

S. E. WILLIAMS

ASSESSOR OF TREASURE COUNTY

HYSHAM, MONTANA

April 2, 1956

Mr. Hans L Bille
Assistant State Engineer
Bozeman, Montana.

Dear Sir;

The 1955 Treasure County Tax roll shows that there was 17,296 acres of irrigate land assessed in Treasure County for that year. This acreage includes both the gravity and the land that is being pumped on.

Yours very truly,

S. E. Williams
S. E. Williams,
County Assessor.

RECEIVED

APR 11 1956
COUNTY ENGINEER

S. B. WILLIAMS
ASSISTANT STATE ENGINEER
TAMPA, FLORIDA

RECEIVED

APR 2 1956

**ASSISTANT
STATE ENGINEER**

~~XXXXXXXXXXXX~~
Hans L. Bille

February 11, 1952

Mr. R. A. Dightman
Section Director
Weather Bureau Office
Helena, Montana

Dear Mr. Dightman:

We wish to take this opportunity to thank you for the write-up you recently sent us on "Climate" for both Park and Treasure Counties. This material will be used in our Water Resources Survey report for the above counties and you will be given credit for same.

Thanking you again, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLE/ab

UNITED STATES DEPARTMENT OF COMMERCE

WEATHER BUREAU

January 24, 1952

Helena, Montana

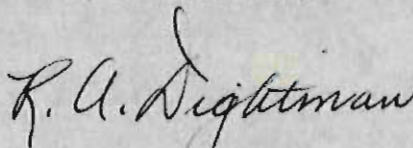
Mr. Hans L. Bille
Assistant State Engineer
Billings, Montana

Dear Mr. Bille:

Herewith are short climate summaries for Park and Treasure Counties, as requested in your letter of January 22, 1952.

I have assumed that you wanted the form of your Sweet Grass County summary followed, and have proceeded accordingly. I hope they are what you had in mind. Both summaries were prepared by the undersigned.

Very truly yours,



R. A. Dightman
Section Director

Enclosures

RAD:pk

XXXXXXXXXXXX
Hans L. Bille

January 22, 1952

Mr. R. A. Dightman
Section Director
Weather Bureau Office
Helena, Montana

Dear Mr. Dightman:

In our Water Resources Survey report for the counties we have completed it is necessary to include a write-up under "General Information About the County", on such subjects as Transportation, Climate, Soils, Crops, Livestock and Forests. These subjects involve many phases of work in order to gather the necessary data to make the information both complete and comprehensive. As you are familiar with the climatic conditions I would like to have you prepare a write-up on this subject for Park County, Montana, and also a similar write-up for Treasure County, Montana.

I am sending you a copy of the Sweet Grass County report that contains a similar write-up on "Climate" from the information we received from the U. S. Weather Bureau in Helena. You will receive credit for any write-ups in our reports. We will need these articles soon as we are preparing our Park County and Treasure County reports for publication.

We are also sending you a map showing the counties which we have completed to date.

Thanking you for the above information, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab
enc.



FRED E. BUCK, STATE ENGINEER
HANS L. BILLE, ASSISTANT

STATE OF MONTANA

STATE ENGINEER

SAM W. MITCHELL BUILDING

HELENA, MONTANA

January 21, 1952

Mr. Hans L. Bille
Assistant State Engineer
Box 873
Billings, Montana

Dear Hans:

I have finally found time to work up for your information some data to be used in preparing the report for Park County. I have used your Part I Sweet Grass County in preparing the changes. Enclosed is a sheet for page II. The only change here is the personnel of the State Water Board. For page III I am enclosing a new letter of transmittal to the Governor. You may date it the same as the date of the report.

On page V under "Acknowledgements" rewrite the paragraph as follows: "A survey and study of water resources involves many phases of both field and office work in order to gather the necessary data to make the information complete and comprehensive. Appreciation of the splendid cooperation of various agencies and individuals who gave their time and assistance in aiding us in gathering the data for the preparation of this report is here acknowledged."

Page 1, 2, and 3 contain the "Foreword". Enclosed are notes on the changes that should be made throughout these three pages.

Page 4, Method of Survey. I have no suggestions as to changes on this page. There may be some changes that you might wish to make.

Page 5. "History". Find enclosed a copy of a write-up on Park County dated April 19, 1931, which I got from the Historical Library. This was written by Mr. M. B. Milligan and I think perhaps we should give him credit for it. In your work over the county you have undoubtedly picked up other historical facts that will be of interest and if so add them to the write-up.

In this connection I am also including a writ-up on Treasure County which you will probably need in a very short time.

Sometime ago you asked me about preparing information found on page 6 to 13 which takes up the subjects of transportation, climate, crops, livestock, water supply and forests. After considering the matter carefully I believe these topics add considerable interest to the report and I believe they should be included.

In preparing this type of subject matter why not have those interested in the subject write a few short paragraphs for you and when the report is printed we will give them credit for the write-up. As for example, you could have Mr. R.A. Dightman prepare a short paragraph on climate in Park County. Mr. L. J. Giesken of the college could prepare you a short write-up on soils. The county agent could prepare a short paragraph on crops and livestock. Some of your staff could write up the water supply. If there are any fish hatcheries the State Fish and Game Department at Helena could write that for you and perhaps add a few other interesting items pertaining to game. Some of the Forest Service could write an article on the forests of Park county. It might be well to have Truman Anderson of Bozeman write a small paragraph on soil conservation service in the county.

The above comprises about the only changes I have to offer. You can use the same corrections in writing up the Treasure County report. When you have your report all prepared ready for the printer I wish you would please submit it up here for review before it finally goes to the printer.

Several days ago I sent the material you asked for on the Big Horn Tullock Project and trust you have received it by this time.

Very truly yours,


STATE ENGINEER

P. S. Since writing this letter I succeeded in getting an old copy of "Montana" dated August 1928. This came from the Historical Library and is an extra copy which is loaned to us as long as we may care to use it. See that it is not destroyed so that when and if we ever get through with the Water Resources Survey of Montana it can be returned to the Library. I am sending it to you under separate cover. FEB

Received from Mrs. Buck on Jan. 21, 1952

Treasure County
March 29, 1931
By M. B. Milligan

Title

→ Treasure County History and Organization

Treasure, one of the newest and smallest of Montana counties, was ~~carved~~ ^{set aside} from western Rosebud ^{County} by the sixteenth legislative assembly and was organized April 1, 1919, with the seat of government at Hysham. Confidence of its residents in developed and potential resources of the section is indicated in the choice of county name.

Hysham, ^{centrally located,} was named for Charles J. Hysham, an Omaha cattleman long connected with the Flying E outfit running thousands of head ^{of cattle} on the reservation south of Yellowstone river. The town is of comparatively recent origin, the first building, a hardware store, being erected by John C. Lyndes in 1909.

A Little History.

