

Smith Ditch: The Big Ditch with Big Ambitions

by
Gary Dielman

“Ditch Breach” and “Smith Ditch Breaks Again” were the headlines in July 2006, when on the 15th of the month waters in the irrigation ditch that serves the Sunnyslope agricultural area east of Baker City rushed through a ten-foot-wide gap in the ditch and flowed harmlessly down a steep slope into Powder River a mile south of Baker City. But just three years earlier, on August 17, 2003, a breach in Smith Ditch on the north side of Old Reservoir Hill above Spring Garden Street, was anything but harmless. Waters from the ditch carved a twelve-foot-deep chasm in the hillside washing all that material down onto the streets and into yards and basements of residents of the east side of town. Law suits followed.

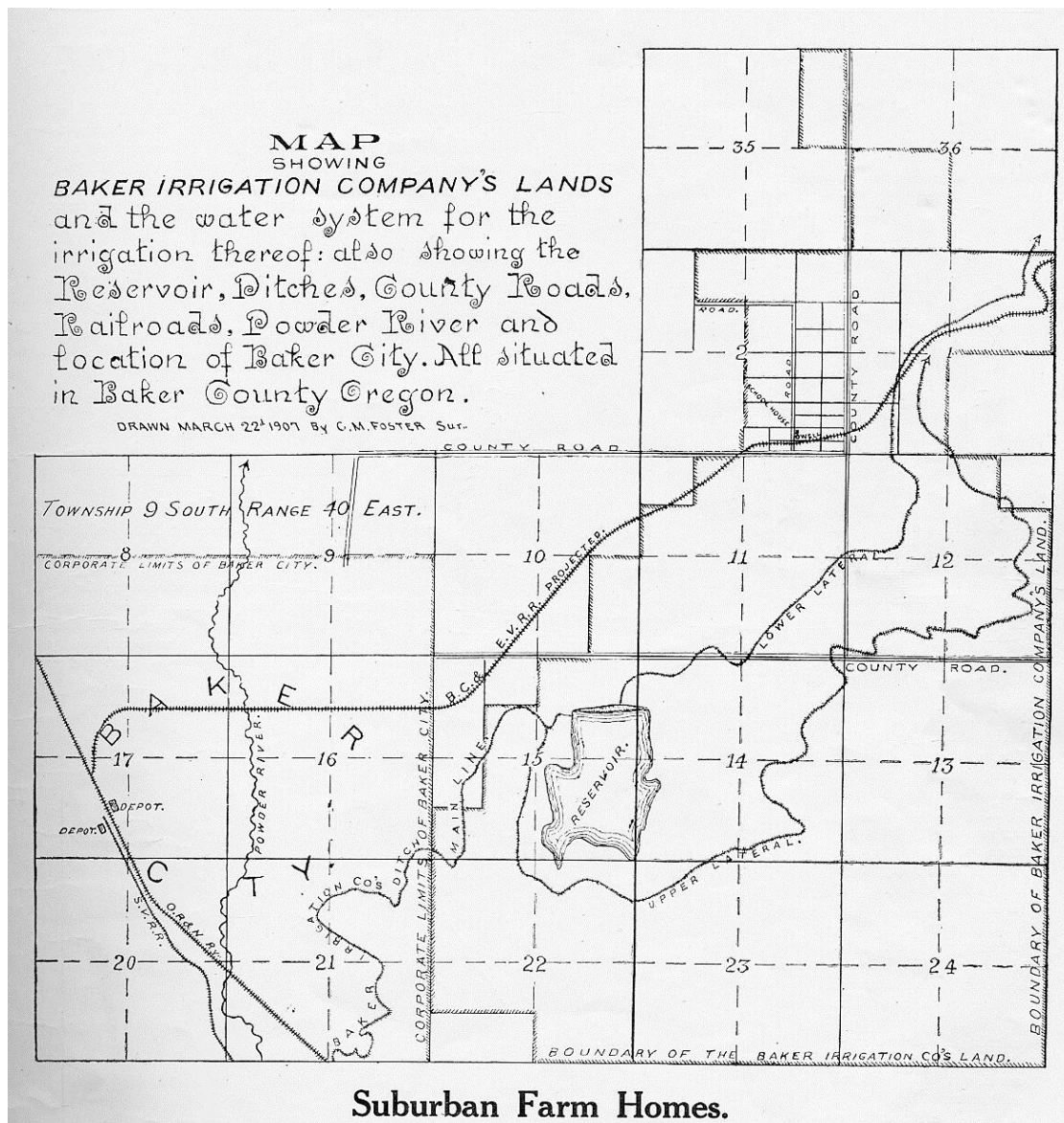
Smith Ditch also sprang a leak on June 19, 1957. A break in the ditch south of Mount Hope Cemetery sent water down Elm Street and around the Lariat Motel. That minor flood followed by just four months the February 1957 Powder River flood that turned much of the Resort Street area of Baker City into a lake.

