

MEMORANDUM

To:

From: Clifton W. Johnson

Re: Proposed Distribution of Birch Creek

Re: San Pitch Dist.

Introduction

At the request of the Mayfield Irrigation Company and the Gunnison Irrigation Company, a brief study was initiated during 1957 to study the distribution of water on Birch Creek, which is a tributary to 12-mile Creek east of Mayfield, Utah.

Water rights

Twelve-Mile Creek to Mayfield Irrigation Company, Inc., Mayfield, Utah.

Irrigations:
Prior Right:

(a) 150 c.f.s. from 42 percent of Twelve Mile Creek, Priority: 1871.

Period of Use: April 1 to October 15. Point of Diversion: To be diverted from Twelve-Mile Creek at each, either, or all of the following described points:

(1) 660 feet E. and 250 feet N. of the SE corner Sec. 34, T19S, R2E into the Anderson Ditch.

(2) 1500 feet W. and 1370 feet N. of said corner into the New Mayfield Ditch.

(3) 1780 feet N. and 1710 feet E. of the SW corner Sec. 34, T19S, R3E into the Old Mayfield Canal.

(4) 2710 feet N. and 860 feet W. of the SE corner Sec. 33, T19S, R2E, into the Mill Ditch.

(5) 1720 feet W. and 2310 feet N. of the SE corner Sec. 33, T19S, R2E, into the Indian Farm Ditch.

(6) 1760 feet W. and 2380 feet N. of the SE corner Sec. 33, T19S, R2E, into the Middle Ditch.

(7) 110 feet E. and 1100 feet S. of the SE corner Sec. 29, T19S, R2E, into the North Mayfield Ditch.

(8) Also a point of diversion known as the Roselund Ditch on the Spaniard Farm, and a point of diversion at the location of the C. L. Larsen Ditch.

Secondary Right: (b) 50 c.f.s. Priority: --- Period of Use: April 1 to October 15.

Point of Diversion: Same as in paragraph (a).

Said secondary right of 50 c.f.s. is subject and inferior to right in the Newfield Canal Company, Inc. to the amount of 32 c.f.s. from May 1 to June 20, with a priority of 1878.

STORAGE:

(c) 250 ac. ft. Priority: 1884. Period of Use: July 1 to October 1. Period of Storage: October 1 to July 1. Said water to be stored in two reservoirs as follows:

(1) Bear Hole Reservoir, situated in the $SE\frac{1}{4}SE\frac{1}{4}$ Sec. 19, $NW\frac{1}{4}NW\frac{1}{4}$ Sec. 29, $SW\frac{1}{4}SW\frac{1}{4}$ Sec. 20, T19S, R3E, having a capacity of 150 ac. ft.

(2) Town Reservoir, situated in the $SW\frac{1}{4}SE\frac{1}{4}$ Sec. 20, $NW\frac{1}{4}NE\frac{1}{4}$ Sec. 29, T19S, R3E, having a capacity of 100 acre feet.

The above described water to be used as a supplemental supply.

DOMESTIC STOCK WATER AND MUNICIPAL:

(d) 5 c.f.s. from 42 percent of Twelve Mile Creek. Priority: 1871. Period of Use: October 15 to April 1. Point of Diversion: To be diverted as described above.

The rights herein decreed to the Mayfield Irrigation Company are subject to the right of the Gunnison Irrigation Company to 58 percent of said Creek, with a priority of 1860.

Birch Creek to Twin Lakes Reservoir Company, Mayfield, Utah.

Irrigation: 2 c.f.s. Priority: 1882. Period of Use: July 1 to October 1.

STORAGE:

315 ac. ft. Priority: 1882. Period of Use: July 1 to Sept. 1. Period of Storage: October 1st to July 1st. Point of Diversion: To be diverted from Birch

Creek and stored in three reservoirs as follows:

- (1) Twin Lake Reservoir, situated in Sec. 29, T19S, R3E, having a capacity of 175 ac. ft.
- (2) Dry Hole Reservoir, situated in said Sec. 29, having a capacity of 125 ac. ft.
- (3) New Field Reservoir, situated in Sec. 21 of the aforesaid Township and Range, having a capacity of 15 ac. ft.

The above described water to be used as a supplemental supply to irrigate lands of the stockholders of Twin Lake Reservoir Company, under the Mayfield Irrigation Company.

Said water to be prorated to the owners of 333 shares of stock in proportion as each owner's shares bears to the total number of shares:

<u>Name</u>	<u>Shares</u>
E. V. Bunderson	15
Michael Jensen	15
Conrad Scow	16
Ephraim C. Scow	15
Merrill Whitlack	20
Clyde Whitlock	32.5
John M. Larson	7.5
Leonard Michaelson	15
Johanna Christiansen	10
Willard F. Willardson	10
Peter H. Scow	10
Chris P. Anderson	30
Martin C. Jensen	10
R. F. Dennison	10
F. J. Christiansen	40
Clyde Willardson	20
L.D.S. Church, $\frac{1}{2}$ W. F. Willardson, Bishop	5
Marion Anderson	6
Amanda Dennison	5
Willard Willardson	15
Hannah M. Christiansen	6
Andrew F. Jensen	10
Christian Jensen	10
Stena A. Nielson	5
Total	333

Said water to be prorated to the owners of the right to the use thereof in proportion as each owner's shares bears to the total number of shares.

No direct interpretation can be made as to the division of waters between Mayfield Irrigation Company and Gunnison Irrigation Company because of lack of information in the decree.

New Field Reservoir (Feeder Reservoir)

A measuring device should be installed immediately below the outlet of the New Field Reservoir. During 1958 the storage in New Field Reservoir should be measured through this device to determine the actual storage which will pass through the outlet. The springs that seep below New Field Reservoir probably have a portion of their source from the reservoir. However, the percentage is not known and should not be considered as an outlet to the reservoir until more information is known.

Dry Hole Reservoir

The seeps or springs below Dry Hole Reservoir are probably the main outlet to the reservoir. During 1958 a study should be made to determine the recovery from the stored waters which flow upon the springs and seeps. A separate measuring device is needed to determine this flow.

^{Twin} Diamond Lakes Reservoir

The weir below ^{the} Diamond Lakes Reservoir should be replaced with a more suitable weir or Parshall flume. The seeps below the reservoir are not of sufficient volume to be a source of disagreement.

Town Reservoir

A measuring device should be installed below the outlet of Town Reservoir.