START → A year before Captain William Clark passed eastward through territory now comprising Treasure ^{County}, Francois Larocque, agent of the Northwest Fur company of Canada, spent a summer in the region trading, trapping and exploring. Two years after Larocque, in 1807, Manuel Lisa erected the first trading post and the first permanent buildings in Montana near the confluence of Big Horn and Yellowstone rivers. The post was abandoned after a few years but others were established from time to time, each more or less short lived. The last, Fort Pease, was erected on the Yellowstone near the present site of Myers for the purpose of competing with Fort Benton for trade of western gold camps. It was completed in 1875, immediately attacked by Sioux Indians, and finally relieved early the following spring by four troops of cavalry from Fort Ellis, 175 miles farther west.

^{In 1876, the year of the Custer massacre}
~~The year of Custer's last fight~~ John Guy, William Mouatt, Ben Green and Tom Carter established themselves near the site of Myers, and the following year, 1877, a Mr. Tolbert settled on Froze-to-Death creek. Tolbert was followed by J. Isaac, who settled on Pease Bottom after having been mustered out of

the army at Fort Custer in 1878, and Ed Jones, who arrived with a herd of cattle from Deer Lodge a few years later.

During the 1870's John

Back in the seventies, Guy broke up land and tried to farm, the first gesture of that sort in the region, but to all intents and purposes the country remained as Indians left it until the Northern Pacific's march across Montana brought civilization and easy access to market in 1882. An influx of settlers in the wake of the railroad located along creeks and rivers to engage in stockraising, ~~and~~ ^{an} industry that remained of dominant importance for many years.

INSERT "A" →

Statistics.

(Par.) Census figures for ¹⁹⁵⁰ credit Treasure with a population of ¹⁴⁰² 1,660, ranking it ^{54th} ~~55th~~ among counties of the state. ~~In area it ranks 53rd.~~ In area,

with 998 square miles, it ranks 53rd. The county is irregular in shape, approximately 39 miles from ^{east to west} and 42 miles from ^{north to south} in its extremities but due to its shape does not embrace the area that those figures would indicate.

It is bordered by Rosebud County on the north and east, by Bighorn County on the south and by Yellowstone County on the west.

STATE ENGINEER'S OFFICE

Fred E. Buck. State Engineer
Hans L. Bille Assistant

STATE WATER CONSERVATION BOARD

Governor John W. Bonner. Chairman
C. H. Raymond. Vice Chairman and Secretary
Fred E. Buck Member and Consulting Engineer
John B. David. Member
Max Mathews Member
Ralph H. Fifield Chief Engineer
R. J. Kelly Assistant Secretary

MONTANA STATE AGRICULTURAL EXPERIMENT STATION

O. W. Monson, Irrigation Engineer, Consultant and Project Leader, Bozeman

Honorable John W. Bonner
Governor of Montana
Capitol Building
Helena, Montana

Dear Governor Bonner:

Submitted herewith is a consolidated report on the Water Resources Survey of Park County, Montana.

This work is being carried on with funds made available to the State Engineer by the 32nd Legislative Session, 1951, and in cooperation with the State Water Conservation Board and the Montana State Agricultural Experiment Station.

The report is divided into two ^{parts.} booklets. Part I consists of history of land and water use, irrigated lands, water rights, etc., and Part II contains all of the township maps in the county showing in color the lands irrigated from each source or canal system.

Work has been completed and reports are now available for the following counties: Yellowstone, Carbon, Stillwater, Big Horn, ~~Custer~~, Rosebud, Musselshell, Golden Valley, Wheatland, Meagher, Sweet Grass, and Park. ^{work} Reports will soon be available for Treasure County and field work is under way in Gallatin County.

add Treasure

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.

Respectfully submitted,

Fred E. Buck, State Engineer

FOREWORD

Page 1

There are a few places under "Foreword" that slight changes should be made. These suggested changes have been taken from the write-up for Sweet Grass County.

Paragraph 1. Leave it as it is without any changes.

Paragraph 2. In Montana the right to the use of water from a stream not adjudicated by the courts may be acquired in one of two ways. First, by posting a notice on the stream and filing a copy of same in the office of the County Clerk of the county wherein appropriation is located and then by proceeding to divert and use the water. Secondly, a person may divert and use water from a stream without posting or filing notice in which case 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.

Paragraph 3. 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. Furthermore, there is no relationship whatsoever between the amount of water filed on and the normal flow of the stream. To further complicate this matter there is no law of abandonment in Montana. Action must be brought in court to abandon a right which makes it almost impossible to prove abandonment if the defendant wishes to oppose the action.

Paragraph 4. 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 on a stream not adjudicated must make a search of the county records wherein the stream is

located in perhaps two, three, or more counties if the stream courses through them. About the only result (Copy the rest of the paragraph as it is.)

Paragraph 5. The pioneers who are able to offer direct testimony in adjudication suits are rapidly passing. (Copy next two sentences as they are through "State Engineer's Office."). At the time of this publication work has been completed and reports are available ^{for} of the following counties: Yellowstone, Carbon, Stillwater, Big Horn, Custer, Rosebud, Musselshell, Golden Valley, Wheatland, Meagher, Sweet Grass, and Park. ^{Treasure} A person having interests in lands located in any of the above-named counties may obtain a good idea of the sufficiency and priority of the water rights appurtenant to the land in question after studying the records.

Paragraph 6. Beginning "In this and succeeding volumes"
Leave this paragraph as it is.

Paragraph 7. In this paragraph change only the first sentence to read as follows: "The results of this work, in the counties affected, prove to be very valuable and necessary in negotiating the Yellowstone River Compact between the states of Wyoming, North Dakota, and Montana. Leave the rest of the paragraph as it is.

Paragraph 8. Leave it as it is.

Paragraph 9. In paragraph 9, change only the first sentence to read as follows: "In a strict sense a water right does not imply ownership of the water in the same way as ~~it~~ does a deed to a tract of land or a certificate of title to an automobile." (Leave the rest of the paragraph as it is.)

Paragraphs 10, 11, and 12 shall be left as they are.

Paragraph 13. Water rights refer also to uses other than those for irrigation. Thus the perfecting ^{ed} right to the use of water for mining, power,

fish hatcheries, bird refuges, recreational purposes, municipal needs, culinary supply and sewage disposal, manufacturing or navigation--all may become valid water rights.

Paragraph 14. Change the last sentence in this paragraph to read: "However, time has changed these conditions and it is now necessary to record the game killed and limit the fish catch in order to perpetuate game, and stock the streams. Likewise it is becoming more and more necessary to file a claim for ~~the~~ water appropriated from the streams and rivers for irrigation or other uses in order to protect the rights.

Paragraph 15. Change only the last sentence to read as follows: "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.

Paragraph 16 and 17 are to be left as they are.

For: "Water Supply"

Treasure and Park Co's

YELLOWSTONE RIVER BASIN

Yellowstone River at Billings, Montana

Location.- Water-stage recorder, lat. $45^{\circ}48'$, Long. $108^{\circ}28'$, in NE $\frac{1}{4}$ sec, T. 1 N., R. 26 E., at highway bridge, 1 mile northeast of Billings and 12 miles upstream from Bryor Creek.

Records Available.- May 1904 to December 1905, August 1928 to September 1950.

Average discharge.- 19 years (1928-29, 1930-32, 1934-50), 6496 sec.-ft.

Extremes.- Maximum discharge during year, 43,400 second-feet June 18 (gage height 10.18 feet); minimum daily discharge, 820 second-feet Jan 5, 6.

