

Water Resources Survey



Part I:

HISTORY OF LAND AND WATER
USE ON IRRIGATED AREAS

Wheatland County, Montana

Published by

STATE ENGINEER'S OFFICE

Helena, Montana, July, 1949

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STATE ENGINEER'S OFFICE

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July, 1949

Hon. John W. Bonner
Capitol Building
Helena, Montana

Dear Governor Bonner:

Submitted herewith is a consolidated report on the Water Resources Survey of Wheatland County, Montana. This work is being carried on by funds made available to the State Engineer by the Thirty-first Legislative Session, 1949, and in cooperation with the State Water Conservation Board.

The report is divided into two booklets—part one consisting of the history of land and water use, irrigated lands, water rights, etc., while part two contains all of the township maps showing in color the lands irrigated from each canal.

The office files contain minute descriptions and details of each individual water right, water and land use, etc., which are too voluminous to be included herein. These office files are available for inspection to those who are interested.

Mr. Gerald J. Oravetz, Assistant State Engineer, has directed the detail office and field work of this project and is entitled to much credit for the excellent accomplishment.

Respectfully submitted,

FRED E. BUCK, State Engineer

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Acknowledgments

A survey and study of water resources involves many phases of work in order to gather the necessary data to make the work both complete and comprehensive. Appreciation of the splendid cooperation of various agencies and individuals who gave their time and assistance in gathering data for the preparation of this report is hereby acknowledged.

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Irrigation Systems and names of those users from whom much of the information was received:

Duncan-Smart Ditch	John Duncan
G. L. Mutual Ditch	E. J. Settle
Harlowton Water Supply	Oscar Callant, City Clerk & Recorder
Lebo Lake Irrigation System	Rene Labrie and Jeff Kiichli
Muir-Klock Ditch	Nick Muir
Muir Mutual Ditch	Nick Muir
O. K. Private Irrigation System	Dan Vonica and E. J. Tierney
Penwell-Ross Irrigation System	E. J. Tierney
The Fochs Irrigation System	Mathias Fochs
Winnecook Ranch Company Ditches and Webster-Bridges Ditch	J. C. Bridges and Thayer Stevens

Foreword

In nearly all of the 17 Western Reclamation States a water right is obtained by first making a filing with some legally designated central state agency—usually the State Engineer's Office—setting forth the amount of water desired and the area proposed to be irrigated. A study is then made of the sufficiency of the water supply and, if found adequate, a permit for use of the water is issued and recorded. If studies show that the stream is depleted, the application is denied. The procedure in Montana, however, is vastly different.

In Montana a right to the use of water from a stream not adjudicated by the courts is acquired by posting a notice on the stream and filing a copy of same in the office of the county clerk of the county wherein the appropriation is located, and by proceeding to divert and use the water. Where a person diverts and uses water from a stream without posting or filing a notice, a water right based thereon has been recognized as valid by the courts. Whenever it becomes necessary to adjudicate the stream, both methods of acquiring rights have been recognized by the courts, and the amount of water finally decreed and dates of priority in either case are determined by the evidences and proofs.

Under Montana law there is no restriction as to the amount of water one may designate in his notice of appropriation. As a consequence, the amount set forth in the filing in no way indicates the amount being diverted and used, nor does it show whether or not the water was ever used at all to perfect the right. Nor is there any relation whatsoever between the amount filed on and the normal flow of the stream. To further complicate this matter, our courts have made it almost impossible to prove the abandonment of a water right.

There is no central office in the State where recordings are filed, or any supervision over the distribution of water from unadjudicated streams. One wishing to study the validity of a water right must make a search of the county records wherein the stream is located and perhaps two, three, or more counties if the stream courses through them. About the only result one will accomplish by such a research will be a tabulation of the dates of filing. The amounts of water filed on will be of no consequence; there is no conclusive evidence that the recorded appropriations have been perfected, and there is no record of the rights which are being used but never recorded. Therefore, a purchaser of ranch property, where he has to depend upon irrigation from a stream that is not adjudicated, has no way of determining the validity or priority of his water right. He has no assurance of the value of the right until the stream is adjudicated by the court, when each claimant must prove his claim by material witnesses.

The pioneers who are able to offer direct testimony in adjudication suits are rapidly passing on. One phase of this Water Resources Survey is to obtain all of the first-hand information possible on water and land use from the "old-timers" who are left, before it is too late. These data will include every known water right up to the time of completing the work in the respective counties, and the information will be on file for inspection in the State Engineer's office. At the time of this publication, Yellowstone, Carbon, Stillwater, Big

Horn, Custer, Rosebud, Musselshell, Golden Valley and Wheatland counties are completed, with work progressing on Meagher County. A prospective land purchaser, after studying the record in these counties may have a good idea of the sufficiency and priority of the right appurtenant to the land in question.

In this and succeeding volumes of the data compiled by this Water Resources Survey, it is the intention to provide as much information as is possible relative to the water right records of the various counties, as well as to assemble such other information as may be available from all sources having knowledge of these various water rights. Every precaution is being taken to avoid errors in the compilation of these data.

The results of this work were used in negotiating the Yellowstone River Compact between the States of Wyoming, North Dakota and Montana. In arriving at an equitable division of the waters between the states, it was necessary for Montana to have a catalog of its irrigated land and water use. This same question may arise in other river basins. Again, it is highly important that Montana gather such data, and thereby be able to defend its water rights in the development of the great river basins of the Missouri and Columbia rivers.

The subject of water rights is coming more and more into prominence as the rapid expansion of our irrigated area proceeds under the impetus of both State and Federal development programs. As new canals are dug and old canals and ditches are enlarged and extended, the relative area of land to be irrigated, compared to the water supply available for irrigation, becomes greater, and a competition for the limited water supply results, which often develops into controversy over the right and ownership of the water.

In a strict sense a "water right" on a live stream does not imply ownership in the same way as does a deed to a tract of land or a certificate of title to an automobile. A water right implies only the right to divert and use water from river or stream. Water when stored in a reservoir, however, is recognized as real property which may be sold, or disposed of as desired by the owner. The ownership to the water of our rivers and streams rests in the State and the rules under which the State grants to the individual the right to use these waters are known as Water Right Laws.

The early settlers in Montana took up land under the provisions of the Homestead Law of 1862 and the Desert Land Act of 1877. The former Act gave 160 acres of land to anyone who settled on it and put it in cultivation. The latter gave 640 acres of land to anyone who would irrigate it and pay the government \$1.25 per acre. In 1890, filings under the Desert Land Act were reduced to 320 acres. The construction of ditches on desert claims was in compliance for title to land, rather than for irrigation, and little attention was paid to the water supply available. Consequently miles of ditches were dug through which no water ever flowed. This is especially true in the drier parts of the state, where the diversions were made from intermittent streams.

In the more fertile mountain valleys irrigation was given more importance than in the plains country. Live streams provided a dependable source of water supply and the ditches which tapped them were designed to actually carry water, not merely to comply

with a legal requirement to obtain title to a piece of land. Thus, the right to diversion and use of water for irrigation became as important as the acquisition of title to the land.

But, while the government granted a patent deed as evidence of title to the land upon proof of compliance with the Homestead Laws, there was no deed, certificate of title or other legal instrument offered as evidence of title to a water right.

Water rights refer also to other uses than irrigation. Thus, the authorized use of water for mining, power, fish hatcheries, bird refuges, recreational purposes, municipal needs for culinary supply and sewage disposal, manufacturing, or navigation, all may become valid water rights.

The first irrigators took for granted their right to use water from creeks or rivers for irrigation. They saw water going to waste and appropriated it to their needs. It was as free to them as the air they breathed. They made no official record of the game they shot for food or the fish they caught in the streams and likewise considered it unnecessary to make official record of the time, place, or the amount of water diverted for irrigation. However, time has changed these conditions and it is now necessary to record the game killed and limit the fish catch, and also file a claim for the water appropriated from the streams and rivers for irrigation or other use.

When game was plentiful, no one concerned himself with the number of deer a person killed, but when game became scarce, steps were taken to prevent a few persons from taking more than their share while others had to go without. To do this it became necessary to issue licenses or permits to kill game and also to keep a record of game killed, a practice which is still followed.

Likewise, when only a few settlers diverted water for irrigation and the supply was more than enough for all, no one was concerned about the exact amount used by any one person. But as more and more settlers constructed diversion dams and ditches and tapped the rivers and streams for irrigation water, it soon became evident that there would not be enough water for all. Thus, a year with low water brought about disputes over the division of the supply. The older settlers, in such cases, demanded that the later comers close down their headgates and refrain from taking water, in order that the prior appropriations might have a full supply. The later users, on the other hand insisted that the available supply be divided among all users so that all might share alike.

Thus, progressive over-development of irrigation, together with the occurrence of seasons of water shortage, combined to bring about the enactment of Water Right Laws in the Western States where irrigation is practiced.

Method of Survey

Data incorporated in this report were obtained by the field survey method in co-operation with the irrigators on the land.

For irrigation systems under private ownership, water users were asked for specific information as to the source of water, present acreage irrigated, potential irrigable acreage under existing works, seeped acreage, condition of irrigation system, type of system, water supply, dates of priority, and the amount of water appropriated or decreed. This information was then recorded on a field form and later checked as to its authenticity.

The information in regard to the location of the irrigation system, present irrigated and potential irrigable lands, was indicated on aerial photographs with the exact location of each shown, and the various systems distinguished by color.

After the field survey was completed, the information was mapped on township maps from the aerial photographs, by means of projection, to insure the utmost in accuracy. In addition to the information pertaining to irrigation, all culture, drainage, section lines, etc., were taken in order to make complete and authentic township plats for the area concerned. This information was then mapped by farm units on individual farm forms that show the farm boundary, the location and type of irrigation system, location of irrigated and potential irrigable lands, present irrigated acres, potential irrigable acres, types of system, source of water, etc., with water filings attached. If the field survey information was complete, these individual farm forms were completed in the office. If not, the water user was again contacted in an attempt to complete the form. After these farm unit forms were completed, a summary was made of each township, which shows the name of the water user, section, township and range, source of water, whether a user has a private irrigation system or is under a ditch company or irrigation district, acres irrigated from each source, present irrigated acres, potential irrigable acres under existing facilities and maximum irrigable acres. The summary given in this report was tabulated from these township summaries to show the totals for the county. After this was accomplished and a final check made, color separation maps were drawn which included from 3 to 10 separation plates, depending on the number of colors that appear on the final township map in Part 2 of this report. Section and township corner locations were obtained by the photogrammetric system, based on Government land classification maps, county maps, plane table sheets and other sources.

This is the first survey of its kind ever to be consummated in the United States. The value of this work has been well substantiated by giving Montana its first accurate and verified information concerning its water resources under existing irrigation facilities. New lands to be developed by State and Federal construction agencies are not within the scope of this report. No effort has been made to analyze economic possibilities, or the problems of the irrigated projects, or to make recommendations as to their future development. The facts presented are as found and provide the items and figures from which a detailed analysis can be made.

General Information About Wheatland County

EARLY HISTORY

When the white man first came into the area he found the Crow Indians claiming the Yellowstone Valley from the western mountains to the mouth of the Tongue River. The immediate valley was claimed by the Mountain Crows. Another group, the River Crows, wandered more widely, centering on the Musselshell River and claiming the area from the mouth of the Musselshell west to Fort Benton and south to the Yellowstone. There were only slight differences between these two groups and they often lived together in entire harmony. The other tribe of Indians to inhabit the area was the Sioux. These groups used the area chiefly as a hunting ground.

Before the discovery of gold in the nearby mountains in 1879 only a few trappers and traders visited the area. After the discovery of gold the Indians became hostile to the ever increasing number of whites and decreasing amount of game. They frequently raided the gold seekers and freighters who hauled supplies, until military posts were established to give them protection. Military roads were also constructed, several of which passed through this area. With the protection provided by the forts, stockmen were encouraged to enter the area in the early '80s. Soon after their arrival, parts of the Musselshell Valley were surveyed but the survey was not completed in the uplands until after 1910.

The idea for the establishment of the present town of Harlowton was first conceived by Arthur Lombard and Richard A. Harlow. After the townsite was surveyed the first sale of lots was held June 10, 1900. This was the beginning of the present town of Harlowton.

Richard A. Harlow was also the promoter of the old Jawbone Railroad which at one time extended from Lombard to Lewistown as an independent carrier. This line is now a part of the Milwaukee Railroad system. This line, completed to Lewistown on October 30, 1903, played an important part in the early development of Harlowton.

EARLY AGRICULTURE

English and Scotch capitalists taking advantage of the open range and nutritious native grasses established livestock companies in the early '80s and were kings of this domain. These early operators established ranch headquarters along the stream valleys where livestock was wintered and fed on hay and grain produced on irrigated land.

With the construction of the railways in 1906 and 1908, settlers poured into the area and by 1915 much of the better range land was homesteaded and fenced into 160

and 320 acre tracts. Fair crops and good prices caused the land values to increase rapidly and the small operator to expand until about 1918. During the drought period to follow much of the cropland was abandoned and the once lush native grasses were no more. As a result, many of the early stockmen either liquidated or curtailed their operations.

WHEATLAND COUNTY ORGANIZATION

The area now embraced in Wheatland County was included in Gallatin County by an Act of the first Territorial Assembly of Montana, approved February 2, 1865, creating the nine original counties. On March 26, 1866, Meagher County was created from the northern half of Gallatin County. Meagher County, however, was not officially recognized as a new county until 1867, after the Act creating it the previous year had been declared invalid. Sweetgrass County was formed March 5, 1895, from Park County which was formed February 23, 1887, from a part of the original Gallatin County.

Wheatland County was created April 1, 1917, from parts of Meagher and Sweetgrass counties. It is located in the central part of Montana and is almost square in shape. The County measures approximately 36 miles wide along its north and south boundaries by 40 miles long, east and west. Except for the northern boundary which follows the crest of the Little Belt Mountain range and that of the Big Snowy Mountains, the boundaries follow straight east-west and north-south lines. The land area contained in the County is considered to be about 1,425 square miles. The County is bounded on the north by Judith Basin and Fergus counties; on the east by Golden Valley County; on the south by Sweetgrass and Golden Valley counties, and on the west by Meagher County. Harlowton, the county seat, is located near the center of the County, and serves as the principal trading center for a large livestock and farming area.

TRANSPORTATION

The main line of the Chicago, Milwaukee, St. Paul & Pacific Railway passes through Wheatland County east and west, and has a branch line running northward from Harlowton to Lewistown and Great Falls. The main line is paralleled by State Highway No. 6 the entire length of the County. State Highway No. 19 running north and south connects Harlowton with Big Timber and Lewistown. The northeastern part of the County is traversed by the Billings-Great Falls branch of the Great Northern Railway.

Harlowton is a division point on the Milwaukee Road and the terminus for the electrified portion of the railway system.

These transportation facilities provide excellent shipping accommodations for the shipment of agricultural products to local and outside markets.

Aside from these transportation facilities the area is well supplied with graded county roads, which make the main highways and railroad shipping points accessible the year round.

CLIMATE

Wheatland County has a rigorous climate with a relatively short growing season, distinguished by plentiful sunshine, low relative humidity, moderate winds, comparatively low rainfall and a wide daily and seasonal variation of temperature. Occasional late spring or early fall frosts cause crop damage, as does hail. In the mountains much of the precipitation occurs as snow, but in the adjoining lowlands most of the precipitation is received in the form of summer showers that are often frequented by an occasional cloudburst. Climatic data compiled from the records of the United States Weather Bureau Station at Harlowton, show that the annual precipitation varies considerably from year to year and throughout the growing season. The average annual precipitation for that station is 11.57 inches, but annual precipitation as low as 6.22 inches and as high as 16.31 inches have been recorded during the period 1902 to 1928. Most of the total rainfall is received between April 1 and September, being the wettest during May and June. The average date of the last killing frost is June 6 and the first killing frost is September 5, giving an average frost-free period of 91 days. The summer and winter extremes of temperature differ greatly. The highest temperature recorded is 100 degrees F. and the lowest --46 degrees F. These are extreme temperatures that are seldom reached and are of short duration. The annual mean temperature is 40.8 degrees. The station elevation is 4,240 feet.

SOILS AND THEIR RELATIONS

The Upper Musselshell Valley area comprises the alluvial lands of the Musselshell Valley and adjacent irrigable uplands and gravelly benches. The soils are developing under a vegetation of short grasses from limy, silty to clayey alluvial sediments on the bottom lands and benches and from clayey to sandy shales on the uplands. The surface layers range in color from brownish gray to dark grayish brown but are dominantly grayish brown. This comparatively light color is the result of semiarid climate and sparse vegetation under which the soils are forming. The annual return of organic matter to the land under these conditions is not sufficient to darken the soils appreciably, except in places where they receive supplemental moisture from seepage of runoff from higher levels.

The soils on the high benches are silty and friable and have a soft granular or crumb structure in the surface layer, and they are underlain at a depth of 1 to 5 feet by water-rounded limestone gravel firmly embedded in a nearly white limy matrix. The texture, structure, and consistence of the soils on the undulating uplands depend in part on the character of the underlying bedrock. Those developed on the lighter textured shales are silty and friable and break into soft irregular aggregates when moist. Those developed on the heavy shales are clayey and have no structure, being hard and compact when dry and sticky and plastic when wet.

The soils occupying the valley slopes, low terraces, and bottom lands vary considerably in texture, structure, and consistence from one locality to another, but they are relatively uniform in these features in a given area. They are developing in colluvium or

local alluvium washed from the adjacent higher lands and in alluvium brought down by streams and redeposited along the courses of the streams. These soils commonly have slightly darker surface layers than those developing on the adjacent uplands. The parent material is more recently formed, the profile is less mature, and the individual layers are less well defined, as compared with those features of the soils of the uplands and high benches.

The soils of the western part of the area are darker than those of the eastern part in comparable positions, a result of the general rise in elevation from east to west and the heavier precipitation and more luxuriant growth of grasses near the mountains.

Natural drainage of the soils and the presence of alkali salts vary considerably in different localities. Free salts, some injurious to plant growth, are present in most of the soils. The concentration of salts depends on the amount originally present, the degree of leaching that has taken place, the quantity of salts carried in seepage water, and the condition of drainage, which may tend to remove or to concentrate an excess of soluble salts.

With only a few exceptions, the soils of the area are friable and easily penetrated by plant roots, air, and moisture. The Pierre soils on the uplands and the Orman soils on the terraces are developed in heavy clay shale and wash from heavy shales, respectively, and the Moline soils, commonly having claypanlike upper subsoil layers and a high content of injurious salts, include most of the soils that offer any appreciable resistance to the penetration of plant roots and moisture. The moisture-holding capacity of the soils ranges from poor to good. Not only is the rainfall low, but some of it is lost through runoff and evaporation without becoming available to plants.

Drainage is good to excessive, except in some of the soils on the bottom lands that have a high ground-water level and in others on colluvial slopes that receive seepage water from higher levels. Though some of the soils are somewhat deficient in organic matter, nearly all have some available plant nutrients in their natural state. Under irrigation and continuous cropping some of the nutrients may become deficient.

Under dry-farming practices, the adapted crops are restricted chiefly to hardy, early maturing small grains and native hay. Where an adequate supply of irrigation water is available, however, a variety of garden crops, grain, and tame hay can be grown on most of the soils.

CROPS

The area immediately adjacent to the Musselshell Valley is excellent grazing land and the river valley is the source of winter feed production. Outside of the native grasses the Upper Musselshell Valley area is limited chiefly to the production of alfalfa hay. Some small grain is produced under irrigation and a small acreage of wheat is produced under dry-farming methods. Nearly all of the hay and grain is fed on the farm or is sold

locally as winter feed for livestock that graze on summer pasture in the adjacent foothills and mountains.

LIVESTOCK

The prosperity of Wheatland County is dependent largely upon the livestock raising industry. From its beginning it has been considered primarily a range country. This still holds today, with the area largely devoted to the raising of beef cattle and sheep. Grade Herefords and Shorthorns are the principal breeds of cattle in the area. For the last few years sheep have been on the decline because of heavy selling and an inadequate supply of labor. In the vicinity of Harlowton a few dairy herds are kept to supply the local demand for milk and cream.

The horse population has rapidly decreased but most farmers and ranchers maintain a supply of horses for draft purposes. Swine and poultry are kept on nearly all of the farms for supplying the farmer's family with meat and eggs. The surplus is usually sold locally or traded for groceries. A few farms have colonies of bees for honey production.

WATER SUPPLY

The principal stream in Wheatland County from which water for irrigation is diverted is the Musselshell River, which drains an area of approximately 9,000 square miles. The North and South Forks of the Musselshell River, which unite near Martinsdale, have their origin in (a) North Fork, Little Belt and Castle Mountains, and (b) South Fork, Castle and Crazy Mountains. The Crazy Mountains bound the watershed on the south, the Castle Mountains on the west, and the Little Belts and the Big Snowy Mountains on the north. These mountains are all high in elevation (6,000 to 10,000 feet), for the greater part are well timbered, and during average years of precipitation are good watersheds.

Numerous small streams enter the main river below the Forks. The main tributaries between Martinsdale and Shawmut are: Little Elk, Big Elk and Lebo creeks and American Fork entering the river from the south, and Daisy Dean, Haymaker, Hopley and Antelope creeks entering from the north. Below this point the principal tributaries are: Fish Creek, which rises in the Cayuse Hills east of the Crazy Mountains and flows northeast to join the Musselshell River near Ryegate; Careless, Cameron and Pole creeks, which rise in the Big Snowy Mountains and flow southeast to join the Musselshell River near Ryegate and Roundup respectively; Willow Creek, which also rises in the Big Snowy range and flows east and north to its confluence with the Musselshell; Flatwillow Creek which, with its two large tributaries Box Elder and McDonald creeks, rises on the northeastern slopes of the Big Snowy Mountains and flows east to join Box Elder Creek, which flows east to join the Musselshell River.

A study of available stream flow records covering a twenty-year period at Harlowton indicates that the Musselshell River may be classed as an intermittent stream be-

cause of the usually high runoff in the spring and a deficiency of water for irrigation after July for areas lower down the stream. In order to improve this situation and provide additional irrigation water the State Water Conservation Board has constructed three storage reservoirs in the Musselshell River Drainage Basin. Two of these, the DuRand with a storage capacity of 7,029 acre-feet on the North Fork, and Martinsdale, an off-stream reservoir near the South Fork with a storage capacity of 23,185 acre-feet, provide additional water for irrigation in the Musselshell Valley above Harlowton. The third and off-stream reservoir, is Deadman's Basin with a usable storage capacity of 52,000 acre-feet, making a total usable capacity of 82,214 acre-feet for the three reservoirs. The State Water Conservation Board has filed water rights on all unappropriated water in the Musselshell Valley in connection with these reservoirs.

According to plans, the Board stores flood water during the flood season and in this way does not interfere with prior water rights on the streams during the irrigation season. The plan of operation is that water users will use the natural flow as long as available and then stored water will be released from the reservoirs for later irrigation needs.

DEADMAN'S BASIN PROJECT

The Deadman's Basin Project is located in Wheatland, Golden Valley and Musselshell counties. This Project consists of a large diversion canal, which diverts water from the Musselshell River into a natural bench reservoir known as Deadman's Basin, and two outlet canals. The reservoir has a total storage capacity of 57,000 acre-feet, but 5,000 acre-feet of this amount is dead storage—thus giving a useful capacity of 52,000 acre-feet.

The supply canal diverts water from the Musselshell River in Wheatland County at a point about two miles below Winnecook, or about eight miles below Harlowton. It has a normal carrying capacity of 600 second feet, with three feet of freeboard, which give a velocity of 2.72 feet per second. It is possible to crowd the flow during high water periods to 787 second feet, which would result in two feet of freeboard and a velocity of 2.92 feet per second. From the intake at the river to the discharge at the Basin the supply canal is 60,300 feet long. The intake structure of the supply canal consists of a concrete overflow weir and headgates built integrally. The overflow wall of the weir is 6 feet high and 184 feet long. On the right end of the weir an earth dyke 800 feet long prevents the Musselshell River from cutting around the weir, and on the left side of the headgate an earth dyke 500 feet long protects the headgate structure. Flow into the canal is controlled by two radial gates each 14 feet long by 6 feet high. The canal is carried under the railroad and highway by double concrete box culverts 7 feet by 6½ feet, 273 feet long, which includes two 20 foot transitions. Numerous concrete spillways along the canal protect it from being loaded beyond capacity.

