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EARLY IRRIGATION CANALS PRE-PROJECT VENTURES

Number 171

Boise Valley water has been not only a major source of its current wealth but also one of the original reasons for travel through the valley. The Wilson Price Hunt party, financed by John Jacob Astor, came through the area in 1811--following the watercourse in order to survive. Later fur trappers and traders followed the water of the river and its tributary streams, not only for potable water, but also for beaver. And as the river valley became an obvious, more steadily used travel route, the Hudson's Bay Company set up Fort Boise, at the Boise River's confluence with the Snake, which was one of the earliest sites of irrigated farming in the valley. John C. Fremont, exploring the area in 1843, suggested that more irrigation at that point (implying that irrigation was already being provided by some means) would produce increased crops for the residents of the fort.

When mining began in the Boise Basin, northeast of the river valley, in 1862, everything had to be freighted in--equipment, food, clothing, most of it either up the Columbia and Snake rivers from the Portland and Willamette Valley area or overland from Salt Lake City. Some moving into the area were convinced farming and ranching might well be profitable enterprises. So diversified farming began in 1863--diversified because, with no other ready source of food, the market was also diversified. With the development of the Owyhee mines, centered at Silver City to the south, farmers and ranchers in the valley had yet another market outlet for their goods.

With a relatively large nearby mining market for farm produce, Boise River bottom lands were irrigated in the summer of 1863, and by 1864 all of the easily watered riverside farm land was in agricultural production. By the early spring of 1863 there were about a hundred people in the valley; and they were promptly raided by the Indians who had formerly had exclusive use of the bottom lands chiefly as campsites and as a base for fishing. Partly because of the Indian raids, partly because of increased use of the Oregon Trail through the region and the two nearby mining areas, the United States Army established a military post--also called Fort Boise--toward the upper end of the valley in June of 1863. Shortly thereafter, the residents of the valley--who were fairly well concentrated in the area near the river south of the post--laid out and established the city of Boise; it has remained the focus of the valley ever since.

When Boise was founded, irrigation already was underway. Tom Davis' canal took water out of the river about a mile and a half above the town. In 1864 he built a headgate and in 1864 and 1865 a good substantial ditch. His first crop--and that for which he and the valley became famous--was fruit; in 1864 Frank Davis set out seven thousand fruit trees, the produce of which was shipped as far as the Montana mines. The system was sold in 1872 and became the Jacobs Canal Company. The ditch eventually went all the way through Boise and was used not only for irrigation, but also for sewage and

pumping.

By the end of 1863, there were three cooperative canal companies in the valley with twenty-one miles of canal among them. The first stock company, the Vallisco Water Company, was incorporated by the territorial legislature in late 1864; it constructed works on the north side of the river and turned the first water onto its land in the spring of 1865. The company went through various enlargements and name changes over the years, and its water also was used not only for irrigation but also for milling, manufacturing, and sewage transport. One offshoot of this company was the Boise City Canal Company, incorporated on March 8, 1869.

Two other early ditch systems near town were what eventually became the Ridenbaugh Canal, first developed in 1865, and the Thurman Ditch, west of town, which powered a flour mill. As early as 1864, Eagle Island--downstream from the town of Boise--was crossed with ditches and successful crop production. A ditch in the Middleton area (known as the Middleton Mill Ditch), began in 1864 to carry 1,200 inches of water, was by 1900 twenty miles long, supplying water to 3,000 acres, and running a flour mill. Chiefly as a result of that ditch's early success, Middleton became one of the early settled areas in the valley.

In 1876 another Middleton organization--the Middleton Water Company--was formed as a cooperative to alleviate the problems which arose when the mill ditch company shut off water for repairs to either the ditch system or the mill. The two Middleton projects were among the most successful in the valley. In addition, the Pioneer Ditch, begun in 1864, led to the founding of Star in 1870; and the Dry Creek ditch, also on the north side of the river, begun in 1879, was irrigating 2,433 acres by 1902. The western end of the valley had fewer and smaller projects, but the few which were there were the only reason at all for settlement at that end.

