

FOREWORD

Two meetings of members of Provo River Distribution System Board were held during 1964, they being on Jan. 8th and Jan. 9th. At the first meeting policy was determined, resolutions made, hearings of individual water users taken. At the second meeting the State Engineer was not present but members of his staff representing him were in attendance. The resolutions of the previous meeting were presented to the State Engineer representatives for action. One of the resolutions of Jan. 8th meeting was the authorization of the repair and instillation of the South Fork Weir and automatic gaging station at a cost of not to exceed \$300. These 1964 minutes show all resolutions made, and action recommended for 1964 season, which are made a part of this report.

In accordance with the authorization and directive #48 of the Board at their^o meeting Jan 8 the Commissioner has authorized contractor Stanley Roberts to proceed with the rehabilitation of South Fork rock and concrete Weir for a lump sum amount of \$250. Repairs to be satisfactory to the Commissioner and USGS officials, and to be complete not later than September 30th 1965. Upon completion of the job the contractor is to submit a state invoice voucher for payment through Utah State Engineer Trust Funds. The Weir, channel and piping is to be so rehabilitated that the automatic gage can be reinstalled in the metal gage house to operate.

Certain pertinent and informative information and exhibits contained in the 1960, 1961, 1962 and 1963¹⁹⁶³ Commissioner Reports are not included as duplications in this report but are referenced by page and report. They are as follows:

- (1) Articles of Association page VII 1960 report.
- (2) List of Water Users and Acre Rights Wasatch Division 1960 report.
- (3) Wasatch Division Third District 1st class water rights as of December 9, 1963 with summary of diversions. Acre right and cfs page 36, 1963 report. Also see page 3 of 1963 Foreword.
- (4) Range and observation of Wells, Heber Valley page 71, 1960 report.
- (5) Basis for computing Assessment Provo River page VI 1961 report.
- (6) Blue Cliff 50 cfs assignments tabulation page 12, 1961 report.
- (7) Tabulation of summer UP&L Co. D.C.R. storage release showing conveyance losses page VII 1961 report. *to Utah Lake*
- (8) Head of River Storage Res. Acre Foot capacity tables page 47 1963 report.
- (9) List of Class "A" water in cfs 100% River for Diversions page 9 1963 report.
- (10) Seasonal Changes in Provo River Rights and Methods of computation page 4 of Foreword 1963 report.

Computed Natural Flow of Provo River below D.C.R. provided 100% and more of Class "A" demands of decreed rights, together with large quantities of secondary water for Provo Res. Water Users Co. Geneva Steel, and others to July 7th as D.C.R. had been declared full May 24th and to that date quantities of River N.F. Water was by passing all Utah County diversions. Only users having no Class "A" or secondary rights were charged for D.C.R. water during that period. Class "A" rights continued at 100% to Aug. 24th, 90% to Sept. 21st, 80% to Oct. 1st, 90% to Oct. 16th, 100% balance of Season. The most that Class "A" over drew on its balance was 1126 Ac. Ft. on Aug. 30th. It showed a plus balance of 1069 at end of Irrigation Season.

Wasatch division for Districts 1 and 2 provided 100% of First Class Rights to July 22nd. Other percentages with comparison for other years

and stock watering purposes, up to the amount of their acres right; this was deducted from their total decreed right when intergrating the balance of their right into an irrigation turn schedule. Detailed instruction including an operating schedule with a letter dated April 8, 1964 was furnished South Fork Users from the Deputy State Engineer, copy of which is listed and attached to this report as Exhibit #1 page.

Since that date written reports as requested of regulation violations July 6, July 29, Sept. 9, and Oct. 2 have been furnished your office also Attorney General representative by the Commissioner. To date written instructions furnished users from your office have not been carried out. I await your procedure instructions.

At the meeting held July 25, 1963 with Riverside Country Club and State Engineer's office representatives it was determined it was the responsibility of officials of the Club to provide and furnish evidence of water rights claimed together with initiating change of point of diversion and place of use applications to facilitate their present method of golf course irrigation. A determination of the adequacy of their water rights acquired to irrigate the acreage developed, can only be resolved after the following facts are established.