At Deadman's Basin it was necessary to construct an earth fill dam across a low portion of the rim and a low earth fill dyke at another place. The dam is 1,065 feet long and the dyke is 625 feet in length. The dam has a maximum height above the natural surface of the rim of 25 feet, while the dyke rises only 12 feet above the rim, or only the

amount of the freeboard. The following data applies to both structures: top width 26 feet, upstream slope 3:1 below water line and 2:1 above water line, and downstream slope 2:1. Elevations are: top of dam and dyke 3,923 feet; spillway crest 3,911 feet; lowest part of the Basin rim 3,898 feet; bottom of cutoff trench (dam) 3,988 feet and flow line of outlet 3,872 feet. The spillway has a crest length of 30 feet, is 12 feet below the top of the right end of the dam and is capable of discharging a flood of 1,000 second feet with a freeboard of 7 feet. The flooded area of the reservoir is 1,895 acres at spillway crest, or 1,980 acres with 5 feet of water over the spillway. The dam and dyke contain approximately 82,200 cubic yards of fill.

The outlet tunnel through the rim was driven through shale and sandstone under 110 feet of the dam sections. Under the balance of the fill section there is a concrete conduit 7 feet 6 inches in diameter. The total length including tunnel, conduit and end structures is 345 feet. An open ditch 1,330 feet long was dredged from the low spot in the reservoir to the entrance of the outlet tunnel. Water is controlled by two sluice gates, each 5 feet by 5 feet, operated through a concrete tower from the top of the dam. An outlet canal approximately two miles long allows the water to return from the reservoir to the Musselshell River below Barber.

Another branch of the outlet canal, approximately seven miles long, carries water out on the Franklin Bench and this water drains back into the Musselshell River through Careless Creek east of Ryegate.

Development of this project has been subjected to considerable colorful history. Various attempts had been made to build the project through private financing, state projects, etc., which covered a period of at least twenty-five years. Finally, when the F. E. R. A. came into existence the local people were successful in getting work initiated by that agency. When the W. P. A. replaced the F. E. R. A. it took the work over under sponsorship of the three counties involved and the State Water Conservation Board. After the sponsorship funds were exhausted the work was abandoned with the main supply canal about seventy percent finished and no other work accomplished. This accomplishment covered a period from 1934 to about July 1, 1938, when the work ceased. Nothing further was done until May, 1939, when the State Water Conservation Board undertook to sponsor a new W. P. A. project, providing the Board could secure a loan of \$135,000 from the Reconstruction Finance Corporation. This loan was authorized and work resumed in the summer of 1940.

When the W. P. A. ceased work in July, 1938, the only work that had been done was on the main supply canal with the following expenditures: F. E. R. A., \$101,651.51; W. P. A., \$364,000.00; S. W. C. B., \$55,243.83; Counties, \$25,000.00; or a total of \$545,895.34.

Work under F. E. R. A. involved the removal of 193,000 cubic yards of earth excavation and 16,000 cubic yards of rock. Under the former W. P. A. project there was 968,163 cubic yards of earth and 23,128 cubic yards of rock removed. Under the two agencies, or up to the last operation before the new work was begun in 1940, there had been excavated a total of 1,161,163 cubic yards of earth and 39,128 cubic yards of rock. In

order to complete the canal, W. P. A. let a contract with Lobnitz Brothers of Ashton, Idaho, which required the removal of 1,000,000 cubic yards of earth and rock, with the balance of the work being done by W. P. A. labor.

In order to complete the Project, the State Water Board made an application to the W. P. A. under date of March 21, 1940, in which the cost of completion was estimated at \$541,572.00, of which the W. P. A. was to furnish equipment, supplies and labor in the sum of \$392,113.00 and the Board to provide equipment, material and superintendents in the amount of \$149,459.00. In addition thereto the W. P. A. agreed to make a contractual expenditure in the sum of approximately \$100,000.00.

The Board had heretofore made application to the R. F. C. for a loan in the amount of \$135,000.00, to provide a part of its sponsorship. This application was approved by the R. F. C. on February 28, 1940—the loan evidenced by water conservation revenue bonds Series "W", dated May 1, 1940, interest at 4 per cent per annum, with first principal in the amount of \$2,500.00 due May 1, 1946, and increasing annual payments to \$7,500.00 on May 1, 1975, secured by a Trust Indenture dated May 1, 1940, between the Board and the Union Bank & Trust Company of Helena, as Trustee.

As security for the loan, the Board entered into a Water Marketing Contract with Deadman's Basin Water Users' Association, wherein that Association agreed to pay the Board the sum of 55 cents for each acre-foot of water contracted to be sold for the first four years, and 75 cents per acre-foot for the remaining thirty years, and agreed to enter into Water Purchase Contracts with individual water users aggregating not more than 20,000 acre-feet.

The sums due under the above mentioned Water Marketing Contract and Water Purchase Contracts are sufficient to repay the loan and reimburse the Board for any funds expended by it from the revolving fund.

As the irrigation systems in the Musselshell Valley are largely privately owned by individuals or groups of individuals, the responsibility for operation and maintenance is placed on the individuals concerned. In some instances the Milwaukee Railroad assumed responsibility in connection with the maintenance of structures when it obtained right-of-way for the railroad. Deadman's Basin Project on the other hand, is owned and administered by the State Water Conservation Board.

ARTICLES OF INCORPORATION

of

DEADMAN'S BASIN WATER USERS' ASSOCIATION

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned, pursuant to and in conformity with the provisions of Chapters 12 to 23, Civil Code, Revised Codes of Montana, 1935, and Acts amendatory thereof or supplemental thereto, associate our-

selves together, not for profit, and do hereby adopt the following Articles of Incorporation:

ARTICLE I

The corporate name of this corporation is hereby declared to be Deadman's Basin Water Users' Association.

ARTICLE II

The objects and purposes for which this corporation is formed are as follows:

1. To appropriate, purchase, market, sell, pump, divert, develop, furnish, distribute, lease and dispose of the waters of the Musselshell River and tributaries, which will be impounded by means of a dam or dams, and a storage reservoir located in Wheatland and Golden Valley counties, Montana; the waters of said Musselshell River and tributaries being diverted therefrom by a supply canal, the diversion point of which is located in or about the northwest quarter of Section 8, Township 7 North, Range 17 East, Wheatland County, Montana, and the reservoir in which said waters will be impounded being located in Sections 13, 22, 23, 24, 25, 26, 27, 35 and 36, Township 7 North, Range 18 East, and Sections 19 and 30, Township 7 North, Range 19 East, and such other structures as may be necessary to carry out the purposes of the Association and the diversion of water from the Musselshell River and tributaries, and from all other available sources of supply, together with the return flow of all of the foregoing waters furnished or supplied by seeping or over-flowing from the previous place of use of such waters, and the waters from other dams, reservoirs, diversion canals, distributing canals, laterals, ditches, pumping units, mains, pipe lines and water works systems; said waters to be used for irrigating lands adjacent to and below said dams, reservoirs, laterals, and canals and for other useful and beneficial purposes.

2. To enter into and carry out agreements with the State of Montana, the State Water Conservation Board, the United States of America, or any instrumentality or agency thereof, any person, firm, association, corporation, private, public or municipal with reference to the purchasing, marketing, furnishing, distributing and selling of the aforesaid waters, and of the privilege of obtaining such waters when available, and the diversion, development, disposition and utilization of such waters, the charging, collecting and disposition of rents and revenues for such waters and privileges, the operation, maintenance, repair, alteration, construction, reconstruction and supervision of the means of conserving and distributing such waters.

3. To construct, reconstruct, maintain, repair, alter, use, control and operate dams, reservoirs, irrigation works and systems, drainage works and systems, diversion canals, distributing canals, lateral ditches, pumping ditches, pumping units, mains, pipe lines, waterworks systems and other means of conserving and distributing the aforesaid waters.

4. To lease, sell or otherwise dispose of water, water rights, lands, easements and/or property which it may acquire.

5. To acquire, own and hold such real and personal property as may be necessary or convenient for the transaction of its business.

6. To incur indebtedness upon its bonds, notes, contracts or other evidences of indebtedness, and to secure the same by mortgages, deeds of trust, pledges of any or all of its revenues and contracts, or in any other manner, subject, however, to the approval of any such indebtedness by resolution of the State Water Conservation Board.

7. To acquire, hold and dispose of stock in other corporations, domestic or foreign.

8. To acquire by purchase, forfeiture or in any other legal manner, shares of the capital stock of this corporation, and to acquire and exercise options thereon, and to dispose of, re-issue or cancel same as the Board of Directors may determine.

9. To have and exercise all the powers and to perform any and all acts necessary, convenient or appropriate to carry out any one or more of the said purposes or anything incident thereto, or which shall at any time appear conducive or expedient for the protection or benefit of the Association or its shareholders, and to that end to enter into any contract, agreement or other arrangement with the State of Montana, the State Water Conservation Board, the United States of America or any instrumentality or agency thereof, or any person, firm, association, corporation, private, public or municipal, or any state or foreign government.

10. To make and promulgate by-laws for the government and control of this corporation. The by-laws, or amendments thereto, adopted by the Board of Directors shall be and become effective only after their approval by the State Water Conservation Board.

11. The powers herein granted and conferred, shall be exercised only with the approval of the State Water Conservation Board.

ARTICLE III

The principal place of transacting the business of the corporation shall be at Roundup, in the County of Musselshell, State of Montana.

ARTICLE IV

This corporation shall have continual existence as provided in Chapter 185, Laws of Montana, 1937.

ARTICLE V

The number of directors who shall manage the affairs of this corporation shall be five (5), and the names and residences of those who are appointed for the first three months, and until their successors are elected and qualified are as follows:

NAME	RESIDENCE
L. W. Goffena	Roundup, Montana
O. P. Balgord	Lavina, Montana
J. Minneman	Barber, Montana
Marguerite M. Jacobs	Musselshell, Montana
Magnus Lindstrand	Roundup, Montana

ARTICLE VI

The capital stock of said corporation shall be Fifty Thousand (\$50,000.00) Dollars, which shall be divided into fifty thousand (50,000) shares of the par value of One Dollar (\$1.00) each. Each shareholder of the capital stock of this corporation shall be entitled to one (1) vote for each share of stock owned by him.

Capital shares of the stock of this corporation shall be subject to purchase, sale or forfeiture under such terms and conditions as are provided by the By-Laws of the corporation and its subscription and pledge agreements with shareholders. Except with the consent of the corporation, no stock of this corporation shall be transferred on the books of the corporation so long as the owner or owners thereof are obligated in any way to the corporation, whether such obligations be matured or unmatured or be under a subscription agreement or note, a water purchase contract or otherwise.

The private property of the stockholders of this corporation shall not be liable for the obligations of the corporation except as in the By-Laws of the corporation otherwise provided.

ARTICLE VII

That the amount of the Capital Stock actually subscribed is Twenty-five Dollars (\$25.00), as follows:

Name	Amount
L. W. Goffena	5 shares \$5.00
O. P. Balgord	5 shares \$5.00
J. Minneman	5 shares \$5.00
Marguerite M. Jacobs	5 shares \$5.00
Magnus Lindstrand	5 shares \$5.00

Witness our hands and seals this 22nd day of June A. D. 1940.

(s) L. W. Goffena
O. P. Balgord
J. Minneman
Marguerite M. Jacobs
Magnus Lindstrand

STATE OF MONTANA

SS.

COUNTY OF MUSSELSHELL

On this 22nd day of June, A. D. One Thousand Nine Hundred and Forty, personally appeared before me, a Notary Public for the State of Montana, L. W. Goffena, O. P. Balgord, J. Minneman, Marguerite M. Jacobs and Magnus Lindstrand whose names are subscribed to the foregoing instrument as the parties thereto, personally known to me to be the same persons described in and who executed the said foregoing instrument, as the parties thereto, and who, each of them duly acknowledged to me that they each of them respectively, executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

(s) R. A. Buzzard,
Notary Public for the State of Montana
Residing at Helena, Montana
My Commission expires June 1, 1942.

(SEAL)

MUSSELSHELL - MELSTONE CANALS

(Under Construction)

Field work and actual construction is under way toward the development of 14,500 acres of irrigable land by the State Water Conservation Board in the Musselshell Valley, east of Roundup. The proposed plan calls for the construction of a concrete overflow diversion weir across the Musselshell River 182 feet long and 6 feet high; a main canal 3,000 feet long with a capacity of 220 second-feet to its division; a canal 33.3 miles long with a capacity of 135 second-feet on the south side of the Musselshell River, and a canal 15.4 miles long with a capacity of 100 second-feet on the north side of the river. The total excavation is estimated to be approximately 787,000 cubic yards. The water supply is to come from the Musselshell River and storage water from Deadman's Basin Reservoir.

In addition to the canals the Board also plans to install pumps to get water to some of the terraced land. The estimated cost of this project is approximately \$300,000.00. The money used to develop the canals is from the State Post-War fund and also legislative appropriation to the revolving fund. Earth work on the canals will be completed this fall. Bids were opened September 1 to build a diversion dam, head works, and a few small structures down to the division of the canal. Contracts will be let later for finishing the remaining structures.

Briefly the water contract plan is this: The canal user pays 75 cents per acre plus the operation and maintenance charge for the use of the canal in delivering his water. This entitles him to a seasonal flow of two acre-feet per acre. Any water that he can divert from the natural flow of the stream up to June 15th will be considered free water, and

will be subtracted from his two acre-feet. The balance of the two acre-feet which he receives after June 15th is considered as storage water from Deadman's Basin and for this amount he will have to pay the Deadman's Basin Water Users' Association 75 cents per acre-foot plus operation and maintenance charges. For the past several years, the operation and maintenance charge on Deadman's Basin has been only 10 cents per acre-foot.

There is one point about the contracts for canal use and that is the water subscribed for is dedicated to a definite piece of land and cannot be used on other land. This phase is different from any of the other Water Board contracts. If a farmer has, say, 160 acres, and he wishes water next year for only 40 acres he can take out a contract for the 40 acres. Next year if he clears up another 40 acres, he can take out a new contract for the second 40, etc. In this way, each contract is separate and has no relation to the others even though the land is owned by the same man.

On April 2, 1949, the State Water Conservation Board filed a notice of appropriation in the Musselshell County Courthouse for 250 cubic feet of water to be diverted from the Musselshell River by means of a diversion dam located in the Northeast Quarter of Section 28, Township 9 North, Range 29 East, and the canal running in an easterly direction therefrom. The purpose is to be for irrigation of lands in Sections 1, 2, 11, 12, 13, 14, 15, 22, 23 and 24, Township 9 North, Range 29 East; Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12, Township 9 North, Range 30 East; Sections 5, 6 and 7, Township 9 North, Range 31 East; Sections 31, 32, 33, 34, 35 and 36, Township 10 North, Range 30 East; Sections 2, 3, 9, 10, 11, 14, 15, 16, 21, 22, 23, 27, 28, 29, 30, 31, 32, 33 and 34, Township 10 North, Range 31 East; Sections 9, 16, 21, 22, 26, 27, 34, 35 and 36, Township 11 North, Range 31 East; and for the watering of stock, domestic and municipal and other beneficial purposes.

The above declaration was made and filed under provisions of Section 349.18 of the Revised Codes of Montana.

Another part of the State Water Conservation Board overall Musselshell Basin development plan is known as the Upper Musselshell Storage Project. This Project was planned to supply supplemental irrigation water to 29,000 acres and a full supply for 6,000 acres. The effect of the upper project on the lower project is that it lowers the flood stages of the Musselshell River at Winnecook where the intake canal diverts to Deadman's Basin Storage Reservoir—thus saving flood water which would otherwise be lost because of the insufficient carrying capacity of said canal. It also increases the fall and winter flow from return ground water. Also, a portion of the peak flood diverted to the upper reservoir can be reclaimed at Deadman's Basin as return flow during late fall and winter.

UPPER MUSSELSHELL PROJECT

This project consists of two storage reservoirs, three diversion canals, one outlet canal and one distribution canal. The project is designed to serve supplemental irrigation to about 28,000 acres of land. The major part of the project lands are located in the

Musselshell valley between Harlowton and Martinsdale, while a minor part is in the North Fork of the Musselshell valley, between Martinsdale and Delpine.

The upper reservoir, called DuRand Reservoir, is located on the North Fork, about one-half mile above Delpine, and has a storage capacity of 7,029 acre feet at the elevation of spillway crest. In addition to the North Fork drainage, water is also fed into the reservoir by a diversion canal from Checkerboard Creek. This canal is three miles long and has a carrying capacity of 51 second feet. Drainage area tributary to the reservoir from North Fork is 48.2 square miles and from Checkerboard 21.3 square miles, or a total of 69.5 square miles, all of which is moderately high mountains, and is lightly timbered.

The Lower, or Martinsdale Reservoir, is located in a basin about one mile southeast of the town of Martinsdale, and contains a storage capacity of 23,185 acre feet at the elevation of spillway crest. Water is fed into it by a diversion canal from the South Fork of Musselshell River; said canal is 2.5 miles long, and has a carrying capacity of 400 second feet. Another diversion canal was constructed to carry water from the North Fork to the South Fork, emptying just above the diversion canal to the Martinsdale Reservoir. This canal assures a water supply to the reservoir from both forks of the river. Said canal is 11.5 miles long, and has a capacity of 104 second feet. The drainage area of the South Fork above the intake canal is 285 square miles, and about 100 square miles of the North Fork drains to the Martinsdale Reservoir, or a total of 385 square miles of moderately high timbered area. The outlet canal, which conveys stored water from the Martinsdale Reservoir back to the river, is 2.5 miles long and has a capacity of 330 second feet.

The distribution canal, known as the Two Dot Canal, diverts from the north bank of the river, just below the junction of the North and South Forks, and courses 32 miles to its end, about two miles northwest of Harlowton. The canal has an initial carrying capacity of 123 second feet, and terminates with a capacity of 5 second feet. It serves water to approximately 5,000 acres of land.

The DuRand Dam is an earth, sand, gravel and rock fill, having a total crest length of 550 feet and top width of 30 feet. The front slope is 3:1 below water line and 2:1 above water line. Downstream slope is 2:1. Elevations are: top of dam, 5,337 feet; spillway crest, 5,325 feet; natural creek bottom, 5,237 feet; bottom depth of cutoff trench, 5,222 feet; flow line of outlet, 5,247.15 feet. From these elevations, the maximum height of dam above natural creek bed is 100 feet and above the bottom of cutoff trench, 115 feet. The spillway crest is 12 feet below the top of the dam. The dam contains approximately 241,600 cubic yards of material.

The outlet conduit rests on solid rock near the middle of the dam and the concrete spillway is at the left end of the dam. The concrete lined outlet conduit is 54 inches by 54 inches inside and equipped with two gates operated through a concrete tower from the top of the dam. The operating gate is a 48 inch diameter Dow disc arm pivot valve, while the emergency is a 48 inch diameter gate valve. The spillway has a crest length of 64 feet

and is capable of discharging a flood of 6,000 second feet with a freeboard of 3 feet. The flooded area of the reservoir covers 272 acres.

The Martinsdale Reservoir was formed by the construction of two earth, sand and gravel fill dams which are designated as the North Dam and the South Dam. The North Dam has a crest length of 1,000 feet and top width of 23 feet. Elevations are: top of dam, 4,791 feet; natural coulee bottom, 4,695 feet; bottom depth of cutoff trench, 4,675 feet. From these elevations the maximum height of the dam above natural coulee bed is 96 feet and above the bottom of cutoff trench is 116 feet. The South Dam has a crest length of 1,635 feet and top width of 23 feet. The elevations are: top of dam, 4,791 feet; natural coulee bottom, 4,742 feet; bottom depth of cutoff trench, 4,729 feet. From these elevations the maximum height of dam above natural coulee bed is 49 feet and above the bottom of cutoff trench is 62 feet.

The slopes are the same for both dams, being: front slope, 3:1 below water line and 2:1 above water line, downstream slopes are 2:1. There is only one spillway, outlet conduit and one set of control gates. The spillway crest elevation is 4,779 feet or 12 feet below the tops of the dams. It has a crest length of 10 feet and is capable of discharging a flood of 600 second feet with a freeboard of 4½ feet. It is located at the right end of the South Dam. The outlet conduit is built of concrete pipe, 60 inches in diameter and laid on sandstone near the right abutment of the North Dam. Elevation of the flow line is 4,715 feet. There are two gates operated through a concrete tower from the top of the dam. The operating gate is 54 inches diameter Dow disc arm pivot valve, while the emergency is a 54-inch diameter gate valve. The two dams together contain approximately 716,500 cubic yards of material. The flooded area of the reservoir covers 985 acres. Rights of Way purchased for the entire project, including reservoir, borrow pits, canals, etc., totaled 2,276.4 acres.

HISTORY:

The State Water Conservation Board received a loan and grant offer from the Federal Government, dated October 2, 1937, which was accepted on October 6, 1937. This offer called for the construction of two reservoirs known as "DuRand" and "Martinsdale"; a supply canal known as "Checkerboard Canal"; a supply canal known as "Martinsdale Canal"; and an "Outlet Canal", at an estimated cost of \$776,364.00, of which \$349,364.00 was to be a grant and \$427,000.00 a loan, evidenced by water conservation revenue bonds. It required the formation of the Upper Musselshell Water Users' Association, and the sale of 30,000 acre feet of water purchase contracts, acceptable to the Finance Division of the PWA. Owing to the question of a sufficiency of water supply for the Martinsdale Reservoir, the PWA required the construction of an additional diversion canal, known as the "North Fork Diversion Canal" in order that the surplus waters of the North Fork of the Musselshell River could be diverted to the South Fork of the Musselshell River, and then into the Martinsdale Reservoir. In order to secure sufficient water purchase contracts acceptable to PWA, it was necessary to construct the "Two Dot Canal" to distribute water to lands not irrigable from any existing ditches from the river. This enlarged in a considerable degree the scope of the project and accounts for the cost over and above the original estimate.

The Upper Musselshell Water Users' Association was incorporated under the laws of Montana on October 22, 1927. Water purchase contracts in the amount of 30,000 acre feet of water on contracts acceptable to PWA were secured and approved by the Association on May 31, 1938, and by the Board on June 1, 1938. The bond transcript was then completed and the bonds sold to the Government on December 3, 1938.

Bids for the construction of the project were received on March 17, 1938, the low bidder being Peter Kiewit Son's Company, of Omaha, Nebraska, (\$619,804.30) and contract was awarded to said contractor on the same day, subject to approval of PWA. This approval was received on March 30, 1938. Work was started on April 1, 1938 and completed September 20, 1939.

OPERATIONS:

The project operated during 1940 for the first time. Owing to the extremely dry fall of 1939 and lack of snow fall and spring rains during 1940, there were only 13,293 acre feet of water in storage for use during the season. This was proportioned among water purchasers, and by its use many crops were grown that otherwise would have been a total failure. Since that time there has never been a shortage of stored water.

FINANCES:

To secure funds to construct the project, the Board issued its water conservation revenue bonds, Series "N" in the amount of \$427,000.00, dated May 1, 1938, secured by a trust indenture of the same date, executed by the Board and the Montana National Bank of Billings, Montana, as trustee. The indenture provides for the pledge of all of the revenues of the project for the payment of interest on and principal of the bonds. These bonds bear interest at 4% per annum, payable May 1st of each year, commencing with the year 1939, and with first bond principal in the amount of \$9,000.00, due May 1, 1942, and increasing annual payments to the sum of \$25,000.00 due May 1, 1968.

The security mentioned consists of a water marketing contract between the Board and the Association, and water purchase contracts entered into between each individual water purchaser, the Association and the Board.