The early growth of the valley--attributable almost exclusively to the availability of water, directly or indirectly--is impressive. From 1863 to 1870 land under cultivation grew from almost nothing to 19,180 acres with a farm value of \$319,300 and of production worth \$431,199. By 1880 there were 256 farms, with a total of 80,853 acres, farm value of \$800,475, and farm production value of \$1,040,073. The valley's incorporated villages contained 2,675 people in 1870 and 4,674 in 1880; it is probable that an equal number of people lived on farms outside the incorporated communities. But by the 1880's, individuals and cooperative projects had accomplished about as much as they could with limited resources of money and equipment to bring water onto the land. The bottom lands, fertile and easily irrigated without complex engineering projects, were just about all taken up. Although the Homestead Act of 1862, the Timber Culture Act of 1873, and the Desert Land Act of 1877 all made it much easier and (inexpensive) for the prospective settler to obtain land, without water he had no way to substantiate his claim and establish a stable economic situation.

However, there was considerable potential money available to finance the next stage in water development. The large eastern investor--the same sort of person attracted to invest in often highly speculative western mining ventures, regarded western irrigation projects as another related speculative opportunity. Perhaps the highly romantic image of "making the desert bloom like a rose" with water appealed to some with a passive sense of adventure. Proposals for irrigation ventures were accompanied by technical and detailed engineering reports that made a faint possibility seem like certain success. The possible romantic appeal interpretation is at least somewhat borne out by the fact that speculators intended to terminate their financial involvement and sell their works to the settlers on the land--before they had actually realized much return on their investment. Getting one's initial investment back on an

irrigation project is a long, slow process and this belated realization may have accelerated sales to settlers.

Two additional factors encouraged major investment ventures in the Boise Valley after 1880. One was the coming of the railroad to the area, making Nampa and Caldwell--though not Boise--shipping points to both east and west and opening up the possibility of a national market for valley crops. The other was the "discovery" of placer gold in the Snake River. Recovering that gold would require much the same sort of water diversion and canal system as irrigating farmland. One particular venture, which went through all the ups and downs that might be expected of such speculation and which presented a most difficult and costly engineering problem, was the construction of the New York Canal--which later became a part of the Boise project.

The story of the New York Canal is recounted elsewhere in this report.

The largest early pre-federal project in the Boise Valley was the Ridenbaugh Canal system, which began in a very small way in 1865. In 1877 its founder, William Morris, claimed 17,076 acres under the Desert Land Act on the first bench across the river from Boise; he then proceeded to find both buyers for his own claimed land and other settlers who would claim adjacent lands which he would then supply with water. Morris used local, farmer work crews--an arrangement that gave the settlers a sense of commitment to the project even though they were not owners or shareholders in it--and he planned his ditch not only for irrigation but to carry lumber and run sawmills. The plan ran out of capital when Morris died suddenly in 1878. Some of the settlers, wishing to keep their land and unable to develop it without water, continued the work.

In 1878 Morris' heir, his nephew William Ridenbaugh, took over the system. Within two years he had sold it; and it was sold again or contracted out three times more before it was completed. Still, by 1891 there were 100 miles of main ditches and 153 of laterals within the system, with ten lakes and reservoirs stretching all the way to Deer Flat south of Caldwell. It irrigated 22,000 acres and also supplied Boise with power for lights. By 1900, 80,000 acres had water available to them and 49,000 of those acres were under cultivation. There were 700 consumers of the irrigation water from the Ridenbaugh system, and the value of their farms and homes was over \$3,000,000.