1904-5, 1928-50: Maximum discharge observed, 64,800 second-feet June 27, 1944 (gage height, 12.5 feet); minimum discharge, 430 second-feet Dec. 12, 1932.

Remarks.- Records good except those for periods of ice effect which are poor.

Many diversions above station.

Yellowstone River at Billings, Montana

Gage History

May 1904 to Dec. 1905 (Location and type of gage not known - no information available in this office.)

August 1928 to June 30 1932, wire-weight gage in N.E. $\frac{1}{4}$ sec. 34, T.1 N., R 26E, at bridge on Custer Battlefield Highway one mile east of Billings in Yellowstone county.

July 1, 1932 to Oct. 12, 1937, water-stage recorder at old irrigation ditch head-works about $1\frac{1}{2}$ miles above bridge and in N.E. $\frac{1}{4}$ Sec 2 T. 1 S, R 26 E. Cableway at site used for measurements.

Oct. 13, 1937 to Oct. 8, 1948, water-stage recorder on right bank in N.E. $\frac{1}{4}$ Sec. 34 T. 1 N, R 26 E. at highway bridge on Custer Battlefield Highway one mile east of Billings.

Oct. 9, 1948 to present time, water-stage recorder on left bank at same location but directly across the stream.

YELLOWSTONE RIVER BASIN

Bighorn River near Custer, Mont.

Location.- Water-Stage recorder, lat. $46^{\circ} 07'$, Long. $107^{\circ} 28'$, near center of Sec. 10, T. 4 N., R. 34 E., just downstream from Manning diversion dam, 3 miles upstream from Tullock Creek, 4 miles southeast of Custer, and $4\frac{1}{2}$ miles upstream from mouth.

Records available.- May 1945 to September 1950.

Extremes.- Maximum discharge during year, 14100 second-feet June 21; maximum gage height, 6.75 feet Feb 27 (backwater from ice); minimum discharge, 756 second-feet Dec. 13 (gage height, 0.89 feet).

1945-50: Maximum discharge, 26,200 second-feet June 24, 1947 (gage height, 8.79 feet) from rating curve extended above 12,500 second-feet by logarithmic plotting; maximum gage height recorded, 10.65 feet Mar. 20, 1947 (ice jam); minimum discharge that of Dec. 13, 1950.

Remarks.- Records good except those for periods of ice effect or of doubtful gage height which are poor. Many diversions above station for irrigation.

Average of 5 years 4350 cubic feet per second.

6-1950

YELLOWSTONE RIVER BASIN

Page 29

Yellowstone River near Livingston, Montana

Location.- Wire-weight gage, lat. $45^{\circ}36'$, long. $110^{\circ}34'$, in NW $\frac{1}{4}$ sec. 12, T. 3 S., R. 9 E., at highway bridge, 2 miles downstream from Suee Creek and 5 miles south of Livingston.

Drainage.- 3,580 square miles.

Records available.- May 1897 to December 1905, August 1928 to September 1932, March 1938 to September 1950.

Average discharge.- 20 years, 3622 second-feet.

Extremes.- Maximum discharge observed during year, 21,400 second-feet June 23 (gage height, 7.82 feet); minimum daily 650 second-feet Jan. 6-8.

1897-1905, 1928-1932, 1938-50: Maximum discharge observed, 30,600 second-feet June 20, 1943 (gage height, 9.34 feet); minimum daily, 590 second-feet Jan. 22, 1940 (backwater from ice.)

Remarks.- Records good except those for periods of ice effect, which are poor. Gage read twice daily. Many diversions above station.

G. W. B.

6-8-51

DISCONTINUED

YELLOWSTONE RIVER BASIN

Bear Creek at Jardine, Mont.

Page 45

Location.- Wire-weight gage, lat. 45°04'15", long. 110°37'45", in NW₄ NW₄ sec. 9, T. 9 S.,

R. 9 E., at Jardine, 3 miles upstream from mouth and 6 miles north of Gardiner, Mont.

Records available.- October 1946 to January 1949 (station discontinued).

Extremes.- Maximum discharge observed during period October 1948 to January 1949, 28

second-feet October 17; maximum gage-height observed, 3.89 feet Nov. 9 (backwater from ice); minimum daily discharge 2 second-feet, January 17-25.

1946-49: Maximum discharge observed, 500 second-feet June 19, 1947, May 26-29, June 2, 1948; maximum gage-height observed, 3.18 feet, June 19, 1947, June , 1948; minimum daily discharge, 6 second-feet Mar. 9-11, 1948.

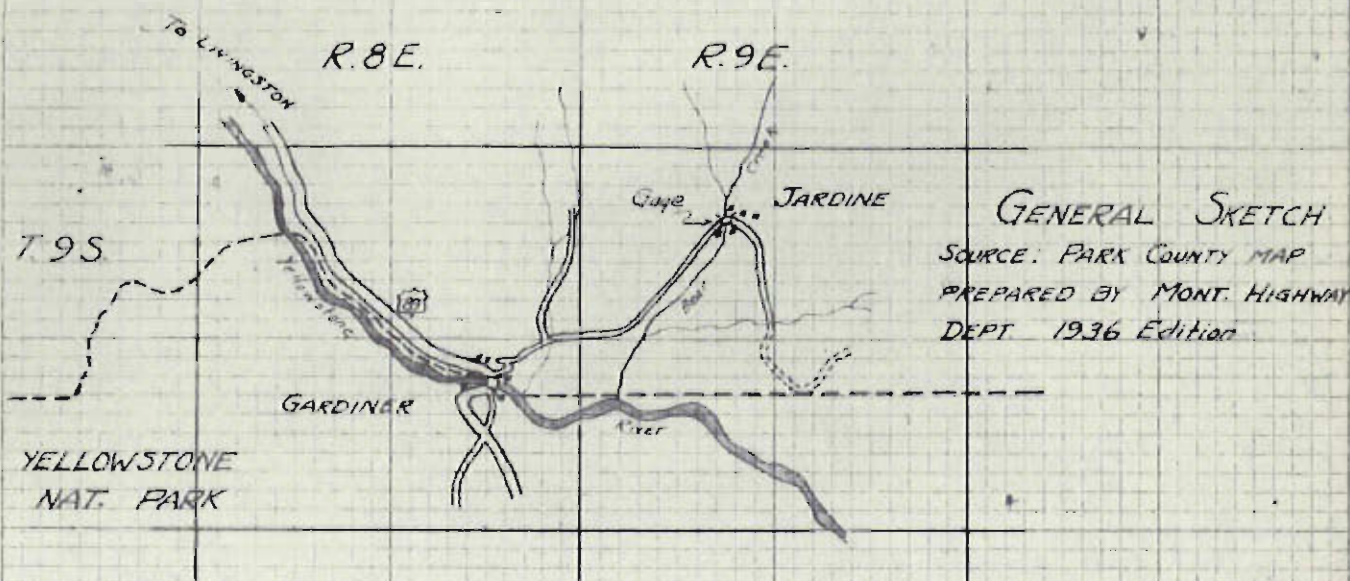
Remarks.- Records fair except those for periods of ice effect, which are poor. Gage read twice daily. No diversion or regulation above station.

