

Provo Reservoir Comapny *

vs

Provo City et al *

2888 Civil

IN DIST. COURT
UTAH CO., UTAH,
* FILED *

NOV 11 1915

E. P. Palfreyman Clerk.

Part 2

Commissioners Report 1915.

W. M. Stewart Deputy.

"Correspondence Relative to the Determination of Water Requirements, soils ect."

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April 13, 1915.

Mr. A. B. Ballantyne,

Provo, Utah.

Dear Sir:

Following your suggestion in our recent conference, I am enclosing to you herewith two court decrees, which have heretofore been made, distributing the waters of Provo River among the several claimants thereto. The earlier of these two decrees is marked "Horse Decree", and was given about 1902. The later of the two decrees is marked "Chidester Decree", and was given about 1907.

The Horse Decree makes specific division of the water at several stages below 250 cubic feet per second and at 250 cubic feet per second. The Chidester Decree makes no specific division of the water except that all the primary rights are covered by a total volume of 17,467 cubic feet per minute; approximately 291 cubic feet per second.

Neither the Horse or the Chidester Decrees make any distribution of the water of Provo River except in Utah County and a small fraction of Wasatch County, located in the immediate vicinity of the Wright Ranch west of Charleston.

No decree covers the use of the water between the Wright Ranch and the Wasatch dam, a distance of some nine miles, having many diversions for use from the stream. The maximum diversions in this section approximating more than 150 cubic feet of water per second; the irrigated area being something like 4,000 acres.

From the Wasatch dam to the head of the river, the right to the use of the waters of Provo River have been adjudicated about the year 1899; this decree of the upper river being commonly known as the "Fulton Decree."

About the year 1909 the Provo Reservoir Company began its operations on Provo River. In the course of time it has

A. B. B. #2. 4-13-15.

constructed a set of storage reservoirs at the cost of some \$50,000.00 and has built a canal system costing something like \$200,000.00 more. It is now irrigating more than 5,000 acres of land.

The Provo Reservoir Company about one year ago brought suit in the District Court of Utah County, to define its rights and the rights of all the other claimants to the use of the waters of Provo River. Unlike the other litigations on this system, every water user from the head of the river to Utah Lake is made a party. This is the first litigation that has been made on the basis of the physical and legal unity of the stream from its head waters to its mouth.

The litigants in this new water litigation on the Provo River, "Provo Reservoir Company, plaintiff, versus Provo City et al, defendant", met by order of the Court on March 26, 1915; listened to the report of the Water Commissioner appointed for the preceding year; agreed to a stipulation, a copy of which is enclosed herewith, which stipulation is to control the distribution of the waters of Provo River for the season of 1915, and further agreed that T. F. Wentz should be the Court Commissioner to enforce the provisions of the stipulation.

The Morse and Chidester Decrees in Utah County in some instances distribute quantities of water to prior appropriators that seem at least on superficial examination, to be excessive. In my report for 1914, I have so reported to the Court and urgently recommended modifications of the quantities distributed under these old judgments more in accordance with modern, economic irrigation practice.

Unfortunately as I view the matter, neither the Court nor the litigants saw fit to adopt the suggestions from my report.

A. B. B. #3, 4-13-15.

They did, however, lodge a discretion with the Court Commissioner which practically enforces a reasonable and economic use of the water. (See paragraph 7-8 of the stipulation referred to above.) There has not been, at least there is not available to the Court Commissioner, any data concerning the duty of water which has been derived from irrigation observations on any of the area served by the waters of Provo River.

✓ You probably recognize, even if you are not aware it is a fact, that observations even in so near and related an area as the Hapleton Bench have been refused recognition as applying to water duty in the area irrigated from Provo River. Such being the case, it is almost paramount necessity to have some duty of water investigations on the lands irrigated from the Provo River, to have those investigations begun as early as possible and to have them carried through systematically, probably on a limited number of fields for the complete irrigation season, in order to meet properly the demands that will doubtless be made on the discretionary authority of the water commissioner, and further to give the Court a set of unbiased data when the final judgment in this case is made. (I might say that the case is set for trial November 1, 1915.)

Personally and professionally, I am satisfied that some such authority as you represent could best undertake such an investigation as is suggested. If in the course of the irrigation season of 1915 it became necessary or desirable for me to exercise my discretion in limiting the quantity of water given to an appropriator, I would follow your findings in the exercise of that discretion.

