bottom and 20 feet wide at water level. When the canal reached Nampa, its width was reduced to 8 feet wide on the bottom and 13.5 on the top. Breaks and disrepair had limited its carrying capacity. Nonetheless, repairs to the side hill portion could, according to Wiley, restore the canal's original capacity.³⁵ With regard to the Caldwell Canal, Wiley's early assessment was that it could be extended on a higher line (i.e. the "High Line") from Ten Mile Creek west, and that the original canal could then be used as a distributing lateral. He also noted that said plan would require an enlargement of the canal, including a ditch on the side hill measuring 24 feet wide on the bottom, 3.5 feet deep, and 10 (ten) feet wide on the top. He estimated that such improvements would cost \$43,000, plus the \$10,000 that the existing owner, Mr. Sebree (acting on behalf of the Caldwell Real Estate and Water Company, soon to be the Caldwell Land Company Limited), was asking for the canal itself.³⁶

By spring 1900, Sebree was said to be strongly in favor of the district system and "cheerfully" willing to do anything in his power to assist in facilitating a system of water distribution.³⁷ The local papers contrasted his "spirit of liberality" with Bradbury's tendency to "squeeze from the farmers every cent that can be squeezed" in the negotiations over the Phyllis.³⁸ In May of 1900, the Pioneer Board of Directors adopted a General Plan to address the District's needs and turned the plan over to the State Engineer.

The plan itself was two-fold: a detailed explanation of the district's intentions with regard to the purchase of the two canals and its plans for further improvements. Even as early as 1900, the farmers in the district were aware of the natural features of the land on which they had settled and how those features affected the behavior of irrigation water. They knew that the lands in their District lay at the low end of a basin to which water from upper lands drained, and they also had some level of awareness of the rather shallow water table that existed in some parts of their district. They were also acutely aware of the arid climate and the desperate need for water that

³³ PID Minutes, March 8, 1900; *The Caldwell Tribune*, March 10, 1900; *Idaho Daily Statesman*, March 1, 1900.

³⁴ *The Caldwell Tribune*, March 17, 1900; PID Minutes, March 15, 1900.

³⁵ *Idaho Daily Statesman*, Dec. 1, 1899.

³⁶ *Idaho Daily Statesman*, Nov. 17, 1899.

³⁷ *The Caldwell Tribune*, April 7, 1900.

³⁸ *The Caldwell Tribune*, May 12, 1900.

farmers typically experienced each season between August and the first half of September, when the rains ceased and the rivers ran low. They noted that although there may someday be plans for “storing the abundant flood waters of the Boise” to accommodate this late season need, there did not yet exist any reservoirs to provide reliable water for the last part of the growing season.³⁹ Thus, the district was left to determine the best way to accommodate the necessity for water on a vast acreage throughout the entire irrigation season. In its General Plan, the board noted:

Of the water applied in irrigation a part is absorbed by the crop, a part is evaporated from the ground, a part runs off the surface and returns directly to the stream, and the remainder sinks into the ground. The water used by the crop and evaporated from the soil is lost to the irrigation system, but that running from the surface and that sinking into the ground is not lost. *The waste water from the fields will return by natural channel to the main stream or it may be gathered in artificial channels and used on other land. The water which sinks into the ground will first fill the sub-soil, and then reappear as springs in the lowest part of the valley, where the main stream is located.* [Emphasis added.]

To take advantage of the return flows and seepage water, the plan suggested constructing a new Caldwell Canal upon the high line location rather than enlarging the existing canal. “The greatest possible percentage of the land in the District should be irrigated from the lowest available point on the river in order to take advantage of the return waters,” the plan contended, “and the High Line covers a considerably larger tract than the present canal.” Thus, even the District’s original construction plans included comprehensive strategic engineering to both drain upper lands and to in turn deliver that water to lower lands. Under “System of Distribution,” the board continued to make its point:

As a necessary adjunct to its lateral system the District will provide drainage channels to collect the water waters, and convey them to lower laterals for redistribution. Title to all waste waters must be vested in the District, whose duty it will be to see that they are not allowed to become a menace to the health and a damage to the property of the residents, as well as an eyesore to its visitors, when by a *properly arranged drainage system they can be converted into an important aid to the water supply.* [Emphasis added.]

Finally, after examining various alternatives, the report recommended the purchase of the Phyllis Canal – even at the somewhat exorbitant price of \$75,000 – as well as the purchase of the Caldwell Canal. It explained the plan for canal improvements to be made, and also outlined the type of works that would be used for water measurement and headgates. The estimated cost for purchase and improvements of both canals came to \$193,315, and the plan recommended that bonds in said amount be issued.

³⁹ Deer Flat and Arrowrock Reservoirs were part of the U.S. Bureau of Reclamation’s Boise Project, and were completed in 1908 and 1915, respectively; Lucky Peak was an Army Corps of Engineers project and was completed in 1955.

They would only be disposed of by the District “as necessity may direct.”⁴⁰ A bond election was ordered to be held on July 28, 1900, at which time the board was authorized by voters to issue \$200,000 in bonds to pay for the purchases and planned works.⁴¹

Upon the bond election’s results and in accordance with the law, the District board directed its attorney to initiate special proceedings at the District and Supreme Courts to confirm the board’s proceedings thus far.⁴² Unfortunately for the people who had worked so hard to make the District a reality, the courts ruled against the District’s plans in November 1900. The ruling stated that the District was “a trifle short on land,” and that not enough of it was assessable. The law required that 25% of land in a District be assessable, and petitioners had not been accurate in their calculations.⁴³ To the farmers’ dismay, the Phyllis remained in the hands of Mr. Bradbury.

Discouraged but determined, the petitioners submitted a new petition to the Canyon County Commissioners, who were expected to hold a hearing on it on January 15, 1901.⁴⁴ The record indicates that the commissioners did not hear the petition until April 15, 1901, after the District petitioners adjusted the boundaries to exclude some lands not benefited by the proposed District.⁴⁵ State Engineer D.W. Ross presented his report on the proposal to the Commissioners in May, the District held its election in early July, and the courts ruled favorably on the district in December.⁴⁶ Throughout 1901, the board made an examination of all of the lands in the district to determine assessments, opting to charge all the lands at the same rate of \$6/acre.⁴⁷ The board also passed bylaws, a revised General Plan, and held a bond election in October to raise funds for the purchase of the canals.⁴⁸

The new plan, passed in September 1901 was almost identical to the plan passed by the board during the first iteration of the District’s petition. The plan specified that the District planned to re-build the Caldwell Canal on a higher level with a shallower grade, using the same heading on the river. The plan noted that the current canal’s grade was 3 ¾ feet to the mile, “which is greatly in excess of what is either necessary or desirable.” The plan was to keep the canal’s same line for the first three miles to what was known as the “big cut,” and then diverge from it and run from half to ¾ of a mile above it at a grade of 35 inches per mile. The board also hoped to take advantage of the area’s return flows with this canal. Estimates of the new canal’s

⁴⁰ “General Plan,” in PID Minutes, May 15, 1900.

⁴¹ PID Minutes, June 26, 1900; *The Caldwell Tribune*, June 30, 1900; PID Minutes, July 31, 1900.

⁴² PID Minutes, July 31, 1900.

⁴³ *The Caldwell Tribune*, Nov. 17, 1900.

⁴⁴ *The Caldwell Tribune*, Dec., 15, 1900.

⁴⁵ PID Minutes, General Plan, Sept. 3, 1901.

⁴⁶ *The Idaho Leader*, May 25, 1901; *The Idaho Leader*, Dec. 14, 1901; PID Minutes, July 11, 1901.

⁴⁷ PID Minutes, July 24, 1901. The flat rate assessment became a general policy of the district throughout the period that this report covers.

⁴⁸ PID Minutes, Sept. 10, 1901.

costs had crept up slightly over the previous year, coming to a total of just over \$207,000, for which the District planned to issue bonds.⁴⁹

After much angst over the cost of the Phyllis, the board secured purchase of the two canals from Bradbury (for the Phyllis) and Sebree/Caldwell Real Estate and Water Company (for the Caldwell) during the first six months of 1902.⁵⁰

Early Years of the Pioneer Irrigation District: 1901-1912

With the canals purchased and the existence of the Pioneer Irrigation District secure, the next few years were spent upgrading the facilities and ensuring the delivery of water to the farmers. The board also maintained a dogged focus on improvements that would increase the irrigable acreage within the District. The neighboring areas to the east and the south were also in the midst of expansion, thanks to the passage of the Reclamation Act in 1902 and the subsequent authorization of the Boise Act in 1905. (See below.) No one anticipated, however, the problems that would come with such a vast increase in irrigation.

In September 1902, the Pioneer board voted to advertise for bids to enlarge the two canals. With regard to the Phyllis, the Board proposed improvements to enable the canal to carry its ultimate capacity of water from its point of diversion to Five Mile Creek, a distance of about six miles. The board also envisioned the Caldwell Canal being enlarged from its point of diversion to the point where it encountered the line of the High Line survey at Indian Creek.⁵¹ Work on both canals involved repairing the side hill cuts, where the canals climbed out of the river bottom and up to the bench land.⁵² Such work was some of the hardest and most expensive to construct. In November, the board awarded the contract for both the Phyllis and Caldwell enlargements to Faris and Kesl who offered a bid of \$65,000 for the work. The enlargement plans included taking the Phyllis canal from 14 feet wide on the bottom to 28 feet, with a top width of 45 feet. The District hoped to use it as a feeder canal to the Caldwell.⁵³ Although their contract required them to complete their work in the spring of 1903, the contractors encountered difficulties in fulfilling their obligations and did not complete the work until sometime in 1904.⁵⁴

⁴⁹ PID Minutes, Sept. 5, 1901.

⁵⁰ *Idaho Daily Statesman*, April 30, 1902; *The Idaho Leader*, May 3, 1902; *Idaho Daily Statesman*, June 24, 1902; PID Minutes April 10, 1902; PID Minutes, June 14, 1902.

⁵¹ PID Minutes, Sept. 20, 1902.

⁵² *The Idaho Leader*, Oct. 1, 1902.

⁵³ PID Minutes, Nov. 6, 1902; Dec. 11, 1902; *Idaho Daily Statesman*, Dec. 12, 1902; *The Idaho Leader*, Dec. 10, 1902; Dec. 13, 1902.

⁵⁴ *Idaho Daily Statesman*, April 29, 1903; Oct. 1, 1903. There was some concern on the part of the Pioneer Board that Faris and Kesl would not complete the work. The board passed an extension for the contractors on April 14, 1903. Even after that time, the work was not completed. The record is unclear as to when and how the work was finalized.