The original list comprises 128 water purchase contracts totaling 30,000 acre feet of water, at \$1.10 per acre foot per year, commencing with the year 1939 to and including 1967. The total sums due under the contracts are sufficient to pay all interest and principal, and provide a reserve of approximately 23%.

ARTICLES OF INCORPORATION **of** **UPPER MUSSELHELL WATER USERS' ASSOCIATION**

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned, pursuant to and in conformity with the provisions of Chapters 12 to 23, Civil Code, Revised Codes

of Montana, 1935, and Acts amendatory thereof, or supplemental thereto, associate ourselves together, not for profit, and do hereby adopt the following Articles of Incorporation.

ARTICLE I

The corporate name of this corporation is hereby declared to be Upper Musselshell Water Users' Association.

ARTICLE II

The objects and purposes for which this corporation is formed are as follows:

1. To appropriate, purchase, market, sell, pump, divert, develop, furnish, distribute, lease and dispose of the waters of the North Fork of the Musselshell River and tributaries and the South Fork of the Musselshell River and tributaries, Meagher and Wheatland counties, Montana, and such other waters as may be deemed advisable.
2. To enter into and carry out agreements with the State of Montana, the State Water Conservation Board, the United States of America, or any instrumentality or agency thereof, any person, firm, association, corporation, private, public or municipal with reference to the purchasing, marketing, furnishing, distributing and selling of the aforesaid waters, and of the privilege of obtaining such waters when available, and the diversion, development, disposition and utilization of such waters, the charging, collecting and disposition of rents and revenues for such waters and privileges, the operation, maintenance, repair, alteration, construction, reconstruction and supervision of the means of conserving and distributing such waters.
3. To construct, reconstruct, maintain, repair, alter, use, control and operate dams, reservoirs, irrigation works and systems, drainage works and systems, diversion canals, distributing canals, laterals, ditches, pumping ditches, pumping units, mains, pipe lines, waterworks systems, and other means of conserving and distributing the aforesaid waters.
4. To lease, sell or otherwise dispose of water, water rights, lands, easements and/or property which it may acquire.
5. To acquire, own and hold such real and personal property as may be necessary or convenient for the transaction of its business.
6. To incur indebtedness upon its bonds, notes, contracts or other evidences of indebtedness, and to secure the same by mortgages, deeds of trust, pledges of any or all of its revenues and contracts, or in any other manner, subject, however, to the approval of any such indebtedness by resolution of the State Water Conservation Board.
7. To acquire, hold and dispose of stock in other corporations, domestic or foreign.
8. To acquire by purchase, forfeiture or in any other legal manner, shares of the capital stock of this corporation, and to acquire and exercise options thereon, and to dispose of, re-issue or cancel same as the Board of Directors may determine.

9. To have and exercise all the powers and to perform any and all acts necessary, convenient or appropriate to carry out any one or more of the said purposes or anything incident thereto, or which shall at any time appear conducive or expedient for the protection or benefit of the Association or its shareholders, and to that end to enter into any contract, agreement or other arrangement with the State of Montana, the State Water Conservation Board, the United States of America or any instrumentality or agency thereof, or any person, firm, association, corporation, private, public or municipal, or any state or foreign government.

10. To make and promulgate By-Laws for the government and control of this corporation. The By-Laws, or amendments thereto, adopted by the Board of Directors shall be and become effective only after their approval by the State Water Conservation Board.

11. The powers herein granted and conferred, shall be exercised only with the approval of the State Water Conservation Board.

ARTICLE III

The principal place of transacting the business of the corporation shall be at Harlowton, in the County of Wheatland, State of Montana.

ARTICLE IV

This corporation shall continue in existence for the term of forty (40) years from and after the filing of these Articles of Incorporation.

ARTICLE V

The number of directors who shall manage the affairs of this corporation shall be five (5) and the names and residences of those who are appointed for the first three months, and until their successors are elected and qualified are as follows:

Name	Residence
E. J. Settle	Martinsdale, Montana
John Duncan	Martinsdale, Montana
Sanford M. Holliday	Martinsdale, Montana
H. C. Klock	Harlowton, Montana
Chas. F. Williams	Two Dot, Montana

ARTICLE VI

The capital stock of said Corporation shall be fifty thousand (\$50,000.00) Dollars, which shall be divided into fifty thousand (50,000) shares of the par value of One Dollar (\$1.00) each. Each shareholder of the capital stock of this corporation shall be entitled to one (1) vote for each share of stock owned by him.

Capital shares of the stock of this corporation shall be subject to purchase, sale or forfeiture under such terms and conditions as are provided by the By-Laws of the corpor-

ation and its subscription and pledge agreements with shareholders. Except with the consent of the corporation, no stock of this corporation shall be transferred on the books of the corporation so long as the owner or owners thereof are obligated in any way to the corporation, whether such obligations be matured or unmatured, or be under a subscription agreement or note, a water purchase contract or otherwise.

The private property of the stockholders of this corporation shall not be liable for the obligations of the corporation except as in the By-Laws of the corporation otherwise provided.

ARTICLE VII

That the amount of the Capital Stock actually subscribed is twenty-five (\$25.00) Dollars, as follows:

Name	Amount
E. J. Settle	\$5.00
John Duncan	5.00
Sanford M. Holliday	5.00
H. C. Klock	5.00
Chas. F. Williams	5.00

Witness our hands and seals this 11th day of September, A. D., 1937.

(s) E. J. Settle
John Duncan
Sanford M. Holliday
H. C. Klock
Chas. F. Williams

STATE OF MONTANA

SS.

COUNTY OF WHEATLAND

On this 11th day of September, A. D., 1937, personally appeared before me, a Notary Public for the State of Montana, E. J. Settle, John Duncan, Sanford M. Holliday, H. C. Klock, and Chas. F. Williams, whose names are subscribed to the foregoing instrument as the parties thereto, personally known to me to be the same persons described in, and who executed the said foregoing instrument, as the parties thereto, and who, each of them, duly acknowledged to me that they each of them respectively, executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

A. A. Poirier
Notary Public for the State of Montana
Residing at Harlowton, Montana
My Commission expires Jan. 15, 1940.

(SEAL)

In the formation of State Projects the terms "Water Marketing" and "Water Purchase Contracts" are often referred to. In order to clarify the meaning of these two terms they are explained briefly herewith:

WATER MARKETING CONTRACT

This is an agreement between the Association and the State Water Conservation Board, whereby the Board agrees to sell to the Association all of the available water of the Project, and the Association agrees to distribute same to water purchasers; and provides method of payment of sums due, levying of assessment for operation and maintenance cost, time of notification of such levy to be given water purchasers, time of default and remedies in the event of default.

WATER PURCHASE CONTRACT

This is a contract entered into between the individual water purchasers, the Association and the State Water Conservation Board, whereby the individual agrees to purchase a definite amount of water, and to pay therefore a definite sum of money on or before a definite day of each year, until a definite future date; in addition to such definite annual sum the individual agrees to pay such additional sum or sums as may be required annually as his proportionate share of the cost of operation and maintenance of the Association. This contract is void unless the water purchaser executes a Subscription and Pledge Agreement.

SUMMARY OF IRRIGATED LAND BY RIVER BASINS IN THE FOLLOWING COUNTIES COMPLETED TO DATE

Big Horn, Carbon, Custer, Golden Valley, Musselshell, Rosebud, Stillwater, Yellowstone
and Wheatland

River Basin	Present Irrigated Acres	Irrigable Acres Under Present Facilities	Maximum Irrigable Acres
Big Horn River Basin	46,915.56	14,850.65	61,766.21
Little Big Horn River Basin	17,134.26	9,843.52	26,977.78
Clarks Fork Basin	33,285.96	7,328.00	40,613.96
Missouri River Basin	54.60	62.00	116.60
Musselshell River Basin	49,703.85	44,215.67	93,919.52
Powder River Basin	8,263.60	1,803.60	10,067.20
Rosebud Creek Basin	1,398.50	3,012.20	4,410.70
Rosebud River Basin	11,831.00	4,724.00	16,555.00
East Rosebud River Basin	4,587.50	9,095.47	13,682.97
Rock Creek Basin	58,482.15	16,866.77	75,348.92
Stillwater River Basin	11,661.20	3,458.50	15,119.70
Tongue River Basin	22,136.56	7,479.48	29,616.04
Yellowstone River Basin	153,914.01	29,879.89	183,793.90
Totals	419,368.75	152,619.75	571,988.50

It was necessary to cover 9,148,153 acres in the above basins in order to complete the survey.

WHEATLAND COUNTY

IRRIGATION SUMMARY OF WHEATLAND COUNTY

BY RIVER BASINS

Name of Ditch	Source	Present Irrigated Acres	Irrigable Acres Under Present Facilities	Maximum Irrigable Acres
Deadman's Basin				
Supply Canal	Musselshell River	309.00	148.00	457.00
Martinsdale Outlet Canal	" (Reservoir)	17.00	67.00	84.00
Two Dot Canal	"	4,162.00	2,856.00	7,018.00
Private Ditches—Regular Irrigation				
Private	Agnes Creek	576.00	210.00	786.00
"	American Fork	1,863.00	2,385.00	4,248.00
"	American Fork and Lebo Creek	669.00	71.00	740.00
"	American Fork, Lebo Cr. and Little Alkali Cr.	203.50	0	203.50
"	Bear Creek	822.00	0	822.00
"	Big Elk Creek	3,017.00	1,147.00	4,164.00
"	Big Elk Cr. and Alkali Cr.	325.00	70.00	395.00
"	Big Elk Cr. and Bear Cr.	230.00	0	230.00
"	Big Elk Cr. and Coulees	34.00	0	34.00
"	Buzzard Creek	18.00	0	18.00
"	Crooked Creek	418.00	46.00	464.00
"	Daisy Dean Creek	14.00	0	14.00
"	East Fork Haymaker Cr.	137.00	59.00	196.00
"	Fish Creek	811.00	396.00	1,207.00
"	Fish Creek (Well)	1.00	0	1.00
"	Haymaker Creek	501.00	205.00	706.00
"	Hopley Creek	116.00	132.00	248.00
"	Lebo Creek	2,220.00	1,344.00	3,564.00
"	Little Alkali Creek	36.00	0	36.00
"	Little Alkali Creek and Crooked Creek	0	113.00	113.00
"	Little Elk Creek	1,061.00	287.00	1,348.00
"	McVay Creek	85.00	0	85.00
"	Middle Fork Hopley Creek	33.00	0	33.00
"	Musselshell River	7,352.00	1,931.80	9,283.80
"	Musselshell River and Mexican John Creek	114.00	19.00	133.00
"	No. Fork Little Elk Creek	156.00	0	156.00
"	No. Fork Musselshell River	1,641.00	1,508.00	3,149.00

IRRIGATION SUMMARY OF WHEATLAND COUNTY BY RIVER BASINS

(Continued)

Name of Ditch	Source	Present Irrigated Acres	Irrigable Acres Under Present Facilities	Maximum Irrigable Acres
Private	Norton Springs	52.00	0	52.00
"	So. Fork Musselshell River	1,290.00	101.00	1,391.00
"	(Spring)	6.00	115.00	121.00
"	Spring Creek	123.00	128.00	251.00
"	Spring Cr. Trib. to Big Elk Creek	34.00	0	34.00
"	Spring Cr. and McVay Cr.	110.00	5.00	115.00
"	Stewart Creek	25.00	0	25.00
"	Unnamed Coulee	57.00	0	57.00
"	Unnamed Coulee, Trib. to Agnes Creek	113.00	0	113.00
"	Unnamed Coulee, Trib. to Big Elk Creek	44.50	31.00	75.50
"	Unnamed Springs	59.00	0	59.00
"	West or North Fork Little Elk Creek	392.00	0	392.00
"	Willow Creek (Springs)	33.00	36.00	69.00
***Grand Total of Regular Irrigated Acreage.....		29,280.00	13,410.80	42,690.80

IRRIGATION SUMMARY OF WHEATLAND COUNTY BY RIVER BASINS

(Continued)

Name of Ditch	Source	Present Irrigated Acres	Irrigable Acres Under Present Facilities	Maximum Irrigable Acres
Private Ditches—Flood Irrigation				
Private	American Fork	19.00	25.00	44.00
"	Antelope Creek	31.00	16.00	47.00
"	Antelope Cr. and Coulees	350.00	39.00	389.00
"	Barnheart Coulee	66.00	0	66.00
"	Blake Creek	69.00	0	69.00
"	Careless Creek	1,817.00	879.00	2,696.00
"	Careless Creek and Springs	250.00	6.00	256.00
"	Cinnamon Cr. or Dry Cr.	0	189.00	189.00
"	Clarks Fk.—Morissy Coulee	92.30	0	92.30
"	Coulee Trib. to Dry Fork Daisy Dean Creek	42.00	0	42.00
"	Coulees Trib. to Halbert Cr.	165.00	0	165.00
"	Coulee Trib. to Galloway Cr.	4.00	0	4.00
"	Coulees Trib. to Roberts Cr.	464.00	20.00	484.00
"	Coulee Trib. to Trombone Cr. or Iron Sps. Coulee	28.30	0	28.30
"	Daisy Dean Creek	378.00	11.00	389.00
"	Dry Fork Daisy Dean Cr.	29.00	0	29.00
"	East Fork Haymaker Cr.	105.00	17.00	122.00
"	East Fork Roberts Creek	319.00	117.00	436.00
"	Fork of Mud Creek	0	2.00	2.00
"	Galloway Creek	404.00	148.00	552.00
"	Hopley Creek	230.00	87.00	317.00
"	Little Careless Creek	72.00	150.00	222.00
"	Little Elk Cr. (Also called Miller Creek)	165.00	40.00	205.00
"	Living Springs Creek and Coulees	266.00	0	266.00
"	Mexican John Creek	101.00	270.00	371.00
"	Morissy Coulee or West Fork Haymaker Creek	149.00	0	149.00
"	Mud Creek	0	287.00	287.00
"	Neill Creek	66.00	0	66.00
"	North Fork of Mud Creek	0	90.00	90.00
"	O. B. Creek or Spring Creek	0	207.00	207.00
"	Red Basin Creek	0	58.00	58.00

IRRIGATION SUMMARY OF WHEATLAND COUNTY BY RIVER BASINS

(Continued)

Name of Ditch	Source	Present Irrigated Acres	Irrigable Acres Under Present Facilities	Maximum Irrigable Acres
Private	Roberts Creek	110.00	1,105.00	1,215.00
"	Roberts Cr. and Oka Spgs.	198.00	0	198.00
"	Spring Creek	90.00	79.00	169.00
"	Spring Cr.—Careless Cr. —Mill Coulee	199.00	0	199.00
"	Timber Creek	235.00	814.00	1,049.00
"	Toll Creek	54.00	6.00	60.00
"	Trombone Creek or Iron Springs Coulee	46.00	0	46.00
"	Unnamed Coulee Trib. to American Fork	0	15.00	15.00
"	Unnamed Coulee Trib. to Big Elk Creek	0	63.00	63.00
"	Unnamed Coulee Trib. to Fish Creek	39.00	12.00	51.00
"	Unnamed Coulee Trib. to Little Alkali Creek	17.00	0	17.00
"	Unnamed Coulee Trib. to Musselshell River	128.00	333.00	461.00
"	West Bercail Creek	54.00	0	54.00
"	West Fork Hopley Creek or Big Coulee	139.00	0	139.00
"	West Galloway Creek	347.00	39.00	386.00
**Grand Total of Flood Irrigated Acreage.....		7,337.60	5,124.00	12,461.60

SUMMARY

REGULAR IRRIGATION

Name of River Basin	Present Irrigated Acres	Irrigable Acres Under Present Facilities	Maximum Irrigable Acres
Musselshell River Basin	29,280.00	13,410.80	42,690.80
Total of Regular Irrigation	29,280.00	13,410.80	42,690.80

FLOOD IRRIGATION

Musselshell River Basin	7,337.60	5,124.00	12,461.60
Total of Flood Irrigation	7,337.60	5,124.00	12,461.60
Grand Total all Irrigation	36,617.60	18,534.80	55,152.40
Grand Total of all Acres in Wheatland County Covered by Survey			855,547.00

DUNCAN - SMART DITCH

The Duncan-Smart Ditch is a small privately-owned system that diverts water by gravity from the Musselshell River in the southwest quarter of Section 19, Township 8 North, Range 14 East, by means of a rock and brush dam and wood headgate. From the point of diversion the ditch extends in a northeasterly direction for about one-half mile to a wooden flume 400 feet long by 14 inches by 36 inches in size. From the flume the ditch extends in an easterly direction for approximately two and one-fourth miles. In April of 1890, Oscar G. Smart filed a notice of appropriation in Book 2, Page 75, of Water Right Records in the Meagher County Courthouse for 1200 miner's inches of water to be diverted from the Musselshell River in Section 19, Township 8 North, Range 14 East, on the south bank. The filing was made October 1, 1890. This notice of appropriation is also filed in Book A-7, Page 87 of Water Right Records in the Wheatland County Courthouse. The purpose was for irrigation through a ditch 60 inches by 24 inches in size. The land description of intended place of use was described as Sections 19, 20 and 21 in Township 8 North, Range 14 East.

In 1948 there were 421.00 acres being irrigated under this system. Supplemental water is purchased from the Upper Musselshell Water Users' Association in the amount of 750 acre feet.

G. L. MUTUAL DITCH

The G. L. Ditch diverts water by gravity from the North Fork of the Musselshell River in the northeast quarter of the northeast quarter of Section 2, Township 8 North, Range 11 East, in Meagher County. From the point of diversion the ditch follows in an easterly direction on the north side of the Musselshell River to a coulee in the northwest quarter of Section 12, Township 8 North, Range 12 East where the use of the present ditch ends. From this point the ditch extends on to Willis Coulee, but this section of the system has not been used for a number of years. The G. L. Ditch is operated as a mutual system with the ownership divided between four users. Each user contributes to the operation and maintenance according to his share in the ditch. According to E. J. Settle, A. E. Peterson owns one-half interest, E. J. Settle one-fourth interest and the other one-fourth is split between A. C. Moe and William R. Olson.

The project is located in the vicinity of Martinsdale in the Musselshell Valley. The main canal follows closely to the foothills on the north side of the river and is approximately 27 miles in length. The general condition of the canal is fair, but in order to supply adequate water to the lands irrigated it should be cleaned. Outside of the wood headgate and a flume over Daisy Dean Creek, there are no major structures for the system.

On May 24, 1892, Jacob Elston, Anna M. Elston, George Lyons, and Mary Lyons filed a notice of appropriation for 1,920 miner's inches of water to be diverted from the North Fork of the Musselshell River near the northeast quarter of the northeast quarter

of Section 2, Township 8 North, Range 11 East on the left bank of the stream. The purpose was to be for irrigation by means of a ditch 108 inches by 18 inches in size. The land description of intended place of use was given as Sections 12 and 14 in Township 8 North, Range 12 East, and Section 18 in Township 8 North, Range 13 East. The date appropriated was given as May 6, 1892. This notice of appropriation is on file in Book 2, Page 187 of Water Right Records in the Meagher County Courthouse. On March 14, 1927, George Lyons made a recording of this notice of appropriation in Book 15, Pages 91 and 92 of Water Right Records in the Wheatland County Courthouse. In 1948 in Wheatland County there were 1,279.00 acres being irrigated under the G. L. Ditch, with an irrigable acreage under present facilities of 1,430.00 acres, or a maximum irrigable acreage of 2,709.00 acres.

HARLOWTON WATER SUPPLY

From the time of the birth of Harlowton, June 10, 1900, until 1914, at which time the city water system commenced, water was supplied to the inhabitants by means of privately-owned wells and water men who distributed water by means of barrels hauled on sled or cart. The average family consumed approximately two barrels of water per week; thus, at the price of fifty cents per barrel, water was not a cheap commodity.

In the spring of 1907 and the summer of 1908 two disastrous fires swept through the north side of town leaving a major portion of the business district in ashes. The townspeople fought the fires by means of a bucket brigade, but the quickly exhausted common well and the courage of the battlers could not subdue the infernos.

Although the town was organized in 1908, it lacked sufficient funds for a water development program and did not wish to risk their meager funds on such a venture, so nine far-sighted citizens, realizing the importance of a water system which would supply water under pressure without the aid of a storage tank, put up a total of \$1,000 to finance the drilling of a deep well on a low hill north of the townsite. Work was begun in 1909 and in August, 1910, the well was completed to a depth of 220 feet. It was thought at that time the well would be artesian; however, a pump was actually required. The well capacity proved to be more than sufficient, but it was not put into general use due to the lack of distribution facilities.

Seeing that the venture was successful, the town reimbursed the investors, took possession of the well, installed a wooden main system in 1912, and in 1913 constructed a 250,000 cubic foot open top concrete reservoir. At the time, this was written into the books as a liability. On July 1, 1914, the town issued thirty \$500 bonds at 6% which were to be redeemable in fifteen years to the Minneapolis Loan and Trust Company to finance the completed work on the first city water system. On August 22, 1919, and March 16, 1920, bonds totaling \$22,040 were issued at 6% for special improvements to the water system in districts 5, 6, 7, and 8. This debt was written into the books as a liability and made payable from taxes.

As the town of Harlowton expanded, water produced by well No. 1 was insufficient to satisfy all demands, so well No. 2 was drilled in the proximity of the first. The two wells with the 250,000 cubic foot reservoir were sufficient for the town up to the late 1930's when it became apparent that the system needed to be supplemented, and restrictions were placed on water use. At this time several attempts were made to deepen the wells. The water level got so low in the wells that water could not be raised fast enough to supply the demand, so well No. 3 was drilled at the site of the Fire House and put into use in 1941. This well was drilled to a depth of 340 feet and has a capacity of 400 gallons per minute. The total cost of the installation was financed from water funds set aside for well construction and amounted to \$2,400. Water from wells Nos. 1 and 2 was pumped into the reservoir while water from well No. 3 was pumped directly into the main which, in turn, served as a line to the reservoir as well as a distribution main.

Insufficient pressure, distasteful water due to chlorination, disrepair, and insufficient capacity of the reservoir brought about the demand for a new storage system. On December 1, 1944, construction began on a new 500,000 cubic foot capacity concrete reservoir tank which was financed by a bond issue totaling twenty \$1,000 bonds and one \$535 bond at 2% interest. This issue was made December 1, 1944, and sold to the Northwestern National Bank of Minneapolis. Also on December 1, 1944, ten \$240 bonds at 2% were issued for deepening well No. 2. The Northwestern National Bank of Minneapolis purchased this bond issue also. These issues are to mature December 1, 1954. This reservoir was completed in 1946 at a cost of \$19,635. Chlorination was found to be unnecessary after the new reservoir was put into use.

In 1947 well No. 2 was drilled 200 feet deeper in order to secure a greater flow. The original perforated casing was replaced by solid casing to exclude shallow water. It was found that the supply from wells Nos. 1, 2 and 3 remained insufficient for the rising demand, so in 1948 well No. 4 was drilled to a depth of 390 feet, at a cost of \$1,045 for the drilling, \$1,820 for the pump house and \$1,020 for the pipe. The pump was removed from well No. 2 and installed in the new well. The open flow test of the well showed that it could produce 715 gallons per minute without lowering the water level. At the required pressure to force the water to the reservoir, the pump will produce 400 gallons per minute.

The total expenditure for the water system to date is \$75,962.25, with an outstanding indebtedness of approximately \$11,500. The only outstanding bonds are half of those issued on December 1, 1944.

Monthly reports on the city water from the State Board of Health in Helena show the water to be of high purity. The Coliform tests are consistently negative; the turbidity tests and bacterial count at 37°C are well within the acceptable safety limits without chlorination.

The present average daily water consumption is 500,000 gallons. With the maximum capacity of wells Nos. 3 and 4 being 1,152,000 gallons per day, plus the possibility of putting wells Nos. 1 and 2 into use again, if the demand arises, and the storage capacity of the reservoir, Harlowton should be well supplied with water in the future.

