

DEPARTMENT OF THE INTERIOR,

UNITED STATES INDIAN SERVICE,

Moqui School,

Keam's Canon, Ariz. July 15, 1905.

The Honorable,

The Commissioner of Indian Affairs,

Washington, D. C.

Sir:-

I have the honor to submit the following report, recommendations and estimate as to the developement of water on this reservation under the following heads:-

- 1, Development and storage of flow of existing springs, primarily for stock, secondarily for irrigation to capacity where available.
- 2, Storage of surface water.
- 3, Finding and raising underground water.

Considerable work has been done at Weepo, Mativa, and Fifteen Mile springs, at each of which much must be done over. At Weepo the cement work was done too late in the fall and much of the cement has fallen off thus rendering the large reservoir practically worthless as such. The pipe and walls are in good shape but cement must be laid again to make it hold water. The small reservoir there is all right at present.

At Mativa-the most promising prospect I have seen on the reservation- the wall has fallen, in a small section, and the pool must be pumped out and repairs made.

At Fifteen Mile Spring the cement cracked in the bottom letting the water through settling the foundation and letting the bottom out of the reservoir-that must be dug out a foundation put in and cement laid.

The interests of the stock on the reservation-which is ninety per cent of our worth; the protection of our cemented reservoirs as well.

~~as well~~ as some irrigation of truck patches therefrom all demand that some of our apparently smaller springs be developed and their waters piped to stone lined watering pools or troughs. The waters of all the smaller springs not fairly accessible should be piped to such accessible point as will permit of making long, narrow, shallow drinking pools or troughs lined with stone bedded in clay, if obtainable, otherwise laid in cement mortar and all approaches so rocked and tamped as to mean permanence.

This work should be done by the Indians, under intelligent direction, and with the understanding that they would do the work without compensation other than any water obtained, but the Government would furnish the pipe necessary and whatever reasonable amount of cement and cement work was necessary.

Such work should be done at Comar Springs, Chettito Springs, Iron Spring, Cow Spring, Willow Spring and a number of others with unspeakable ~~Indian~~ Indian Names.

As such piping as would be necessary simply conducts water without pressure I have listed light well casing as equally efficient and less expensive.

Surface ~~of~~ water is to me as yet wholly a matter of report and surface evidence- will report further when the rainy season shall have furnished me with more definite ideas and evidences.

Finding underground water is wholly a matter of investigation, and should consist of using the little drill to sink ~~prosps~~ prospect holes to a reasonable depth, first about Oraibi Day School. If potable water is not found near the school it will be necessary to go to the wash, a mile distant, dig a couple of large wells and put in a pump, tank and pipe line but this will ^{be} made the subject of a separate communication as will each point investigated.