The year after awarding the initial enlargement work to Faris and Kesl, the District decided to continue the enlargement of the two primary canals for a further distance. At the same time, it opted to cease allowing new lands into the District for fear of being unable to provide water for them.⁵⁵ During 1903, new contracts were let to continue the work of enlarging the Phyllis an additional twelve miles to Star, going from a bottom width of eight feet to 27 feet.⁵⁶ The board also accepted and awarded bids to construct the Caldwell High Line to two contractors for two different sections of the work, the first to Bisset, Marsh, and Reeser, who would construct the canal from station 171 to station 358, and the second to Metcalf and Nicholas who would construct the High Line from Mason Creek to Indian Creek.⁵⁷ The new canal was to take out of the Boise River at the same place as the original Strahorn (Caldwell) Canal and run 10 miles along higher bench land than the original ditch. It was surveyed to be in the shape of a crescent.⁵⁸ In the meantime, during the 1904 season, the old Caldwell Canal continued to be utilized as a lateral.⁵⁹ Work on both the Phyllis and Caldwell Canals was completed to a degree, without incident. That spring water was turned in to the delight of the farmers, who now felt assured of a reliable water supply.⁶⁰

As with most projects in the Boise Valley, the next stage of progress was not immediate or linear. There was some hesitation – perhaps dictated by monetary concerns – to continue work on the High Line of the Caldwell. In May 1904, a board member formally suggested that the board examine the old Caldwell Canal from the point where the new High Line Canal emptied into it to its terminus, to determine whether it was necessary to complete the new “lateral” right away. After conducting the examination, the board decided that “the completion of the High Line lateral is not necessary.”⁶¹ Additionally, they did not abandon the Old Caldwell Canal in the area in which it *had* been replaced by the new High Line, being instead “convinced that benefit will accrue to the District through maintaining the old Caldwell Canal, from Mason Creek down,” and opting to keep the canal open “for the *purpose of catching waste water and redistributing the same.*”⁶² [Emphasis added.]

Additional improvements were made over the course of the next six years. The Phyllis side hill section was enlarged again between 1907-1908 with the use of a District-purchased dredge.⁶³ The farmers in the District were increasingly successful, subsisting and supporting families thanks to the water being delivered through these two canals onto their largely productive lands.

⁵⁵ PID Minutes, June 2, 1903.

⁵⁶ *Idaho Daily Statesman*, Oct. 1, 1903; *The Caldwell Tribune*, Oct. 17, 1903.

⁵⁷ PID Minutes, Oct. 1, 1903.

⁵⁸ *Idaho Daily Statesman*, Sept. 13, 1903; PID Minutes, Oct. 1, 1903.

⁵⁹ PID Minutes, April 5, 1904.

⁶⁰ *The Caldwell Tribune*, March 14, 1904; April 16, 1904; *Idaho Daily Statesman*, April 28, 1904.

⁶¹ PID Minutes, May 3, 1904.

⁶² PID Minutes, May 12, 1904.

⁶³ PID Minutes, Oct. 15, 1906; Feb. 6, 1907

Pioneer Irrigation District, the Boise Project, and the United States Reclamation Service, 1902-1912

As the Pioneer District continued its work during the first decade of the 20th century, irrigation and reclamation in the West underwent a dramatic transformation. And while the Pioneer District was determined to remain a private entity, it did not operate in isolation from broader changes in neighboring desert lands south of the Boise River. The most significant event to occur during this period was Congress's passage of the Reclamation Act, or the Newlands Act, in 1902. The law provided federal dollars for the construction of reclamation projects across the West, and the Boise area was one of the new agency's first targets.

Because hydrological systems do not conform to arbitrarily created human boundaries, irrigation development that occurred in the desert south of the Boise River but outside of Pioneer's boundaries nonetheless impacted the District's operations. Thus, while the particular history of the U.S. Reclamation Service's Boise Project itself is not within the scope of this report, it is important to understand three issues: the general history of the Project, the federal activity in the Boise desert during the first two decades of the twentieth century, and the evolving relationship between the Pioneer District and the Project.

Created by the 1902 Reclamation Act, the U.S. Reclamation Service was highly aware of the problems confronting farmers who needed water late in the irrigation season. Because the agency had access to the funding for the construction of water storage facilities, the Service began to actively survey this land in 1903-1904 in an attempt to determine the best location for a dam and reservoir. Upon receiving an enthusiastic report on the project's potential, Congress authorized the project, initially called the "Payette-Boise Project," in March 1905, and allocated \$1,300,000 from the Reclamation fund to conduct the work.⁶⁴ By then, landowners throughout the Boise Valley had formed the Payette-Boise Water Users' Association, contracting with the United States to return the cost of building the necessary structures.⁶⁵ The Service commenced work immediately, completing the Deer Flat Reservoir just a few years later, an off-river reservoir site approximately four miles west of Nampa fed by water diverted through the Reclamation Service's New York Canal.

Soon after the Project's authorization, a relationship developed between the Reclamation Service and the Pioneer District. Many landowners in the Pioneer District signed stock subscriptions with the Payette-Boise Water Users' Association in 1905, and the District itself signed a contract with the association in 1906 in the hopes of receiving late season water through the Service's facilities. But being a part of the Association meant that the District lands were subject to liens held by the

⁶⁴ F.H. Newell, *Ninth Annual Report of the Reclamation Service* (Washington, D.C.: Government Printing Office, 1911): 107.

⁶⁵ *Ibid*, 107.

Association, which later posed problems for the District.⁶⁶ Additionally, the newly developed lands watered by the Boise Project created a good deal of seepage water that, by virtue of Pioneer's location in the hydrological system, waterlogged large swaths of District lands, thereby rendering much of it useless for meaningful cultivation. By 1909, it had become clear that the two Reclamation Service and Pioneer Irrigation District would have to work together to ensure the continuation of productive lands.

Drainage of Desert Lands South of the River and other Improvements, 1909-1922

Individual landowners began reporting waterlogged lands in the Pioneer Irrigation District as early as December 1904.⁶⁷ The continued irrigation of lands under the Phyllis and Caldwell Canals and the increased irrigation on other lands across the southern desert created a dual set of concerns for the farmers in the Pioneer District. First, there was a great deal of unabsorbed water flowing onto the lower-lying lands in the Pioneer District; second, the water table underlying the lands had gradually begun to rise either to land surface levels or very near. The continued seepage and return flow water gradually began to ruin what recently had been productive farmlands. Farmers, who relied exclusively on the productivity of the lands for their livelihood, could not survive in the barren desert without water to farm or drainage in the areas which had become swamped. The economic impact of the swamping was severe. The farmers, who could finally rely on a steady delivery of water, were now faced with a problem that none had anticipated – too *much* water on their land.

The Reclamation Service was also struggling to solve the problem of seepage in the Boise Project. Because their upland projects were often the cause of seepage onto lower lands, the Service found itself subject to liability. To contend with the issue, the District and the Service began working together to solve the problem soon after Deer Flat Reservoir was constructed in 1908. Beginning in March 1909, the Reclamation Service's Project Engineer, Edward Hedden, came frequently to the Pioneer Irrigation District board meetings to discuss the Service's desire to divert seepage water from Deer Flat into the Phyllis Canal, which ran immediately below it. The District was wary of the partnership, engaging in it only reluctantly and insisting that the Service cease the diversion into the Phyllis as of October 1, when the District needed the Phyllis to be dry in order to conduct seasonal repair work.⁶⁸

⁶⁶ F.W. Hanna, Project Engineer to Supervising Engineer, U.S. Reclamation Service, Feb. 9, 1912, "260-A BOISE PROJECT Drainage of Pioneer Irrigation District Thru 1912 260-A," Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, Record Group 115, Records of the Bureau of Reclamation, National Archives and Record Administration, Rocky Mountain Region. Hereafter "RG 115."

⁶⁷ PID Board Minutes, Dec. 6, 1904; Sept. 5, 1905.

⁶⁸ PID Minutes, March 2, 1909; May 4, 1909; June 1, 1909; Aug. 3, 1909. F.E. Weymouth to Director, U.S. Reclamation Service, July 8, 1909, 699-6 Boise Project, Idaho. Grant of right for U.S. to flow seepage water into canal of 699-6, Entry 3, General Administrative and Project Records, 1902-1919, box 406, RG 115.



Figure 6 June 22, 1914

"Reclaimed land on U.S. Drain to Upper Embankment. Flats on either side of drain are now covered with heavy wheat crop. Before drain was constructed they were immense swamps covered with bullrushes."⁶⁹

⁶⁹ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

By January 1910, the seepage problem clearly necessitated a District-wide solution. Describing the situation some years later, engineer R.J. Newell wrote:

There was a large increase in the irrigation of lands lying higher on the valley slope, mainly in the federal project, and the water table began to rise rapidly. Seepage conditions, already observable, spread and demanded attention. Forests of tules took possession of the low lands in the principal draws and alkali deposits appeared in many cases. Apparently the groundwater table did not parallel the ground surface but was near level transversely to the general valley slope, thus coming to or near the surface in the draws while the slightly higher ridges did not suffer.⁷⁰

The District board approached what it called “the waste water problems” with its attorneys in January of that year,⁷¹ but it was not until July 1910 that the board was forced to deal with the matter by a group of landowners living in the vicinity of the Midway school house (located on the Oregon Short Line approximately halfway between Nampa and Caldwell). The landowners had met earlier in the month and appointed a three-person committee to petition the board, resolving that there was “great need of such drainage system at the present time, and this need is growing greater and more urgent each succeeding [SIC] year.” Therefore, they requested that the District construct a system to:

provide drainage channels to collect the waste waters and convey them to lower laterals for redistribution. Title to all waste water must be vested in the district, whose duty it will be to see that they are not to become a menace to the health and a damage to the property of the residents, as well as an eyesore to its visitors, when by a properly arranged drainage system they can be converted into an important *aid to the water supply*.⁷²

Upon receiving the resolution at a special board meeting, the board directed its attorneys to submit a written opinion at their next meeting on whether or not the district could legally issue bonds for the construction of a drainage system.⁷³ The attorneys offered their opinion at the next board meeting, recommending two strategies: first, that the board should first obtain a survey and an estimate of the drain system before issuing bonds, and second, that they needed to call an election and obtain a ruling from the courts as to whether or not the board had the legal right to issue bonds for drainage purposes.⁷⁴ The board directed their attorneys to advise them on the best way to proceed.

⁷⁰ R.J. Newell to Chief Engineer of Bureau of Reclamation, Jan. 22, 1931, 636 Payments – Drainage, Pioneer Irrigation District Historic Records, Basement Drawers.

⁷¹ PID Minutes, Jan. 20, 1910.

⁷² PID Minutes, July 16, 1910.

⁷³ PID Minutes, July 16, 1910.

⁷⁴ PID Minutes, Aug. 2, 1910. Edward Hedden also provided a written opinion at this board meeting that the cost of surveying the district would be approximately \$10,000, or \$.30/acre.

Surprisingly, in spite of the great need for drainage, there remained a simultaneous need for supplemental water, particularly in the lower ends of the District and in the late irrigation season. A group of landowners who were at the low end of the District had created an organization called the Idaho Promotive and Protective Association. The association petitioned both the District board and the Reclamation Service to cooperate with them in inaugurating a “more complete irrigation system”⁷⁵ so as to obtain additional water. The farmers on District lands, accustomed to fending for themselves, were clearly suffering from one of two opposite plagues: waterlogged land or inadequate water.

After struggling with the problem, the District board came to realize that it could simultaneously solve its drainage problem *and* provide additional water in the late season. Although it was clear that there would have to be some level of cooperation between the District and the Reclamation Service and that by working together, all the land south of the river might be aided, the Pioneer Board did not feel it had the luxury of waiting for the Reclamation Service to join its efforts. Discussions had begun between the entities in 1911, both regarding collaboration on drainage beyond the Deer Flat seepage as well as the release of District lands from the Water Users Association. But communication was painfully slow and tedious at the time, and various Reclamation Service officials provided conflicting messages as to whether the agency would participate in either the draining of the lands or the release of District lands from the Water Users Association.⁷⁶ With the final decision in *Farmers’ Cooperative Ditch Company vs. Riverside Irrigation District* decided in 1909 and the District now clear on their decreed yet inadequate water rights,⁷⁷ Pioneer realized that its needs could not wait. Thus, it resolved in September 1911 that:

there are large quantities of waste and seepage water within the boundaries of the District which, if the same could be conserved, could be applied to a *beneficial use* upon the lands of the District and would thereby be a great benefit to the District...these waste and seepage waters within the District are ruining the lands of the District and that by collecting the same in ditches and by pumping the water collected thereby into our canals, the District would work a double benefit for itself.⁷⁸ [Emphasis added.]