LAKE LEBO IRRIGATION SYSTEM

The past history of this project is long, varied and symbolic of early irrigation development in Montana. Therefore, the task of tracing the history of a project of this kind to its beginning is extremely difficult, taking exceptional skill to overcome the obstruction of facts encountered. After a painstaking and complete study based on consultation with present land owners and those who had a part in the past development of the system, we believe that the facts herewith presented are pertinent and relating to the origin and history of the Lake Lebo Irrigation System.

On November 17, 1891, a natural lake bed comprising an area of about 78 acres was designated as United States Reservoir Reserve Number 37 by Commissioner letter "C" of the same date. The lands set aside were the $S\frac{1}{2}SE\frac{1}{4}$ and $S\frac{1}{2}NE\frac{1}{4}SE\frac{1}{4}$ of Section 36, Township 7 North, Range 13 East, the $SW\frac{1}{4}SW\frac{1}{4}$ and $S\frac{1}{2}NW\frac{1}{4}SW\frac{1}{4}$, Section 31, Township 7 North, Range 14 East, and Lots 4, 5, 6, 11, and 12, and the $NW\frac{1}{4}NW\frac{1}{4}$ Section 6, in Township 6 North, Range 14 East, and Lots 2, 8, 9, and 10, and the $N\frac{1}{2}NE\frac{1}{4}$ of Section 1, Township 6 North, Range 13 East. This site is now known as Lake Lebo Reservoir.

According to our records the first attempt to develop this reservoir site was made by W. J. Beecher of Livingston, Montana, who, on November 6, 1903 made a recorded filing for 4,000 miner's inches of water from the American Fork of the Musselshell River, combined with a filing for 1,000 miner's inches of the water of Lebo Creek. The date of appropriation was given as November 4, 1903, with the specific purpose for irrigation by means of Reservoir Reserve Number 37 included.

Beecher also filed on the reservoir site and started on the construction work of a ditch from the American Fork to the site in order to perfect his water rights. On or about this same time, Beecher formed a Corporation, called the Lake Lebo Irrigation Company, that was incorporated for 20 years with a capital stock of \$25,000.00 divided into 1,000 shares of a par value of \$25.00 each. Actual stock subscribed to was \$75.00. The directors named were: J. W. Hefferlin, Alexander Livingston and W. J. Beecher, all of Livingston, Montana.

The papers of the Corporation were notarized and filed with the County Clerk and Recorder of Park County, Montana, on December 31, 1903, and certified by the Secretary of the State of Montana on January 2, 1904.

Immediately following the incorporation on January 5, 1904, W. J. Beecher turned all of his rights in the irrigation system over to the Lake Lebo Irrigation Company by means of quit-claim deed. Previous to the construction of Beecher's diversion and ditch from the American Fork, a canal was constructed by the Norton and Lyons ranch in the same location to divert water from the American Fork to Lebo Creek, from which the water could be diverted on to their lands for irrigation purposes. For this system Michael Lyons et al made a water right filing for 5,000 miner's inches from the American Fork on September 13, 1902. This notice of appropriation is on file in Book 19, Page 120,

of Water Right Records in the Sweet Grass County Courthouse. Michael Lyons et al also made a filing as of the same date for 5,000 miner's inches of the waters of Lebo or Basin Creek. This notice of appropriation is on file in Book 19, Page 121, of Water Right Records in the Sweet Grass County Courthouse.

After further work was accomplished on the Lake Lebo Irrigation System, the Lake Lebo Irrigation Company's financial resources were inadequate for further construction and as a result, Beecher offered to sell shares in the Corporation to Joseph Labrie in order to raise the necessary funds to complete the project. According to Rene Labrie, a son of Joseph Labrie, his father agreed to buy shares in the Corporation with the stipulation that in so doing he would acquire controlling interest in the Lake Lebo Irrigation Company. This arrangement was agreeable and Joseph Labrie purchased 498½ shares of the Company stock in his name and three shares in the name of Ben Urner. The three shares were later transferred to Rene Labrie. A short time after Joseph Labrie acquired his stock in the Company, Beecher sold the remaining 498½ shares to Norton and Lyons.

In 1907, Labrie and Norton and Lyons resumed work on the Lake Lebo Irrigation System and by fall of 1908 the necessary construction was completed and water was diverted into the reservoir. At this time the structures at the outlet of Lake Lebo consisted of an earth dam with a wooden headgate. The original dam later washed out and was reconstructed with flash board type headgate, a concrete tunnel and standpipe.

At this same time, the Labries and Norton and Lyons were in disagreement over the waters of Lebo Creek. This brought about a court action to adjudicate the said waters: The American Fork Livestock Company et al, Plaintiffs, vs. James Norton and Michael Lyons et al, Defendants, dated December 1, 1908. See Lebo Creek Decree.

On December 21, 1908, in the case of Wilson vs. McCurry, the waters of the American Fork were decreed. In this case W. J. Beecher's appropriation for 4,000 miner's inches from the American Fork as of November 6, 1903, was not decreed because his name was entered in the Court records as W. Y. Beecher and the Summons was returned unserved. Consequently, W. J. Beecher was not represented at the trial. So far as the W. J. Beecher water right is concerned, the decree is not final nor binding because this storage right was perfected by beneficial use, and is exercised independently of the decreed rights on the direct flow of the stream. See American Fork Decree.

In July of 1911, the United States Government approved the Lake Lebo Irrigation System, giving title to Reservoir Reserve Number 37 to the Lake Lebo Irrigation Company. In addition, the Company had acquired title to the canal right-of-way and land, other than the Reservoir Reserve, submerged by the lake water.

The Labries, upon obtaining control of the Lake Lebo Irrigation Company made the Company stock assessable in order to obtain funds to repair or improve the system as necessity demanded. According to Rene Labrie, who acted as secretary for the Company, the system functioned very well from the time it was completed until the expiration of the original Corporation. In about 1918 the Company decided to raise the dam at the

outlet of the reservoir to provide for added storage capacity. In compliance with this contemplated additional storage two additional water filings were made, each for 4,000 miner's inches of the waters of the American Fork. The first filing was made April 26, 1919, by the Labrie Ranch Company and the second by the Lake Lebo Irrigation Company, April 2, 1920. The dam, however, was not raised until years later.

Before the expiration of the original incorporation of the Lake Lebo Irrigation Company in 1924, Norton and Lyons sold their ranch, water rights, and interests in the Lake Lebo Irrigation Company on contract to the Grain Growers' Corporation, a company under the directorship of Oscarson and Dahl. As a result, the land in the ranch was divided into small tracts, and sold along with shares in the Lake Lebo Irrigation Company, giving the purchasers of these parcels of land the right to use water from the Lake Lebo Irrigation System for irrigation purposes. Due to neglect, the corporation charter of the Lake Lebo Irrigation Company was allowed to expire in 1924. The records of the corporation have since been lost.

In 1926, the Labries re-incorporated the Lake Lebo Irrigation Company for 40 years with a capital of \$25,000.00, divided into 1000 shares with a par value of \$25.00 each. The actual stock subscribed to was \$225.00, or three shares to each of the directors who were Rene Labrie, Bourke Labrie and C. A. Johnson.

In 1928, the Grain Growers' Corporation defaulted on payment to Norton and Lyons. Because of this litigation followed. Norton and Lyons brought suit to reclaim their interests in the Norton and Lyons ranch. As a result, most of the purchasers of land lost their equity in said lands. Seemingly, the mortgages contained provisions for the release of portions of the property as the same were sold from time to time to third parties. The mortgagor being in default under both mortgages, suits in foreclosure were instituted and went to final decrees by which the sale of all the property which had not been released was ordered. At the sale, the appellees here became the purchasers and in due time received sheriffs' deeds, containing like descriptions. Oscarson and Dahl, as co-partners, brought suit against Norton and Lyons to keep all water rights of the Lake Lebo Irrigation Company. The District Court ruled that the system was a part of and appurtenant to the Norton and Lyons ranch. This case was carried to the Circuit Court of Appeals in San Francisco, where the decision of the District Court was upheld.

A few years after the second incorporation of the Lake Lebo Irrigation System, the Labries lost their ranch holdings through default on mortgage payments which finally ended up in the hands of the Denver Joint Stock Land Bank. Rene Labrie, who had been Secretary for the Lake Lebo Irrigation Company, discontinued keeping the Company records at this time. He did continue to operate the Labrie ranch, however, until the time it was sold to C. V. Linck in about 1940. About the same time the Lincks took over the Lake Lebo Irrigation Company's operation, installing as officers and directors,, C. V. Linck, Charlotte H. Linck and William A. Brown.

In 1942 the Denver Joint Land Bank sued the Lake Lebo Irrigation Company in effect to clear title to water rights appurtenant to the Labrie ranch. See Lebo Lake Case, Number 2198.

Another factor in the development of Lake Lebo was started in 1927 by C. F. Williams who owned the land surrounding the reservoir. Soon after that time he constructed an addition to the dam sufficient to increase the capacity of the reservoir by four feet. To insure an adequate water supply for this increased storage, Williams made water filings on Big Elk Creek in the amount of 2,000 miner's inches as of October 15, 1927. (See Big Elk Decree). In recent years it has not been necessary to use this water right or the Big Elk, Crooked Creek diversion, to supply supplemental water to the Lake Lebo reservoir.

In 1944 the Norton and Lyons ranch holdings were purchased by the Northwestern Auto Supply Company, of Billings, Montana. Since this transaction they have added several improvements to the Lake Lebo Irrigation System at their expense in order to make the system operate efficiently. Because of these improvements and the fact that the Company was paying one-half of the taxes on the system, they obtained a Court Decree in 1947 declaring that the irrigation system was equally owned by the Lake Lebo Irrigation Company and the Northwestern Auto Supply Company as tenants in common.

In 1947 the Northwestern Auto Supply Company purchased the C. F. Williams ranch along with all water rights and appurtenances, thereby obtaining the Williams water rights appurtenant to the Lake Lebo Irrigation System. The C. V. Linck ranch, formerly the Labrie ranch, together with water rights, appurtenances, and stock in the Lake Lebo Irrigation Company, is now (Dec. 1, 1949) being sold by contract deed to George Glennie Sr., Mrs. George Glennie Sr. and George Glennie Jr.

At the present time the use of the Lake Lebo Irrigation System is divided between the Glennie Ranch and the Northwestern Auto Supply Company's C-J Ranch. The system is operated in a rather unique manner inasmuch as the reservoir is filled during the winter months from the flow of Lebo Creek. In the spring, flood waters from the American Fork and all of the natural flow of Lebo Creek are used for irrigation purposes for a time. During this time the water that was stored in Lebo Reservoir during the winter months is released to Lebo Creek to supplement the natural flow used during the spring irrigation season, in order to satisfy the prior rights on Lebo Creek, and stored water for the Glennie ranch. After this operation the natural flow of Lebo Creek is allowed to run its normal course and the Reservoir is filled by flood waters from the American Fork. The estimated cost of reservoir and appurtenant structures is about \$35,000.00.

The project is located about ten miles southwest of Harlowton. The water supply is adequate except in extremely dry years. Because of the abundance of grazing land in the vicinity, this is an excellent cattle and sheep country. Alfalfa hay claims nearly the entire irrigated acreage. Crested wheatgrass has been planted to supplement the native range with good success. Winter feeding is at a minimum because winter winds help to keep the range clear of snow. One ton of hay is about the average used to winter one animal unit.

MUIR - KLOCK DITCH

The original ditch for this system was constructed by Lycurgus Fitzpatrick who, on May 1, 1893, appropriated 600 miner's inches of water to be diverted from the Mus-

selshell River in the southeast quarter of Section 24, Township 8 North, Range 14 East, on the left bank of the stream. The purpose was for irrigation of land in Sections 19 and 20, Township 8 North, Range 15 East. The system was described as a dam and ditch, said ditch being 52 inches wide on the bottom, 72 inches wide across the top and 36 inches deep. The notice of appropriation was filed May 3, 1893, in Book 3, Page 116, of M. L. Records in the Meagher County Courthouse. It is also filed in Book A-7, Page 186 of Water Right Records in the Wheatland County Courthouse. Later the original ditch was abandoned and a new ditch was constructed immediately below it, covering the same lands. The point of diversion was also moved about one-fourth of a mile down stream. The only part of the original ditch that is now in use is used to pick up waste water from a coulee to irrigate lands above the new ditch in Section 20, Township 8 North, Range 15 East. As the name implies, this system is used by Nick Muir and the Klock Land and Livestock Company. In 1948 there were 217.00 acres being irrigated under this system.

MUIR MUTUAL DITCH

The Muir Ditch diverts water by gravity from the Musselshell River in the northeast quarter of the northwest quarter of Section 21, Township 8 North, Range 14 East, by means of a rock and brush dam. From the point of diversion the main canal extends in an easterly direction on the south side of the Musselshell River for about seven miles. The extreme lower part of the ditch is not now in use. The system is in good repair having been recently cleaned to the section line between Sections 28 and 29, Township 8 North, Range 15 East. The main canal is approximately 15 miles in length. This system is operated as a mutual, having three users, who are Nick Muir, with 540 miner's inches, Ray Roberts, 180 miner's inches, and Claude H. Duncan, 180 miner's inches, or a total of 900 miner's inches. Operation and maintenance costs are divided among these users with no fixed levies from year to year. Stored water is available for this system from the Upper Musselshell Water Users' Association.

On May 10, 1900, Lycurgus Fitzpatrick appropriated 900 miner's inches of water to be diverted in the northeast quarter of Section 21, Township 8 North, Range 14 East, from the Musselshell River on the south bank. The purpose was to be for irrigation through a ditch 48 inches by 24 inches in size. The land description of intended place of use was described as the south half of the southwest quarter, the south half of the southeast quarter, Section 22, the south half of Section 23, and the south half of Section 24, Township 8 North, Range 14 East. This notice of appropriation was filed May 22, 1900, in Book 2, Page 393, of Water Right Records in the Meagher County Courthouse. It is also filed in Book A-7, Page 145, of Water Right Records in the Wheatland County Courthouse.

In 1948 there were 501.00 acres being irrigated under the Muir Ditch, with a potential acreage under existing facilities of 64.00 acres, or a maximum irrigable acreage of 565.00 acres.

O. K. PRIVATE IRRIGATION SYSTEM

The O. K. Ditch diverts water by gravity from the Musselshell River in the north half of the northeast quarter of Section 25, Township 7 North, Range 17 East. From the

point of diversion the ditch extends in an easterly direction on the south side of the Musselshell River for approximately four miles.

On May 28, 1888, George S. and Elmer Crawford filed on 1200 miner's inches of water to be diverted from the Musselshell River. The date appropriated was given as April 4, 1887. The purpose was to be for irrigation, domestic and other uses. The system was described as a ditch and headgate 144 inches by 12 inches in size. The land description of intended place of use was described as; the east half of the south half of the northwest quarter, and the northeast quarter of the northwest quarter of Section 32, the south half of Section 33, and the west half of the southwest quarter, the southeast quarter of the southwest quarter, the southwest quarter of the southeast quarter, in Section 34, all in Township 7 North, Range 18 East, and Lots 1, 2 and 3 in Section 4, Lots 1, 2, 3, and 4 in Section 3, Township 6 North, Range 18 East.

This notice of appropriation is on file in Book 1, Page 169 of M. L. Records in the Meagher County Courthouse, and in Book A-7, Page 164 of Water Right Records in the Wheatland County Courthouse.

As near as we can tell, on May 24, 1897, the Crawfords turned this right over to the Bloomington Land and Livestock Company. (Book A-1, Pages 537-538 Wheatland County Records). Later, this company deeded one-sixth back to Crawford. Subsequently, several others owned the land to which this portion of the original water right is attached. This portion is now owned by Dan D. Vonica; however, he does not irrigate from the O. K. Ditch.

At the present time there seems to be a dispute between the owners of the O. K. Ditch and land owners under it as to whether or not the lands in Sections 30 and 31, Township 7 North, Range 18 East should be irrigated from the O. K. Ditch or from the Jenizen Ditch which is not in use. As the Jenizen Ditch parallels the O. K. Ditch for almost its entire length and carries a water right for 600 miner's inches through rehabilitation, it could serve the land in question. The notice of appropriation for this ditch was filed by W. C. Jenizen June 13, 1899, with the date appropriated given as May 20, 1899. This notice of appropriation is on file in Book 2, Page 368, of Water Right Records, in the Meagher County Courthouse, and in Book A-7, Page 138, of Water Right Records in the Wheatland County Courthouse.

In 1948 there were 181.00 acres irrigated from the Vonica Ditch and 826.00 acres irrigated from the O. K. Ditch, with a potential acreage of 43.00 acres. If we consider the land that is in dispute which could be irrigated from either the O. K. or Jenizen Ditch which amounts to 263.00 acres, we would have a potential acreage of 263.00 acres under the Jenizen Ditch or a total potential acreage of 306.00 acres under the O. K. Ditch.

PENWELL --ROSS IRRIGATION SYSTEM

This system was originally known as the Basin Livestock Company Ditch, and later was known as the Penwell Irrigation Ditch. The history of this system goes back to the

date of April 1, 1890, when Ellen Ford appropriated 2000 miner's inches of water from the Musselshell River. The date of instrument was March 3, 1892, and filed for record March 5, 1892, and recorded in Book 2 of Water Rights, on Page 181, in the Meagher County Courthouse, later transcribed to the Wheatland County Courthouse and filed in Book A-7, Page 100. The point of diversion was described as near the southeast quarter of Section 25, Township 8 North, Range 15 East on the north bank of the stream. The purpose was for irrigation. The system was described as a ditch 36 inches by 60 inches. The land description of intended place of use was described as; to irrigate Section 30 and a portion of Sections 29, 32 and 33, Township 8 North, Range 16 East. On February 2, 1898, Fred-eric I. Bower filed a subsequent notice of appropriation for 800 miner's inches covering the same land as that covered by the Ellen Ford appropriation with the exception of Section 34, Township 8 North, Range 16 East which was not covered by the Ellen Ford appropriation. The date of instrument was January 29, 1898, and the date of appropriation November 1, 1897. This record is filed in Book 2 of Water Rights, on Page 340 in the Meagher County Courthouse and was later transcribed to Book A-7, Page 134, in the Wheatland County records. The place of diversion was described as a point upon the left bank of the Musselshell River from which water will be diverted by means of a dam and ditch. The purpose was for irrigation and stock purposes, in Sections 29, 30, 32, 33, and 34, Township 8 North, Range 16 East.

From all the information available and after a complete check of this information we are of the opinion that these rights pertain to the Penwell-Ross Irrigation System, as the lands irrigated by this system are located on the north side of the Musselshell River. However, we have on record another filing made by William T. Ford for 2000 inches with the date appropriated given as April 1, 1890. This date and the amount filed on is the same as that given in the Ellen Ford appropriation. The main difference between the two appropriations is that in the William T. Ford filing the point of diversion is on the south bank of the Musselshell and the Ellen Ford appropriation on the north bank. William T. Ford also includes Section 25, Township 8 North, Range 15 East, and Section 31, Township 8 North, Range 16 East, which are not included in the Ellen Ford appropriation as the place of intended use. This evidence makes us inclined to believe that the William T. Ford appropriation applies to the lands irrigated by the Tierney ditches although parts of said land are covered by the above three appropriations. The William T. Ford notice of appropriation is dated March 3, 1892, filed for record March 3, 1892, and recorded in Book 2, Page 180 of Water Right Records in the Meagher County Courthouse and later transcribed to Book A-7, Pages 98 and 99 of Water Rights in the Wheatland County Courthouse. The name of the stream is the Musselshell River. The point of diversion was described as a point upon its south bank in Section 26, Township 8 North, Range 15 East. The system was described as a ditch 36 inches by 60 inches in size and carries or conducts 2000 inches of water. This appropriation also states:

"That the special purpose for which said water is intended to be used, and the place of intended use is for the irrigation of Section 25, Township 8 North, Range 15 East, and Sections 31, 32 and 33, Township 8 North, Range 16 East, that I appropriated and took said water on April 1, 1890."

The Penwell-Ross Project is located immediately east of Harlowton on the north

side of the Musselshell River. Water for the system is diverted by gravity from the Musselshell River by means of a dam which is located in the southwest quarter of the northeast quarter of Section 26, Township 8 North, Range 15 East. At this point the main canal takes out on the north side of the stream, and from here extends in an easterly direction for a distance of approximately four and one-half miles. Also using the dam at the point of diversion, but not connected with the Penwell-Ross System, is a ditch known as the Tierney Ditch. This ditch takes out on the south side of the Musselshell River and after traversing a short distance easterly is divided into two canals which extend on for about a mile each. This system is used only by Tierney.

In 1948 there were five water users being served by the Penwell-Ross System. There are no fixed operation and maintenance charges as each user keeps up that portion of ditch which he uses. Stored water is purchased by individual users but not for the system as a whole.

When the Chicago, Milwaukee, St. Paul & Pacific Railroad Company came through the Musselshell Valley in 1907, a number of changes were made in the then Basin Livestock Company Ditch. The system's dam, located in the southwest quarter of the northeast quarter of Section 26, Township 8 North, Range 15 East, was not disturbed. Due to a channel change made below the dam the railroad constructed a culvert, with a headgate in the northeast quarter of Section 26, and a ditch from this point through Section 25 of sufficient capacity to carry 1000 miner's inches into the old river channel north of the track, and back to the existing ditch in the northeast quarter of the southeast quarter of Section 25, Township 8 North, Range 15 East. The railroad also constructed a dam under the bridge in the same southeast quarter of Section 25, in order to maintain three feet of water in the old river bed. The old Basin Livestock Company ditch combined with these changes made by the railroad is, in general, the same system used by the present users of the Penwell-Ross Irrigation System. The system is in good repair.

In 1948 there were 371.00 acres being irrigated under the Penwell-Ross Irrigation System, with a potential acreage under existing facilities of 4.00 acres, or a maximum irrigable acreage of 375.00 acres. Of these, 100.00 acres were irrigated by means of pumping.

THE FOCHS IRRIGATION SYSTEM

This system was originally constructed by Albert Jenizen and Edward M. Jenizen who, together, on December 15, 1886, filed on 1000 miner's inches of water to be diverted from the Musselshell River at a point near the center of Section 15, Township 7 North, Range 17 East. The purpose was to be for irrigation and domestic uses, and the system was described as a headgate and ditch, 102 inches by 24 inches in size. The land description of intended place of use was given as lands in the south half, the south half of the north half and the north half of the northwest quarter, all in Section 29, and all of Section 30, in Township 7 North, Range 18 East, and the southwest quarter of Section 14 in Township 7 North, Range 17 East. The date appropriated was given as December 13, 1886. This notice of appropriation is on file in Book 1, Page 41 of M. L. Records in the

Meagher County Courthouse, and in Book A-7, Page 157 of Water Right Records in the Wheatland County Courthouse.

Later, on August 12, 1893, Albert Jenizen and Edward M. Jenizen made a second filing for 800 miner's inches to be diverted from the Musselshell River at a point near the center of Section 15, Township 7 North, Range 17 East. The purpose was for irrigation and domestic uses, and the system was described as a headgate and ditch 72 inches in width on the top and 36 inches deep. The land description of intended place of use was described as all of Section 23, the west half of the northwest quarter, the southeast quarter of the northwest quarter, and the southwest quarter of the northeast quarter, Section 24, Township 7 North, Range 17 East, 100 acres in the north half of Section 31, the south half of Section 19, Township 7 North, Range 18 East. The date appropriated was given as June 1, 1893. This notice of appropriation is filed in Book 6, Page 3 of Water Right Records in the Meagher County Courthouse and also in Book A-7, Page 491 of Water Right Records in the Wheatland County Courthouse.

In 1907, at the time of the construction of the Chicago, Milwaukee, St. Paul & Pacific Railroad through the valley, the ditch was acquired by A. C. Graves; then in about 1917 it passed into the hands of John David; then by foreclosure to a loan company, and then to its present owners.

At the time of the first transfer the railroad made a channel change in the Musselshell River to avoid building bridges. This channel change made the original headgate, located in the southwest quarter of the northeast quarter of Section 15, Township 7 North, Range 17 East, useless. To compensate for the damage done, the railroad constructed a new headgate and dam in the southwest quarter of Section 9, and a new ditch from said headgate to the old channel of the river. Water then passed through the old channel to the original headgate, at which point the railroad also constructed a small earth dam to preserve the proper level of water. Construction by the railroad of these works was done in 1907. In the years to follow many disputes were encountered between the railroad and the various parties involved. It was not until about 1922 that the railroad was released from the last obligation by them to the system.