Smith Ditch has a total length of about twelve miles and has been in continual use for over 100 years. Its construction followed a rich history of ditch digging in Baker County, which had its start in the county's earliest days. After gold was discovered in Griffin Gulch in the fall of 1861, miners, mostly former California Forty-Niners, rushed into the area the next spring creating a tent city called Auburn. In those days placer mining predominated as a means of gold extraction. After spring runoff petered out with the hot days of summer arrived, placer mining production literally dried up in most gold-bearing areas, necessitating diversion of water from where it was more abundant.

Although ever man was out to make his own fortune, miners quickly banded together to organize for mutual benefit the Auburn Water Company (later called Auburn Canal Company). Lead organizer, William H. Packwood, engaged engineer A.C. Goodrich to survey a ditch along the face of the Elkhorns. The ditch, dug post-haste with the assistance of Chinese laborers, was soon gathering water from Pine Creek and streams south to Auburn, a distance of about thirty miles, dumping it into a reservoir above town. Below Elkhorn Peak a natural glacier-formed lake was augmented with a dam on top of the terminal moraine called Goodrich Reservoir, named for the surveyor and construction manager of the Auburn Ditch. Packwood went on to be the prime mover in the construction of two other well-known ditches, the 125-mile Eldorado Ditch in the Burnt River area of southern Baker County and the 32-mile Sparta Ditch in the Eagle Creek area in northeastern Baker County.

After placer mining faded, farmers acquired many of the miners' ditches and dug hundreds of miles of additional ditches to irrigate their fields. One of those ditches was the 12-mile Smith Ditch, which was constructed in the winter of 1905-1906.

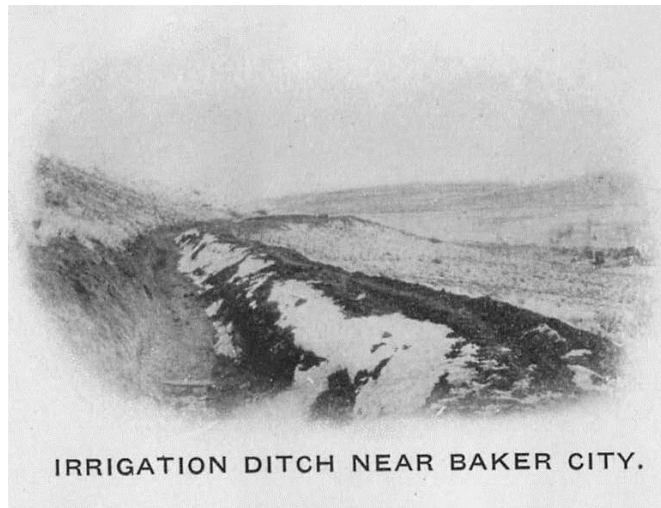
The Smith Ditch, soon referred to at the time of its construction as a "canal," was conceived and financed by a couple of brothers from the Hood River and The Dalles area, E.P. Smith and J.A. Smith, who formed the Baker Irrigation Company. E.P. was president of the company and J.A. was the project manager. In early 1906, the *Oregonian* announced to its readers, "The first and only irrigation project of any magnitude in Baker County is now under construction. E.P. Smith, the wheat king of Hood River, is at the head of a company which has now commenced the construction of a ditch which will water 5,000 acres adjoining and immediately northeast of Baker City. The ditch will be seven miles long and have a tunnel of several hundred feet under Reservoir Hill. The land watered will be devoted to fruit raising."