In particular, the board believed that by digging a large ditch through the lands bordering Mason Creek, Indian Creek, and the Dixie slough, “a large supply of water could be obtained, which is greatly needed for irrigation.” The members then hired Edward Hedden, previously employed by the Reclamation Service, to examine the lands in those areas and determine the amount of water that could be obtained by such a plan.⁷⁹ It took only two months for Hedden to examine the tract and create a

⁷⁵ PID Minutes, Oct. 4, 1910; Dec. 3, 1910.

⁷⁶ PID Minutes, Feb. 11, 1911, March 7, 1911; April 4, 1911. Director to F.E. Weymouth, Sept. 25, 1911, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District Thru 1912 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

⁷⁷ *Farmers’ Co-operative Ditch Company v. Riverside Irrigation District, Ltd.*, et al., 16 Idaho 525

⁷⁸ PID Minutes, Sept. 19, 1911.

⁷⁹ PID Minutes, Sept. 19, 1911.

general plan of construction, the estimates for which came to slightly over \$313,000. The board approved his plans unanimously on November 18, 1911, and set the bond election for February 9, 1912.⁸⁰

Immediately thereafter, the Pioneer Irrigation District officially petitioned the Payette-Boise Water Users Association to be released from the obligation of membership. Pioneer explained its history with the Boise Project in its request, stating that the original 1905 contract with the Service had provided the District with late season water from Deer Flat Reservoir. Sometime after that contract was signed, the Reclamation Service changed its storage of late season water to the Arrow Rock Reservoir, causing an increase in cost to Pioneer Irrigation District without its consent, according to the official petition. Thus, the District felt it had ample justification for requesting release. Additionally, the District wanted to construct the drainage facilities privately, and knew that without such a release, it would be difficult to raise the bonds necessary to finance the construction.⁸¹ The District's pleas fell on deaf ears, and the Association voted to deny the petition, forcing the District to remain in the Association. The Director of the Service informed the District of the decision by letter.⁸²

⁸⁰ PID Minutes, Nov. 18, 1911.

⁸¹ Petition in the Matter of the Application of the Pioneer Irrigation District and the Landowners Within the Boundaries of Said District to Withdraw from the Payette-Boise Reclamation Project, Jan. 10, 1912, in 260-A BOISE PROJECT Drainage of Pioneer Irrigation District Thru 1912 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

⁸² Director of U.S. Reclamation Service to the Directors of Pioneer Irrigation District, Dec. 14, 1911, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District Thru 1912 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 7 June 22, 1914

"Scene on Upper Wilson Slough four miles above where the dredge is now working...[This will be] made ready for crops in 1915. Four years ago this was some of the finest agricultural land in the Boise Valley, now a lake of rushes."⁸³

⁸³ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 8 June 22, 1914

“Whitehead & Bradley's once prosperous 10 acre prune orchard from which four car loads of prunes were marketed four years ago. Now completely ruined by seepage.”⁸⁴

⁸⁴ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 9 June 22, 1914

"Scene in H.G. Monce's orchard. Trees dying off and a heavy growth of rushes growing up among the trees."⁸⁵

⁸⁵ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 10 June 22, 1914

"Young orchard on Chas Verheyne's Ranch giving way to serious seepage conditions. These trees blossomed this spring but were to [sic] nearly drowned to produce foliage. Some of the trees may live as the ground water has been lowered approximately 6 ft. by the Mason Creek Drain."⁸⁶

⁸⁶ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 11 June 22, 1914

"The famous Pittenger nursery on Mason Creek which netted the owner an income of \$9,000 per year but which has been practically submerged for the past three years. The drain has been dug through this place for 40 days. Mr. Pittenger has mowed and burned most of the rushes and has a large acreage plowed."⁸⁷

⁸⁷ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 12 June 22, 1914

"Whitehead & Bradley's ruined orchard in the foreground. H.G. Monce's apple orchard in the back ground. Note lack of foliage on trees due to waterlogging of ground by seepage from ground waters."⁸⁸

⁸⁸ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

Despite early indications that the Reclamation Service would not participate in the construction of Pioneer's drainage facilities, cooperation with the government now looked likely. The Reclamation Service had never disagreed that drainage was necessary throughout the lands south of the Boise River, but for a variety of reasons, had initially thought it impossible to pay for such works. After months of back and forth communication among themselves, however, Service engineers and attorneys had since concluded that the work was better done by the government and not by the District, and they had also opined that the 1902 law did in fact enable such work. It was near impossible to construct a drainage system that would serve *only* the lands in the District, they reasoned, with one engineer arguing: "The drainage system...of the Pioneer Irrigation District cannot be made an entirely independent system from some of the lands of the rest of the Boise project."⁸⁹ They therefore agreed that it would be more appropriate to build a system that would serve all the lands in the area jointly. Reclamation Service officials felt that the cost estimates Hedden came up with in the fall of 1911 were fair.⁹⁰ Thus, although the Water Users Association had voted to deny the District's withdrawal, the Director of the Reclamation Service recommended to the Secretary of the Interior in January 1912 that the District be released from the Boise Project under certain conditions: 1) that a stipulation be made with regard to exchange of water with the Phyllis Canal; 2) that the proposed drainage ditches be large enough to carry water from Deer Flat and other lands above the Phyllis; and 3) that the land owners below the Phyllis agree to make no further claim for damages from seepage water above the Phyllis.⁹¹

Almost as though the Reclamation Service had ordered it, the special bond election in called by Pioneer for February to pay for drainage construction failed, and the District was left no choice but to negotiate with the government agency regarding the drainage. The engineers on the Boise Project were now convinced of the importance of building an integrated system for the entire area south of the River. As Frederick Newell, director of the Reclamation Service reiterated, the District itself is "practically surrounded by the Boise project, and no adequate system of drainage for the Boise project can be carried out without at the same time providing for a certain amount of drainage of the Pioneer District."⁹² As part of the Service's effort to propose a solution of its own, an engineer on the Boise project provided his own version of a plan for the drainage system in July 1912. It included estimates and project plans for the various ditches, as well as a map indicating what he believed the

⁸⁹ F.W. Hanna to Supervising Engineer, U.S. Reclamation Service, Feb. 9, 1912, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District Thru 1912 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

⁹⁰ F.W. Hanna to Supervising Engineer, U.S. Reclamation Service, Feb. 9, 1912, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District Thru 1912 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

⁹¹ F.W. Hanna to Supervising Engineer, U.S. Reclamation Service, Feb. 9, 1912, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District Thru 1912 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

⁹² F.H. Newell to the Honorable Secretary of the Interior, April 26, 1912, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District Thru 1912 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

priorities should be, based on what he perceived to be the greatest need. The majority of the drains covered in the 1913 contract were built in the western part of the District. Mason Creek, Dixie Slough, Wilson Slough, Purdum Gulch, and Elijah Slough were included in the group he called the “No. 1” drains. “No. 2” drains included Dixie Slough, Noble Slough, and Solomon Slough. Finally, the lowest priority group, the “No. 3” drains consisted of Dixie Slough, Moses Slough, Noble Slough, Solomon Slough, Jacob Slough, and Isaiah Slough.⁹³ The Service plan included a slightly greater number of drains than Hedden’s plans had envisioned, and limited the financial outlay to \$350,000.

The Service drafted a contract favorable to Pioneer, with the Reclamation Service building and financing the drains and Pioneer paying the costs back over time. Electors in the District approved the terms of the contract in a special election that fall,⁹⁴ and directors immediately arranged for a petition to be reviewed by the courts in order for the contract to be “judicially examined, approved and confirmed.”⁹⁵ Pioneer Irrigation District and the United States signed the agreement in February 1913, providing a \$350,000 advance by the government for a drainage system in the Pioneer Irrigation District, and new terms for water delivered from Arrow Rock Reservoir to the District.⁹⁶ The contract became effective on April 23 of that same year.⁹⁷ The \$350,000 was expected – and stated as such – to be insufficient to drain the entire District, but any degree of construction was expected to make some significant progress toward drainage of the worst waterlogged lands and to help deliver water to lower lying lands in the late season. Crews were employed throughout the summer of 1913 to conduct surveys, make test pits, determine topography, and classify subsoil. Construction of the drains began in November, and continued into 1915.⁹⁸ And in October 1913, the Payette-Boise Water Users Association finally released all lands within the Pioneer District from obligation.

⁹³ Walter Ward to Acting Project Engineer, July 30, 1912, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District Thru 1912 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

⁹⁴ PID Minutes, Nov. 6, 1912. Election was held Oct. 29, 1912.

⁹⁵ PID Minutes, Dec. 3, 1912.

⁹⁶ The voters approved the contract in October 1912; the Idaho Supreme Court passed favorably on the contract on February 15, 1913. The contract provided the District with a \$560,000 interest in Arrowrock Reservoir in addition to the drainage authorization. William M. Green, “Report of Drainage Operations in the Pioneer Irrigation District and the Nampa and Meridian Irrigation District of the Boise Project,” Dec. 1917, p. 9, Project Reports, 1910-1955, 8NN-115-85-019, Box 59, RG 115.

⁹⁷ William M. Green, “Report of Drainage Operations in the Pioneer Irrigation District and the Nampa and Meridian Irrigation District of the Boise Project,” Dec. 1917, p. 9, Project Reports, 1910-1955, 8NN-115-85-019, Box 59, RG 115.

⁹⁸ William M. Green, “Report of Drainage Operations in the Pioneer Irrigation District and the Nampa and Meridian Irrigation District of the Boise Project,” Dec. 1917, Project Reports, 1910-1955, 8NN-115-85-019, Box 59, RG 115.