Cooperation.- Gage-height records collected by Jardine Mining Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

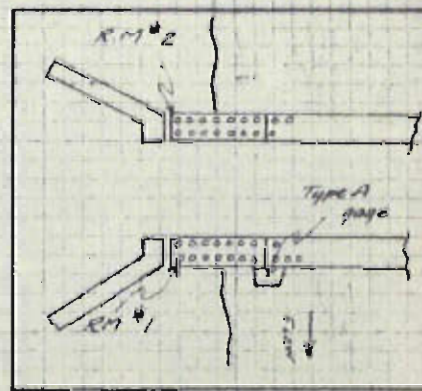
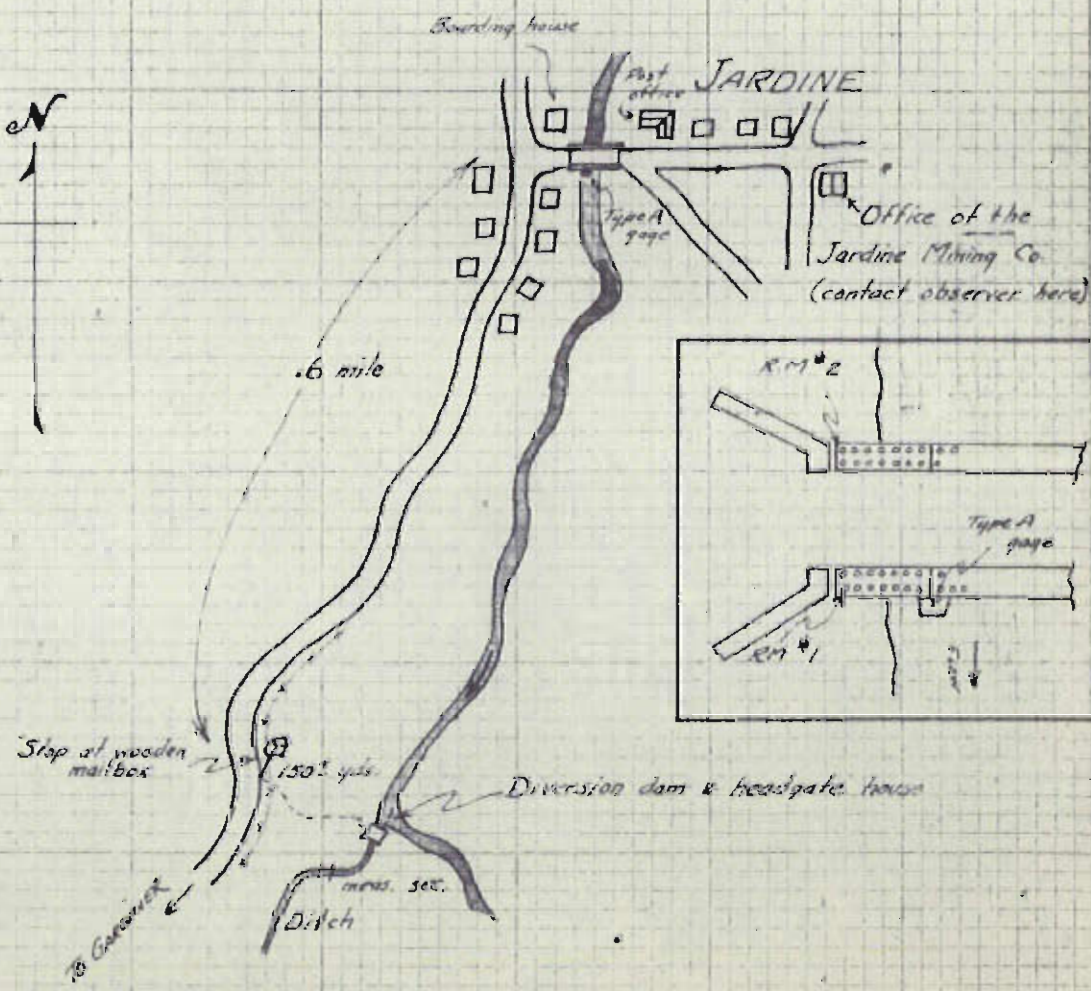
J. D. G.
G. W. B.
12-5-50

BEAR CREEK AT JARDINE, MONT. (Showing power ditch)

16-13594 GPO



DO NOT USE THIS SPACE EXCEPT FOR BINDING PURPOSES



Page 35

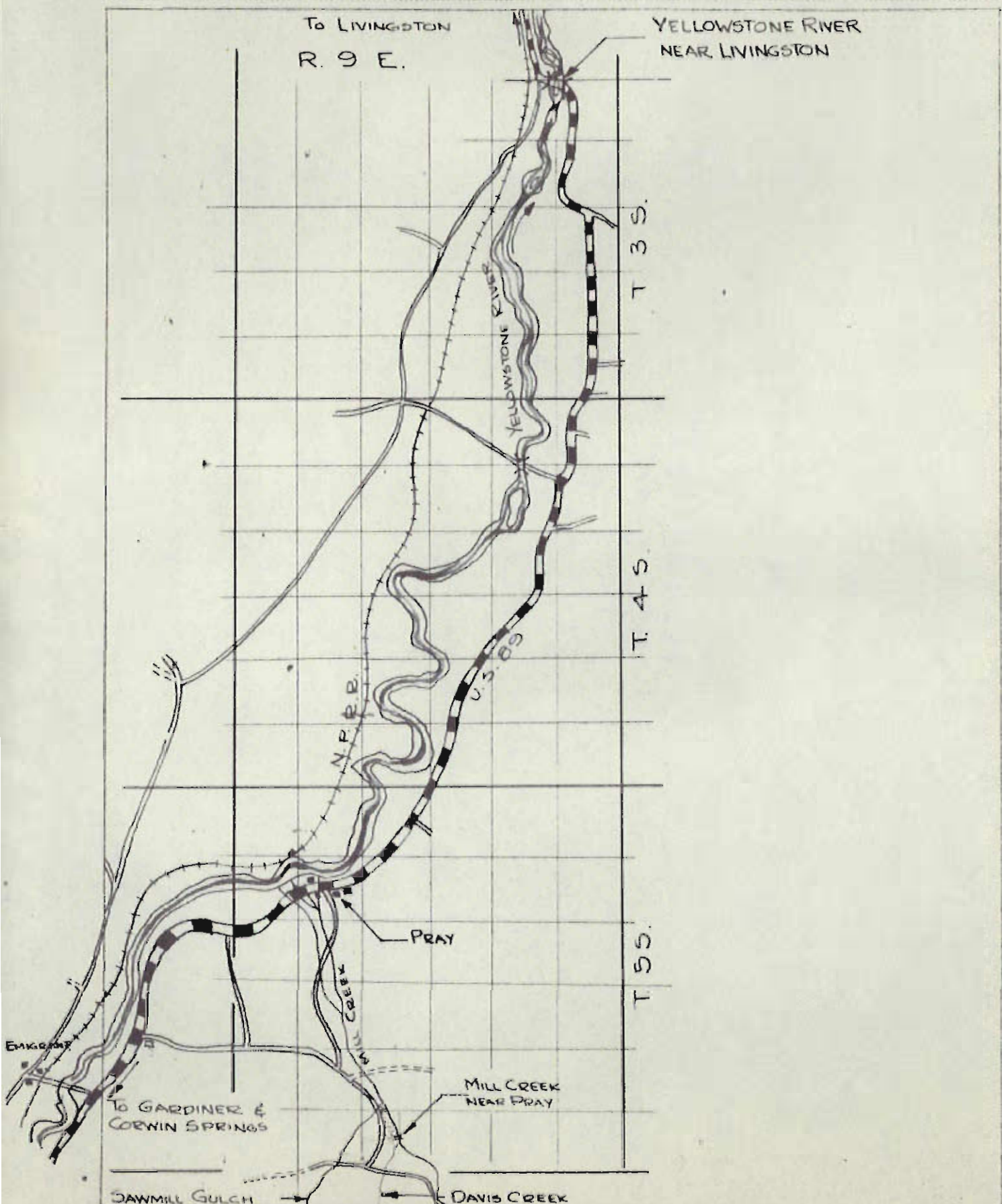
YELLOWSTONE RIVER BASIN
Mill Creek near Pray, Mont.
Established March 21, 1951