I believe that this situation on Provo River which involves the beneficial use of the water on an area of some 40,000 acres of land, offers an opportunity for the agricultural college and the officers of Utah, Wasatch and Uinta Counties, to do a great

A. B. B. #4, 4-13-15.

public service. In my judgment, with a favorable attitude from you personally and the other state and government interests that you represent, we shall be able to work out a co-operative basis for ^{the} doing of the work that is necessary in this matter. If I might hear from you with reference to the assistance you and the bureaus you represent would give in supervision and financial assistance and what would be expected from the litigants on the Provo River, I think I should be able on presentation of the matter to the Court to bring the business to a favorable issue.

Yours respectfully,

Sec.

Table VII

TABLE SHOWING DISTRIBUTION AND WATER DUTY UNDER THE "MORSE DECREE".

Canal System.	Irrig. Area.	At 300 S.F. Stage			At 250 S.F. Stage			At 250- S.F. Stage.		
		Prop.	Quant.	Duty.	Prop	Quant	Duty	Prop.	Quant	Duty.
Provo Bench Canal	4333	.2295	68.85	<u>63</u>	.2295	57.37	<u>76</u>	.1765	44.12	<u>98</u>
Timpanegus Canal Co.	847	.0395	11.85 <u>22</u>	<u>72</u>	.0395	9.87	<u>86</u>	.0355	8.87	<u>105</u>
Upper East Union	762	.0605	18.15	<u>42</u>	.0605	15.12	<u>50</u>	.0665	16.62	<u>46</u>
Faucett Field	109	.0169	5.07	<u>21</u>	.0169	4.22	<u>26</u>	.0180	4.50	<u>24</u>
River Bottoms	516	.0875	26.25	<u>20</u>	.0875	21.87	<u>23</u>	.0875	21.87	<u>24</u>
Little Dry Creek	506	.0321	9.63	<u>53</u>	.0321	8.02	<u>63</u>	.0390	9.75	<u>52</u>
Lake Bottoms	1275	.0545	16.35	<u>70</u>	.0545	13.62	<u>94</u>	.0595	14.87	<u>86</u>
West Union Smith, Carter	1900	.1260	37.80	<u>50</u>	.1260	31.50	<u>60</u>	.1270	31.75	<u>60</u>
Provo City	3192	.3525	65.30	<u>37</u>	.3525	67.67	<u>47</u>	.3895	66.82	<u>48</u>

Note: The amount to Provo City as shown is 20.45 less than the proportionate part; 19.3 second feet allowed for machine interests, and 1.15 for Blue Cliff Right.

The above is copy of page 19, of the Report of T.F. Wentz, to the District Court, for the year 1914, and which shows the distribution of Provo River under an existing decree, and shows the duties of water under several of the canals.

TABLE SHOWING DISTRIBUTION AND WATER DUTY

August 15-28, 1914.

This table is only an approximation, and merely assumes to show the relative duties of water during this period.

Canal System	Irrig. Area	Amount in sec. feet.	Duty.
Preve Bench Canal	4333	86.75	50
Timpanegus	847	18	47
Upper East Union et al	871	23.20	38
River Bottoms	516	26.25	20
Dry Creek	506	10.	51
West Union Smith Carter	1900	37.80	50
Preve City	3192	95.3	33(Exclusive Mach. Water)
Fert Field	574	7.03	81
Lower Charlesten	500	21	24
Spring Creek & Sage Brush	1200	21.37	56
Upper Charlesten	653	20.47	32(6 s.f. added for inflow)
Midway Irrig. Co.	4109	47.21	87
Wasatch Canal Company			60(Reported by Clegg)

The duty to Wasatch Canal Co. does not include storage water.

The amount to Preve City as shown is 19.3 sec.ft. less than the amount allotted, 19.3 sec.ft. is allowed for machine interests.

The above is a copy of page 20 of the report of T.F. Wentz, to the District Court for the year 1914, and shows the relative duties of water in vogue on the System for the dates as shown.

Sec. IV.

Table VIII.

TABLE SHOWING DUTY OF WATER IN THE UTAH VALLEY WITH CANAL AT THE MAXIMUM CAPACITY.

Canal	Irrig. Area.	Max Canal Capacity	Duty.
Preve Bench Canal	4333	139.88	31.
Timpanegus Canal.	847	39.65	21.
Upper East Union & Faucett Field	871	47.62	18.
River Bottoms	516	101.85	5.
Little Dry Creek	506	20.17	25.
Lake Bottoms	1275	27.27	47
West Union Smith Carter	1900	69.88	27
Preve City	3192	110.43(185.34)	29.