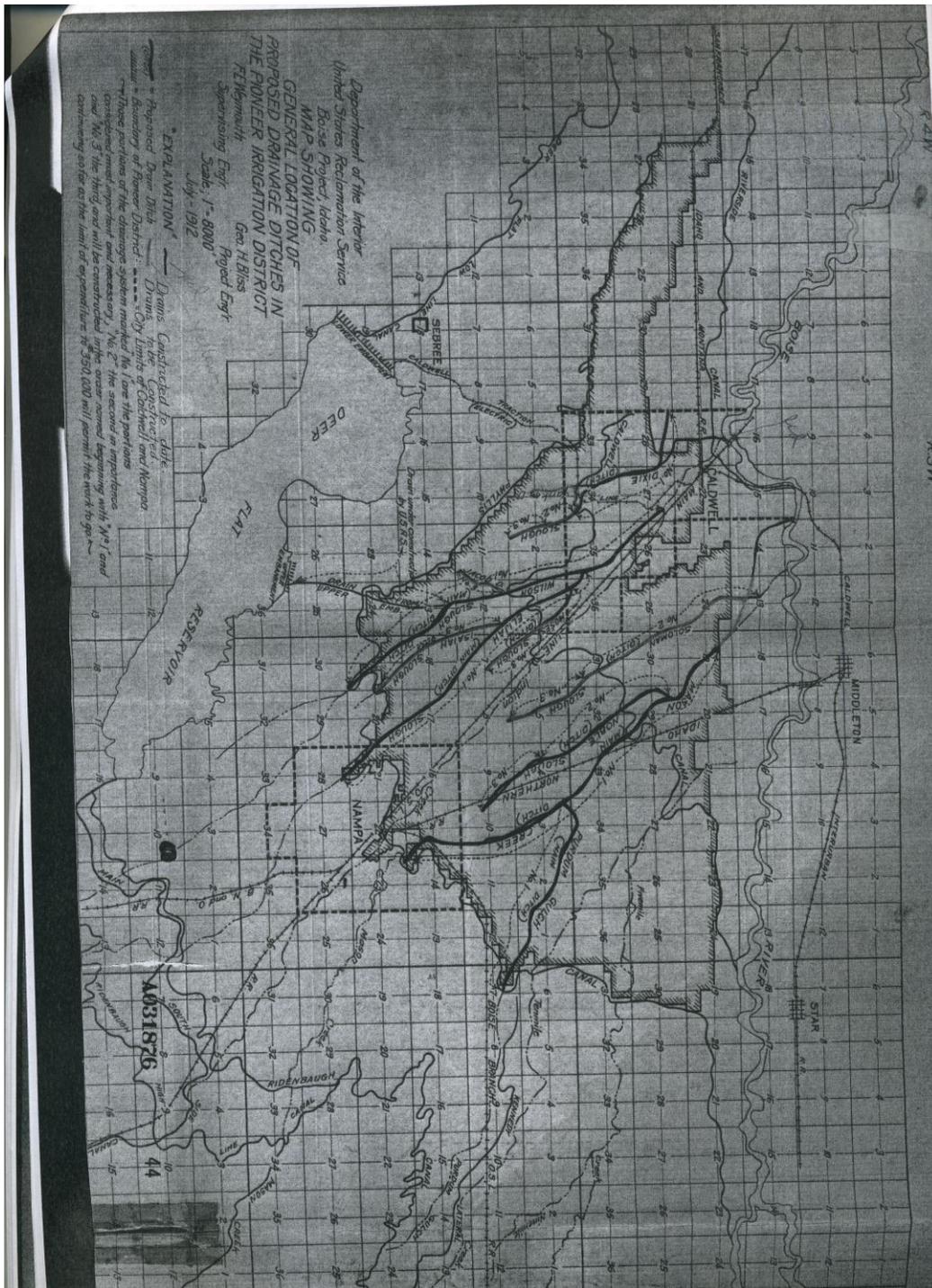


Figure 13 July 1912
Map Showing General Location of Drainage Ditches in the Pioneer Irrigation District⁹⁹

⁹⁹ Map Showing General Location of Proposed Drainage Ditches in the Pioneer Irrigation District, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

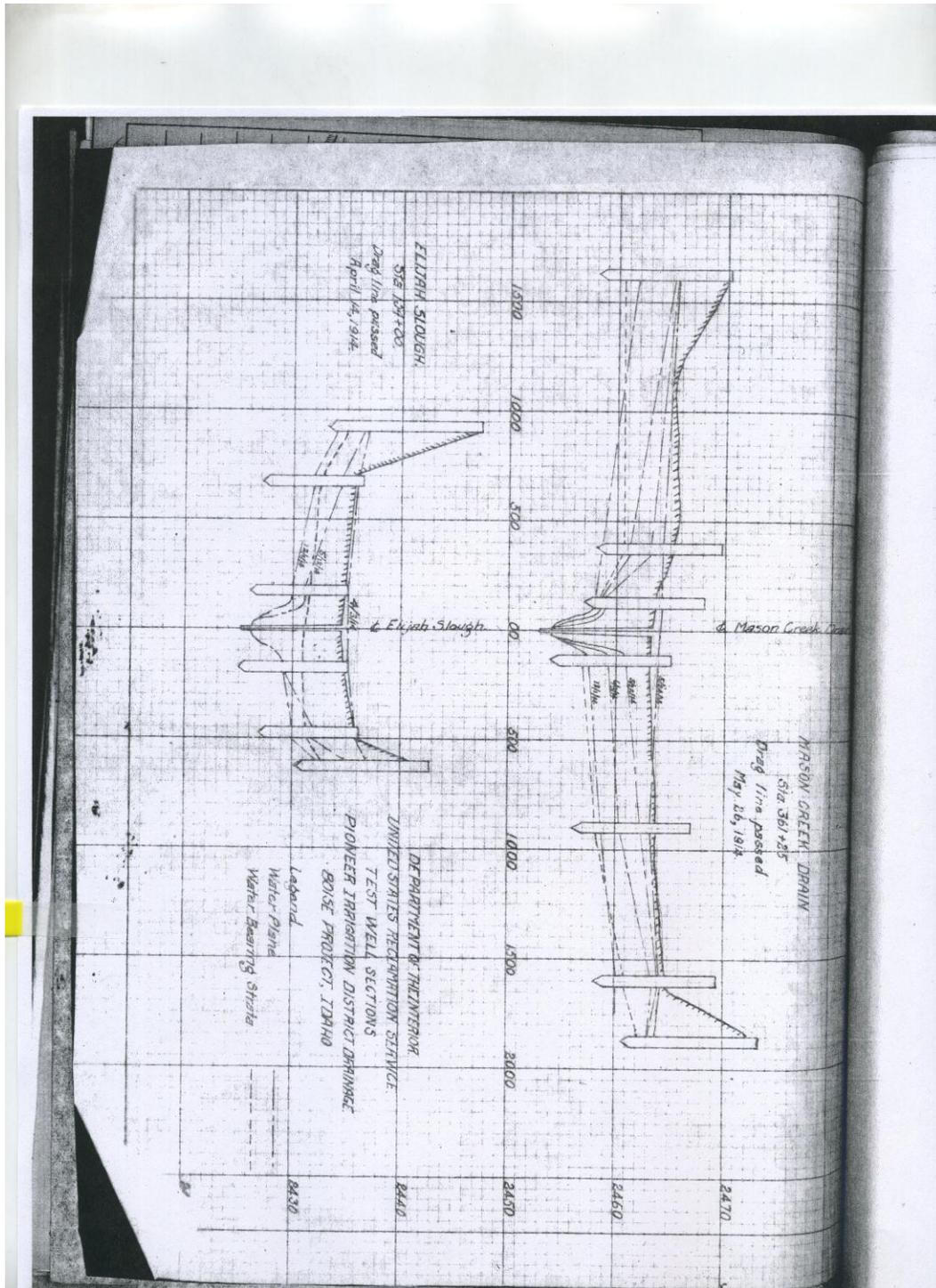


Figure 14 1914
 U.S. Reclamation Service Diagrams of the Mason Creek and Elijah Slough Drains¹⁰⁰

¹⁰⁰ Report of Drainage Operations in the Pioneer Irrigation District and the Nampa and Meridian Irrigation District of the Boise Project, by Wm. M. Green, Dec. 1917, Project Reports, 1910-1955, 8NN-115-85-019, Box 59, RG 115.



Figure 15 June 22, 1914
"Electric Dredge on Wilson Slough Drain."¹⁰¹

¹⁰¹ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 16 June 22, 1914

"Electric Dredge on Wilson slough drain about three miles from Caldwell, showing immense tract of swamp land."¹⁰²

¹⁰² 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 17 June 22, 1914

"Dredging on Wilson Slough Drain. Note development of water, approximately 2 sec. ft. in 600 feet of ditch."¹⁰³

¹⁰³ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 18 (no date, likely June 22, 1914)
"View showing drainage from water bearing strata on Mason Creek Drain."¹⁰⁴

¹⁰⁴ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 19 June 22, 1914

"View on Mason Creek Drain showing large discharge of water from water bearing strata. This picture was taken 30 days after the dredge passed this point. The drain through this section of the country is developing approximately 7 sec. ft. of water per mile."¹⁰⁵

¹⁰⁵ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 20 June 22, 1914

"View on Mason Creek Drain near the Chas. Verheyn orchard. This drain is developing approximately 7 sec. ft. of water per mile through this country."¹⁰⁶

¹⁰⁶ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 21 June 22, 1914

"Mason Creek Drain where it passes through the once famous orchard section about one and one-half miles from Nampa, Idaho."¹⁰⁷

¹⁰⁷ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 22 June 22, 1914
Electric Dredge excavating, Purdam Slough Drain on Lemp's Ranch."¹⁰⁸

¹⁰⁸ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 23 June 22, 1914
"Dredge bucket loading in hard cemented gravel on Purdam Slough Drain."¹⁰⁹

¹⁰⁹ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.



Figure 24 June 22, 1914
"Excavating for bridge sills on road crossing on Purdam Drain."¹¹⁰

¹¹⁰ 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

Between 1913 and 1915, the drainage ditches, which were intended to not only drain waterlogged lands, but to augment the District's water supply, were built across the Pioneer Irrigation District in the phases outlined in the Reclamation Service's plan.¹¹¹ It was clear by late 1914 that the costs incurred in building the system were considerably less than all parties had expected. However, in that same short period of time, the water table in the *eastern* end of the District has risen rapidly, causing damage to farmlands there, as well. Thus, arrangements were made to negotiate a supplemental contract between the Pioneer District, the Nampa Meridian Irrigation District (which borders Pioneer on the East), and the Reclamation Service to construct additional drainage works.¹¹² By June 5, 1915, all work under the original 1913 contract had been completed successfully at an approximate cost of only \$193,000,¹¹³ and the supplemental contract was signed ten (10) days later. The contract itself acknowledged the rise in the water table, noting "that the danger of seepage in that portion of the District is becoming alarming, and that an additional drain or drains should be constructed in said portion of the Pioneer District at a location where non was...contemplated under the original contract."¹¹⁴ The 1915 contract included plans to construct a deep drain at the eastern end of the Pioneer District, as well as the Moses, Nampa, Midway, East Caldwell, Grimes,¹¹⁵ Madden Spur, West End, Parker, Bardsley Gulch, North and South Phyllis drains, and Caldwell Feeder drains.¹¹⁶ Not all of the drains were anticipated or planned when the contract was signed; some were added as construction progressed and needs were better understood.¹¹⁷ In 1916, Pioneer also requested that funds be spent out of the initial \$350,000 to construct a cement lining for the Phyllis Canal, which had been responsible for a great deal of seepage water at the place where it skirted the hillside in Ada County, near the head of the canal. The Service denied that request.¹¹⁸

¹¹¹ There are many references to such intentions. There was an agreement drawn up between the Reclamation Service, the Pioneer Irrigation District, and the Nampa Meridian Irrigation District in approximately 1916 specifically for the saving of water in the Five and Ten Mile drainage systems. Said water was to be, with "three short ditches" constructed, "turned into the Caldwell High Line Canal and through said canals applied to beneficial use for irrigation purposes." Draft agreement between United States of America, Nampa & Meridian Irrigation District and the Pioneer Irrigation District, undated, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1915-1919 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

¹¹² E.B. Hoffman to Mssr Bien, Nov. 30, 1914, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1913-1914 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

¹¹³ William M. Green, "Report of Drainage Operations in the Pioneer Irrigation District and the Nampa and Meridian Irrigation District of the Boise Project," Dec. 1917, p. 15, Project Reports, 1910-1955, 8NN-115-85-019, Box 59, RG 115.

¹¹⁴ Jan. 2, 1915 Draft of 1915 contract, 636 Payments – Drainage, Pioneer Irrigation District Historic Records, Basement Drawers.

¹¹⁵ PID Minutes, Aug. 10, 1915.

¹¹⁶ A.P. Davis to the Secretary of the Interior, Aug. 14, 1916, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1915-1919 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

¹¹⁷ R.M. Patrick to Chief Counsel, March 2, 1916, 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1915-1919 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115; PID Minutes, Feb. 1, 1916.

