

## IDAHO STATE HISTORICAL SOCIETY REFERENCE SERIES

## SALMON TRACT IRRIGATION

Number 448 1981

Salmon Falls Creek flows into Idaho from Nevada through a canyon in good farm lands. An excellent construction site for a dam west of Rogerson provided an attractive early twentieth-century Carey Act project. Several advantages of such a project became evident as soon as Twin Falls tract canals were dug. Adjacent lands higher up could be watered by an economical gravity system. A tunnel had to be blasted out of a lava canyon, but a canal system from a 220-foot dam could be installed at an estimated project cost of about \$2,500,000. Over 120,000 acres--perhaps as many as 150,000--could be watered for not much more than twenty dollars an acre. A reservoir impounding about 180,000 acre-feet of storage could be obtained for such an investment. Twin Falls Land and Water Company investors did not hesitate to add this additional system to their already successful adjacent operation.

An effective promotional campaign was undertaken soon after 127,707.27 acres of Salmon tract sagebrush were segregated in 1908. Organizing an impressive project, Twin Falls-Salmon River Land and Water Company developers opened their large tract in 1909. (Salmon River, rather than Salmon Falls Creek, sounded a lot better in their title. Idaho's Salmon River had plenty of water, but had nothing to do with this project. Salmon Falls Creek, their actual water source, was much more modest.) By 1910, Salmon Dam and its canal system was almost ready to deliver water. Energetic farmers were clearing thousands of acres of sage brush from their arid lands. About all they needed was water. Some six thousand Salmon Tract acres were actually irrigated in 1911. This total rose to about 19,000 in 1912. By then, some disturbing problems had become all too evident. About 35,000 acres of intended farm land were relinquished in 1912, and additional retraction appeared likely.

Two miscalculations plagued farmers trying to operate Salmon Tract properties. Their 180,000-acre-foot reservoir had far more storage capacity than Salmon Falls Creek had water. Ranging from a flood stage maximum of 1,280 second feet on May 22, 1912, to a minimum of only ten second feet on July 25, 1919, during recorded years of 1909-1916 and 1919-1924, that stream lacked potential for irrigating 180,000 acres even if every drop could have been used. Approximate total acre-feet available from that small stream never approached that amount. Some sample annual totals are instructive:

1911	98,600	1921	134,000
1912	143,000	1922	123,000
1919	63,000	1923	96,700
1920	33,100	1924	80,900

The average total runs a little over 100,000 acre-feet annually.

Those years were critical to farmers in need of water that never reached their reservoir. Worse yet, their lava wall reservoir, unlike their concrete arch dam, leaked like a sieve. Altogether too much water flowed around their dam. So their large storage capacity served less than a useful purpose. Only about 76,000 acre-feet can be diverted for irrigation purposes each season. Only slightly over 40 per cent of Salmon Reservoir's capacity could be used in an average year.

Water allocations were proportional to company shares which expectant farmers owned. Those who could get no water at all, or insufficient water to grow crops, had to sell out. Farmers had to keep buying shares until they gained enough water, in good seasons at least, to get by. They quickly learned not to waste water. After enough water claims were consolidated to allow those who remained to conduct marginal farming operations, acreage under cultivation gradually stabilized. By 1918, only 35,000 acres out of an original anticipated 180,000 were irrigated. This level of farming continued from that time on. Excess lands grew more handsome sagebrush than had been produced before a lot of work had gone into acreage preparation, but Salmon Tract farmers had a rather limited market for superior sagebrush.

Aside from statistics from early state engineer's office and reclamation reports, and from Water Resources of the Salmon Falls Creek Basin Idaho-Nevada Water Supply Paper #1879-D by E. G. Crosthwaite, information for this summary was provided largely by Norman D. Wells, who cleared Salmon Tract sagebrush from 1909 to 1916.

Publications--450 N. 4th Street, Boise, ID 83702--208-334-3428