Land Sales Advertisement (1907).

Construction of the ditch began in late November 1905 with several crews totaling about 60 men who, a local newspaper reported, “for the last thirty days are making the dirt fly from a point about eight miles southwest of Baker on Powder River.... For the entire length to Sutton Creek just south of the city the surface portion has been cut out, save in places where blasting is necessary.” Curiously, in March 1906 blasting turned up a petrified buffalo horn.

Engineer for the project was early Baker County pioneer Charles M. Foster. Foster was a man of many accomplishments. In 1864 he was elected county clerk; from 1867 to 1868 he worked for the Auburn Canal Company; in 1870 he was employed by Packwood to survey a route for the Sparta Ditch; and the voters elected him to a total of 36 years as county surveyor. In addition, at various times he held positions as county school superintendent (1865), county commissioner, government deputy mineral surveyor, Baker City surveyor, and Baker City councilman.



*Twelve-mile-long Smith Ditch south of Baker City.
From a promotional brochure, ca. 1910.*

Smith Ditch was designed to be twelve miles long with possible extension of another twelve miles. Diversion of Powder River waters into the ditch took place, as it does today, about six miles south of Baker City, where the river leaves the canyon and enters the upper end of Bowen Valley. From there the ditch skirts the eastern edge of the valley following the contour of the hills. Originally there was a 175-foot flume at the Dudley Bowen place about midway down the east side of the valley, now replaced by a culvert. Bob Bowen of Baker City, Dudley's nephew and a relative of the original settlers of Bowen Valley, says that at age ten while walking on the flume he fell into the swift water and almost drowned. Bob says there was another flume in Bowen Valley south of this one.

At Sutton Creek on the outskirts of Baker City, workers installed a four-foot-diameter, 598-foot siphon pipe (since then replaced with a smaller pipe) under

the creek and railroad tracks with a drop of ninety-three feet on the south side and a rise of ninety feet on the north side. From Sutton Creek the course of the ditch runs around the back side of Mount Hope Cemetery and then into a 600-foot tunnel through Old Reservoir Hill. From the north exit of the tunnel, the ditch runs under Highway I-84 to Smith Lake and continues north past Highway 86 for another mile or so.

During the winter of 1905-1906, double shifts worked both ends of the tunnel, which was six feet high and five feet wide at the bottom. By the end of December, tunneling had progressed about 75 feet from both ends. Construction of the ditch, which measured eight feet wide at the bottom, twelve feet at the top, and three feet deep, continued throughout a mild but snowy winter. Old timers said it was the snowiest winter in ten years. In January 150 men and 60 horses and mules were at work in ground that had surprisingly remained unfrozen. By mid-February work on the ditch was two-thirds complete, with the most difficult work "on the north side of reservoir hill where heavy rock work is encountered requiring more or less blasting in hard lava."



*Smith Ditch exits from the north side of Spring Garden Hill.
Entrance to the 600-foot tunnel is on the cemetery side of the hill.*

While work continued on the ditch, Baker Irrigation Company executives negotiated a 99-year right-of-way agreement with Baker City with two sticking points that needed to be ironed out concerning the city's right to enforce both construction standards and repair work. In February 1906, city council passed the agreement unanimously. Negotiations were probably facilitated by city

council's desire to encourage a project with a vision of irrigating between 3,000 to 5,000 acres of land east of Baker City in the Sunnyslope area and possibly north of the road to Richland.