¹¹⁸ In the Matter of the Application of the Pioneer Irrigation District to Use Balance of Drainage Fund for the Cementing of Phyllis Canal Where Said Canal Skirts the Hillside in Ada County, Idaho, June 6, 1916;



2. This is a view taken on Five Mile drain about two miles above Phyllis crossing.

It shows the effect of allowing large heads of waste water to run into the drains over gravel banks. This wash is composed of coarse gravel and cobble rock, and when it becomes settled the water does not readily cut through. It is difficult to clean a drain where it has been filled with this material.

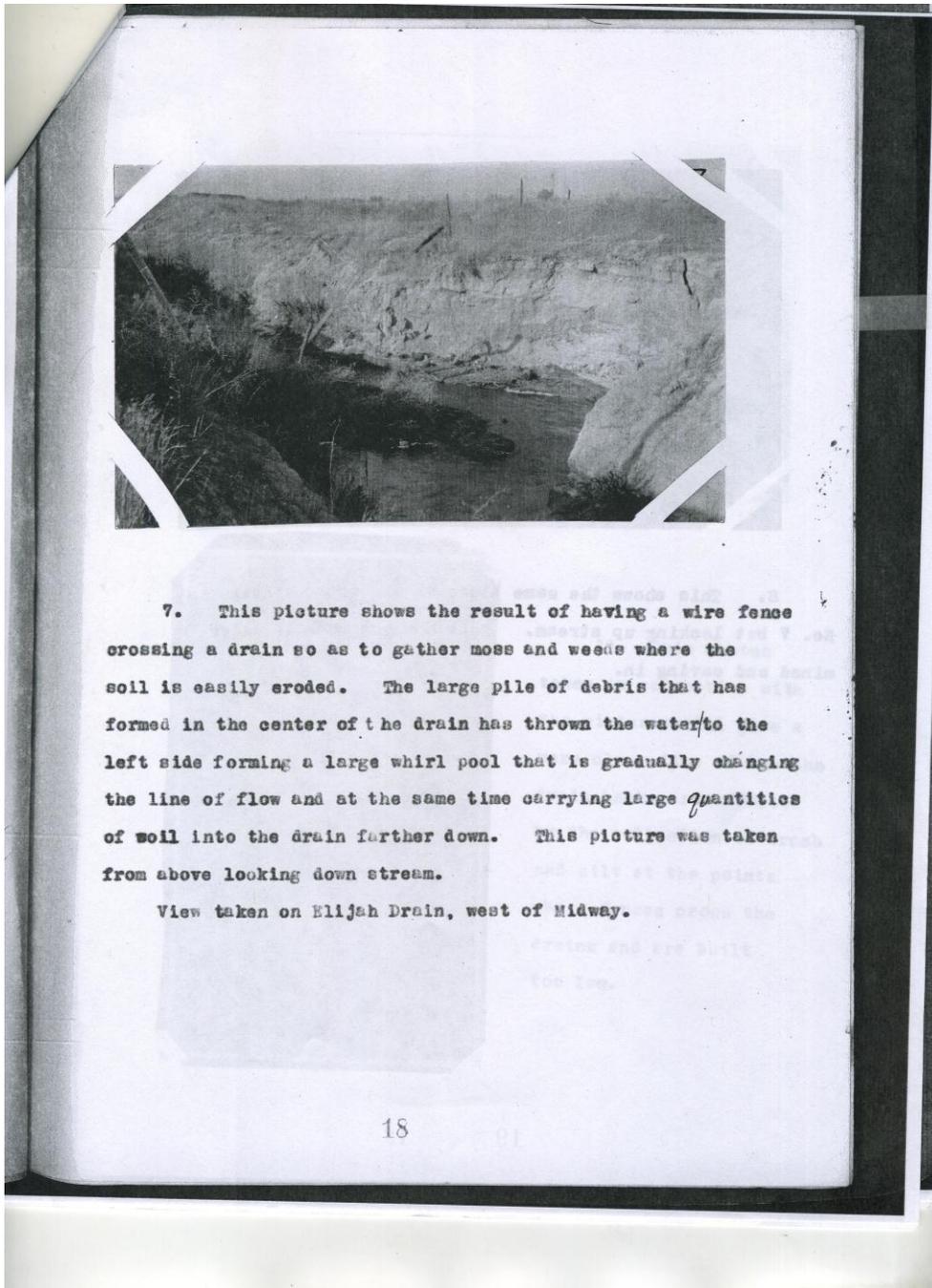
This view was taken about one quarter mile below No. 1.

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Figure 25
Five Mile Drain above Phyllis Crossing¹¹⁹

D.W. Cole to J. Jester, Jr., Pioneer Irrigation District, June 27, 1916, both in 260-A BOISE PROJECT Drainage of Pioneer Irrigation District 1915-1919 260-A, Entry 3, General Administrative and Project Records, 1902-1919, Boise 260A, Box 391, RG 115.

¹¹⁹ Report on How the Return Flow from Lands on the South Side of the Boise River is Effected by Drainage, Evaporation, and Reservoir [sic] Losses, Supplementary [sic] to 1916 and 1917 Drainage Reports for the Pioneer and Nampa-Meridian Districts, by W.G. Steward, April 1919, Report on How the Return



7. This picture shows the result of having a wire fence crossing a drain so as to gather moss and weeds where the soil is easily eroded. The large pile of debris that has formed in the center of the drain has thrown the water to the left side forming a large whirl pool that is gradually changing the line of flow and at the same time carrying large quantities of soil into the drain farther down. This picture was taken from above looking down stream.

View taken on Elijah Drain, west of Midway.

18

Figure 26
Elijah Drain¹²⁰

Flow from Lands on the South Side of the Boise River is Effected by Drainage, Evaporation, and Reservior [sic] Losses, Supplementary [sic] to 1916 and 1917 Drainage Reports for the Pioneer and Nampa-Meridian Districts, by W.G. Steward, April 1919, RG 115.

¹²⁰ Ibid.

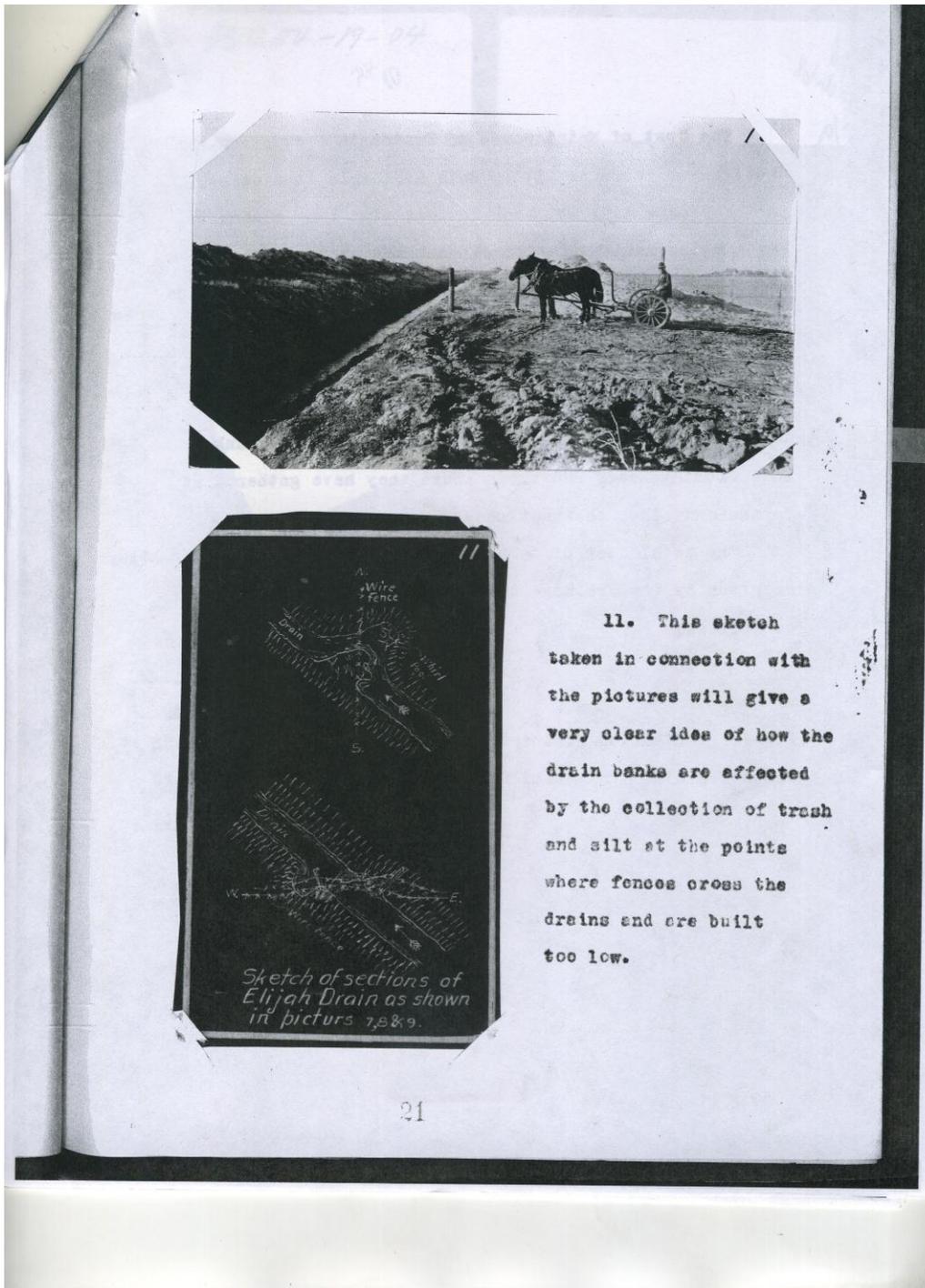


Figure 27
Elijah Drain and Elijah Drain Diagram¹²¹

¹²¹ Ibid.

No. 4 shows the sharp depression at the left angle of the inlet. No. 5 is a view of the left side showing the waves continuing down the flume on account of the inlet disturbance. This wave action is described in a paragraph above. No. 6 shows the turbulence and backwater movement below the outlet. This condition is probably caused by the abbreviated form of outlet. No. 7 is another view giving an even better idea of the disturbed condition of the water.



-8-

Figure 28
Indian Creek Flume¹²²

¹²² Report on Heads Lost and Recovered in Five Boise Project Flumes, by W.G. Steward and K.B. Keener, Project Reports, 1910-1955, 8NN-115-85-019, Box 43, RG 115.