All three of the early large systems, the New York, Phyllis, and Ridenbaugh canal works, remain at the heart of modern irrigation in the Boise Valley. Although their construction was--especially in the first two cases--highly speculative, obviously the men who originally suggested their development could see what would be needed to provide water adequate to the continued growth of the valley. But these were not the only long lasting irrigation systems built in the valley before 1902. In 1875 the Johnson ditch was constructed west of Middleton, and it was expanded in 1883 by the farmers who owned it. In 1887 it was bought by Howard Sebree, whose name it continues to bear, and that year and the next Sebree began a large northside canal. By June of 1888 it was twenty-three miles long and could serve about 22,000 acres. But the system suffered regularly from maintenance problems (most notably the frequent and disastrous collapse of ditch banks), and eventually--in 1902--the farmers it served bought it themselves, handled the maintenance themselves, and renamed it the Farmers Cooperative Ditch. In 1882 the Dixie Canal (as three of its founders were Methodist ministers, it quickly became known as the Methodist Ditch) was begun in the Roswell area near Parma with a filing for 6,000 inches of water. It too had construction and maintenance problems, caused largely by its location on a hillside to the south of the river. In 1886 it was extended somewhat by placer miners on the Snake who needed water and finally in 1892 it was sold under the name of the Riverside Canal to a group of valley investors that included later state engineer D. W. Ross and later leader in the development of the Boise Project J. W. Lowell. These

men also used farmer labor to do maintenance and repair work, a job opportunity that was particularly welcome during the depression (and short-water year) of 1893. By 1900, some 3,000 of a potential 12,000 acres were under irrigation, and the system was operating as a cooperative.

The other two major works in the valley were begun as, and remained, cooperatives. The Farmers Union Ditch Company on the north side, based on an 1865 canal, was begun in 1894. By 1899 the main ditch was twenty-four miles long, and by 1902, 9,000 acres were being irrigated from it; the system is still in use. In 1884, the Settlers ditch was begun near Meridian. At first farmer labor on this system did not work well--apparently few members of the cooperative were prepared to fully meet their labor obligation. John Lemp, a prominent and substantial Boise businessman, took over the system, got it working smoothly, and in 1901 sold it back to another farmer group. Both he and they were so successful that they could not supply enough water to fill the demand of farmers on land under the system.

By 1900 there were 19,056 people in the valley, with 1,650 farms on 113,205 acres of land. Farm property itself was valued in 1899 at \$750,000; there were 568 miles of ditches, irrigating 96,652 acres. A variety of financial problems plagued the various systems; there was no completely satisfactory way of providing some kind of income and expense money as well for the operators of the commercial systems. Water rent charges, soon resorted to, were a burden on the farmers who had already had to pay for water rights. But generally farmers dealt directly with the companies that supplied them with water--whether cooperative or privately owned--and not only worked out solutions to immediate problems but became more and more involved in the companies themselves. There was a great variety of management plans among the canal systems; indeed, there still is.

The ultimate pre-federal solution to operational difficulties came as a result of conflicts over the Sebree Ditch System. In 1891 the California State Legislature had passed the Wright Act, allowing the formation of irrigation districts, and in 1895 the Idaho Legislature passed a similar law. In that latter year, the farmers under both the Sebree and the Phyllis system began the legal procedures necessary to form such a district, which in effect would turn those systems into public systems. Their progress was halted by a challenge in the courts to the constitutionality of the Wright Act; and by the time that was settled (in favor of the Act) in 1896 apparently the Sebree and Phyllis farmers had lost interest in such a step. But other farmers, in 1900, formed the Pioneer Irrigation District in Canyon County to purchase and operate the Phyllis and Caldwell systems. The establishment of this district was brought about not only by the farmers who received water from the two systems but also by the townspeople of Canyon County, who were well aware that their livelihood depended completely upon the successful operation of the irrigation systems in the valley. The Settlers and Nampa-Meridian Irrigation districts came after 1902; but the reasons for their establishment were the same as those of the earlier systems.

As with the Settlers Ditch, the other irrigation systems in the valley faced the problem of bringing about too much success. The river water was being used, by the turn of the century, at about its maximum capacity given the extreme dryness of late summer--when irrigated crops need water most. The only possible solution to this--the only possible provision for continued growth in the valley--was provision for water storage. And this could only be provided at a cost far beyond that which speculative or cooperative development could handle.

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