At the present time the controlling user of the system is the Fochs family. In addition to them there are five other users who are dependent upon the system for water supply. The ditch was cleaned in 1944 and is in fair condition. The system is not organized and therefore we were unable to secure any data relative to its operation and maintenance costs.

The project is located on the north side of the Musselshell River in the immediate vicinity of Shawmut. From the point of diversion to its terminus, the main canal is about 13 miles in length.

In 1948 there were 739.00 acres being irrigated under the Fochs irrigation system, with a potential acreage under existing facilities of 270.00 acres, or a maximum irrigable acreage of 1,009.00.

WINNECOOK RANCH COMPANY DITCHES

and

WEBSTER - BRIDGES DITCH

The Winnecook Ranch Company Irrigation system is made up of three separate irrigation systems which divert water from the Musselshell River by gravity. The first of these diverts water by means of a rock and brush dam, and a concrete headgate located in the northeast quarter of Section 33, Township 8 North, Range 16 East, a short distance below the confluence of the American Fork and the Musselshell River. From the point of diversion the main canal extends in a southeasterly direction on the south side of the Musselshell River, a distance of approximately two and one-half miles to where it spills into Timber Creek. After traveling a short distance from Timber Creek it is again picked up by means of a headgate. From this point the canal extends eastward for about one mile to its end. The canal is approximately nine miles in length and is in good repair. Six hundred (600) miner's inches of water were filed on for this system by John E. Stewart, February 7, 1901. The date appropriated was given as February 4, 1901. The place of diversion was described as a point 200 yards below the mouth of the American Fork on the right bank of the Musselshell River. The purpose was for irrigation and domestic uses. The system was described as a ditch 96 inches by 56 inches in size. The land description of intended place of use was given as the south half of the northwest quarter, the southwest quarter of the northeast quarter, the northeast quarter of the southwest quarter, and the southeast quarter, Section 2, Township 7 North, Range 16 East.

This notice of appropriation is on file in Book 2, Page 412 of Water Right Records in Meagher County Courthouse. It was later transcribed to the Wheatland County Courthouse and is filed in Book A-7, Page 150 of Water Right Records.

The second of these systems diverts water by means of a rock and brush dam and wood headgate in the northeast quarter of the southeast quarter of Section 34, Township 8 North, Range 16 East, on the north side of the Musselshell River. From the point of diversion the main canal extends in a southeasterly direction for about one and one-fourth miles to where the canal divides into two ditches. The highest of these two follows the foothills in a southeasterly direction for approximately four miles, while the lower follows the same direction for approximately two and one-half miles. The entire length of the main canal for this system is about 18½ miles. The canal is in good repair.

For this system 1000 miner's inches of water were appropriated October 1, 1884, and filed on June 16, 1892, by Ralph Berry. The point of diversion was shown as being near Section 35, Township 8 North, Range 16 East, on the north bank of the Musselshell River. The purpose was for irrigation and other purposes. The system was described as a ditch seven feet by 15 inches in size. The land description of intended place of use was given as the northwest quarter of the southeast quarter, the northeast quarter of the southwest quarter, and Lot 6 of Section 6, the north half of the northeast quarter, the

southwest quarter of the northeast quarter, the northeast quarter of the northwest quarter, Section 8, and all of Section 9, Township 7 North, Range 17 East, the south half of Section 35, Township 8 North, Range 16 East, and Section 1, Township 7 North, Range 16 East. This notice of appropriation is on file in Book 2, Page 190 of Water Right Records in the Meagher County Courthouse and in Book A-7, Page 104, of Water Right Records in the Wheatland County Courthouse.

The third ditch of the Winnecook System diverts water by means of a rock and brush dam and wood headgate in the northeast quarter of the northwest quarter of Section 7, Township 7 North, Range 17 East, on the south bank of the Musselshell River. From the point of diversion the main canal extends in a southeasterly direction for about four miles with the entire length of the main canal being approximately 12 miles. Seven hundred (700) miner's inches of water were appropriated for this system on March 6, 1906, by Berry and Stevens, and filed for record on March 30, 1906, in Book 3, Page 570 in M. L. Records in the Meagher County Courthouse. This notice of appropriation is also on file in the Wheatland County Courthouse in Book A-7, Page 217 of Water Right Records.

The point of diversion was described as a point on the right bank of the Musselshell River in the southwest quarter of the northeast quarter in Section 7, Township 7 North, Range 17 East. The purpose was for irrigation and other useful purposes. The system was described as a dam and ditch, said ditch to be six feet wide on the bottom, eight feet wide on the top and one foot deep. The land description of intended place of use was given as Sections 8, 16 and 17 in Township 7 North, Range 17 East.

In addition to the Winnecook Ranch Company, J. C. Bridges and sons also use this system under a water right filed by Sadie A. Webster, June 7, 1910, for 300 miner's inches. All of the Bridges irrigated land south of the Musselshell River can be irrigated from the Winnecook Ditch. It is in their plans to do this some time in the future and thereby maintain only the one ditch. At the present time, in addition to the Winnecook Ditch, they use what is known as the Webster-Bridges Ditch which carries a water right of 1000 miner's inches appropriated by Frank Webster April 16, 1896, and filed for record April 29, 1896, in Book A-7, Page 126, of Water Right Records in the Wheatland County Courthouse, and in Book 2, Page 342 of Water Right Records in the Meagher County Courthouse.

In 1948 there were 1,680.00 acres being irrigated under the three Winnecook Ranch Company Ditches, with a potential acreage under existing facilities of 229.80 acres, or a maximum irrigable acreage of 1,909.80 acres. Under the Webster-Bridges Ditch, not including the land irrigated by the Winnecook Ditch, there were 235.00 acres being irrigated with a potential acreage under existing facilities of 16.00 acres, or a maximum irrigable acreage of 251.00 acres.

AMERICAN FORK DECREE

On December 21, 1908, in the Sixth Judicial District Court, in Sweetgrass County, in the case of Wilson vs. McCurry, the waters of the American Fork Creek were decreed as follows:

"That the plaintiff, Tooley-Baxter Land and Livestock Company, successors to G. R. Wilson, on the 31st day of May, 1884, appropriated of the waters of the said American Fork three hundred (300) inches, or a flow equivalent to seven and one-half ($7\frac{1}{2}$) cubic feet per second of time, and that the said Tooley-Baxter Land and Livestock Company thereafter, on the 31st day of May, 1886, appropriated of the waters of the said American Fork three hundred (300) inches, or a flow equivalent to seven and one-half ($7\frac{1}{2}$) cubic feet per second of time; and that the said Company is now the owner and holder of said several amounts of water appropriated, as of the amounts and dates aforesaid, and entitled to the use and enjoyment of the same.

"That the plaintiff, C. Koehler, is the owner of and entitled to the use and enjoyment of the following amounts of water, to-wit: seventy (70) inches, or a flow equivalent to one and three-fourths ($1\frac{3}{4}$) cubic feet per second of time, of the waters of the said American Fork Creek, appropriated May 1st, 1882, through what is known as the 'North Side Ditch'. That the said C. Koehler is also the owner of fifty (50) inches, or flow equivalent to one and one-fourth ($1\frac{1}{4}$) cubic feet per second of time, of the waters of the said American Fork, appropriated May 1st, 1890, through the North Side Ditch above mentioned. That the said C. Koehler is the owner of twenty-five (25) inches, or a flow equivalent to five-eighths ($\frac{5}{8}$) of a cubic foot per second of time, of the waters of the said American Fork Creek, appropriated May 1st, 1882, through what is known as the 'South Side Ditch'. That the said plaintiff, C. Koehler, is the owner of fifty (50) inches, or a flow equivalent to one and one-fourth ($1\frac{1}{4}$) cubic feet per second of time, of the waters of the said American Fork Creek, appropriated through the Agnes Creek Ditch, on the 10th day of April, 1888. That he is also the owner of one hundred and fifty (150) inches, or a flow equivalent to three and three-fourths ($3\frac{3}{4}$) cubic feet per second of time, of the waters of the said American Fork, through the Agnes Creek Ditch aforesaid, as of the first day of June, 1889. That said C. Koehler is the owner of one hundred (100) inches, or a flow equivalent to two and one-half ($2\frac{1}{2}$) cubic feet per second of time, of the waters of the said American Fork, through the said Agnes Creek Ditch, as of June 1st, 1892. That he is also the owner of one hundred (100) inches, or a flow equivalent to two and one-half ($2\frac{1}{2}$) cubic feet per second of time, of the waters of the said American Fork, through the Theabeau Ditch, appropriated June 1st, 1893. That the said plaintiff, C. Koehler, is also owner of one hundred and eighty (180) inches, or a flow equivalent to four and one-half ($4\frac{1}{2}$) cubic feet per second of time, of the waters of the said American Fork Creek, the appropriation of which was made June 1st, 1903, by means of an enlargement of the Agnes Creek Ditch heretofore mentioned. That he is also the owner of one hundred and eighty (180) inches, or a flow equivalent to four and one-half ($4\frac{1}{2}$) cubic feet per second of time, of the waters of the said American Fork Creek, appropriated June 1st, 1903, by means of an enlargement of the North Side Ditch heretofore mentioned.

"That the plaintiff, J. H. Duffy, is the owner of and entitled to the use and enjoyment of the following amounts of water, to-wit: eighty (80) inches, or a flow equivalent to two (2) cubic feet per second of time, of the waters of the said American Fork, appropriated June 1st, 1886, through what is known as the 'South Side Ditch' out of said creek. That the said J. H. Duffy is also owner of one hundred and sixty (160) inches, or

a flow equivalent to four (4) cubic feet per second of time, of the waters of the said American Fork, appropriated June 30, 1891, through the South Side Ditch above mentioned. That the said J. H. Duffy is also the owner of one hundred (100) inches, or a flow equivalent to two and one-half ($2\frac{1}{2}$) cubic feet per second of time, of the waters of the said American Fork Creek, the appropriation of which was made June 30, 1887, through what is known as the 'North Side Ditch' out of said American Fork. That said J. H. Duffy is also the owner of five hundred and forty (540) inches, or a flow equivalent to thirteen and one-half ($13\frac{1}{2}$) cubic feet per second of time, of the waters of said American Fork Creek, the appropriation of which was made May 31, 1899, by means of an enlargement of the North Side Ditch above mentioned.

"That the defendants, S. G. and Katie E. McGregor, (jointly) are the owners of and entitled to the use and enjoyment of four hundred and eighty (480) inches, or a flow equivalent to twelve (12) cubic feet per second of time, of the waters of the said American Fork Creek, the appropriation of which was made June 25, 1907.

"That the defendant, Norton & Lyons, are the owners of and entitled to the use and enjoyment of thirty-nine hundred (3900) inches, or a flow equivalent to ninety-seven and one-half ($97\frac{1}{2}$) cubic feet per second of time, of the waters of said American Fork Creek, appropriated September 5th, 1902.

"That the defendants, Veasey and McDonnell, are the owners of and entitled to the use and enjoyment of the following amounts of water, to-wit: Eighty (80) inches, or a flow equivalent to two (2) cubic feet per second of time, of the waters of the said American Fork Creek, appropriated May 1, 1882, through what is known as the 'McClatchey Ditch' from Agnes Creek. That the said defendants, Veasey & McDonnell, are also the owners of one hundred (100) inches, or a flow equivalent to two and one-half ($2\frac{1}{2}$) cubic feet per second of time, of the waters of the said American Fork appropriated May 30, 1882, through what is known as 'Ditch No. 2', out of said creek. That the said defendants are also the owners of forty (40) inches, or a flow equivalent to one (1) cubic foot per second of time, of the waters of said American Fork, appropriated May 1, 1882, through what is known as 'Ditch No. 3', out of said creek. That said defendants are also the owners of three hundred and sixty (360) inches, or a flow equivalent to nine (9) cubic feet per second of time, of the waters of said American Fork, appropriated June 10, 1886, by means of an enlargement of Ditch No. 3, above mentioned. That the said defendants, Veasey & McDonnell, are also the owners of sixty (60) inches, or a flow equivalent to one and one-half ($1\frac{1}{2}$) cubic feet per second of time, of the waters of said American Fork, appropriated April 25, 1897, through what is known as 'Ditch No. 4', out of Ahern Creek, a tributary of said American Fork. That said defendants are also the owners of thirty (30) inches, or a flow equivalent to three-fourths ($\frac{3}{4}$) of a cubic foot per second of time, of the waters of said American Fork, appropriated June 10, 1883, through what is known as 'Ditch No. 5', from said creek. That the said defendants are also the owners of sixty (60) inches, or a flow equivalent to one and one-half ($1\frac{1}{2}$) cubic feet per second of time, of the waters of said American Fork, appropriated June 1, 1884, through what is known as 'Ditch No. 6', from said creek. That the said defendants are also the owners of one thousand (1000) inches, or a flow equivalent to twenty-five (25) cubic feet per second

of time, of the waters of said American Fork, appropriated December 9, 1886, through what is known as 'Ditch No. 7', from said creek. That said defendants are also the owners of one hundred and sixty (160) inches, or a flow equivalent to four (4) cubic feet per second of time, of the waters of said American Fork Creek, appropriated June 30, 1901, through what is known as 'Ditch No. 8', from Agnes Creek.

"That the defendant, S. B. Reisland, is the owner of and entitled to the use and enjoyment of the following amounts of water, to-wit: sixty (60) inches, or a flow equivalent to one and one-half ($1\frac{1}{2}$) cubic feet per second of time, of the waters of said American Fork Creek, appropriated May 31, 1899, through what is known as 'Ditch No. 1', from said creek. That said defendant is also the owner of fifty (50) inches, or a flow equivalent to one and one-fourth ($1\frac{1}{4}$) cubic feet per second of time, of the waters of said American Fork, which said amount of water was appropriated July 1, 1900, through what is known as 'Ditch No. 2', from Spring Run Creek, out of said American Fork.

"That the defendant, S. O. Mydland, is the owner of and entitled to the use and enjoyment of three hundred (300) inches, or a flow equivalent of seven and one-half ($7\frac{1}{2}$) cubic feet per second of time, of the waters of said American Fork Creek, appropriated June 15, 1907, from said creek

"That the defendant, American Fork Livestock Company, is the owner of, and entitled to the use and enjoyment of the following amounts of water, to-wit: five hundred (500) inches, or a flow equivalent to twelve and one-half ($12\frac{1}{2}$) cubic feet per second of time, of the waters of the said American Fork Creek, appropriated December 21, 1908, through what is known as 'Ditch No. 1', from said creek. That said defendant is also the owner of four hundred and eighty (480) inches, or a flow equivalent to twelve (12) cubic feet per second of time, of the waters of the said American Fork Creek, appropriated September 25, 1907, through what is know as 'Ditch No. 2', from said creek.

"That the defendant, S. I. Hopkins, is the owner of and entitled to the use and enjoyment of the following amounts of water, to-wit: one hundred and sixty (160) inches, or a flow equivalent to four (4) cubic feet per second of time, of the waters of said American Fork, which said amount of water was appropriated May 31, 1887, through what is known as 'Ditch No. 1', from the south bank of the said American Fork. That the said defendant is also the owner of one hundred (100) inches, or a flow equivalent to two and one-half ($2\frac{1}{2}$) cubic feet per second of time, of the waters of said American Fork, through what is known as 'Ditch No. 2', from springs at the head of Agnes Creek, appropriated May 31, 1887. That the said defendant is also the owner of forty (40) inches, or a flow equivalent to one (1) cubic foot per second of time, of the waters of said American Fork through what is known as 'Ditch No. 3', from the North Fork of the said American Fork, appropriated May 31, 1887. That said defendant is also the owner of two hundred and eighty (280) inches, or a flow equivalent to seven (7) cubic feet per second of time, of the waters of said American Fork, appropriated June 1, 1896, by means of an enlargement of Ditch No. 3, hereinabove mentioned. That said defendant is also the owner of one hundred (100) inches, or a flow equivalent to two and one-half ($2\frac{1}{2}$) cubic feet

per second of time, of the waters of said American Fork through what is known as 'Ditch No. 4', from said creek, appropriated May 31, 1899.

"That the defendant, Thomas McCurry, is the owner of and entitled to the use and enjoyment of the following amounts of water, to-wit: one hundred and twenty (120) inches, or a flow equivalent to three (3) cubic feet per second of time, of the waters of the said American Fork, appropriated June 1, 1904."

In this decree, water was allowed on the basis of "an inch to the acre," or one second-foot per forty acres. One of the principal points at issue in this suit was as to the water of American Fork which sinks in the porous creek bed. The defendants claimed that no water carried down the stream over this porous section after July 15th and that therefore the diversion of American Fork into Lebo Creek made by Norton and Lyons in 1902 did not adversely effect the prior rights on American Fork below the porous section of the stream bed. The court decreed that "The Norton and Lyons diversion does **not** effect the flow in American Fork after August 1st," but by supplemental court order four years later, the word "not" was stricken out as having been erroneously entered in the original decree. This means that for the critical part of the season at least, the effect of seepage in the stream bed was to be ignored and all rights on the stream were to be rated on the basis of their respective priorities. Also by supplemental decrees on American Fork, the following rights were awarded:

Name	Date of Priority	Second-feet
Mary L. Kamps	March 24, 1909	2.50
John E. Foster	Nov. 16, 1910	2.18
James I. Langston	June 15, 1912	3.00
Jesse E. Langston	June 15, 1912	3.00
Robert G. Anderson	Feb. 18, 1913	3.00

In these decrees, no distinction was made between storage rights and direct flow rights, and no storage rights were considered, although two of the largest appropriations had theretofore been made expressly for storage purposes. In the case of an appropriation of 100 second-feet made in 1903 by W. J. Beecher, specifically for storage purposes, no rights were decreed as the court records show that this name was erroneously entered as W. Y. Beecher and that summons on this party was returned unserved and that this defendant was not represented at the trial. So far as this right is concerned the decree is not final nor binding, and this storage right on the flood waters has since been perfected by beneficial use, and is exercised independently of the decreed rights on the direct flow of this stream.

In the case of Norton and Lyons' right, the original appropriation was made primarily for storage purposes, although the decree does not so state.

Transcribed from Judgment Record No. 4, Page 100, Records of Meagher County, Montana, to Book 1, Page 6, of Water Right Records in the Wheatland County, Montana, Courthouse.

BANNOCK SPRING OR MEXICAN JOHN CREEK

In the District Court of the Fourteenth Judicial District of the State of Montana, in and for the County of Meagher.

Herbert Holloway, Plaintiff) Findings of Fact and
vs.) Conclusions of Law and
William Delgarno and Norman Delgarno, Defendants)	Decree

This cause came on regularly to be heard on the 23rd day of June, 1913, Hon. J. A. Matthews, Judge of the Fourteenth Judicial District of the State of Montana, in and for the County of Meagher, presiding, and sitting without a jury; C. A. Linn, Esq., appearing as and Leonard DeKalb, of the law firm of Belden & DeKalb, appearing as counsel for the defendants. Whereupon the Court proceeded to a hearing, and witnesses on behalf of the plaintiff were duly sworn and testified, and plaintiff rested. Witnesses on behalf of the defendant were sworn and testified, defendant rested. And all of the testimony of the respective parties having been by the Court heard and considered; after argument of counsel, said case was taken under advisement, and the Court being now advised of the facts and the law of this case, now makes the following findings of fact.

1. The Court finds that the parties, plaintiff and defendants herein are each the owners and in possession of their respective lands as set forth and described by them in the pleadings in this action.

2. The Court finds that said lands require artificial irrigation for the profitable production of agricultural crops thereon; that a statutory inch per acre is necessary for the proper irrigation of the same.

3. That a certain natural stream or creek known as the "Bannock Springs Creek" also known as "Mexican John Creek", runs and flows through the lands of plaintiff, and that said lands border upon said "Bannock or Mexican John Creek."

4. The Court finds that "Bannock Spring" or "Mexican John" Creek is a small stream rising in the foothills of the Little Belt Mountains in Meagher County, Montana, and receives its supply of water both from springs and from natural drainage of surface waters, including those certain springs known as "Bannock Springs" and emptying into the Musselshell River at a point within the lands of plaintiff described in the complaint herein, flowing its entire length within said Meagher County.

5. That the channel of said creek from said Bannock Springs to the lands of plaintiff is more or less broken, and except in flood time, the waters of said Creek disappear from the surface and flow in an underground channel; but that the said water course forms one continual depression, and from the evidence introduced coupled with personal inspection of said channel, the Court finds that said channel is a continuous water course.

6. That from the testimony introduced and personal observation the court is unable to say that there exists any physical reason in the channel of Mexican John or Bannock Spring Creek, at the point where the waters sink, from which a presumption can be indulged that the waters disappear into the earth and do not therefore follow a sub-surface channel, and thereafter rise into the surface channel of said stream before reaching the lands of plaintiff. The Court therefore finds, that said waters on sinking, follow a well defined sub-surface channel within and along said water course, and thereafter return to the same at all times during the irrigating season, augmenting and forming a part of the waters of said Creek.

7. That for the purpose of irrigating said lands of plaintiff and for other useful and beneficial purposes, one John Salazar, the predecessor in interest of plaintiff, during the summer of 1880, by means of a dam and ditch, diverted and appropriated from said Bannock Spring or Mexican John Creek, 200 inches of the unappropriated waters of said Creek and conveyed the said waters to and upon the said lands of the plaintiff, and therewith irrigated said lands, and there used said waters for stock and other domestic purposes. That the said waters of said Creek, except in times of extraordinary flood or high water, do not exceed the said amount of 200 inches. And the waters of said stream, and all thereof, except in time of extraordinary flood or high water, have been during the irrigating seasons since said appropriation, continuously used by the plaintiff for the irrigation of said lands.

From the foregoing Findings of Fact, the Court makes the following Conclusions of Law:

CONCLUSIONS OF LAW

1. That the parties to this action are entitled respectively to the use of the amounts of waters of said Bannock Spring or Mexican John Creek and its tributaries hereinbefore in the Findings set forth; that they are entitled to the same in the order of the dates of their respective appropriations; that said amounts of water shall be measured in the mode provided by law; that the parties to this action are entitled to a decree of this Court establishing their respective rights as ascertained by said Findings and these Conclusions of Law, and enjoining and restraining them and each of them respectively, from using said waters in violation of the rights of the other appropriators thereof, according to the dates and amounts of their respective appropriation. That said parties are entitled to said amounts of water as of the dates hereinbefore set forth in the Findings of Fact, or so much of said amount as said parties shall respectively apply to a beneficial use, and when not so applied to a beneficial use, the subsequent appropriators thereof shall and may enjoy the use thereof; that each of said parties is entitled to an injunction forbidding the other parties, their agents, attorneys, employees and successors in interest, from in any manner interfering with the flow of the waters of said Bannock Spring or Mexican John Creek to the prejudice of such parties hereto.

DECREE

The Court having made and adopted the foregoing Findings of Fact and Conclusions of Law, it is now ORDERED, ADJUDGED AND DECREED:

1. That the parties hereto are respectively the owners and in possession of the lands mentioned and described in their respective pleadings herein.

2. That the lands so mentioned are arid lands, and will not produce to the full capacity of the soil thereof, without artificial irrigation.

3. That the amount of water required to properly irrigate said land, is one statutory inch to each acre thereof, which is susceptible of irrigation.

4. That 100 inches of water as expressed in said Findings shall be equivalent to a flow of two and one-half cubic feet (18.7 gallons per second); and this proportion shall be observed in determining the equivalent flow represented by the rights of the respective parties hereto, expressed in inches.