In early April 1906, with all work completed on the upper ditch, all blasting finished, and break-through accomplished in the tunnel, about 90 men were laid off. A big moment in the project came at the end of May, when water was turned into Smith Ditch for the first time, providing water to arid, sagebrush-covered Sunnyslope. Water went into a natural basin for storage and onto five-, ten-, and 20-acre tracts on which Baker Irrigation Company promoted cultivation of "big red apples, the juicy pear, the delicious berry and any and everything in the shape of vegetables of north temperate zone" and even bananas, as well as three crops of alfalfa. The company also planned to run the ditch into the alkali lands further north.



*Smith Reservoir. Located one mile east of Baker City.
There were plans to turn it into a recreation area,
but today it's still just a shallow reservoir.*

In 1907, besides running high-powered advertisements in the newspapers, the company was also busy with construction of a dam at the lower end of the natural basin to form what would become Smith Lake. At the time it was called Park Lake, because of plans to plant palm trees, poplars, and provide "a fleet of

rowboats” and other amenities, plus ice skating in winter. Although a photo taken at the time shows a rowboat on the lake, plans for a park never materialized.

Work on the 240-acre, 6,000-acre-feet reservoir required construction of a flume to bring in fill material for the dam. A local newspaper described the hydraulic construction method this way. “The dam is a wonderful piece of work, for the builders are using just what they have at hand for building material, sage brush and sand. A hedge of sage brush is laid across the opening where the dam is to be, which resembles a windrow of hay, then the sand is pumped from the mountain side and while wet is filled in around the brush. This is followed by another hedge of brush and another layer of sand until the job will have been completed. At present they have the dam probably twelve feet high in the highest place and it will be made larger and higher.” The dam was designed to be 2,000 feet long, 450 feet wide at the base, and 50 feet high.

In July 1907 a portion of the dam failed requiring a large release of water out the overflow gate. Project Manager J.A. Smith was quoted as saying, “The report circulated to the effect that the reservoir of the Baker Irrigation Company had broken was entirely unfounded.” This small failure of the dam caused some trepidation among local residents and with good cause. Other failures of reservoirs in Baker County resulted in very destructive flash floods. When the original Goodrich Dam, constructed in 1863 as part of the Auburn Ditch project, broke on June 15, 1896, all seven members of the French family died when raging waters swept away their farm house southwest of Wingville. Goodrich Dam broke again in June 1956, but luckily there was no loss of life. In June 1917 Killamacue Dam on a tributary of Rock Creek failed resulting in almost complete destruction of the little town of Rock Creek.

With Smith Ditch completed to the Sunnyslope area and water rising in “Park Lake” with promises to make it into a recreation area, Baker Irrigation Company, which had purchased the barren Sunnyslope land, began an advertising blitz to sell tracts that would support up to 500 farm families. Full-page advertisements extolled Sunnyslope as “a natural fruit area,” because temperatures on the bench were on average higher than lower in the valley. One of the full-page ads in July 1907 described how to make the land pay with this sure-fire formula for success: Purchase land from the company with twenty percent down and sixteen percent yearly for five years at seven percent interest. Plant apple trees at \$95 per acre. In five years, when the land was paid for in full, the trees would begin bearing fruit increasing the value of the land to \$300-\$500 per acre. In the meantime, while the trees were maturing, plant vegetables and strawberries. Sure-fire it was not.

All the big plans, the financial investment in canal and land, and full-page ads of the Smith brothers and their Baker Irrigation Company were not enough to turn Sunnyslope into a successful fruit-producing area. Today, a drive out east Campbell Street to an orchard-less Sunnyslope is evidence that those high hopes probably withered in late spring frosts that, as Baker Valley residents know, too often kill fruit buds that pop out too early after the spring thaw.

(Author's note: this article is based on local newspaper articles from the years 1905 to 1908.)

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