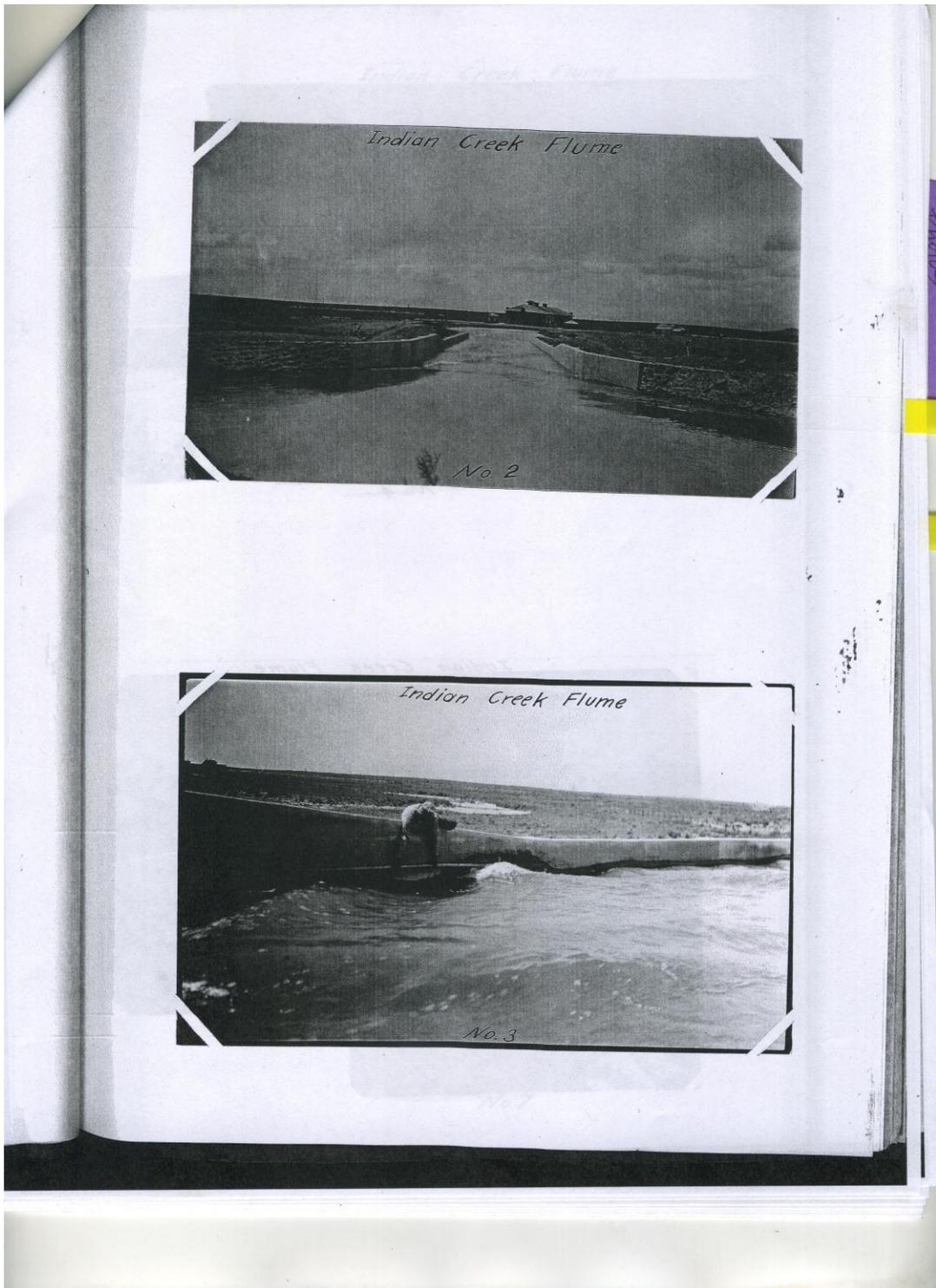
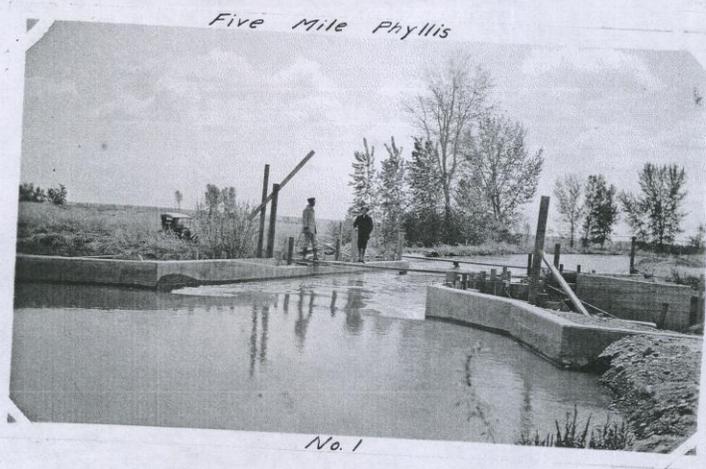


Figure 29
Indian Creek Flume¹²³

¹²³ Ibid.

PHOTOGRAPHS. No. 1 is a good view of the inlet, and of the water surface in the flume, looking down stream. It can be seen in this how little is the wave action in the flume. No. 2 is a view of the right portion of the inlet, looking upstream, and showing the decided dip at the angle. No. 3 shows the conditions at the outlet, and the turbulence created by the piers of the foot bridge.



-11-

Figure 30
Five Mile and Phyllis¹²⁴

¹²⁴ Ibid.

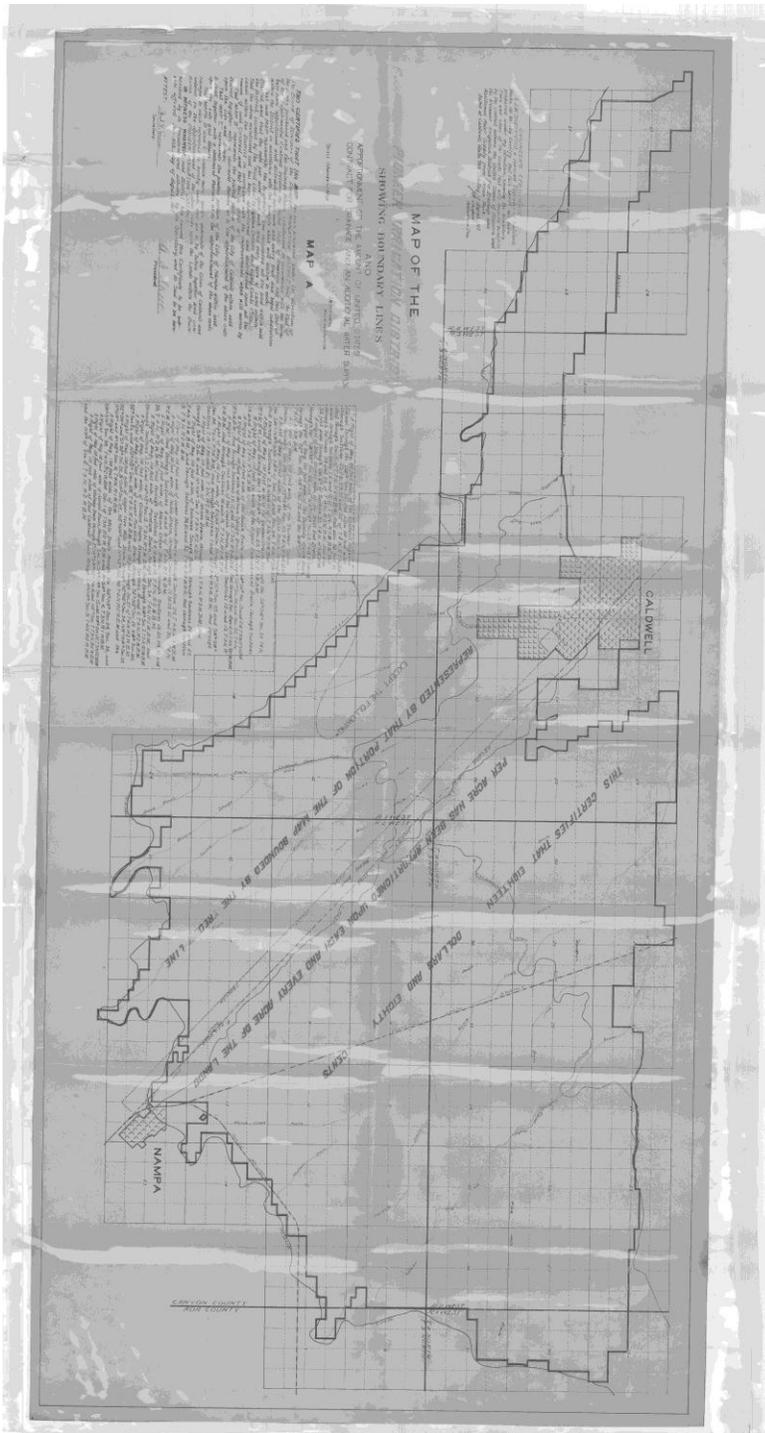


Figure 31
Aug. 8, 1917 Map of Pioneer Irrigation District Showing Newly Constructed Drains¹²⁵

¹²⁵ Idaho State Historical Society, Records of the Idaho Department of Reclamation, AR 20.

Whether or not the Reclamation Service became involved, Pioneer needed to contend with the concerns over the Phyllis canal's seepage. In order to do so, the District held an election on August 28, 1916. Voters were asked two questions. The first was whether or not to issue refunding bonds in the amount of \$189,200, to which the electors said "yes," and the other to issue new bonds to cover the lining of the hillside portion of the Phyllis Canal, to which the electors said "no."¹²⁶ However, some 35 patrons of the District – from various parts therein – approached the board about the project again regarding this issue in July 1920. The landowners were concerned about the liability of canal breakage on these "dangerous portions of the side hills," (see Figure 3 Phyllis Canal, Side Hill Work, c. 1890) and also desired the enlargement of the canal in order to increase capacity where needed.¹²⁷ The board voted to obtain estimates for the improvements, and discussed them at their meeting in November. During that discussion, the board members noted that without lining the canal, it would continue to be necessary to "keep men on this section of the canal, day and night, to prevent, as far as possible, these breaks and to report any signs of leaks or dangerous conditions along this embankment. These helpers could be dispensed with if the canal were lined."¹²⁸ In addition to the cement lining of the side hill and other parts of the Phyllis, the District also intended to construct a dam at the head of the Caldwell High Line Canal, purchase a drag line dredge, and construct the North Caldwell drainage ditch north of town. The total cost was estimated to be \$214,979, and the voters elected to authorize bonds in that amount on December 14, 1920.¹²⁹ Despite its lack of involvement, the Reclamation Service supported the projects emphatically.¹³⁰

When the engineer charged with making the Phyllis plans reported to the board, his recommendation changed the District's plans for the canal. Fred McConnell reported to the board on August 20, 1921 his belief that lining the canal with concrete on the side hill section would not solve the main problem. As it stood, the "seepage water from higher lands above the Phyllis Canal has water logged the lower bank of the canal and caused it to slide and at present the canal is in grave danger of being ruined from this slide. Also, the chances are good that the seepage will increase and endanger the stability of the lower bank even after the canal is lined." McConnell believed that the best course of action was to actually change the line of the canal so as to place it entirely "in cut" and back away from the brow of the hill. The solution was also less costly than cement lining. The board unanimously approved the new plan, and executed it with contractor Morrison Knudson, who moved the canal to the north half of the southeast quarter of section 20 in Township 4 North, Range 1 West.¹³¹

¹²⁶ PID Minutes, Sept. 5, 1916.

¹²⁷ PID Minutes, July 19, 1920.

¹²⁸ PID Minutes, Nov. 2, 1920.

¹²⁹ PID Minutes, Dec. 20, 1920.

¹³⁰ W.G. Swendsen to Pioneer Board of Directors, Nov. 9, 1920, in PID Minutes, Nov. 9, 1920.

¹³¹ PID Minutes, Aug. 25, 1921; Oct. 13, 1921; Oct. 17, 1921.

Pioneer Irrigation District and the New Deal, 1927-1937

In spite of all of the drainage work done in the preceding years, farmers in the Pioneer Irrigation District continued to approach the Board for drainage assistance.¹³²

Beginning in the late 1920s, farmland was being swamped again, and crops were failing both due to the waterlogging as well as the growing lack of water. Seeking a new solution to the ongoing drainage issues, the District began to experiment with drainage wells. In combination with open drain ditches, the drainage wells could aid in the drainage of over watered lands as well as provide a supplemental source of additional irrigation water for use elsewhere.

