RESERVOIRS - BULLETIN 1916

208-549-123 Jean Rice christy "History of the Intermountain Institute"

> "The Institute has the right of way for the water which can be brought down the valley fifteen miles through a concrete aqueduct. By this plan one thousand acres of fruit, alfalfa, and grain land can be irrigated and work provided for 500 students in the fields and canneries."

Dry farming will produce some grain, but the great crop for this country is alfalfa, and alfalfa must have water, plenty of it. So when the plan to found a great Industrial school began to evolute, the land and water question came first to the front.

"The land part of the question was easily solved; for at that early date there were thousands of unoccupied acres in Idaho. And good "dry" land could be purchased from \$5 to \$10 per acre. Several homesteads were taken up and after "proving up" that is, getting a deed from the government, were sold to the I. I. I. What is known as the "Upper Ranch" consisting of 320 acres was purchased for \$3,000. On this ranch a small reservoir had been practically constructed. A creek known as Jenkin's Creek

> Permit No. 67-15333 Protestant's Exhibit 143

flows through the ranch. In the spring when the snow melts away, the creek is a raging torrent for 2 months or more, but in June it becomes quite dry. With the flood water the alfalfa fields recieve one irrigation, and one fairly good crop is cut. The little reservoir stores enough water to supply a good garden during the summer. It is proposed to more than double the capacity of this reservoir, which will furnish enough water to irrigate a large part of the alfalfa a second time.

"This reservoir will also serve as a receiver for the water sent down from the reservoirs higher up the creek, which sometime (in the future) will irrigate all the Institute land.

"Going up the creek about 4 miles we come to reservoir No. 2. This reservoir was surveyed by our lamented Prof. Maryatt more than 10 years ago. The work was commenced in the summer of '06 but for the lack of funds was discontinued for several years. For two or three years past, some work has been done every year, so that now a good deal of water can be stored. When completed, this reservoir will contain enough water to irrigate 200 acres or more. The water from this reservoir is carried into the creek again and flows down into the reservoir 58

No. 1 to be taken to the ranch when needed.

"The ditch connecting Jenkins Creek with the reservoir is about a mile long. The head gate made of concrete, and a concrete conduit 18" in diameter leads the water through a cut of about 200 feet in length. The plan is to raise the dam several feet each year until it is 80 feet in height.

We now come to reservoir No. 3, the greatest of them all. The site for this reservoir was also surveyed by Prof. Maryatt. Indeed he was working on the application plats when he was smitten by typhoid fever which caused his death! This reservoir is located on the divide between Monroe and Jenkins Creeks and the water to fill it is to come from Monroe Creek. When the reservoir is filled, that water will cover more that 200 acres of land, forming a lake $\frac{1}{2}$ of a mile wide by one and one half $(1\frac{1}{2})$. miles long. More than half of the ditch is cut through lava rock and as the hill side is very steep a large amount of rock had to be moved. The rock work had to be done by hand, as teams could not be used, hence the work was slow and expensive. Along the line of this ditch are several deep draws or gulches. It was found, when heavy storms occurred, earth and stones were washed down

MONROE-000119

27

these draws in sufficient quantity to fill the ditch and cause a break. This made it necessary to build concrete culverts at the junction of these draws with the ditch, allowing the earth, stones, etc., to pass over it.

"Although so many extras were demanded in the construction of this great ditch and not withstanding the unexpected amount of rock work, the cost of the ditch was several thousand dollars below the estimate made by an expert engineer.

"By far the most expensive part of the construction is the building of the dam. This work was commenced September, 1913. The first work in the dam construction is to find bed rock upon which to rest the concrete core. Fortunately the rock was found only a few feet below the surface and a core of solid concrete ten feet thick was founded on this bed rock. Banks of rock and earth will be put on both sides of the core, which will form the main body of the dam.

"If the reservoir fund will grow to meet the demands put upon it, the work on this dam will be prosecuted with great vigor. With the reservoirs completed it is estimated that a revenue can be derived from the great Institute Ranch, nearly sufficient to pay the running expenses of the school."

Information from Esther Hettinger, Salem, Ore. Typed copy. MONROE-000120