Location.- Staff gage, lat. $45^{\circ}21'$, long. $110^{\circ}37'$, in SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 33, T. 58. N. 9E. on farm bridge leading to ranch of Sandy Malcola, 1 $\frac{1}{2}$ miles SE of Pray.

Cooperation.- Montana State Water Conservation Board.

Remarks.- Two large and two small ^{SP}divisions above this gage. Record kept of diverted flow by water master.

MILL CREEK NEAR PRAY, MONT.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

File No. Washington
Field

Description Prepared 3-23-51
(Date)
by G. W. B.

Description of Gaging Station on Mill Creek Creek

Near Pray State of Montana

Prepare description in accordance with outline on back of Form 9-277. Plot cross section to scale. Use Form 9-213A for sketch and cross section. Initial and date all sheets.

Location.- Lat. $45^{\circ}21'$, long. $110^{\circ}37'$ in $SE\frac{1}{4}NW\frac{1}{4}$ section 33, T. 5 S., R. 9 E., $4\frac{1}{2}$ miles southeast of Pray, Mont., $4\frac{1}{2}$ miles upstream from confluence with Yellowstone River, and about $\frac{1}{2}$ mile below Davis Creek.

Established.- Gage established March 21, 1951, by G.W. Buswell, USGS.

Gage.- Staff gage on downstream side of farm bridge leading to the ranch of Sandy Malcolm. Gage consists of enameled sections from 0.0' to 6.70' mounted on 2"x6" anchored to left abutment.

Read Log.- Livingston (center of town) 0.0 miles; Yellowstone R. nr Livingston gage, 5.0; turn left at sign "Mill Cr road and Snowy Range Ranch", 19.8 miles; cross bridge on Mill Cr., 22.7 miles; turn left, 22.8 miles; school house, 24.0 miles; turn left down lane to observer's ranch and gage.

Observer.- Mr. Sandy Malcolm, who lives at ranch near gage. Reads gage twice daily. Pay \$5 per month.

Reference marks.- R.M. No. 1 - $\frac{3}{8}$ " lag screw 3' above ground in 12" cottonwood tree on left bank 48' downstream from bridge and 5' shoreward. (cont'd on next page).

Control.- Gravel and rock riffle about 40 feet below gage. At low stages there is a gravel bar which will split the flow over the control with the major portion of the water on the left bank. This gravel bar will drown out at higher stages and will probably be subject to considerable shifting.

Discharge measurements.- Made by wading in vicinity of gage during low water period. Higher stages can be measured from bridge with handline. Poor measuring conditions at low stages due to extreme rocky condition of stream bed. A better low water

..... section may be found some distance above or below the gage.

Floods.- 1948 high water was highest in period of ranchers memory. This high water washed out his farm bridge and probably rose to a stage of about 6.0' present gage datum.

Point of zero flow.- At about 0.0' gage datum.

Winter flow.- Seriously effected by ice upstream, but observer states that warm water from seepage generally keeps gage pool open.

Regulation.- Natural flow.

Diversions.- Two large and two small diversions above gage. Record kept of diversions by water master. Davis Creek does not empty into Mill Creek except possibly a very small amount during the spring.

Accuracy.- Should be fair. Roughness of stream-bed and probability of shifting control conditions will probably prevent record from being good.

Cooperation.- Montana State Water Conservation Board.

Sketch.- Prepared.

Photographs.-

Reference Marks cont'd.- Elevation 5.66 ft gage datum.

R.M. No. 2 - 3/8" lag screw 2' above ground in 2' forked cottonwood tree on left bank 106 ft. below bridge and 63' shoreward. Elevation 6.08 ft gage datum.

YELLOWSTONE RIVER BASIN

Page 11

Shields River at Clyde Park, Mont.

Location.- Wire-weight gage, lat. $45^{\circ}53'$, long. $110^{\circ}37'$, in NW $\frac{1}{4}$ sec. 33, T. 2 N., R. 9 E., at highway bridge, three-quarters of a mile west of Clyde Park and 2 miles upstream from Brackett Creek.

Drainage area.- 544 square miles.

Records available.- March 1921 to September 1933, April 1929 to December 1932, February 1934 to September 1950.

Average discharge.- 19 years (1929-32, 1934-1950), 116 second-feet.

Extremes.- Maximum discharge during year, 1,300 second-feet Apr. 2, from graph based on gage readings; maximum gage height observed, 4.69 feet Feb. 27 (backwater from ice); minimum observed, 20 second-feet Mar. 29.

1921-1923, 1929-1932, 1934-1950: Maximum discharge, 1,450 second-feet Mar. 29, 1943; maximum gage height observed, 7.39 feet June 5, 1918; minimum observed, 1.8 second-feet Aug. 29, 1935 (gage height, 0.72 foot).

Remarks.- Records fair except those for periods of ice effect, which are poor. Gage read once daily. Many diversions above station.

B. A. Anderson

7-51

6-1950

YELLOWSTONE RIVER BASIN

Page 14

Brackett Creek near Clyde Park, Mont.

Location.- Wire-weight gage, lat. $45^{\circ}52'$, long. $110^{\circ}40'$, near center of $82\frac{1}{2}$ sec. 1, T. 1 N., R. 3E., 4 miles southwest of Clyde Park and 1/2 mile upstream from mouth.

Records available.- April 1934 to September 1950. March 1921 to September 1923 at site three-quarters of a mile upstream.

Average discharge.- 10 years (1921-23, 1934-35, 1937-50) 27.9 second-feet.

Extremes.- Maximum discharge during year, 473 second-feet Apr. 1 (gage height, 3.70, from graph based on gage readings) from rating curve extended above 140 second-feet; minimum daily, 4 second-feet on several days.

1921-23, 1934-50: Maximum discharge, 1,400 second-feet May 22, 1942 (gage height, 4.9 feet, from floodmark) from rating curve extended above 330 second-feet; minimum observed, 0.6 second-foot Dec. 27, 1943 (gage height, 1.07 feet).

