

THE STATE OF UTAH

OFFICE OF STATE ENGINEER

SALT LAKE CITY

April 8, 1937

T. H. HUMPHERYS

STATE ENGINEER

Memorandum for Office Study only, by T. H. Humpherys

REL: COAL CREEK DISTRIBUTION

At the conclusion of the meeting held in Cedar City on Saturday, March 20, 1937, to consider matters relating to the Cedar City underground water area, I spent an hour or so with Mr. J. T. Leigh, the Water Commissioner on Coal creek.

We went first to the erosion structure, - being an ^{Coal} O-G rubble masonry type dam located on Coal creek about two miles above the mouth of the canyon. The structure was originally built by the CCC under the supervision of the Forest Service, - Mr. Martin, in 1934 or 1935. The area back of the dam was completely filled with silt and the water broken through the lip of the weir about 3 feet down and near the south side. The water had also undermined the lower cutoff wall and the structure would soon be destroyed except for repairs which were then under way.

We then went down the creek, following the meanderings thereof, to the primary users' weir and headgates immediately below the State road. The channel consists of boulders imbedded in a loose clay and sand, causing movement of both with any great flow of the creek. With high water great damage will result. There is a bare possibility that the creek will overflow its banks and possibly find its way into the town of Cedar City. Below the State road the overflow from the silt-carrying creek each succeeding year has builded the creek bed so that it is higher than the surrounding country, overflowing from one channel to another over a cross-sectional area of about one quarter or a half mile. Unless something be done to put up a revetment on either side of this overflow area the creek, with recurring floods, will cut into and damage contiguous farming lands. The headgate and weir above referred to is an improvised affair of concrete and timber with little or no convenience or possibility for diversion with any degree of accurateness. Commissioner Leigh said that weirs were constructed one-half mile down the creek in the ditches where the water was still to some extent and offered reasonable accuracy for measurement.

The conditions on this creek offer a real problem in confining or

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YOUR NUMBER

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Memorandum for Office Study only, by T. H. [Name]

THE [Name] DAM

At the conclusion of the meeting held in Cedar City on Saturday, March 20, 1937, a number of matters relating to the [Name] Dam were discussed. I spent an hour or so with Mr. J. L. [Name], the Water Commissioner on local creek.

We went first to the erosion structure, - built on [Name] rubble masonry dam located on local creek about two miles above the mouth of the canyon. The structure was originally built by the G.O. under the supervision of the Forest Service, - Mr. [Name] in 1914 or 1915. The area back of the dam was completely filled with silt and the water broken through the top of the dam about 1 foot from the right side. The water had also undermined the lower outlet wall and the structure would soon be destroyed except for repairs which were then under way.

We then went down the creek, following the meandering channel to the primary water, weir and headgate located below the dam road. The channel consists of boulders embedded in a loose silt and sand, causing the movement of both with any great flow of the creek. With high water great damage will result. There is a bare possibility that the creek will overflow the dam and possibly find its way into the town of Cedar City. Below the dam road the overflow from the [Name] creek each succeeding year has undermined the creek bed so that it is rather than the surrounding country overflowing from one channel to another over a cross-sectional area of about one quarter of a mile. It is something to be considered on either side of this overflow area the structure.

great length of time, will result in the destruction of the entire dam at the lower end of the structure which, if permitted to endure to any waters pass through and around the structure. There is some undercutting dividing the water. As conditions now obtain at the headgate the flood waters pass through and around the structure. There is some undercutting at the lower end of the structure which, if permitted to endure to any great length of time, will result in the destruction of the entire dam.

The conditions on this creek offer a real problem in continuing or