To execute this new solution, the District began contracting with outside companies. In May of 1927, the District issued contracts to make test or observation holes and to dig wells where observation holes suggested a successful well could be dug. The “essence” or intent of the contracts was “the development of a water supply by the installation of one scientifically constructed drainage well.”¹³³ In a continued exploration of its options, the District sent Engineers W.G. Sloan and Superintendent J.W. May to California’s San Joaquin Valley on a reconnaissance trip in 1928 to investigate the construction and operation of drainage wells there.¹³⁴ Their trip found such wells to be successful, and upon their return to Caldwell, the District board appointed Sloan as the District’s drainage engineer, charged with completing three additional drainage wells that year.¹³⁵ In October 1928, after noting that “a large amount of land lying within the District is already seriously damaged by seepage of underground water, and that the rising water table seriously threatens damage to much more land, and that the recurring years of water shortage make the acquirement of more water necessary,” the board asked Sloan to prepare a plan and cost estimate both for drainage and for acquiring an additional water supply.¹³⁶ Sloan’s plans caused the board to resolve to construct an additional twenty drainage wells according to Sloan’s maps and plans, upon raising the funds by which to do so.¹³⁷ However, the matter appears to have been dropped until the same resolution was passed at another board meeting eighteen months later.¹³⁸ In just a few weeks, the board unanimously passed a resolution adopting Sloan’s plans as the “general plan for the drainage of the water-logged area in said District and the development of an increased water supply,” noting that funds could not be secured through an annual levy to pay for drainage, and that the recurrent shortages in the water supply had decreased the return flows upon which the District had come to depend. Sloan’s plan included the twenty additional wells together with some open ditches.¹³⁹ With the approval of the State Department of Reclamation, the District called a special election on February 26, 1930 to vote on

¹³² PID Minutes, Dec. 1, 1925, Nov. 23, 1926; March 6, 1928.

¹³³ PID Minutes, May 4, 1927.

¹³⁴ PID Minutes, Jan. 13, 1928.

¹³⁵ PID Minutes, Feb. 16, 1928; March 7, 1928.

¹³⁶ PID Minutes, Oct. 2, 1928.

¹³⁷ PID Minutes, Oct. 19, 1928.

¹³⁸ PID Minutes, Jan. 7, 1930.

¹³⁹ PID Minutes, Jan. 18, 1930.

bonds to pay for the work, which Sloan had estimated would cost \$100,000.¹⁴⁰ The wells, the District argued, were especially useful because they not only drained the lands, but provided additional irrigation water in a time of severe shortage. The District's plan also included drain extensions and the cleaning and enlargement of certain existing drains. Despite the clear need for the work, farmers were wary of additional assessments during a time of great economic uncertainty, and voted the bonds down, leaving the District to find other means of financing the work.¹⁴¹

¹⁴⁰ George N. Carter to Board of Directors, Pioneer Irrigation District, Jan. 21, 1930, in PID Minutes, Jan. 23, 1930.

¹⁴¹ PID Minutes, March 4, 1930.

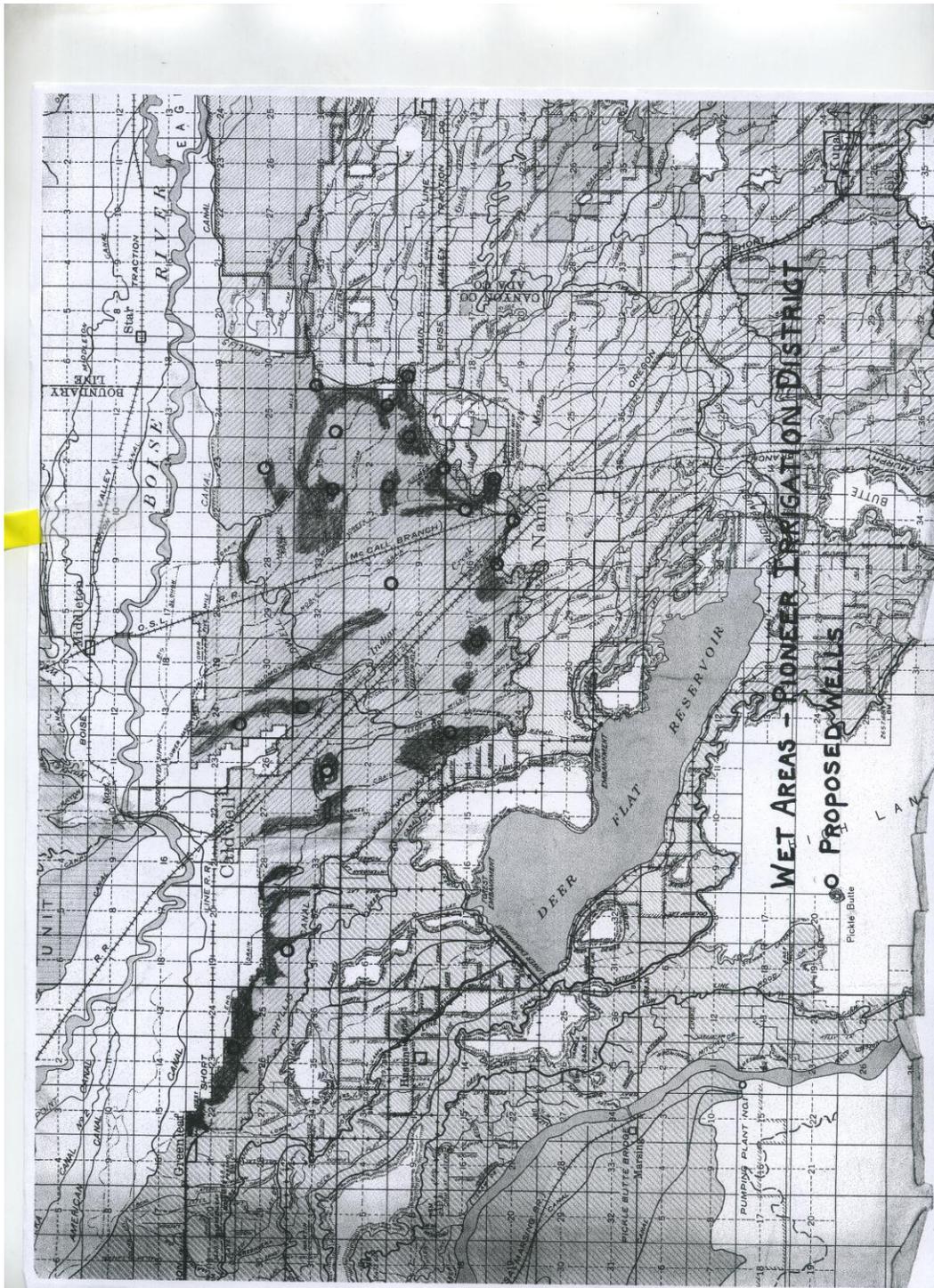


Figure 32
Wet Areas and Proposed Wells¹⁴²

¹⁴² Pioneer Irrigation District, Payments – Drainage, Historic Records of Pioneer Irrigation District, Basement Drawers.

Having received financial assistance from the Government in the past, the District turned to the U.S. Bureau of Reclamation (previously the U.S. Reclamation Service) for assistance with additional drainage in December 1930. In its petition to the government, the District requested that the agency expend remaining funds from the \$350,000 allowance made in the 1913 contract, as well as postpone the District's annual payment for existing works for the next one to two years until the aggregate amount reached \$100,000. According to the District, there should have been slightly more than \$52,000 left in the original 1913 budget. To make up the difference, the District figured it would need a postponement of at least its 1931 Arrowrock payment as well as a portion of its 1932 payment in order to obtain the full amount to pay for the plan.¹⁴³

The Bureau of Reclamation took the request seriously. R.J. Newell, superintendent of the Boise Project, acknowledged the needs of the District in a January 1931 letter to the Bureau's chief engineer, but questioned the government's involvement:

Over the district the progression typical in seeped areas, from deep-rooted crops like alfalfa and orchard trees to small grain and from small grain to blue grass pasture is everywhere apparent. Not enough hay is grown to supply the needs of the district, which is unusual for an irrigated district in Southern Idaho. A few fields were not cropped in 1930 and a very few spots of grain could not be harvested. The fact that the condition is progressive is not doubted but the rate of progress in seepage is usually exaggerated by the apprehensive farmer. Testimony with no intent to deceive that farms have yielded fairly in the past, but are on the verge of going bad and probably can not [sic] be cropped next year unless drained has often been received for the same farms on each of the last five years....The Pioneer District evidently needs continuing drainage work. From the fact that good use could be made of some additional water supply in the latter part of the season, and that test holes often show a formation favorable for drainage by pumping from wells, it is believed wise to give serious consideration to drainage wells, which should furnish additional water and relieve surrounding land from seepage at the same time.¹⁴⁴

Newell ultimately recommended that a drainage expert be sent to evaluate the situation further. Later that spring, the Bureau sent J.R. Iakisch to conduct additional studies.¹⁴⁵ Iakisch reported that more studies would need to be done before he could recommend endorsement or financing of Pioneer's plans, stating that: "it is entirely impracticable to make a decision as to the type of drainage best suited to the needs of the District or to attempt a layout plan of the drainage required with the present lack

¹⁴³ Petition of Pioneer Irrigation District to the Secretary of the Interior and the Commissioner of the Bureau of Reclamation, Dec. 19, 1930, 636 Payments – Drainage, Pioneer Irrigation District historic records, basement drawers.

¹⁴⁴ R.J. Newell to Chief Engineer of Bureau of Reclamation, Jan. 22, 1931, 636 Payments – Drainage, Pioneer Irrigation District Historic Records, Basement Drawers.

¹⁴⁵ PID Minutes, March 25, 1931.

of information relative to subsoil conditions and water table stages.”¹⁴⁶ To accommodate this demand, Pioneer sank test wells in order to further study the water table as well as the soil that underlay the District. These actions were conducted in the hopes of obtaining funding for the project.¹⁴⁷

By now the entire West was in the grips of an extended and relentless drought. The drought, combined with the country’s equally ruthless economic depression, made life in the Boise Valley extremely difficult during the 1930s. The Pioneer District, which had always paid its debts to the government in a timely manner, was once again contending with its unfortunate topography: its location in the natural sink of the area’s drainage, as well as the area where the underground water table was continuing to rise. [See Figure 33.] But while the water difficulties undoubtedly generated sympathy of farmers across the District, the failure of bond issues during this era points to the farmers’ equally strong conservative financial leanings. The farmers were adamantly opposed to increased assessments. To contend with the very serious issues facing these farmers, the Pioneer Irrigation District board passed the following resolution in October 1931, designed to pay for drainage work to be done without further assessing the farmers:

WHEREAS, Approximately 5,000 acres of District lands are either already seeped or seriously threatened by rising water table, making immediate drainage imperative in order to save the land; and WHEREAS, Two years of water shortage has materially reduced production of many crops, especially late crops, third cutting hay and pasture, making it necessary for farmers to buy hay to feed stock or sell the stock at ridiculously [sic] low prices, and the present extremely low prices for farm products requiring double the amount of produce now to raise a stated sum compared with recent years, thus making it extremely hard for farmers to pay assessments at all, and wholly impossible for many to pay any increase of assessments necessary for required drainage; Now therefore BE IT RESOLVED, By the Board of Directors of the Pioneer Irrigation District, that we respectfully petition the Government of the United States to grant the District a moratorium of not less than three years, that necessary drainage may be done without increased assessments, and that many of the land owners may be saved from a total loss of their possessions.¹⁴⁸

Faced with similar pleas from irrigation districts across the West, the U.S. Congress recognized the farmers’ tenuous situation and therefore passed a moratorium and

¹⁴⁶ Report on Drainage Pioneer Irrigation District, Boise Project, April 6, 1931, by J.R. Iakisich, Engineer, 636 Payments – Drainage, Pioneer Irrigation District historic records, basement drawers.