Remarks.- Records fair except those for periods of ice effect or no gage-height record, which are poor. Gage read once daily. Many small diversions above and below station.

B. A. Anderson

7-6-51

WILLOWSTONE RIVER BASIN

Shields River near Billings, Montana

Location - 1700-foot gage, lat. 46°09', long. 110°35', in SW 1/4 sec. 34, T. 5 N., R. 9 E., 11 miles northwest of Billings and 12 miles upstream from Placated Creek

Records available - May 1935 to September 1950

Average discharge - 15 years, 57.4 second-feet

Extremes - Maximum discharge observed during year, 577 second-feet June 18 (Gage height, 71.13 feet); minimum daily, 9 second-feet Jan. 17, 19

1935-50: Maximum discharge, 1,770 second-feet June 14 or 15, 1948 (Gage height

71.0 feet from Floodmark) from rating curve extended above 250 second-feet; minimum

daily, 2.3 second-feet Feb. 11-19, 1936

Remarks - Records fair except those for periods of low effect or no gage-height record,

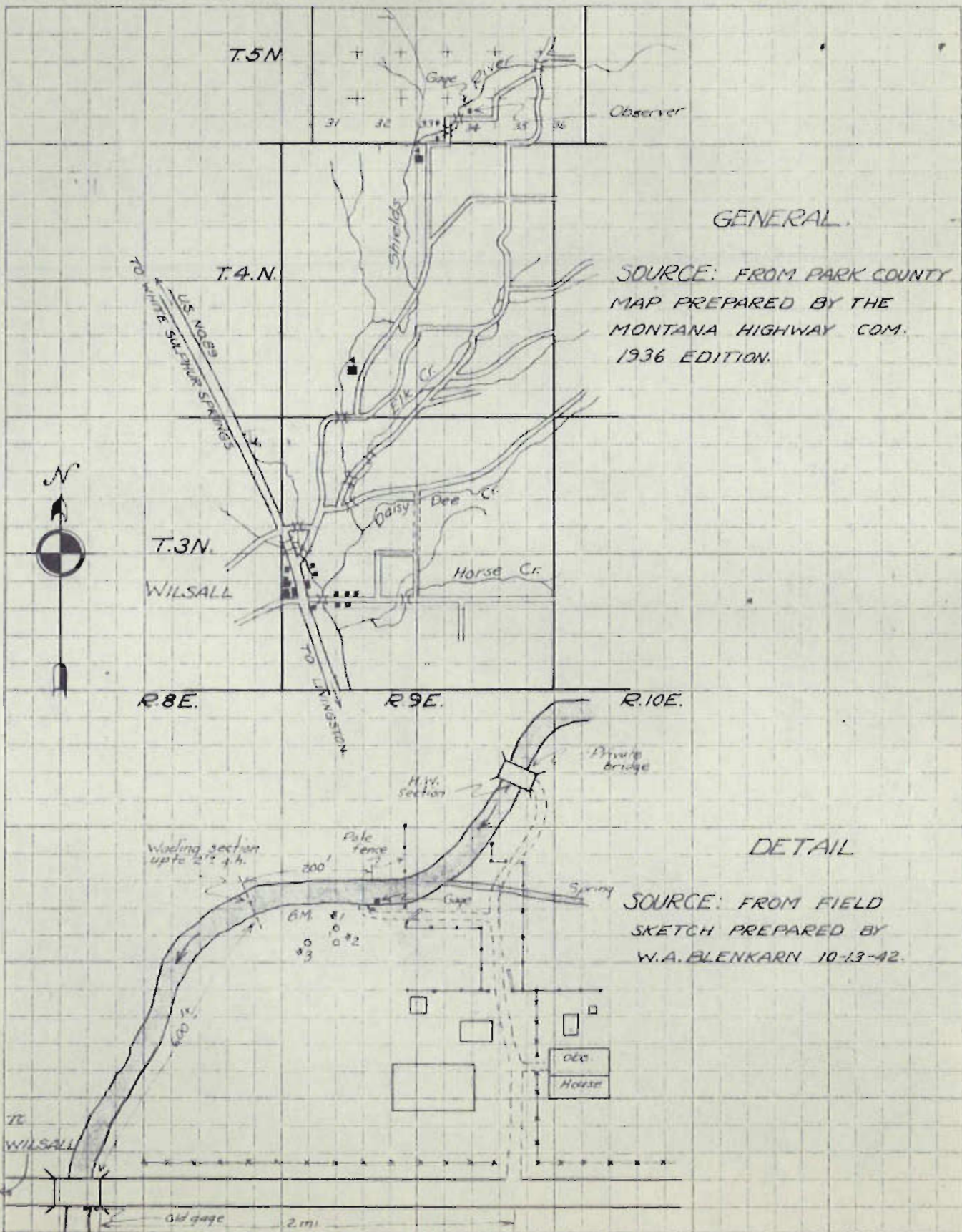
which are poor. Gage read once daily. Several small diversions above station for

irrigation.

B. A. Anderson
1-9-51

Page 2

SHIELDS RIVER NEAR WILSALL, MONT



~~XXXXXXXXXXXX~~
Hans L. Bille

P.O.Box 873

April 10, 1952

Mr. R. U. Harmon, Acting
Regional Forester
U. S. Forest Service
Federal Building
Missoula, Montana

Dear Mr. Harmon:

In reply to your letter of April 8th, we wish to advise that the requested information on Forest Service Activities in Park County has been received.

The write-up which we received for our Water Resources Survey report was very well written. We wish to thank you for your cooperation in this matter.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
NORTHERN REGION



ADDRESS REPLY TO
REGIONAL FORESTER
AND REFER TO

FEDERAL BUILDING
MISSOULA, MONTANA

M
COOPERATION - Gallatin
State of Montana

April 8, 1952

Mr. Hans L. Bille
Assistant State Engineer
P. O. Box 873
Billings, Montana

Dear Mr. Bille:

This is in reply to your letter of March 28, 1952.

We have checked with the Gallatin Forest and they report that the writeup of Forest Service Activities in Park County was forwarded to you within the last few days.

It is hoped that the lateness of our report did not cause you serious inconvenience.

Very sincerely yours,

P. D. HANSON, Regional Forester

By

A handwritten signature in cursive script, appearing to read 'P. D. Hanson'.

Acting

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
GALLATIN NATIONAL FOREST



ADDRESS REPLY TO
FOREST SUPERVISOR
AND REFER TO

BOZEMAN, MONTANA

M
COOPERATION
Gallatin
State of Montana

April 3, 1952

Mr. Hans L. Bille
Assistant State Engineer
State of Montana
Billings, Montana

Dear Mr. Bille:

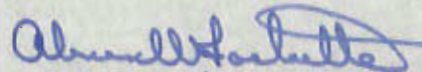
Enclosed is the write-up which you called about recently at the Forest Supervisor's office in Bozeman.

I trust the work of the Forest Service in Park County has been adequately covered in this paper. Perhaps it is too long in which case please feel at liberty to delete whatever is desired.