5. That the said parties to this action are the owners of, and entitled to the use of the amounts of water of the said Bannock Spring or Mexican John Creek and its tributaries, situated in the County of Meagher, and State of Montana, by virtue of appropriations made thereof by them, or their predecessors in interest on the dates and in the amounts following: And the said parties are respectively entitled to the use of the said waters in the order, and by virtue of the priority of their respective appropriations, as also appears:

Name	Date	Amount
Herbert Holloway	May 1, 1880	200 inches or 5 cubic ft. per second
William Delgarno and Norman Delgarno	April 21, 1911 Which right is subse- quent and subservient	320 inches or 8.75 cubic ft. per second

It is further ORDERED, ADJUDGED AND DECREED that such parties to this action shall be entitled to the use and enjoyment of, and to use the amounts of their respective appropriations of the waters of said Bannock Spring or Mexican John Creek and its tributaries, according to their respective priorities and appropriation as the same are established and set forth in this decree and that all the parties to this action and their agents, attorneys, servants, employees and successors in interest, are and each of them is, hereby perpetually enjoined and restrained from in any manner interfering with or using the respective rights of the other, and from in any manner, interfering with, hindering or delaying the other from taking from said stream the respective amounts of their several appropriations as herein set forth, and from in any manner interfering with or stopping the flow of said water to the head and through the ditches of the other respective parties, at such times and in such manner as the prior appropriator desires the use and enjoyment of his said right.

It is further ORDERED, ADJUDGED AND DECREED that each of said parties shall place and maintain at the head of his ditch, suitable boxes or headgates and appli-

ances for measuring water as required by law, and that no water shall be taken from said streams unless such water has been measured through said box or headgate.

It is further ORDERED, ADJUDGED AND DECREED that the said parties are entitled to the use of and to use the amount of their appropriation during each of the irrigating seasons, or so much thereof as they shall apply to a beneficial use; and when not so applied, the subsequent appropriators may use the same.

It is further ORDERED, ADJUDGED AND DECREED that each of the parties to this action pay his own costs and expenses herein incurred.

Done in open Court at White Sulphur Springs, Montana, this 22nd day of November, A. D. 1913.

John A. Matthews, District Judge

Transcribed from Judgment Record 5, Page 191, Records of Meagher County, State of Montana, to Book 1, Pages 31 to 34 of Water Right Records in the Wheatland County Courthouse.

BRANNOCK SPRINGS

In the District Court of the Sixth Judicial District of the State of Montana.

John W. Salazar, Plaintiff

vs.

Oscar G. Smart and Alice L. Smart, Defendants

This cause came on to be heard at the regular November, 1892, term of said Court, on the 5th day of December, 1892, before the Court and a jury of twelve men duly empanelled and sworn therein:

Thompson & Maddox appeared as counsel for plaintiff, and Waterman & Callaway, counsel for the defendants.

And thereupon the defendants file, in open court and offer to consent to judgment being entered for the plaintiff for the water claimed in the complaint, which offer was accepted by the plaintiff:

Whereupon the Court finds the facts, that the plaintiff appropriated 200 inches of the waters of Brannock Springs, which rises about four and six miles respectively from the land of plaintiff described in the complaint, being the southeast quarter of the northeast quarter, the northwest quarter of the northwest quarter, the south half of the northwest quarter, the north half of the southwest quarter and the north half of the southeast quarter of Section 22, Township 8 North, Range 14 East of the principal Base Line and Meridian of Montana, in the County of Meagher and State of Montana, and empty into the Musselshell River on the north side thereof, within the limits of said land, upon May 1,

1880, and has used said waters upon said lands for irrigating purposes in the irrigating seasons ever since, and that he is the owner thereof and is entitled to the possession thereof and that the defendants have no right thereto:

It is therefore ORDERED, ADJUDGED AND DECREED, that the plaintiff John W. Salazar is the owner of, and is entitled to the possession of two hundred (200) inches, miner's measurement, of the waters of said Brannock Springs.

And it is further ORDERED, ADJUDGED AND DECREED that the defendants, Oscar G. Smart and Alice L. Smart, their agents, servants, counselors, attorneys, solicitors and all other acting in aid or assistance of them, and each and every one of them, be, and they hereby are, perpetually restrained and enjoined from taking, diverting, conveying away or interfering in any manner with the said two hundred (200) inches of the waters of said Brannock Springs so belonging to the plaintiff.

And it is further ORDERED, ADJUDGED AND DECREED that the plaintiff have and recover of the defendants, Oscar G. Smart and Alice L. Smart, his costs and disbursements herein, taxed at ninety four and 30/100 (\$94.30) dollars, and that the plaintiff have execution therefor.

Done in open Court this 8th day of December, 1892.

Frank Henry, Judge.

BIG ELK DECREE

On June 24, 1911, in the Tenth Judicial District Court, in Meagher County, in the case of John H. Freeser et al, Plaintiffs, versus A. C. Graves et al, Defendants, the waters of Big Elk Creek were decreed as follows:

JOHN H. FREESER RIGHTS

Name of Ditch	Date	Amount in Statutory Inches and Cubic Feet per Second
Charles A. Dunning	March 15th, 1880	250 inches or 6¼ Sec. ft.
Do	May 1st, 1889	92 inches or 2.3 Sec. ft.
Montgomery-Freeser	June 15th, 1900	500 inches or 12.5 Sec. ft.

WILLIAM R. MONTGOMERY RIGHTS

Busha-Heaton	July 15th, 1884	188 inches or 4.7 Sec. ft.
Second Montgomery	June 1st, 1888	40 inches or 1 Sec. ft.
Third Montgomery	June 1st, 1890	77 inches or 1.93 Sec. ft.
Montgomery-Freeser	June 15th, 1900	263 inches or 6.58 Sec. ft.

SANFORD MOORE RIGHTS

Name of Ditch	Date	Amount in Statutory Inches and Cubic Feet per Second
Sanford Moore Ditch	May 15th, 1899	166 inches or 4.15 Sec. ft.
Do Island Ditch	June 15th, 1889	40 inches or 1 Sec. ft.
Shumaker-Moore Ditch	June 15th, 1891	158 inches or 3.95 Sec. ft.

CHARLES W. SHUMAKER RIGHTS

Shumaker-Moore	April 20th, 1888	217 inches or 5.4 Sec. ft.
Do	May 15th, 1899	232 inches or 5.8 Sec. ft.
George W. Moore	June 1st, 1887	66 inches or 1.65 Sec. ft.
Do	June 1st, 1889	66 inches or 1.65 Sec. ft.
E. L. Shumaker	August 20, 1889	165 inches or 4.12 Sec. ft.

CHARLES F. WILLIAMS RIGHTS

Noble	June 30th, 1887	50 inches or 1.25 Sec. ft.
Do	June 30, 1890	179 inches or 4.48 Sec. ft.
Noble Ditch No. 2	August 1st, 1895	192 inches or 4.8 Sec. ft.
Ditch from Crooked Creek	June 15th, 1901	173 inches or 4.32 Sec. ft.
Do	July 1st, 1908	78 inches or 1.95 Sec. ft.

ANDREW C. GRAVES RIGHTS

Moore-Williams	May 15th, 1900	87 inches or 2.17 Sec. ft.
Do	June 15th, 1901	355 inches or 8.88 Sec. ft.
Old Weber Ditches from Dry Elk	May 15th, 1889	40 inches or 1 Sec. ft.
Old Weber Ditches from Bear Cr.	May 15th, 1889	40 inches or 1 Sec. ft.
Robert Clark	July 15th, 1905	40 inches or 1 Sec. ft.
Muir-Pound	July 15th, 1889	52 inches or 1.3 Sec. ft.
Do	June 15th, 1899	80 inches or 2 Sec. ft.
McKenzie	June 1st, 1890	40 inches or 1 Sec. ft.

GEORGE D. MARTIN RIGHTS

George Hatch	May 15th, 1881	56 inches or 1.4 Sec. ft.
Do	May 15th, 1888	56 inches or 1.4 Sec. ft.
Do	June 15th, 1890	188 inches or 4.7 Sec. ft.
Pound-Haggerty	May 15th, 1890	230 inches or 5.75 Sec. ft.
Muir-Martin	June 15th, 1901	80 inches or 2 Sec. ft.
Bryan	June 15th, 1903	139 inches or 3.48 Sec. ft.
Pound, from Alkali	June 15th, 1890	40 inches or 1 Sec. ft.
O. B. Anderson	June 5th, 1901	40 inches or 1 Sec. ft.
Muir-Martin	June 15th, 1897	114 inches or 2.85 Sec. ft.
Sheetz Ditches from Big Elk	June 15th, 1891	46 inches or 1.15 Sec. ft.
Pound Spring Creek Ditch	June 1st, 1890	40 inches or 1 Sec. ft.
Spring right	May 15th, 1881	15 inches or .38 Sec. ft.
Ditch from Alkali Creek	June 30th, 1899	40 inches or 1 Sec. ft.

O. B. ANDERSON RIGHTS

Name of Ditch	Date	Amount in Statutory Inches and Cubic Feet per Second
From Spring Creek	June 15th, 1898	112 inches or 2.8 Sec. ft.
From Dry Creek	May 15th, 1906	40 inches or 1 Sec. ft.

JOHN ARTHUR RIGHTS

Brown Ditch from Stewart Cr.	June 15th, 1894	46 inches or 1.15 Sec. ft.
From Park Right	June 15th, 1896	40 inches or 1 Sec. ft.
Brown Ditch from Big Elk	June 15th, 1899	40 inches or 1 Sec. ft.
Do	June 15th, 1907	60 inches or 1.5 Sec. ft.
Dry Creek	June 30th, 1901	40 inches or 1 Sec. ft.
Arthur-Hartt	June 15th, 1896	76 inches or 1.9 Sec. ft.

DUDLEY N. HARTT RIGHTS

Arthur-Hartt, Weber Right	June 15th, 1897	60 inches or 1.5 Sec. ft.
Arthur-Hartt, Hanson Right	June 30th, 1898	96 inches or 2.4 Sec. ft.
Arthur-Hartt, Laura A. Smith Right	June 1st, 1903	40 inches or 1 Sec. ft.
Mattie A. Campbell Right from Spring Creek	June 1st, 1902	45 inches or 1.12 Sec. ft.
Mattie A. Campbell Right from Dry Creek	June 1st, 1903	48 inches or 1.2 Sec. ft.
Karnop Right from Bear Cr.	June 30th, 1898	53 inches or 1.33 Sec. ft.
F. R. Smith Right from Crooked Creek	July 1st, 1895	40 inches or 1 Sec. ft.
John Campbell Right from Big Elk	July 1st, 1900	233 inches or 5.83 Sec. ft.

E. L. SHUMAKER RIGHTS

Original diversion from George W. Moore Ditch, now used through E. L. Shumaker Ditch	April 30th, 1887	68 inches or 1.7 Sec. ft.
Original diversion Shumaker- Moore Ditch, now used through E. L. Shumaker Ditch	April 30th, 1888	278 inches or 6.95 Sec. ft.
E. L. Shumaker Ditch, Mary S. Shumaker Right	June 1st, 1898	240 inches or 6 Sec. ft.
E. L. Shumaker Ditch, E. L. Shumaker Right	June 1st, 1898	140 inches or 3.5 Sec. ft.
George W. Moore Right from Big Elk	May 31st, 1891	40 inches or 1 Sec. ft.

THE TWO DOT TOWNSITE COMPANY, A CORPORATION, RIGHTS

Busha-Heaton, from Wm. R. Montgomery	July 15th, 1884	22.5 inches or .56 Sec. ft.
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In this Decree, water was allowed on the basis of three-fourths of a miner's inch per acre. The Court also granted a four per cent allowance per mile of ditch for the loss of water by seepage and evaporation. The Court also ordered that none of the parties in this action shall convey any of the waters of the said Big Elk Creek and its tributaries from and out of the basin of the said Big Elk Creek to the prejudice of any of the other parties, but that, after using such waters, each and every one of the parties hereto shall allow the said waters again to flow in the natural channel of the said Big Elk Creek or to follow the natural declivity of the ground toward and into the said Creek. The foregoing, however, shall not apply to any rights heretofore acquired wherein waters have been and are necessarily conveyed from said basins for irrigating the lands of the appropriators.

BIG ELK CASE NO. 2030

In the District Court of the Fourteenth Judicial District of the State of Montana in and for the County of Wheatland.

G. D. Martin and Charles F. Williams, Petitioners and Plaintiffs.

vs.

Gilbert McFarland, George McFarland, Mary McFarland,
Leona McFarland, McFarland Bros., a corporation,
Wallis Huidekoper, John Arthur, Charles F. Williams,
as trustee under the last Will and Testament of
E. L. Shumaker, Deceased, O. B. Anderson, Freeser
Ranch Co., a corporation, James A. Freeser, Minnie F. Lyons,
Marie F. McCarthy, Laura L. Freeser and Two Dot Townsite Co., a corporation,
Defendants.

DECREE

This cause came on regularly to be heard this day in open court, W. C. Husband appearing as counsel for the petitioners and plaintiffs herein, and all of the above named defendants having failed to appear either in person or by attorney, and the Court having heard all of the evidence, and proof produced herein, and having duly considered the same, and having been fully advised in the premises, and it appearing therefrom to the satisfaction of the Court, and the Court so finds:

FIRST: That the Summons and Complaint in the above entitled action were served or by written admission of service of said defendants, and that each of said defendants have either waived his or her right to appear or answer in said cause or have failed to appear or answer in said cause, and that the time in which the said defendants may appear or answer has expired, and that said defendants and each of them have made default in that behalf, and that the default of the said defendants and each of them for failing to appear or answer in any manner in said cause has been duly and regularly entered herein.

SECOND: That the Big Elk Creek is a natural and living stream of fresh and running water flowing in a regular channel with beds and banks, and is situated for the most

part in Wheatland County, Montana, that said Big Elk Creek rises in the mountains in the southeasterly part of Meagher County, Montana, and flows in a northeasterly direction through Wheatland County, and empties into the Musselshell River at Two Dot, Wheatland County.

THIRD: That the waters of Big Elk Creek and its tributaries were adjudicated and decreed by a decree duly given, made, rendered and entered in the District Court of the Tenth Judicial District of the State of Montana, in and for the County of Meagher, on the 24th day of June, 1911, in a certain suit or action therein pending wherein John H. Freeser, William R. Montgomery and Two Dot Townsite Company, a corporation, were plaintiffs, and A. C. Graves, D. N. Hartt, John Arthur, Arthur Whelan, E. L. Shumaker, Charles W. Shumaker, Nels Pearson, Charles F. Williams, G. D. Martin, O. B. Anderson, Sanford Moore and Mary Shumaker were defendants and which Decree is now filed and on record in the office of the Clerk of Court of the District Court in and for the County of Meagher, and has been transcribed in Judgment Records No. 5 at page 123 in the office of the Clerk of Court of Wheatland County, Montana, reference being hereby made to said record, and that subsequent to the giving, making, rendering and entering of the aforesaid Decree to-wit, in the year 1917, the County of Wheatland was created, and that all of the lands and water rights hereinafter mentioned in the aforesaid Decree and all of the boundaries of Wheatland County, and that the County of Meagher and the County of Wheatland are a part of the Fourteenth Judicial District of the State of Montana.

FOURTH: That subsequent to the giving, making, rendering and entering of said Decree, the defendants Gilbert McFarland, George McFarland, Mary McFarland, Leona McFarland and McFarland Bros., Inc., became and are, the successors in interest to and the owners of the lands and water rights of defendants A. C. Graves, Arthur Whelan and O. B. Anderson, mentioned in said Decree; that subsequent to the giving, making, rendering and entering of said Decree, the defendant, Wallis Huidekoper, became and now is the successor in interest to and the owner of the lands and water rights of the defendant, D. N. Hartt, mentioned in said Decree that E. L. Shumaker, now deceased, but before his death, and subsequent to the giving, making, rendering and entering of said Decree, became the successor in interest to and the owner of the lands and water rights of the defendants Charles W. Shumaker, Sanford Moore and Mary Shumaker, mentioned in said Decree, and that on the 8th day of May, 1928, by an order duly given and made in the Estate of E. L. Shumaker, deceased, in the above entitled Court, Charles F. Williams was duly appointed as the trustee under the Last Will and Testament of the said E. L. Shumaker, deceased, and that on the 7th day of June, 1928, Letters of Administration were duly and regularly issued to the said Charles F. Williams as such trustee, and Charles F. Williams is now, and ever since the 7th day of June, 1928, has been the duly appointed qualified and acting trustee of the estate of E. L. Shumaker, deceased, and as such trustee is now the successor in interest and owner of the lands and water rights of the defendants, E. L. Shumaker, Charles W. Shumaker, Sanford Moore and Mary Shumaker, mentioned in said decree, that subsequent to the giving, making, rendering and entering of said decree, the defendant O. B. Anderson became, and now is, the successor in interest to and the owner of the lands and water rights of the plaintiff, William R. Montgomery, mentioned in said Decree, that subsequent to the giving, making, rendering and entering

of said Decree, the Freeser Ranch Co. became the successor in interest to and the owner of the lands and water rights of the plaintiff, John H. Freeser, mentioned in said Decree; and that James A. Freeser, Minnie F. Lyons, Marie F. McCarthy and Laura L. Freeser are now the successors in interest of John H. Freeser mentioned in said decree, and have been made parties defendant in this action by stipulation duly entered, and are in default for failure to appear and plead, and default against each of the parties to this action has been duly entered herein; that the defendant, Freeser Ranch Co., is now, and continuously for more than eight years immediately last past has been a corporation organized and existing under and by virtue of the laws of the State of Montana, and that the defendant, Two Dot Townsite Co., is now and during all the times hereinafter mentioned was a corporation duly organized and existing under and by virtue of the laws of the State of Montana, that the defendant, McFarland Bros., Inc., is now and continuously for more than three years immediately last past has been a corporation organized and existing under and by virtue of the laws of the State of Montana.

FIFTH: That the District Court of the Tenth Judicial District of the State of Montana, in and for the County of Meagher, at the time of the commencement of the aforesaid action, and at all times subsequent, and upon the date and at the time of the giving, making, rendering and entering of the aforesaid Decree, was a court of competent jurisdiction to determine the matters and facts contained in said Decree, and to give and make said Decree, and that all of the appropriators and users of the waters of Big Elk Creek and its tributaries were joined as parties plaintiff or defendant in said suit, and at the time of the giving, making, rendering and entering of said Decree were parties thereto, either as plaintiffs or defendants, and that the rights to the waters of said Big Elk Creek by virtue of the aforesaid Decree were, and ever since have been and now are adjudicated and decreed.

SIXTH: That the plaintiff and petitioner, G. D. Martin, is now, and he and his predecessors in interest at all times here mentioned and continuously for many years immediately prior hereto have been the owners of, in the possession of, and entitled to the possession of, the following described lands situated in the County of Wheatland, State of Montana: Sections thirty two (32) and thirty-three (33), the south half of Section thirty-four (34) and Section thirty-five (35), in Township seven (7) North, Range thirteen (13) East, and Lots two (2), three (3) and four (4) in Township six (6) North, Range thirteen (13) East, together with other lands; and that the plaintiff and petitioner, Charles F. Williams, is now, and he and his predecessors in interest at all times herein mentioned and continuously for many years immediately prior hereto have been, the owners of, in the possession of, and entitled to the possession of, the following described lands situated in the County of Wheatland, State of Montana: Sections twenty-four (24) and twenty-five (25), the east half ($E\frac{1}{2}$) of Section twenty-six (26) and Section thirty-six (36) in Township seven (7) North, Range thirteen (13) East, together with other lands; that all of the above described lands are agricultural lands, but are dry and arid and incapable of producing crops without artificial irrigation, but that with artificial irrigation the same will produce large and bounteous crops of alfalfa, hay, grain and vegetables; that it requires at least one miner's inch of water per acre to successfully irrigate each acre of the lands of the plaintiffs and petitioners; that is to say, it requires forty

miner's inches, equivalent to a flow of one cubic foot of water per second of time to irrigate each forty-acre tract of plaintiffs and petitioners' land herein described.

SEVENTH: That the natural flow of water in Big Elk Creek is more than sufficient to satisfy the needs and requirements of all the appropriators and claimants to said water and the decreed water users, and that during the months of November, December, January, February, March, and April, and a big part of May of each year, and at other times when the waters of Big Elk Creek are not diverted or used for irrigation purposes, there is a large quantity of water in said Creek generally known as flood or waste water, which flows past and by the lands and premises of the plaintiffs and petitioners, and also all of the appropriators and decreed water users on said stream, and thereupon discharges it flow in the Musselshell River, and thereupon goes to waste, and that during the months of May and June down to about July 15th of each year, which period of time covers the irrigation season of each year, the flow of water in Big Elk Creek at times exceeds the needs and requirements of all the appropriators and claimants, and decreed water users upon Big Elk Creek as fixed and determined and adjudicated in the Decree aforesaid, and that during the months of May, June and July, and down to the 15th day of July of each year there is in normal seasons when the rains and moisture are general, a surplus of water flowing in said Big Elk Creek that is not used by any person whomsoever, but runs to waste down said stream into the Musselshell River and that the amount of water so running to waste in Big Elk Creek during the irrigation season and also during the months of November, December, January, February, March and April and up to the 15th of May, varies in volume and the amount of the flow, and at times exceeds the flow of two thousand (2,000) miner's inches, equivalent to a flow of fifty (50) cubic feet of water per second of time, and that during flood times the flood or waste water in Big Elk Creek exceeds the flow of fifty (50) cubic feet of water per second of time, and that when the water right users on said Creek begin to irrigate, the volume of water in Big Elk Creek gradually decreases, and that the plaintiffs and petitioners are entitled to appropriate for beneficial and useful purposes and for irrigating as hereinafter mentioned, the flood or surplus water of Big Elk Creek and any water not being used by any of the prior appropriators or owners of adjudicated rights.

EIGHTH: That the plaintiffs and petitioners, G. D. Martin and Charles F. Williams, did on the 15th day of October, 1927, appropriate and divert from Big Elk Creek the flood or waste waters flowing therein to the extent of two thousand (2,000) miner's inches, equivalent to a flow of fifty (50) cubic feet per second of time, which appropriation was made by means of an earth and brush diversion dam built across Big Elk Creek in the north half of Section 6 in Township 6 North, Range 13 East, and that said water was then diverted through a plank headgate, located upon the north bank of the stream immediately above the diversion dam, which headgate is four feet high and five and one-half feet wide at the bottom, and fourteen feet wide at the top, and which ditch runs in a northerly direction, and by means of said ditch and a natural channel does and will convey the aforesaid water to and discharge the same into a natural reservoir located on the south half of Section 31, Township 7 North, Range 13 East, in Wheatland County, which reservoir is oblong in shape and embraces 125.1 acres, and has a capacity of 785 acre feet of water, in which reservoir the water is impounded by means of an earth and

stone dam built at the southeast end of said reservoir, which dam is now eighteen feet high, and five hundred (500) feet long, and the plaintiffs and petitioners are hereby permitted to increase the size of said dam so that when completed the maximum height of said dam will be 22½ feet with a top width of 9 feet and a bottom width of 100 feet, and a total length of 1,000 feet. That the water so impounded in said reservoir is then diverted through a gate in an outlet box which is two feet high by three feet wide, commonly called an outlet, which outlet conveys the water to and empties it into a ditch two feet deep, four feet wide at the bottom and seven feet wide at the top, which ditch runs in a southeasterly direction about 550 feet, and conveys the water therein to and empties it into Big Elk Creek, where the said appropriated water is mingled with waters of Big Elk Creek, thus increasing the normal stream flow of Big Elk Creek during the time the said water is so being diverted into Big Elk Creek, to the extent of the amount of water so permitted to pass through the reservoir dam and spillway; and the water is thereafter diverted from Big Elk Creek through the dams, headgates, ditches, flumes, aqueducts and other appurtenances to the lands and premises of the plaintiffs and petitioners described in paragraph 6 of this Decree, and that the plaintiffs and petitioners are the appropriators and owners of the aforesaid water rights, dams, headgates, ditches, flumes, reservoirs, aqueducts and spillways, and other water right appurtenances, and have continuously used the same since said water was appropriated for irrigating and other useful and beneficial purposes.