¹⁴⁷ R.J. Newell to Chief Engineer, June 12, 1934, 246. Corres. RE Activities under National Industrial Recovery (Public Works) Act of June 16, 1933 1930 thru June 1945 246, Entry 7, Project Correspondence, 1930-1945, Boise Project 225.11-246, Box 56, RG 115. At least one well was referenced in the PID Minutes of April 7, 1931, where a Memorandum of Agreement between Pioneer Irrigation District and Allen E. Hosack for the purposes of drilling a well “for drainage and irrigation purposes” is copied into the record.

¹⁴⁸ PID Minutes, Oct. 20, 1931.

payment deferment bill in early 1932.¹⁴⁹ In addition to relief provided by the government, Pioneer’s farmers also pleaded for relief from the District itself. In July 1932, a group of landowners representing a new group called the Pioneer Water Users’ Association, appeared before the board and requested a series of cutbacks in the District’s budget, including reductions in salaries and the sale of one of the District’s automobiles. The farmers also requested that the use of pumps to raise water from canals be ceased, and that all open drain ditches be cleaned and put in “first class condition” before any additional drainage wells were dug.¹⁵⁰ The board took the requests under advisement. And, when faced with maturing bonds just a year later and knowing full well the precarious situation of its landowners, the board unanimously resolved to issue a series of refunding bonds to pay its debt *without* holding an election for approval.¹⁵¹ Even so, the District was obviously in very serious trouble and expressed its concern that it had “no prospect of receiving any bids” for the bonds.¹⁵²

¹⁴⁹ Senate Bill 3706, signed by President Herbert Hoover on April 1, 1932, as referenced in the PID Minutes, June 7, 1932.

¹⁵⁰ PID Minutes, July 5, 1932.

¹⁵¹ PID Minutes, June 6, 1933.

¹⁵² Secretary to Frank Keenan, Reconstruction Finance Corporation, June 26, 1933, 618-A P.I.D. P.W.A. Loan 618-A, Drawer 5, Historic Records – Basement, Pioneer Irrigation District.

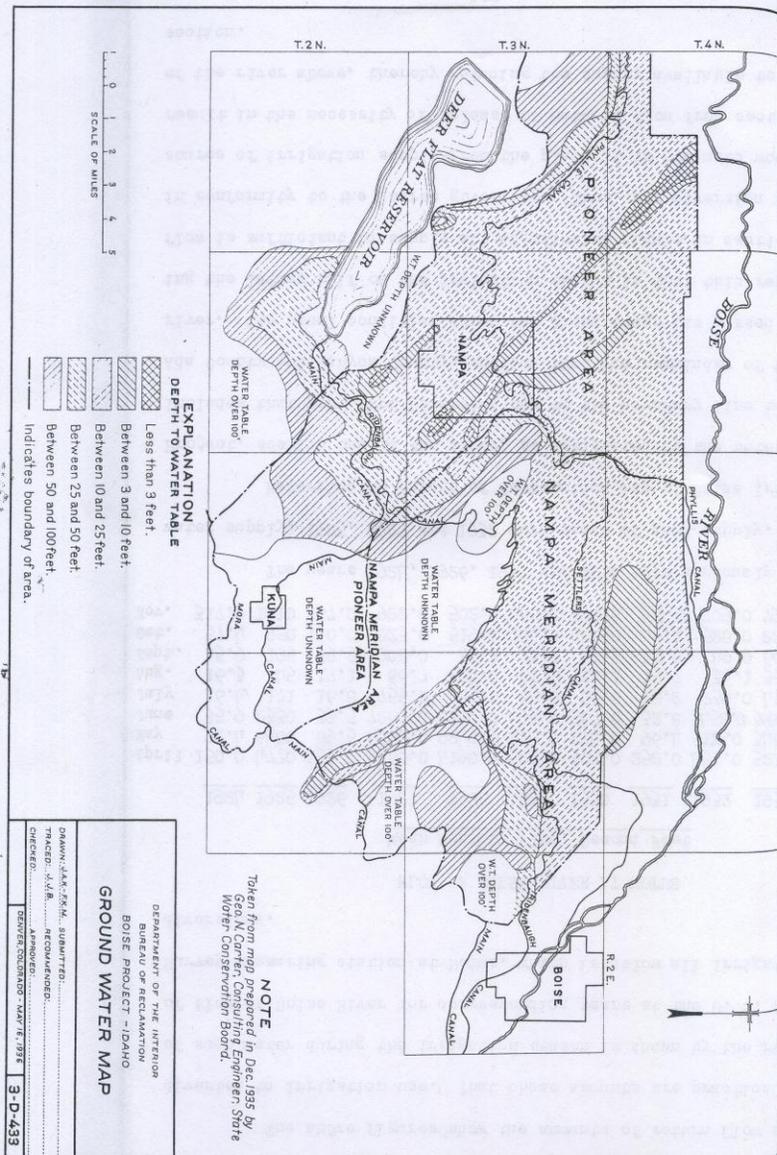


Figure 33 December 1935
 Ground Water Table Map¹⁵³

¹⁵³ Boise River Investigations, Idaho, by J.R. Riter and John A. Keimig, April 1936, Project Reports, 1910-1955, 8NN-115-85-019, Box 47, RG 115.

While recognizing the farmers' plight, the Bureau of Reclamation nonetheless declined to assist Pioneer monetarily with its plan for additional water-producing and drainage wells, again leaving the District in a financial dilemma. Despite acknowledging that "there is no doubt that additional drainage is needed and justified" in the District, the Bureau's superintendent, R.J. Newell, again expressed reluctance for getting involved in the matter.¹⁵⁴ Sensing the Bureau's wariness even before receiving a final answer (the Bureau had been under a great deal of scrutiny over the previous decade and was far more cautious with spending than it had been in earlier years), the District simultaneously opted to investigate the New Deal programs initiated by the newly elected President of the United States, Franklin D. Roosevelt, as a potential funding mechanism.

Upon taking office in March 1933, Roosevelt had immediately created a series of emergency relief agencies designed to provide prompt assistance to those with the most urgent needs. The most significant for the purposes of Pioneer Irrigation District was the National Industrial Recovery Act, passed in June, which created the Emergency Administration of Public Works. In September 1933, Robert Ednie, employed as an engineer by the Pioneer Irrigation District, proposed a plan of 5 new drains, labeled A-E, as well as 16 additional wells. Other than Drain "A," which was proposed to originate in section 25 of Township 4 North, Range 3 West and run north and was the longest and most expensive of the proposed drains, the other letter drains – D through E – were located to the west of the city of Caldwell and below the line of the Phyllis Canal. The District submitted a report to the Idaho Commissioner of Reclamation that included a map showing the location of said drains in addition to the wells he proposed. The report also provided specific information about the length and location of the drains, as well as their estimated cost.¹⁵⁵

¹⁵⁴ R.J. Newell to Chief Engineer, June 12, 1934, 246. Corres. RE Activities under National Industrial Recovery (Public Works) Act of June 16, 1933 1930 thru June 1945 246, Entry 7, Project Correspondence, 1930-1945, Boise Project 225.11-246, Box 56, RG 115.

¹⁵⁵ Map of Pioneer Irrigation District, Caldwell, Idaho, Sept. 15, 1933, E07E02/012.15a, Idaho Department of Reclamation, AR 20, Idaho State Historical Society (hereafter ISHS); Ednie Report,

In October 1933, with approved report in hand,¹⁵⁷ the Pioneer Irrigation District applied for a loan in the amount of \$100,000 from the Federal Emergency Administration of Public Works.¹⁵⁸ Sloan, under whose supervision the plan originated in 1930, provided his blessing in a letter to the Public Works Advisory Board, noting that “the program herein outlined...is an ultimate solution of the [District’s] problem.”¹⁵⁹ The District waited for what must have seemed an interminable two years for a response to its loan request. In September 1935, Pioneer finally received notice that it had received money from the Public Works Administration in the form of a \$45,000 grant, and an offer to purchase bonds in the amount of \$55,000. The board immediately accepted the offer of aid, and put matter to the voters on November 26. Voters approved the bond issue by a vote of 258 to 121, and construction on the drain ditches began in November 1936. The board awarded the contract to local contractor J.A. Terteling & Sons once the funds were made available.¹⁶⁰ The wells followed later in the year after that contract was awarded to Allen Hosack and G.H. De Coursey.¹⁶¹ Less than a year later, Ednie reported to the Pioneer board of directors that “the work of constructing the new drain ditches and wells in the Pioneer Irrigation District under Contract A, B, C, D, and E of P.W. A. Docket No. 2363-R have been completed according to the plans, specifications and the change orders.” Ednie recommended that the board accept them as complete, which the board did in August 1937.¹⁶²

Conclusion

At the creation of the Pioneer Irrigation District, the lands in the area were only beginning to get transformed from a desolate landscape into viable farms. Although the two main canals supplying water to the Pioneer Irrigation District were originally conceived and built with capitalist money from afar, farmers who settled in the area around the town of Caldwell were a self-determining group of people. Upon the successful formation of the District at the turn of the twentieth century, the farmers’ early struggles focused on the procurement of water and the maintenance and enlargement of the irrigation canals. Once a reliable system was in place, drainage of

¹⁵⁷ R.W. Faris to Pioneer Board of Directors, Oct. 22, 1935, as recorded in PID Minutes, Oct. 25, 1935.

¹⁵⁸ PID Minutes, Oct. 3, 1933.

¹⁵⁹ W.G. Sloan to Ivan C. Crawford, Sept. 25, 1933, 618-B P.W.A. loan 618-B, Drawer 5, Historic Records – Basement, Pioneer Irrigation District.

¹⁶⁰ PID Minutes, Nov. 5, 1935; Dec. 2, 1935; April 27, 1936; May 2, 1936; Nov. 28, 1936; *The Caldwell Tribune*, Nov. 25, 1935; Nov. 27, 1935; April 17, 1936; Engineer (Ednie) to J. Vernon Otter, Aug. 6, 1936, 1936 PIONEER IRRIGATION DISTRICT Letters on P.W.A. Loan, Pioneer Irrigation District records, from Moffatt Thomas.

¹⁶¹ PID Minutes, Oct. 24, 1936. Some five wells had been partially constructed by the District’s own force immediately upon receiving notification of the funding, but had not been completed. PID Minutes Nov. 5, 1936.

¹⁶² Robert M. Ednie to Pioneer Board of Directors, Aug. 7, 1937, 1936 PIONEER IRRIGATION DISTRICT Letters on P.W.A. Loan, Pioneer Irrigation District records, from Moffatt Thomas; PID Minutes Aug. 3, 1937.

over watered lands and an adequate supply of water in the District became the most frequent problems plaguing the farmers.

As Pioneer negotiated the purchase of its facilities, the simultaneous change in federal policy that led to the passage of the Reclamation Act in 1902 led to a 100-year relationship between the government agency and the farmers. But throughout that history, Pioneer Irrigation District took the initiative to solve its own challenges. Resolving to continue the District's tradition of self-sufficiency and self-determination, farmers throughout the twentieth century demonstrated initiative to solve its irrigation problems, despite facing numerous obstacles, not least of which was an inconsistent water supply, swamped lands, and federal bureaucracies. The development of s system of drainage wells, the "letter" drains, and continued negotiations with the federal government demonstrate a continued commitment to improve the delivery of water to those within the District.

Signature

Date