Very truly yours,

J.C. URQUHART, Forest Supervisor

By

 Acting

Enc. as above

XXXXXXXXXXXX

P.O. Box 873

March 28, 1952

Mr. R. U. Harmon
Acting Regional Forester
Federal Building
Missoula, Montana

Dear Mr. Harmon:

On January 22nd we wrote you requesting a write-up covering Forest Service work in Park County to be used for our Water Resources Survey report for that county. We have your reply of January 31st in which you stated you had written to the supervisor of the Gallatin National Forest asking him to prepare this write-up, and that when this had been received you would forward it to us.

To date we have not received this write-up and were wondering if we might be able to expect it within the next few days. Our Park County Water Resources Survey report is now ready for publication, so we would very much appreciate hearing from you as soon as possible.

Thanking you in advance for the above information, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
NORTHERN REGION



ADDRESS REPLY TO
REGIONAL FORESTER
AND REFER TO

FEDERAL BUILDING
MISSOULA, MONTANA

M
COOPERATION
State of Montana

January 31, 1952

Mr. Hans L. Bille
Assistant State Engineer
State of Montana
Billings, Montana

Dear Mr. Bille:

This is in reply to your letter of January 22 requesting a writeup covering Forest Service work in Park County.

It will be necessary for us to request the supervisor of the Gallatin National Forest to prepare this writeup which, when received, will be forwarded to you.

Very sincerely yours,

P. D. HANSON, Regional Forester

By

P. D. Hanson
Acting

XXXXXXXXXXXX
Hans L. Bille

January 22, 1952

Mr. R. V. Harmon
U. S. Forest Service
Missoula, Montana

Dear Mr. Harmon:

In our Water Resources Survey report for the counties we have completed it is necessary to include a write-up under "General Information About the County", on such subjects as Transportation, Climate, Soils, Crops, Livestock and Forests. These subjects involve many phases of work in order to gather the necessary data to make the information both complete and comprehensive. As you are familiar with the Forest Service work I would like to have you prepare a write-up on forests in Park County, Montana.

I am sending you a copy of our Sweet Grass County report that contains a similar report on the Gallatin National Forest. You will receive credit for any write-ups that you may be able to give us for our reports. If you cannot supply us with this information perhaps you can forward this letter to someone connected with the Forest Service in Park County. We will need these articles soon as we are preparing our Park County report for publication.

We are also sending you a map showing the counties which we have completed to date.

Thanking you for the above information, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab
enc.

OFFICE OF
County Clerk and Recorder

PARK COUNTY

HELEN ERICKSON, DEPUTY

F. C. BROOKING, CLERK

MARGARET MONICAL, DEPUTY

Livingston, Montana

March 12th, 1952

Mr. Hans L. Bille
Assistant State Engineer
Helena, Montana

Dear sir:

In answer to your inquiry as to when The State Water Conservation Board filed a declaration to store 50 cubic feet of the unappropriated waters of Flathead Creek.

This instrument was filed December 17th, 1948 at 1:10 o'clock P.M. as document # 47495 and is recorded in Book 25 Page 563 misc. records of Park County Montana.

Yours truly
F.C. Brooking
Clerk & Recorder

Box 873

XXXXXXXXXXXX
Hans L. Bille

March 24, 1952

Mr. George Fowle, Jr.
Deputy Field Agent
Department of State Lands & Investments
White Sulphur Springs, Montana

Dear Mr. Fowle:

We are sending you, under separate cover, a copy of our Water Resources Survey report and map book for Meagher County.

We are also enclosing a map showing the counties that have been completed to date. Park and Treasure counties will be available late this summer, so if these books will be of any help to you please advise this office.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

STATE BOARD OF
LAND COMMISSIONERS

JOHN W. BONNER
GOVERNOR

MARY M. GONDON
SUPT. OF PUBLIC INSTRUCTION

SAM W. MITCHELL
SECRETARY OF STATE

ARNOLD H. OLSEN
ATTORNEY GENERAL



W. P. PILGERAM
COMMISSIONER OF STATE LANDS
AND INVESTMENTS

J. B. BOURASSA
CHIEF FIELD AGENT

C. A. LINDBERG
CASHIER

State of Montana

DEPARTMENT OF STATE LANDS
AND INVESTMENTS

=HEEENA=

White Sulphur Springs, March 19, 1952.

H. L. Bille, Assistant State Engineer,
Box 873, Billings, M o n t a n a.

Dear Sir:

When calling at the AAA Office here today, talked with Mr. Sarter with reference to some State Lands I have been checking here in Meagher County. During our conversation he showed me some Water Resources Survey Maps, taken from Aerial photographs, and feel that they would be very helpful to me in my work, and right now I am interested in Meagher County.

Would appreciate it very much if you would kindly let me know what such a map would cost.

Very truly yours,

George Fowle Jr.
Deputy Field Agent.

~~XXXXXXXXXXXX~~
Hans L. Bille

March 24, 1952

Mr. Forest Keller, Foreman
Big Timber State Fish Hatchery Unit
Big Timber, Montana

Dear Mr. Keller:

We wish to take this opportunity to thank you for the information you recently sent us on the Emigrant hatchery. You will be given credit for this write-up in our Park County Water Resources Survey report.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

XXXXXXXXXXXX
Hans L. Bille

March 24, 1952

Mr. Walter M. Allen
Supt. of Fisheries
Department of Fish & Game
Helena, Montana

Dear Mr. Allen:

We wish to take this opportunity to thank you for the information you recently mailed to us on the Emigrant hatchery. We are also writing Mr. Keller thanking him for his cooperation in this matter.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLE/ab

XXXXXXXXXXXXXXXX
Hans L. Bille

February 28, 1952

Mr. James A. Keane
State Director
Farmers Home Administration
P. O. Box 350
Bozeman, Montana

Dear Mr. Keane:

On February 5, 1952 I wrote a letter to Mr. Carl Arthun for certain information on the water rights owned by the Shields Canal Company. The following is a list of the water rights that we found in the Park County courthouse as belonging to the Shields Canal Company:

Bought from Clyde F. Kirby:

60 inches of the 80 inch right decreed to Thomas Toston on 4-1-1887
All of the 60 inch right decreed to Thomas Toston on 5-15-1888
25 inches of the 50 inch right decreed to Thomas Toston on 5-1-1894
100 inches of the 200 inch right decreed to Thomas Toston on 1-1-1910

Bought from T. F. Lennemann:

All of the 150 inch right decreed to H.J.Staubach & Geo.H.Brown on 4-1-1891
All of the 250 inch right decreed to H.J.Staubach & Geo.H.Brown on 5-2-1902

This makes a total of 245 inches that the Shields Canal Company have acquired from Clyde F. Kirby, and 400 inches from T. F. Lennemann, or a total of 645 inches. I would like to know if you have any record of any other water rights owned by the Company when your investigation of the system was made to advance funds totalling approximately \$73,000.

The Shields Canal Company have issued 1450 shares of stock, which are equivalent to 1450 inches of water, and the decreed rights that we found for the Company only total 645 miner's inches. This would leave a balance of 805 shares of stock or 805 inches of water that we are unable to account for.