NINTH: That the plaintiffs and petitioners have duly and regularly made the appropriation of the water aforesaid in accordance with law, and that J. Minneman, a competent civil engineer, has made a survey of the dam, headgate, ditch, natural water course and reservoir, reservoir dam outlet and spillway, whereby the water is to be conveyed from Big Elk Creek and stored and impounded in the reservoir and that a plat of the survey was filed in the office of the Clerk of Court of Wheatland County, Montana, with the petition of the petitioners and plaintiffs, and which plat and petition showed the amount of water sought to be appropriated, and a description by name of the water course from which they intend to appropriate the water, also a general description of the dam, headgate, ditch, aqueduct, natural water course, reservoir, dam and spillway, stating the size, length and capacity of each, prepared by the Engineer, also showing the proposed means of appropriation and the use of water, and the place of use thereof, together with the location and size of the reservoir and the manner of its construction and the means of conveying the water to the place of use.

TENTH: That the Engineer's map on file herein, and his report with reference to the aforesaid appropriation and all of the means of diversion of said water are hereby approved and are in accordance with law, and that the said G. D. Martin and Charles F. Williams are joint owners of the water right herein, and have an undivided interest and ownership in and to the said water right appropriation and the appurtenances, which water was so appropriated to the extent of 2,000 inches or a flow of fifty (50) cubic feet per second of time, on the 15th day of October, 1927, but said water right appropriations so decreed to the plaintiffs herein is subject to, and that in the use of the water the petitioners shall be bound by, the terms of the Decree mentioned and described in paragraph two of this Decree.

ELEVENTH: That the petitioners and plaintiffs have named as parties defendant in this action, all the appropriators or claimants who have or appear to have, water rights in or out of Big Elk Creek, and whose rights may be in anywise affected by the appropriation of plaintiffs and petitioners.

It is therefore ORDERED, ADJUDGED AND DECREED that the plaintiffs and petitioners, G. D. Martin and Charles F. Williams do have, and they are hereby awarded an appropriation of water from the waters of Big Elk Creek, subject to all prior adjudicated water rights in Big Elk Creek, a flow of 2,000 inches, or fifty (50) cubic feet per second of time, for the purpose of impounding the same in a reservoir located in the south half (S $\frac{1}{2}$) of Section thirty-one (31) in Township seven (7) North, Range thirteen (13) East, and that the said petitioners and plaintiffs are joint owners, have an undivided interest in and to the means of appropriation and appurtenances, and are entitled to the sole and undisputed use of the water so impounded in said reservoir for irrigation and other useful and beneficial purposes, and are entitled, and are hereby granted the right, to divert from Big Elk Creek at their respective points of diversion below said reservoir, in addition to their respective rights so determined by the Decree of June 24th, 1911, a constant flow of water equal to the amount or flow of water released from or permitted to flow from said reservoir through said reservoir dam and spillway, and the petitioners herein are hereby granted two years from date hereof in which to complete said reservoir dam, and may repair the same at any time.

It is further ORDERED, ADJUDGED AND DECREED that the petitioners herein have consented to be bound by, and they are hereby bound by, the terms of all prior decrees with respect to the water right awarded petitioners in the same manner and to the same effect as though the parties hereto had been parties to the decree originally made, and the water right herein granted shall be subject to all prior adjudicated rights on Big Elk Creek.

It is further ORDERED, ADJUDGED AND DECREED that the petitioners herein shall at all times maintain a weir for the measurement of water, or other proper devices for measuring water, at or near the point of diversion of the water to be impounded in the reservoir in Section six (6), Township six (6) North, Range thirteen (13) East, to ascertain the amount of water that is being diverted into the reservoir, and also at the outlet from the reservoir for the purpose of ascertaining the amount of water that is being taken or diverted from the reservoir and being returned to Big Elk Creek.

It is further ORDERED, ADJUDGED AND DECREED that said appropriation shall bear the date as of the 15th day of October, 1927.

Done in open Court this 30th day of August, 1935.

William L. Ford, Judge.

Recorded in Judgment Records Number 5, Pages 155 to 160, incl., in the Wheatland County Courthouse.

CARELESS CREEK DECREE

The first decree of the waters of Careless Creek was dated May 2, 1890, and was known as Case 285, Plaintiff: Philip I. Moule vs. Edward Massing et al, Defendants. As a result of this case the plaintiff and defendants were entitled to the number of inches of water respectively, as follows, to-wit:

Name	Date of Priority	Inches
Philip I. Moule	June 11, 1881	50
Edward Massing	June 17, 1881	200
Philip I. Moule	Feb. 15, 1882	200
Alfred Bouchard	April 25, 1882	200
Alfred Bouchard and John Ross (jointly)	July 12, 1882	200
Andrew Distler	June 1, 1884	200
Matthew Gunton	June 5, 1884	200
William W. Renig	Aug. 1, 1884	200

On January 25, 1918, an order changing the decree of Philip I. Moule, Plaintiff, vs. Edward Massing was submitted to the Court. "The petition of Alfred Bouchard and John Ross coming on regularly for hearing and it appearing to the Court that they are identical persons named as Alfred Bouchard and John Ross in that certain Decree dated May 2, 1890, entered in the District Court in and for the County of Meagher, State of Montana, and wherein the said petitioners Alfred Bouchard and John Ross were jointly decreed 200 miner's inches of the water of Careless Creek and its tributaries, according to the priorities in said Decree expressed, and as expressed in the fifth paragraph of said Decree, and it further appearing to the Court that a mistake was made in granting said petitioners jointly the said two hundred (200) miner's inches of the said waters of Careless Creek, and that the said John Ross did appropriate, on the 12th day of July, 1882, one hundred (100) inches of water for irrigating and other useful purposes the waters of Careless Creek, and that the said Alfred Bouchard did not make an appropriation until the month of April, 1883, and that the said John Ross was then, and is now entitled to a prior Decree to the said Alfred Bouchard for 100 inches of the waters of Careless Creek.

"And it further appearing to the Court that the said Alfred Bouchard and John Ross are now the owners of the land effected by the waters so granted jointly in the fifth paragraph of said Decree and are the only parties interested in the rights of the priority in the said 200 inches of said waters of Careless Creek.

"And it further appearing that the said petitioners have appeared in open Court, and having agreed that the Water Right of the said John Ross is prior and superior to that of the said Alfred Bouchard and have petitioned this Court that the aforesaid Decree be so amended to show said priority.

"Therefore, it is hereby ordered that the Decree of water right so made and entered

on the 2nd day of May, 1890, in the District Court in and for the County of Meagher, State of Montana, be corrected and amended, and that the said John Ross shall have, and it is hereby ordered that he shall have one hundred (100) inches of the said waters of Careless Creek, which water right shall bear date as of the 12th day of July, 1882, and that the said Alfred Bouchard shall have the second one hundred (100) inches of said two hundred (200) inches so jointly decreed to the said Alfred Bouchard and the said John Ross, and that the right of the said Alfred Bouchard shall take date as of the 15th day of April, 1883."

The second Decree involving the waters of Careless Creek and tributaries was held in the District Court of the Fourteenth Judicial District of the State of Montana, in and for the County of Wheatland. Jennie Patterson, Plaintiff, vs. J. J. Giltinan et al, Defendants, dated March 11, 1925. As a result of this Judgment and Decree the following water rights were granted, to-wit:

Name	Date of Priority	Inches
E. F. McQuitty and I. S. McQuitty	June 11, 1881	50
W. L. Halbert	June 17, 1881	200
E. F. McQuitty and I. S. McQuitty	Feb. 15, 1882	200
E. F. McQuitty and I. S. McQuitty (West Fork)	June 12, 1882	160
The Yellowstone-Merchants National Bank	April 25, 1882	200
John Ross	July 12, 1882	100
Lyle Goodman	July 12, 1882	100
Lyle Goodman (West Fork)	April 1, 1883	200
Jennie Patterson	June 5, 1883	100
John Buller	May 28, 1884	200
C. R. Stiffler	June 1, 1884	200
W. L. Halbert	August 1, 1884	200
W. L. Halbert	June 1, 1885	100
John Francis Burke and Charles Thomas Burke	April 1, 1888	50
John Francis Burke and Charles Thomas Burke	Sept. 4, 1888	160
John Francis Burke and Charles Thomas Burke	April 1, 1890	200
W. L. Halbert	April 13, 1891	200
William C. Qualls (West Fork)	May 1, 1891	300
William C. Qualls (West Fork)	June 4, 1891	200
Jennie Patterson	April 5, 1892	100
H. J. Giltinan (West Fork)	April 20, 1892	200
William C. Qualls	May 6, 1893	150
William C. Qualls (West Fork)	June 3, 1893	200
William C. Qualls (West Fork)	Sept. 15, 1898	200
William C. Qualls (West Fork)	May 1, 1899	200

Name	Date of Priority	Inches
Edward Fuchs (West Fork)	May 1, 1899	200
Margaret McKay	June 1, 1905	160
Bercail Farms Company	August 1, 1905	200
The Yellowstone-Merchants National Bank (Spring Creek)	Nov. 29, 1906	40
Edward Fuchs	Jan. 17, 1907	100
William C. Qualls (West Fork)	May 8, 1908	200
Margaret McKay	Oct. 1, 1911	300
W. L. Halbert	June 26, 1915	200

The number of inches set forth were based on the miner's measurement that one inch of water is equal to a flow of one-fortieth (1/40) of a cubic foot of water per second of time; 40 inches of water, miner's measurement, being equal to a flow of water of one cubic foot per second of time. The cause came on regularly for trial on the 18th day of June, 1924, before the Honorable William L. Ford, of the above entitled court, sitting without a jury, a jury having been expressly waived by the parties concerned.

DAISY DEAN CREEK DECREE

In the District Court of the Sixth Judicial District of the State of Montana, in and for the County of Meagher:

George Lyons, Plaintiff

vs.

Harry Scott and Alexander Wright, Defendants

DECREE

"Be it remembered that at the regular April Term, 1890, of the District Court in and for Meagher County, Montana, to-wit: on the 7th day of May, 1890, the above entitled cause came on for trial before the Court, sitting without a jury, a jury having been waived therein by the agreement of the parties thereto, and the respective parties to said action, having introduced before said Court their proof and testimony, and it was agreed by Counsel, FIRST: That the plaintiff is the owner of agricultural lands in the vicinity and near to Daisy Dean Creek, so called, in the County of Meagher and State of Montana, which said lands require irrigation for the purpose of raising crops of hay, grain and vegetables, thereon: SECOND: That on the 14th day of October, 1885, the plaintiff George Lyons, for the purpose of irrigating his said lands in order to raise crops of hay, grain and vegetables, thereon, by means of a ditch, which takes the waters of said Daisy Dean Creek and conveys the same to the said lands of the plaintiff, appropriated of the said waters of said stream three hundred inches thereof, and ever since that date has continuously used the same for the purpose aforesaid: THIRD: That on the 1st day of April, 1888, the defendants, being the owners, or in possession of certain agricultural lands in the vicinity of, or near to said Daisy Dean Creek, by means of a ditch, appropriated three hundred inches

of the waters thereof, for agricultural purposes, on said lands, and that the water, so appropriated was necessary for such use:

"And as a matter of law the Court finds: FIRST: That as between the said plaintiff and the said defendants, the said plaintiff is the prior appropriator and the owner of the waters of said Daisy Dean Creek to the extent of three hundred inches thereof, measured as provided by law and that as against said defendants, the plaintiff has the prior and first right to the use of the waters of said stream, to the extent of three hundred inches, thereof, on his said lands for agricultural purposes, without let or hindrance from or by said defendants, and their agents, employees or successors in interest: SECOND: That as between said parties the said defendants, of the remaining waters of said stream, have the right to use, for the purpose of irrigating their lands, aforesaid, for hay, grain and vegetables, three hundred inches thereof, as the second right and in subordination to the right of the plaintiff aforesaid:

"It is therefore ordered, adjudged and decreed, that, as between the parties to this action, the said George Lyons, plaintiff therein, do have and enjoy the right to possess and use the first three hundred inches of the waters of said Daisy Dean Creek, so called, situated in the County of Meagher and State of Montana, upon his lands aforesaid through his ditch aforesaid for agricultural purposes, and the said Harry Scott and Alexander Wright, defendants herein, are perpetually enjoined and restrained from in any manner interfering with, or obstructing the flow of said waters of said Daisy Dean Creek to the head of the plaintiff's said ditch, or through said ditch, and the agents, employees, servants and successors of said defendants are in like manner enjoined and restrained from in any manner interfering with said water and said ditch:

"And it is further adjudged and decreed, that as between said parties, the defendants are entitled to the second right to the waters of said stream to the extent of three hundred inches thereof, after the first right therein, of the plaintiff has been satisfied, without let or hindrance from the plaintiff, and of the remaining waters of the said stream, after the right of the plaintiff has been satisfied, the plaintiff is perpetually enjoined and restrained from in any manner interfering with the flow of the waters of said stream, to the head of, or through the said ditch of the defendants, and the agents, employees, servants and successors of said plaintiff are in like manner enjoined and restrained.

"It is further ordered, adjudged and decreed that the said defendants and their successors in interest place, keep and maintain at the head of their respective ditches, boxes or flumes, suitable for measuring water from said stream through their said ditches, as required by law, and each of said parties are enjoined and restrained from using the waters of said stream except as measured as aforesaid through their respective ditches.

"And it is further ordered and adjudged that the defendants pay the costs herein expended to be taxed."

Frank Henry, Judge.

Transcribed from Judgment Record 2, Page 222, Records of Meagher County, State of Montana, to Wheatland County Water Right Records, Book 1, Pages 4 and 5.

HAYMAKER CREEK DECREE

In the District Court of the Tenth Judicial District of the State of Montana, in and for the County of Meagher.

Dudley N. Hartt, Plaintiff

vs.

Porter Byers, David Byers, J. R. Franklin,
Eugene Powell and George Thacker, Defendants

DECREE

This cause came on regularly to be heard in open court on the 5th day of March, 1907. Messrs. H. G. and S. H. McIntyre appearing as counsel for the plaintiff, and W. L. Ford, Esq., as counsel for the defendant, J. R. Franklin. The court having heard all the evidence and proofs herein, and duly considered the same, and being fully advised in the premises, and it appearing therefrom to the satisfaction of the court:

1. That Porter Byers, David Byers, J. R. Franklin, Eugene Powell and George Thacker, the above named defendants, have been duly and regularly summoned to answer unto the plaintiff's complaint herein, and Porter Byers, David Byers, Eugene Powell and George Thacker having made default in that behalf, and their and each of their default has been duly and regularly entered herein.

That the defendant J. R. Franklin filed his answer herein, and afterward in open court withdrew his said answer with leave of court, and in open court disclaimed any right to use the waters of Haymaker Creek, mentioned in the complaint.

2. That the plaintiff is the owner in fee and in possession of five thousand four hundred and eighty (5,480) acres, more or less, of patented lands, situate in Meagher County, Montana, mentioned and described in the plaintiff's complaint. That a certain natural stream or creek called Haymaker Creek flows through the said lands and have been and are used for the purpose of raising and growing agricultural crops thereon, that in order to raise agricultural crops on said lands it is necessary to have water on said lands, and by means of artificial irrigation crops of hay, grain and vegetables may be and have been grown on said lands, and without such artificial irrigation the said lands are worthless.

3. That for the purpose of irrigating lands owned by him and for other useful and beneficial purposes, one A. McGregor, the predecessor of the plaintiff, on the 20th day of May, 1879, by means of dams and ditches appropriated from said Haymaker Creek five hundred inches of the waters thereof, measured according to the law then in force for the measurement of water: That the said five hundred (500) inches of water so appropriated by the said A. McGregor comprise all the waters flowing in said Haymaker Creek during the irrigating season of each year and that said waters so appropriated have since been continuously used in irrigating the said lands. That the plaintiff by certain means con-

veyances become and now is the owner of the said lands and water right of said A. McGregor.

4. That subsequent to the 20th day of May, 1879, the defendants, Porter Byers, David Byers, Eugene Powell and George Thacker constructed dams, ditches and other obstructions in said Haymaker Creek above the lands of the plaintiff, and diverted the said waters and deprived the plaintiff of the use thereof, and prevented the plaintiff from having the quantity of said waters to which he is entitled.

5. That patents to the lands described in the complaint were issued by the United States Government to the grantors and predecessors in interest of the plaintiff long prior to the commission of the wrongful acts of the said defendants, Porter Byers, David Byers, Eugene Powell, and George Thacker, mentioned in the complaint and at the time of the commission of said acts the said defendants, Porter Byers, David Byers, Eugene Powell and George Thacker, well known of the ownership of the said lands and the prior appropriation of the said waters of Haymaker Creek by the plaintiff and his grantors, yet the said defendants, Porter Byers, David Byers, Eugene Powell and George Thacker, have deprived and still continue to deprive plaintiff of the use thereof to which he is entitled.

CONCLUSIONS OF LAW

That the plaintiff, Dudley N. Hartt, is the owner and entitled to the unobstructed and beneficial use by prior appropriation of 500 miner's inches, 12.5 cubic feet per second of the waters of Haymaker Creek for the irrigation of his said lands; and plaintiff is entitled to have the said Haymaker Creek flow in its natural channel and course through the said lands of the plaintiff.

WHEREFORE, by reason of the law and the facts aforesaid, it is ORDERED, ADJUDGED AND DECREED:

1. That the plaintiff, Dudley N. Hartt, is the owner and entitled to the unobstructed right and beneficial use of 500 miner's inches, 12.5 cubic feet per second, of the water of said Haymaker Creek.

2. That the defendants, Porter Byers, David Byers, Eugene Powell and George Thacker, and each of them, and their and each of their servants, agents, and employees, be, and they are hereby perpetually enjoined and restrained from in any manner interfering with the use by the plaintiff, or diverting from the plaintiff, of the waters of said Haymaker Creek, to the amount, quantity and proprietary right of the plaintiff as herein determined and decreed.

3. That the plaintiff do have and recover of and from the defendants, Porter Byers, David Byers, Eugene Powell and George Thacker, his costs and disbursements herein incurred amounting to the sum of thirty dollars and fifty cents. (\$30.50).

Done in open court this 4th day of June, 1907.

E. K. Cheadle, Judge

Transcribed from Judgment Record 5, Page 60, Records of Meagher County, State of Montana, to Water Right Records, Book 1, Pages 7 and 8 in Wheatland County Records.

EAST BRANCH OF HAYMAKER CREEK

In the District Court of the Fourteenth Judicial District of the State of Montana, in and for the County of Meagher.

In the matter of the application of Henry G.)
Vestal, for a Decree of Water Right from) DECREE
the East Branch of Haymaker Creek, a trib-)
utary of Haymaker Creek.

"The above entitled matter coming on regularly this day for hearing and adjudication, upon the verified petition of the petitioner, Henry G. Vestal, and upon the report, now on file, of the duly appointed and qualified civil engineer, E. R. Lausted, and upon the records and files herein, and the court having examined the said report and the plat of survey of the proposed water right, made and filed by the said engineer, and it appearing to the court that said report and the plat of survey of the proposed water right, are true and have been truly executed according to the law, and it appearing from the records that the Clerk of the above entitled court caused to be published in the Harlowton Press, a newspaper published nearest the point of diversion of the proposed ditch and water right, and in three consecutive issues of the said paper, a notice giving the name of the appropriator, amount of the appropriation, and name of stream from which the water is appropriated, and it appearing from the affidavit of the appropriation on file herein, that the said appropriator duly posted a notice as required by law before appropriation of said water, in a conspicuous place at the point of intended diversion, and that said notice stated: 1. The flow claimed, expressed in cubic feet per second: 2. The purpose for which said water is claimed, and the place of intended use: 3. The name of the stream; 4. The name of the appropriator; and 5. The date of posting said notice; and it appearing that the work in the construction and completion of the means of diverting and conveying the water to the place of use, was prosecuted with reasonable diligence, and it further appearing that the appropriator herein shall not acquire any rights to water in excess of the carrying capacity of the ditch, not in excess of the amount actually needed by the appropriator for the purpose of irrigation, and it appearing that no person or persons interested in the waters of said stream have, on or before the last day of the publication of the notice published in the said Meagher County Democrat, filed with the Clerk of this Court any written objection or objections to the appropriation, or to the publication for such water right; and it appearing that this is a proper matter to come before this court, and the court having jurisdiction thereof, and this court having been fully advised in the premises, and it appearing that the application of the water right has been made in full compliance with the statutes in such case made and provided, and by virtue of the power and authority vested in this Court, and in pursuance of the statute in such cases made and provided:

It is hereby ORDERED, ADJUDGED AND DECREED, That the records now on

file in this matter, together with the report of the survey and the plat thereof, be, and the same are hereby in all things approved and confirmed, and that they be taken, deemed and held in all respects as the findings of the Court in this matter, and it is further ORDERED, ADJUDGED AND DECREED, that the said Henry G. Vestal has the right, authority and privilege to use and appropriate, subject to all water rights formerly adjudicated on Haymaker Creek, a flow of six cubic feet per second of time of the waters of the East Branch of Haymaker Creek, a tributary of Haymaker Creek, on the west side of said stream, at a point 705 feet east and 2,980 feet north, of the north quarter corner of Section 5, Township 9 North, Range 13 East, Montana Meridian, running thence in a southwesterly direction across a portion of Section 32, Township 10 North, Range 13 East, and across the west half of Section 5, Township 9 North, Range 13 East, according to the plat and survey of said ditch now on file and of record in the above entitled court, and that the said Henry G. Vestal have the use and benefit of said flow of six cubic feet per second of time of the waters of the East Branch of Haymaker Creek, a tributary of Haymaker Creek, for the purpose of irrigating ten acres in the northeast quarter of Section 5, 55.65 acres in the northwest quarter of Section 5, 65.15 acres in the southwest quarter and 30.30 in the southeast quarter of Section 5, all in Township 9 North, Range 13 East, and which water right shall be prior and superior to any water rights or water appropriations since or subsequent to the 12th day of September, 1908, taken or appropriated from the East Branch of Haymaker Creek, a tributary of Haymaker Creek, and this water right is hereby dated as of the 12th day of September, 1908.

Done in open Court this 6th day of June, 1916.

John A. Matthews, Judge.

Transcribed from Judgment Record 5, Page 327, Records of Meagher County, State of Montana, to Water Right Records, Book 1, Pages 50 and 51, in Wheatland County Records.

LEBO CREEK DECREE

Rights to the use of the waters of Lebo Creek were adjudicated in the District Court of the Tenth Judicial District of the State of Montana, in and for the County of Meagher, beginning April 22, 1908, and completed December 1, 1908. The plaintiffs were: American Fork Livestock Company, a corporation and Joseph Labrie, vs. James Norton and Michael Lyons, co-partners doing business as Norton and Lyons, Basin Livestock Company, a corporation, Catherine Lyons, Ellen Norton, Charles W. Shumaker, W. J. Beecher and Don Martin, defendants.

The Court ORDERED, ADJUDGED AND DECREED as follows:

1. That each of the plaintiffs and each of the appearing defendants in this action are respectively the owners and in possession of the lands mentioned and described in their respective pleadings herein.

2. That the lands so mentioned and described are arid lands and will not produce to the full capacity of the soil thereof without artificial irrigation.

3. That the amount of water required to properly irrigate the said lands is one miner's inch, or one-fortieth of one cubic foot per second, to each acre which is capable of irrigation on the respective tracts.

4. That the plaintiff, the American Fork Livestock Company, a corporation, is the owner and entitled to the use of three hundred four (304) miner's inches, or seven and six-tenths (7.6) cubic feet per second of the waters of Lebo Creek, situated in the County of Meagher, and the State of Montana, by virtue of an appropriation thereof on the 14th day of May, A. D. 1882, by its grantors and predecessors in interest, which said right is the first in time of all the rights adjudicated by this Decree, and is prior to all the other rights hereinafter mentioned.

5. That, subject to the preceding right, the plaintiff, Joseph Labrie, is the owner of and entitled to the use of two hundred twenty-three (223) miner's inches, or five and twenty-three fortieths ($5\frac{23}{40}$) cubic feet per second, of the waters of said Lebo Creek, by virtue of an appropriation thereof made by his grantors and predecessors in interest on the 25th day of August, A. D., 1884, which said right is the second in time of rights adjudicated by this Decree, and is prior to all the rights hereinafter mentioned.

