

FORWARD

Two meetings of the members of the Provo River Distribution System were held in the Court House, Provo Utah. One on February 3rd and one on February 17th 1959.

A majority of the water users from the system were represented at both meetings. The financial report of the State Engineer's Office covering the system for the year of 1958 was read and approved at the first meeting.

Provo River Commissioners report for 1958 was given at the first meeting also a proposed budget for 1959 was submitted and approved in the amount of \$11,455.00.

A motion was passed that the River Commissioner shall report the storage water available, to the various Canal Presidents, having storage water, every two weeks or sooner if necessary and desirable. The matter of the appointment of a Commissioner was held over to the February 17th meeting.

At the February 17th meeting considerable discussion was had on the method to be used in voting for a Commissioner. A motion was finally passed to vote by individual user and not by stock. By motion the previous Executive Committee was retained for another year, with Mr. A. P. Hicken as chairman. The vote showed that from the two nominated for Commissioner, Wallace R. Wayman received a majority along with Isaac Bawn for Deputy Water Commissioner.

Due to the death of A.P.Hicken chairman, a meeting of the Executive Committee was called for Sept. 1st 1959 and by motion and vote Neils Anderson was made chairman for the balance of the term.

Natural flow of Provo River provided 100% of the demands for Class A Decreed Rights in Utah Valley To May 13th; 70% of 57 Acre duty May 13-18; 100% May 19th to June 21. 70 % of 63 Acre duty June 22 to July 3; 85% of 63 Acre duty July 4 to 9; 70 % of 63 Acre duty July 10-20; 75% of 70 Acre duty July 21 to Aug 14; 60% of 70 Acre duty Aug. 15-28; 70% of 70 Acre duty Aug. 29-to Sept 5; 60% of 70 Acre duty Sept 6-20; 100% of balance of Season. In Wasatch Division 100% to July 8; 44% July 8 to Aug. 1; 58% through Aug; and 59% through September.

The storage lakes at the head of the River all filled completely except Big Elk with only 121 A F Washington with 1846 AF, and Wall with 1500 A F. In that Washington Lake did not fill 38 A F storage in Crystal Lake on a tributary to Washington Lake was distributed or allocated to Washington Lake owners or rights. Big Elk did not fill because the gate was not closed during winter and Spring months. Some one had shot off the lock and opened the gates in late fall. restriction to the use of flash board in the Spillway of Trial Lakes by the Forest Service and State Engineers Office resulted in less storage in this lake than the previous year. 8368 A F was the total 1959 storage from all lakes.

Duchesne River Tunnel diversions accounted for 34197 acre feet, Deer Creek storage with 32273 Acre feet from Weber River through Weber Provo Canal. The 5367.78 feet Water Elevation of Deer Creek Reservoir reached Oct. 16th 1959 with only 55747 Acre Feet, storage, marks the lowest level since the reservoir was first built and filled.

One new diversion was added to the River system during the year for daily readings and reporting by the Water Commissioner, that of Orem City diversion of storage water from UP&L's penstock above Olmsted. This demand storage water is furnished a group of farmers in trade for Alta Spring water and accounted for 957 Acre feet storage delivery.

2900

RECOMMENDATIONS.

Fluctuations during hot summer days in River flow measured into Canals, below D C R provoked a study to determine factors and causes for such fluctuation in order that proper charges could be made for these river losses.

Records from the Automatic Gage recorder on the Murdock Canal show day and night flow peak differences of as high as 12 cfs. This is with discharge from the Reservoir holding and diversion into the U P & L Flume kept constant. With the present system or method (only storage delivery charged) of Provo River flow computations this 10 mile reach loss all falls on N.F. Water. By using the same monthly surface evaporation factor as applied to D.C.R. for the six mile river reach from the Reservoir to Flume intake and the 4 mile river reach from Flume intake to Murdock Canal Diversion the computed result would be negligible. Less than 1 Acre foot is computed to be lost in the 10 mile reach per day with July .59' evaporation factor and average river width of 40 feet.

Until more data can be compiled on amount and period of fluctuation river losses, together with causes for same no recommendation will be made by the River Commissioner. However the simplest and most nearly Court Approved conveyance loss allowance for this 10 mile open river reach would be to add a 2% charge to storage water delivered through the Murdock Canal as compared with the 4% Court Approved charge for the 25 mile average River reach loss on Weber Provo Canal, Duchesne Tunnel and Head of the River Storage water conveyed to D.C.R. at higher elevations.

During the period from June 17 to Oct 16th 1959 no water was diverted through the Weber Provo Canal from Weber River; yet observations at Woodland 20' Parshall Flume and reading on the 8' Cipoletti weir installed Sept. 24 shows that as much as 7.5 cfs was coming from return flow into and through the Canal from Weber and Provo River water sheds. Should the State Engineer rule that this return flow is N. F. water it is my recommendation that 4 cfs be set and stipulated on as Irrigation Season (April 15 to Oct 15) daily N. F. developing in Weber Provo Canal instead of the 1.5 cfs presently credited to N.F.

Distribution to the individual non-incorporated water users under Spring Creek falls to the duties of the River Commissioner. He act as water master under that integrated water supply system, taking water both from Provo River and from Spring Creek. Due to the rapid change of lands, titles, and distribution under that distribution system through increasing subdivisions, requiring double or thrible the water tickets, it is my recommendations as follows:- That until such time that this system incorporates and provides a water master of their own, that a minimum charge of \$3.00 per individual water user be made by the State Engineers Office.

In the past no conveyance loss has been given the Ontario Tunnel Developer water measured into the River at Hallstone. I see no reason why the same 4% Court Approved loss as applies to Duchesne Tunnel and Weber Provo Canal water should not apply. I so recommend it for 1960 Irrigation Season.