- (1) Acres water right acquired as listed in the Decree Case #2838
- (2) Acres now irrigated and developed by the Club
- (3) Drain Water developed for pumping or return flow to the river.
- (4) Measured discharge capacity of existing pumping facilities.

Should it be determined the Club does not have sufficient water rights to cover the acreage developed and water diverted, than acquisition of additional storage or other water rights may be the answer. All these conditions were to be substantially resolved during the 1964 irrigation season. To date it is reported a water meter (AF) has been purchased but to date it has not been installed on the pump discharge pipe. If items (1) (2) and (3) have been furnished your office I am not aware. During 1964 season the N.F. rights of the river were on a % basis without facilities to determine if the Country Club diversion was exceeding their right.

1965 operational recommendations are substantially the same as listed in 1962 report. These recommendations deal with the points of later tertiary storage releases and full utilization of D.C.R. capacity use with Class "A" water, to the end that all parties can receive substantial benefit. Such operational practices can only be carried out when a early forecast of unutilized reservoir capacity is available. It is predicted that with time and short year storage water availabilities, that such will become common practice.

During years of surplus N.F. water above present Reservoir capacities. N.F. users above Utah Lake are concerning themselves with the following.

When there is excess N.F. water in Provo River above recorded Class A and Secondary listed rights it has always been the practice for canals to fill to capacity with no charge for storage water. This includes all diversions including S.L. Aqueduct, Orem City, and Provo City Culinary. See sheet # 3 covering reports from May 24 to July 7, 1964, where no Bear Creek Storage use is charged or listed.

This ditch full right enjoyed by the Natural Flow users in Utah and Heber Valleys when surpluses exists, it is claimed by N.F. users is the difference between maturing most crops planted and a year like 1961, when all available water was used to keep existing trees alive during the latter part of the irrigation season. This ditch full use during periods of surplus, is an unlisted basic right use, of long standing, as claimed by many N.F. users.

An entire change in policy, with a directive from the State Engineer and the D.C.R. Association to the commissioner would be necessary if Class A and Secondary users are to be restricted to listed decreed and application rights or charge without request their storage during periods of river surpluses as existed between May 24th and July 6th 1964. Such a policy would in all probability meet with resistance.

The amount of this surplus use by Utah Valley Canals and users is available from analysis of Commissioners annual reports. That amount is only a fractional part of recorded surplus water which might be utilized by construction of further storage facilities on Provo River. Based on Canal capacities and analysis of previous surplus uses, 40 cfs would cover that going to Class "A" diversions and something more than that to Secondary users. Murdock being the principal user. Similar uses are being made by 1st to 17th class N.F. users in Heber valley, during period of surpluses.

Two interesting investigations conducted and being conducted on Utah Valley lands and potential water supply within the past two years are:

- a) "Irrigation Water Use in the Utah Valley, Utah"
Research Paper No. 79 of the Department of Geography University of Chicago by James Hudson, a graduate student.
- b) Charging of Under ground water supply, Utah Valley as reflected by surface application of water. This investigation is by the U.S.G.S. with field work headed by Mr. Robert Cardova.

From a digest of (a) one would be led to conclude it is decidedly academic, but that one can also learn considerable about ourselves by reading it. It is well organized from available source material, with ample tables and charts.

When publication of (b) is available it will be interesting to determine if any new relationships have been developed. Summary of Utah Valley Canal deliveries (Irrigation Period) page 15, this report should be helpfull.

A list of available points of diversion from Provo River is incorporated in this report as exhibit # II. Those * are exchange points listed under Application #12230. As many as possible at this time are identified by name. In that DCR Association members are the principal bodies storing, distributing, and leasing storage; it is suggested they extend their points of exchange under one change application, to all fore-seable exchange point sales in order to simplify processing of exchange water. This same action could well be used by Provo City for their available Head of River storage sales. It is apparent and consistant that exchanges covering direct or NF water can only be made by the incorporated canals and not by individuals owning stock in such incorporation. Exchange points indicated by Δ are those made by individuals owning stock in some canal company which will only be honored by the Commissioner upon a directive from higher authority or a written approval and request by action of the board of directors of the corporation from which exchange is made.

Exhibit III is included to show Secondary direct flow rights below D.C.R. in order of priority.