6. That, subject to the preceding rights, the defendants, James Norton and Michael Lyons, as co-partners, are the owners of and entitled to the use of two hundred thirty (230) miner's inches or five and three-fourths ($5\frac{3}{4}$) cubic feet per second of the waters of said Lebo Creek, by virtue of an appropriation made by them on the 1st day of June, A. D., 1887, which said right is the third in time of all the rights adjudicated by this Decree, and is prior to all the rights hereinafter mentioned.

7. That, subject to the preceding rights, the plaintiff, the American Fork Livestock Company, a corporation, is the owner of and entitled to the use of two hundred twenty (220) miner's inches, or five and five-tenths (5.5) cubic feet per second of the waters of said Lebo Creek, by virtue of an appropriation made by its grantors and predecessors in interest on the 1st day of July, A. D., 1888, which said right is the fourth in time of all the rights adjudicated by this Decree, and is prior to all the rights hereinafter mentioned.

8. That, subject to the preceding rights, the plaintiff, Joseph Labrie, is the owner of and entitled to the use of two hundred forty-four (244) miner's inches, or six and one-tenth (6.1) cubic feet per second, of waters of said Lebo Creek, by virtue of an appropriation made by his grantors and predecessors in interest on the 1st day of June, A. D., 1889, which said right is the fifth in time of all the rights adjudicated by this Decree, and is prior to all the rights hereinafter mentioned.

9. That, subject to the preceding rights, the defendant, Don Martin, is the owner of and entitled to the use of ninety-five (95) miner's inches, or two and three-eighths ($2\frac{3}{8}$) cubic feet per second, of the waters of said Lebo Creek, by virtue of an appropria-

tion made by his grantors and predecessors in interest on the 26th day of October, A. D., 1889, which said right is the sixth in time of all the rights adjudicated by this Decree, and is prior to all the rights hereinafter mentioned.

10. That, subject to the preceding rights, the defendant, Don Martin, is the owner of and entitled to the use of fifty-six (56) miner's inches, or one and two-fifth ($1\frac{2}{5}$) cubic feet per second, of the waters of said Lebo Creek, by virtue of an appropriation made by his grantor and predecessor in interest on the 15th day of May, A. D., 1890, which said right is seventh in time of all the rights adjudicated by this Decree, and is prior to all the rights hereinafter mentioned.

11. That, subject to the preceding rights, the defendants, James Norton and Michael Lyons, co-partners, are the owners and entitled to the use of two hundred and fifty (250) miner's inches, or six and one-fourth ($6\frac{1}{4}$) cubic feet per second of the waters of said Lebo Creek, by virtue of an appropriation made by them on the 1st day of April, A. D., 1892, which said right is the eighth in time of all the rights adjudicated by this Decree, and is prior to all the rights hereinafter mentioned.

12. That, subject to the preceding rights, the defendants, James Norton and Michael Lyons, co-partners, are the owners of and entitled to the use of five hundred fifty (550) miner's inches, or thirteen and three-fourths ($13\frac{3}{4}$) cubic feet per second of the waters of said Lebo Creek, by virtue of an appropriation made by them on the 15th day of April, A. D., 1893, which said right is the ninth in time and the latest of all the rights adjudicated by this Decree.

It is further ORDERED, ADJUDGED AND DECREED that each of the plaintiffs and each and all of the appearing defendants in this action shall be entitled to the use and enjoyment of their respective appropriations of the waters of the said Lebo Creek, according to their respective priorities of appropriation and the amounts of their respective appropriations of the said waters, as the same are established and set forth in this Decree, and that all the parties to this action, and each of them, are hereby perpetually enjoined and restrained from in any manner interfering with or using the respective rights of each and any of the other parties to this action, and from in any manner interfering with, hindering or delaying the other parties in taking from said stream the respective amounts of their several appropriations, as set forth and described in this Decree, and from in any manner interfering with or stopping the flow of said waters to the head of or through the ditch of the other respective appearing parties to this action.

It is further ORDERED, ADJUDGED AND DECREED that each of the said appearing parties shall place and maintain at the head of his or its ditch or ditches suitable flumes, boxes, or appliances for measuring water, as required by the laws of the State of Montana, and that no water shall be taken from said stream or used by said parties, or any of them, except such water as has been measured through the said boxes or flumes as required by law, and that the said boxes or flumes must be constructed and placed by a person or persons competent to construct and place the same correctly, and must be kept and maintained in proper condition by the said appearing parties respectively.

And it is finally ORDERED, ADJUDGED AND DECREED that none of the parties to this action shall convey any of the waters of the said Lebo Lake from and out of the basin of the said Lebo Creek, to the prejudice of any of the other said parties, but that, after using such waters, each and every one of the parties hereto shall allow the said waters again to flow in the natural channel of said Lebo Creek, or to follow the natural declivity of the ground toward and into the said Lebo Creek.

E. K. Cheadle, Judge.

SUBSEQUENT LEBO CREEK DECREE

In the matter of the application of Percy E. Thompson,)
for a Decree of water right from Lebo Creek, a tributary) DECREE
of American Fork and McVey Creek, a tributary of Lebo Creek)

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tion 16 at a point 450 feet east of the center of said Section 16, all in Township 7 North, Range 15 East, M. M. According to the plat and report of survey of said ditches, and that the aforesaid Percy E. Thompson have the use and benefit of the said flow of five (5) cubic feet per second of time of the waters of Lebo Creek, a tributary of the American Fork, and McVey Creek, a tributary of Lebo Creek, for the purpose of irrigating certain lands in the SE $\frac{1}{4}$ and the SW $\frac{1}{4}$ of Section 16, Township 7 North, Range 15 East, M. M. and is hereby dated as of the 8th day of June, 1914, and shall be prior and superior to any water rights or water appropriations since the 8th day of June, 1914, taken or appropriated from Lebo Creek, a tributary of the American Fork and McVey Creek, a tributary of Lebo Creek.

Done in open Court this 16th day of March, 1915.

John A. Matthews, Judge.

Transcribed from Judgment Record 5, Page 243, Records of Meagher County, State of Montana, to Book 1, Pages 44 and 45 of Water Right Records in the Wheatland County Courthouse.

LAKE LEBO CASE NO. 2198

Denver Joint Stock Land Bank of Denver, a corporation, Plaintiff

vs.

Lake Lebo Irrigation Co., a corporation; Rene Labrie as surviving director and trustee for the assets of Lake Lebo Irrigation Co., formerly a corporation; Labrie Ranch Co., a corporation; Rene Labrie, personally and as surviving partner of Labrie Brothers and as an heir of Joseph Labrie, deceased, and Marie C. Labrie, his wife; Seraphine Duffy, as an heir at law of Joseph Labrie, deceased, and as Executrix of the estate of Bourke Labrie, deceased; Estella Sedgwick, as an heir at law of Joseph Labrie, deceased; and all other persons, unknown, claiming or who might claim any right, title, estate, or interest in, or lien or encumbrance upon, the real property described in the complaint, or any thereof, adverse to plaintiff's title thereto, whether such claim or possible claim be present or contingent, including any claim or possible claim of dower, inchoate or accrued.

Defendants.

That the plaintiff is now the owner and in possession of the lands described in paragraph 5 of these findings and of all water rights appurtenant thereto, including those described in said paragraph 5 as against the defendants and each and all of them.

It is therefore, ORDERED, ADJUDGED AND DECREED:

1. That the plaintiff do have judgment herein and judgment in its favor is now given, declaring that as against the defendants named herein, the plaintiff is the owner, in possession and entitled to the possession of all those certain lands and water rights situated in Wheatland County, Montana, and described as follows: All of Section thirteen

(13); the east half ($E\frac{1}{2}$) and the southeast quarter of the northwest quarter ($SE\frac{1}{4}NW\frac{1}{4}$) and the east half of the southwest quarter ($E\frac{1}{2}SW\frac{1}{4}$) of Section twenty-four (24); all of Section twenty-five (25); Township seven (7) North of Range fourteen (14) East; also all of Fractional Section thirty (30), Township seven (7) North, Range fifteen (15) East, except one (1) square acre in the southeast (SE) corner of Section thirty (30), Township seven (7) North, Range fifteen (15) East (deeded for school) of the Montana Principal Meridian and containing 2348.92 acres, more or less; and the south half of the southeast quarter ($S\frac{1}{2}SE\frac{1}{4}$) and the southeast quarter of the southwest quarter ($SE\frac{1}{4}SW\frac{1}{4}$) of Section eighteen (18); all of Fractional Section nineteen (19); the north half ($N\frac{1}{2}$) and the southwest quarter ($SW\frac{1}{4}$), and the northwest quarter of the southeast quarter ($NW\frac{1}{4}SE\frac{1}{4}$) of Section twenty (20); all of Fractional Section five (5); all of Section eight (8); all of Section seventeen (17) of Township seven (7) North, Range fifteen (15) East, of the Montana Principal Meridian, and containing 3190.64 acres, more or less, together with the tenements, hereditaments and appurtenances, all and singular, thereunto belonging; together with all water rights appurtenant to said lands or any part thereof, including a water right of 500 inches of the waters of Lebo Creek, a tributary of the American Fork of the Musselshell River, which right was appropriated by William Boyd on August 25, 1884, for lands above described, and which appropriation was recorded on Sept. 5, 1884, in Book T of Locations at Page 339 of the records of Meagher County, Montana, in which County said waters were then located. Also a second right for 1,000 inches of the waters of Lebo Creek, appropriated by William Boyd, on June 1, 1889, for use upon said lands above described which appropriation was recorded on July 24, 1889, in Book 1 of Water Rights at page 162 of the records of said Meagher County. Both of which rights were by a decree which was on the first day of Dec. 1908, signed and ordered filed, entered and docketed in the District Court of the Tenth Judicial District of the State of Montana, in and for the County of Meagher, in a cause therein pending, entitled American Fork Livestock Co., a corporation, and Joseph Labrie, plaintiffs, vs. James Norton and Michael Lyons, co-partners and others, as defendants, which decree is recorded in Volume 5 at page 87 of the Judgment Records of said County, and in which decree the said William Boyd right of August 25, 1884, adjudicated and decreed to be the second right of the waters of Lebo Creek, a tributary of the American Fork of the Musselshell River as of the date mentioned, for 225 miner's inches or $5\frac{23}{40}$ cubic feet per second of time of the waters of said stream, and which said second right of June 1, 1889, was adjudicated and decreed to be a fifth right to the waters of Lebo Creek, as of the date mentioned, for 244 miner's inches or 6.1 cubic feet per second of time, of the waters of said stream.

2. That as against said defendants of this action, the court does decree that the plaintiff herein is the lawful successor in interest of all of the rights to the waters of Lebo Creek, which was adjudicated to Joseph Labrie in that certain decree, dated Dec. 1, 1908, and on said date signed and ordered filed, entered and docketed in the District Court of the Tenth Judicial District of the State of Montana in and for the County of Meagher, in a cause therein pending entitled American Fork Livestock Co., a corporation, and Joseph Labrie, plaintiffs, vs. James Norton and Michael Lyons, co-partners and others, defendants, which decree is recorded in Volume 5 at page 87 of the Judgment records of said county, and is now recorded in Water Rights No. 1 at pages 9 to 14 of the Transcribed Records of Wheatland County, Montana.

3. That the defendants have no rights, title or interest in and to the waters herein described as belonging to the plaintiff, and said defendants and each of them are hereby enjoined and perpetually restrained from in any manner or at all interfering, with the use by the plaintiff of any of the water rights herein decreed to be the property of the plaintiff.

Done in open court this 29th day of May, 1940.

W. C. Husband, Judge.

From Judgment Record 5, Pages 383 to 388 inclusive, Wheatland County Records.

LITTLE ELK CREEK DECREE

In the District Court of the Fourteenth Judicial District of the State of Montana, in and for the County of Meagher.

Perry J. Moore, Plaintiff

vs.

Roy O. Sherman, Helen Pump, Emma Miller,
Henry Pump, Jacob T. Tvetene, Williard E.
Sherman, and Jake Teig, Defendants.

"Wherefore, by reason of the law and the premises, it is hereby ordered, adjudged and decreed that the respective parties to this action who have appeared herein are the owners of and entitled to the possession of their respective lands as shown and described in their respective pleadings in this action, and that the whole of said lands are arid and require artificial irrigation and that they require for their necessary irrigation the amounts of water shown in the findings herein.

"That all of the said lands above described are within the County of Meagher, State of Montana.

"That said parties appropriated the respective amount of water and at the respective dates found and determined in the findings herein and are the owners of and are entitled to the use of such water according to their respective priorities therein found.

"It is further ORDERED, ADJUDGED AND DECREED that each and every party hereto, their agents, servants, employees, attorneys, grantees, and successors in interest, be and they are hereby perpetually restrained and enjoined from in any manner interfering with the ditches, dams, flumes or headgates of any of the other parties hereto and from using any of the waters of the said Little Elk Creek, or its tributaries, which other parties are hereto entitled by right of prior appropriation as found and determined in this decree.

"It is further ORDERED, ADJUDGED AND DECREED that each and every one of the parties to this action place measuring boxes at the head of each and all of their re-

spective ditches tapping said stream or its tributaries prior to the irrigating season of 1915, and that said measuring boxes be maintained so as to enable a water commissioner or commissioners to measure the water hereby decreed to each of the parties hereto, if it is found necessary to have such water commissioner or commissioners do so, and that the measuring boxes be perpetually maintained at or near the respective headgates. It is further ORDERED, ADJUDGED AND DECREED that the water decreed to the defendant Helen Pump be decreed to her in the name of Annie Helen Pump, according to her true name as found in the findings of fact.

"It is further ORDERED, ADJUDGED AND DECREED that the following persons who have made default herein, to-wit: Emma Miller, Henry Pump, Jacob T. Tvetene, Willard E. Sherman and Jake Teig, their agents, servants, employees, attorneys, grantees and successors in interest, be forever perpetually enjoined and restrained from using or diverting any of the waters of Little Elk Creek or its tributaries to which any of the other parties to this action are entitled under this decree, and that the rights of each and all of the parties appearing in this suit are prior to any of the rights of the persons so defaulted.

"It is further ORDERED, ADJUDGED AND DECREED that each party appearing in this action pay his own court fees, sheriff's fees, witness fees and other costs if any.

"It is further ORDERED, ADJUDGED AND DECREED that the pleadings of each and all of the parties hereto shall be deemed to conform to the proof and findings as made in this decree.

"Dated this 5th day of February, 1915."

John A. Matthews, Judge.

CONCLUSIONS OF LAW:

A. The plaintiff herein, Perry J. Moore, is entitled to a decree fixing and establishing his rights to the use of the waters of Little Elk Creek, and the priority thereof as against the defendants herein as follows:

1. Two hundred (200) inches, or 5 cubic feet per second of time, as of March 31st, 1878, which right is the first right on said creek.
2. Four hundred (400) inches, or 10 cubic feet per second of time, as of June 30th, 1882, which right is the second right on said creek.
3. One hundred (100) inches, or 2.5 cubic feet per second of time, as of March 22nd, 1886, which right is the third right on said creek.

All of which rights are, in point of time and point of right prior and paramount to all the rights hereinafter mentioned.

B. That the defendant Annie Helen Pump is entitled to a decree fixing and determining her right and priority thereof of the waters of said stream as follows:

4. Seventy-five (75) inches, or 1.875 cubic feet per second of time, as of Oct. 31st, 1888, which right is the fourth right on said creek and in point of time and point of right is prior and paramount to all of the rights hereinafter mentioned.

C. That the defendant Roy O. Sherman is entitled to a decree fixing and determining his right to

5. One hundred (100) inches, or 2.5 cubic feet per second of time, as of June 30th, 1907, which right is the fifth on said stream.

6. Eighty seven and five-tenths (87.5) inches, or 2.19 cubic feet per second of time, as of September 30th, 1907, which right is the sixth right on said stream.

Which two rights are prior and paramount to all of the rights hereinafter mentioned.

D. That defendant Annie Helen Pump is entitled to a decree fixing and determining her right to

7. Five hundred (500) inches, or 12.5 cubic feet per second of time, as of September 30th, 1911, which right is the seventh right on said stream, and in point of time and point of right is subsequent and inferior to the rights hereinbefore mentioned.

E. That, as to the right initiated by the said F. Miller, the predecessor in interest of the said defendant Annie Helen Pump in the year 1892, it affirmatively appearing from the testimony introduced on behalf of said answering defendant that, for more than ten years prior to the commencement of this action, said defendant, and her predecessors in interest, the heirs at law of said F. Miller, failed to use any of the waters of said stream for any purpose whatsoever or to exercise any act of ownership over the ditch then constructed and permitted the same to become practically obliterated so that, upon going upon the ground no notice is given or knowledge imparted that a ditch had ever there existed, and by their failure to so use any of said waters or to do any work upon said ditch and water right, and permitting, without objection or actual notice, third parties to initiate rights and place lands under cultivation and to cultivate the same for years under the assumption that no such right existed and that the said right of 1888 was the only right claimed by the defendant as appurtenant to her lands acquired from said F. Miller, and by a course of conduct which would, in the absence of her statement to the contrary, show a clear intent and purpose to abandon said right and ditch if any she had, the said defendant is declared to have failed to establish any right in and to the waters of said Little Elk Creek by reason of said ditch constructed in the year 1892, and to have forfeited any right which may have existed at the time of the death of said F. Miller, and to be stopped from asserting any such right as against the answering defendant Roy O. Sherman.

F. That the defendants, Emma Miller, Henry Pump, Jacob T. Tvetene, Willard E. Sherman and Jake Teig, are without right or title to or interest in the waters of said Little

Elk Creek or any part thereof, and are, by their default herein, forever estopped by this decree from asserting any right therein as against any of the rights hereinbefore set forth.

G. That the plaintiff and the answering defendants herein, Annie Helen Pump and Roy O. Sherman, are and each of them is, entitled, as a part of the decree herein to have each of the others, their agents, servants, employees, attorneys, grantees and successors in interest, perpetually restrained and enjoined from in any manner interfering with the prior rights of each of said parties as herein set forth.

Done in open Court this 29th day of January, 1915.

John A. Matthews, Judge.

Transcribed from Judgment Record, 5, Page 235, Records of Meagher County to Book 1, Pages 37 to 44, of Water Right Records in the Wheatland County Courthouse.

MODIFICATION OF LITTLE ELK DECREE

Perry J. Moore, Plaintiff and Respondent

vs.

Roy O. Sherman, Annie Helen Pump,
Defendants and Respondents

C. Miller, predecessor in interest of Annie Helen Pump, appropriated 50 miner's inches October 25, 1892, for lands in NW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$ in Section 30, Township 7 North, Range 12 East. "The said 50 miner's inches are in addition to the water rights provided for in the original decree as applied to the water rights decreed to her shall apply to this decreed right of 50 miner's inches, and that the injunctive provisions of said decree shall likewise apply to this decree so adjudged her under the mandate of the Supreme Court directing the reversal of the decree in-so-far as she was not awarded the said 50 miner's inches right." Dated October 7, 1916.

WEST FORK OF LITTLE ELK CREEK

(Miller Creek)

In the District Court of the Fourteenth Judicial District of the State of Montana, in and for the County of Wheatland.

Henry Pump, Plaintiff

vs.

Argo Woodward, G. L. Ranch Company, a corporation, Smith Bros. Sheep Company, a corporation, Jacob Tieg and Mandius Tieg,
Defendants

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JUDGMENT AND DECREE

" IT IS THEREFORE ORDERED, ADJUDGED AND DECREED; that the rights of the plaintiff and the defendants be, and the same are, settled, fixed and deter-

mined in all respects in accordance with the said Findings of Fact and Conclusions of Law, and that the plaintiff and answering defendants have the right to the quantities of water hereinabove set out for the purposes therein named, according to their respective priorities as fixed by the respective dates of appropriation, and as hereinafter set out.

"FIRST: That the plaintiff, Henry Pump, is the owner and entitled to the use of 200 inches of water of the West Fork of Little Elk Creek, sometimes known as Miller Creek, appropriated on the 18th day of May, 1881, and the ditch which conveys the same to and upon the lands of said plaintiff, together with the appurtenances of said water right, and that the same is a first right in said Creek prior to any and all other rights hereinafter mentioned, and which water may be used for irrigating the lands of the plaintiff, on either side of said Creek

"SECOND: That the plaintiff, Henry Pump, is the owner of and entitled to the use of 200 inches of waters of the West Fork of Little Elk Creek sometimes known as Miller Creek, appropriated on the 15th day of June, 1881, and the ditch which conveys the same to and upon the lands of the plaintiff, together with the appurtenances of the said water right, and the said water right is a second right in said Creek and prior to the rights hereinafter mentioned, and that the said plaintiff Henry Pump may use said water for irrigating the lands of the plaintiff on either side of the Creek.

"THIRD: That the plaintiff, Henry Pump, is the owner and entitled to the use of 200 inches of the waters of the West Fork of Little Elk Creek, sometimes known as Miller Creek, appropriated on the 10th day of June, 1883, and the ditch which conveys the same to and upon the lands of the said plaintiff, together with the appurtenances of said water right, and the said water right is a third right in said Creek and prior to the rights hereinafter mentioned, and which water right may be used on either side of said Creek for the purposes of irrigating the lands of the plaintiff.

"FOURTH: That the defendant, Argo Woodward, is the owner of and entitled to the use of 300 inches of waters of Little Elk Creek, sometimes known as Miller Creek, appropriated on the 1st day of October, 1888, and the ditch which conveys the same to and upon the lands of said defendant, together with the appurtenances of said water right, and that the same is a fourth right in said Creek, and prior to any other right upon said Creek, save and except the first, second and third right of the plaintiff Henry Pump, and that the defendant, Argo Woodward, is entitled to use said water for irrigating his land upon either side of said Creek.

"FIFTH: That the plaintiff, Henry Pump, is the owner of and entitled to the use of all the surplus waters of the West Fork of Little Elk Creek, sometimes known as Miller Creek, over and above the first, second and third right of the plaintiff, Henry Pump, and the fourth right of the defendant, Argo Woodward, which surplus water was duly appropriated on the 11th day of June, 1890, and the plaintiff Henry Pump, is the owner of the ditch which conveys the same to and upon the lands of the plaintiff, and that the same is the fifth right in said Creek and prior to any right of any of the defendants, except the

fourth right of the defendant, Argo Woodward, and which surplus waters may be used on the lands of the plaintiff on either side of said Creek.

"It is further ORDERED, ADJUDGED AND DECREED that the water rights herein determined and adjudicated, include all of the water in said Creek, together with its tributaries, and the measurement of said water shall be miner's measurement, and one inch of water is equal to a flow of one-fortieth of a cubic foot of water per second of time, and forty inches of water being equal to a flow of one cubic foot of water per second of time.

"It is further ORDERED, ADJUDGED AND DECREED that all of the defendants are perpetually enjoined and restrained from in any manner interfering with the flow of the waters of the West Fork of Little Elk Creek, sometimes known as Miller Creek, together with its tributaries, until the amount of water herein decreed, shall be flowing and allowed to flow in the ditches of the plaintiff, Henry Pump, and of the ditch of the defendant, Argo Woodward, in accordance with the priorities herein determined.

"It is further ORDERED, ADJUDGED AND DECREED that the said plaintiff, Henry Pump, and the said defendant, Argo Woodward, are each entitled to the possession, use and enjoyment of the waters of said West Fork of Little Elk Creek, sometimes known as Miller Creek, and its tributaries, according to the priorities herein expressed, and each of the parties joined in this action are enjoined and perpetually restricted from in any manner interfering with the other rights to said water as herein defined.

"It is further ORDERED, ADJUDGED AND DECREED that the plaintiff pay all of the costs of this action.

"Done in open Court this 26th day of September, 1931."

William L. Ford, Judge.

Filed Sept. 26th, 1931. Alma Berquist, Clerk.

Recorded in Judgment Record Book Number 4, Pages 615 to 617, in the Wheatland County Courthouse.