Note: The total diversion to Preve City was 185.34 sec.ft., 74.91 sec.ft. in the Factory Race, this amount is deducted in the calculation.

"This table is given to show the inconsistency of claimants for allotment to full capacity"

The above is copy of page 20 of the report of T.F. Wentz, to the District Court for the year 1914, and which shows the distribution of Preve River with the canals at full carrying capacity.

TABLE SHOWING DISTRIBUTION AND WATER DUTY.

For July 28, 1914.

Under stipulation of May 25, 1914, and on order of Commissioner
of July 28, 1914.

Canal System	Irrig. Area.	Amount Sec. ft.	Duty.
Prove Bench	4333	106.	41
Timpanogus Canal Co.	847	18.	47
Upper East Union et al	871	25.20	38
River Bottoms	516	26.25	20
Dry Creek	506	10.	51
West Union Smith Carter	1900	37.80	50
Prove City	3192	98.70	32

Note; The amount to Prove City as shown is 19.30 sec.ft. less than the amount allotted, 12.3 second-feet allowed for machine interests.

The above is a copy of page 21 of the report of T.F.Wentz to the District Court for the year 1914. And shows the duty in vogue on July 28, 1914.

Provo, Utah, April 16, 1915.

Bureau of Soils,
Department of Agriculture,
Washington, D. C.

Gentlemen:

There is pending between all the parties claiming rights to the use of water of the Provo River a litigation. The trial of the case has not yet been made, pending the trial the parties are operating under a stipulation, as provided in the stipulation I have been appointed Commissioner to make distribution for the season of 1915.

I shall be under the necessity of determining reasonable use and necessities for irrigation on at least a number of the areas irrigated from Provo River, my time and opportunities for doing such work will be limited.

The main problem, as I view it, is to determine the quantity or volume used in an irrigation, and further to determine how much of such quantity or volume is held in the soil. I propose in the first proposition to measure the water used on the field in irrigating the same. I propose in the second proposition to proceed as follows; With an ordinary soil auger cut out a section of soil, just before the irrigation, and weigh the same, after the irrigation (A sufficient length of time to have permitted the soil to reach uniformity) cut out a second section in the immediate vicinity of the first, and of equal volume, and weigh, to determine the volume or weight of the water retained in the soil supplied by the irrigation referred to above.

The foregoing will serve to show about what I am trying to get at. In the light of your extended experience, please advise me if my method is fairly accurate in making these investigations, and if the soil auger is a proper instrument for collecting these samples, and further what type (and make and address of manufacture) of weighing instrument would you recommend to be used in the field, necessarily small and portable, but having a weighing capacity to handle borings of 2 inch auger to 4 foot depth.

I expect to retain the sample collected before the irrigation and later "Air Dry" and Saturate, to get the relative percentages and tabulate the whole experiment or test on a table which I enclose a copy herewith.

As I using the proper 'form' and the proper method. Any suggestion to a better method will be appreciated.

In this section there is more than 25,000 acres of land covering a great variety of soils and diversified crops.

In this work I will be very thankful for any assistance you may be able to give me.

Yours truly,

Commissioner.

(Copy)

Provo, Utah, April 16, 1915.

Hon. Reed Smoot,

U.S. Senate,

Washington, D.C.

Dear Sir:

I am enclosing herewith letter to the Bureau of Soils, I will be pleased to have you take this matter up with the Department of Agriculture, and render whatever assistance is available and proper. I am assured I can get more complete information through this source than from our Agriculture College. As I desire to get at this work as soon as possible, I will appreciate an immediate reply.

Yours respectfully,

Commissioner Provo River.

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Provo May 8 1915.

Mr C. P. Wentz, Water Commissioner
Provo, Utah,

Dear Mr Wentz:-

Dr Widtsoe's and Dr

E. G. Peterson's letters in reply to those of mine proposing the cooperative irrigation work you and others placed before me, have been received. Dr Widtsoe says I am sorry that it does not seem advisable ~~to~~ at this time to undertake the work that you propose, but I believe we can give equal service to Utah County in other ways than by undertaking just now an investigation in a legal controversy when we would be under limitations that would make it difficult to obtain conclusions of real service to any of the parties interested."

Dr E. G. Peterson writes. "The College is designed primarily to serve the farmers and industrial workers generally. Any action by the College may be considered justified if it has in view the development of agriculture and the farmers interest."