

MEMORANDUM

TO: Wayne D. Criddle, State Engineer
FROM: Donald C. Norseth, Distribution Engineer
DATE: May 4, 1959
SUBJECT: Duchesne River Transmission Study

A reconnaissance of the Duchesne River area, from the lands served by the Uintah Basin irrigation canal and the Grey Mountain Canal to the top diversion on the north fork, *was made* during the week of April 27, to May 3, 1959.

The main objective was to select canals that would represent the general area in character and to establish sections to make transmission measurements.

The following five canals suggested by Furhiman, Skeen, and Carter were checked for good sections:

Grey Mountain-Uintah Basin Canal

Rocky Point Canal

Rhodes Ditch

Broadhead Ditch

Farm Creek Canal.

A six-mile section was selected on the Uintah Basin Canal below the Indian Diversion at Birch Draw.

A section was selected on the Rocky Point Canal from Brumley Bridge to the main turn out.

A section was selected on the Rhodes Ditch, from the recorder on the top to just east of the Forest cabins.

The other ditches were checked, but no sections selected because of numerous unmeasured turnouts..

The Duchesne River system operates on a very loosely measured basis.

The canals, in general, have headgates that can very easily be regulated by the water user with measuring stations below the headgate. It is noted, that wherever recorders are maintained, in almost every instance, the acre feet per-acre ratio is very high.

There apparently is little attempt made to distribute the water within a canal system. The turnouts do not have locks or measuring devices, and appear to be placed wherever the users want them.

The ^{Farrshall}~~partial~~ flume which measures the Indian water from the Grey Mountain Canal is of little value for measurement; and combined with the recorder of the Uintah Basin Canal, can at best give a poor estimate of the water diverted into the Grey Mountain Canal that gets past the uncontrolled turnouts, above Birch Draw.

We should work towards:

- (1) Getting locks on all diversions that they may be regulated by the commissioner only.
- (2) All turnouts out of the canals should have measuring devices and locks installed and be under control of the local ditch master.
- (3) Selection of at least two more sections to be measured for transmission losses, that would give bottom land relationships.