In your letter of February 11th you stated that 1300 acres are now being irrigated, and some additional acreage is being brought under the project at the present time. You also stated that approximately 2000 acres could be irrigated from the present system. Our survey, which was completed last summer, shows under present

irrigated acres, 869, irrigable acres under present facilities, 238, making a total maximum irrigable acreage of 1107. I believe this information will be of value to you because it would be impossible to irrigate any more land under the present system than what I have quoted to you. When our map books and report are published this summer for Park County you will be better able to determine the accuracy of the figures I quoted above. The acreage under the old Clyde Park Canal Ditch Company that is now dissolved and is used as a carrier for water from ~~the~~ Shields Canal Company has been included in the maximum figure of 1107 acres. I believe someone misinformed you as to the present acres irrigated under the system and potential acreage that can be irrigated.

Any information that you may be able to give us regarding the water rights will be greatly appreciated.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLE/ab

~~XXXXXXXXXXXX~~
Hans L. Bille

March 14, 1952

Mr. James A. Keane
State Director
Farmers Home Administration
P. O. Box 350
Bozeman, Montana

Dear Mr. Keane:

Under separate cover I am sending you a map with all the information we have concerning the amount of irrigable land under the Shields Canal in Park County. I would like to mention that the land indicated on the map with (SI) is sub-irrigated land and will not require any additional irrigation. Also, the areas marked as rolling hills (RH) are too rough for land leveling, although a sprinkler irrigation system may be adapted to parts of this land.

Thank you for the water right and other information you sent to me for the write-up of this Canal Company.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

conservation farm or
cooperating farmers
res. Plans have been
ers an area of 23,717

part of farmers and
one interested should
or Extension Service

ct has purchased a
eradication machine.
ers and ranchers in
m. camera was pur-
e idea of getting pic-
lishing conservation
es are to be used in
the district during

RT
51..... None
..... \$2,247.90
..... 1,292.28
1951..... 995.62

irman

B. Bohleen

liam D'Ewart

tary

the first Tuesday



Flood control dike on the Shields river at the Keyes Bros. ranch on the west side of U. S. Highway 89 four miles south of Clyde Park, Mont. This dike was constructed by the Corps of Army Engineers in cooperation with Shields Valley Soil Conservation District in 1950.

*Mr. Homer L. Bill
Assistant State Engineer
Billings, Montana*

1951 Annual Report
**Shields Valley
Soil Conservation
District**

PARK COUNTY, MONTANA

THE SHIELDS VALLEY Soil Conservation District was voted into existence by the land owners and tenants on April 30, 1949. The district includes all of Park County lying north of the mouth of the Shields River and that part of Gallatin County, lying east of the Bridger Range that drains into the Shields River.

Your Supervisors are entirely free and independent of the Federal Government in the administration of the district program. They have entered into certain memoranda of understandings with the U. S. Department of Agriculture that provides technical and equipment assistance to the district. At the present time the Soil Conservation Service is supplying the district with two technicians, office space and equipment, a pickup and a sedan delivery. These technicians also assist the local P.M.A. committee in establishing the permanent type practices for their program.

The basic soil and water conservation policy for the district adopted by your supervisors is as follows: "Use each acre of agricultural land within its capabilities and treat each acre of agricultural land in accordance with its needs for protection and improvement."

A stubble mulch tillage demonstration put on a year ago in cooperation with the implement dealers of Park County and the County Agent, stimulated considerable interest in this practice and as a result several farmers are trying this practice for the first time.



Mr. A. B. Bohleen has done a very good job with stubble mulch tillage. 1951 was the first year he has tried the practice in earnest. He is well satisfied with results obtained so far. The above picture shows one of his fields as it went into the winter last fall (1951). Inspecting the work from left to right are Clarence Walton, Lenix Badger, Fred Egeler, Roy Houser, Bill D'Ewart, Walter Hoffman, A. B. Bohleen and E. C. Coey.

Your Supervisors recognize the economy and effectiveness of a conservation program when an area is worked on a watershed basis. With this idea in mind all farmers and ranchers within the Flathead Creek drainage basin are going to be asked to cooperate with the district. The district technicians can work more effectively and the results of the district program can be evaluated much sooner, if this cooperation can be obtained. Your supervisors are going to try to get this demonstration started this year.

Two tours were conducted by the district in cooperation with the County Agent and U. S. Forest Service. The first was a range tour which included stops at the Woodring pit silo, a leafy spurge infested area on Rock Creek, dryland ranch problems on the A. B. Bohleen ranch, a demonstration of a sage bush control machine on the Charles Zimmerman ranch, and a demonstration on spraying range land for poisonous weed control on the Clarence Walton ranch. Dr. Welch from Montana State College gave a very informative talk on poisonous range plants at the Porcupine Creek Ranger Station. Sixty farmers and ranchers were on the tour.

Reporting on his first year experience with alfalfa ensilage Ralph Woodring has this to say about it: "When we started feeding our ensilage to eighteen dairy cows they increased production twelve gallons per day in three days. Production continued to increase for several days but at a reduced rate. During cold weather they did not drop in production as they usually have on dry feed. The cattle like the ensilage much better than any other kind of feed we have ever had. One acre of ensilage will go twice as far in feeding as one acre of dry hay. We figure it costs one-half as much to put up alfalfa ensilage as it does to bale the hay. We put up 150 tons in 1951 and we plan to put up 300 or more tons in 1952."

Mr. A. T. Ralston who also put up alfalfa ensilage in 1951 states: "A crop that makes very inferior hay may make good feed in the form of ensilage. The very best quality hay preserves only 80% of the food value while ensilage saves 85% of it." Mr. Ralston enumerates a few of the advantages of ensilage over dry hay as follows: "Ensilage increases the carrying capacity per acre of hay land, weather has no effect on quality of feed, ensilage provides better general health of livestock, cheaper to harvest and easier to feed than stacked hay."

A second tour of the district was made by the Supervisors, the County PMA Committee, the County Agent and technicians from the Soil Conservation Service. The purpose of the tour was to study the practices being applied by farmers and ranchers under the supervision of the district technicians. Inspections were made of Bill D'Ewart's irrigation dam, the Johnson dam, A. B. Bohleen's stubble mulch tillage demonstration, land leveling, irrigation pumping systems, and border dikes on Howard Bodine's ranch and the flood control dike at the Shields River bridge near Howard Bodine's ranch.

Your Supervisors sponsored an informal get-together at the Park Hotel for supervisors and their wives from Gallatin, Madison, Jefferson, Broadwater, Beaverhead and Park Counties. The meeting was attended by fifty-five people and the principal speaker for the occasion was James Vessey, Assistant Regional Forester from Missoula.

Howard Bodine, assisted by the Shields Valley Soil Conservation District and the Soil Conservation Service, installed a pump to lift irrigation water out of the Shields River at the site of a high-water headgate.



SOIL AND WATER

Stubble mulching
 Range improvement
 Pasture improvement
 Seeding of range
 Seeding of pasture (f)
 Farm and ranch ponds
 Farm drainage
 Irrigation land preparation
 Improved water application
 Proper stocking
 Deferred grazing
 Rotation grazing
 Weed and brush control
 Approved crop rotation
 Seeding permanent pasture
 Land clearing
 Streambanks erosion control
 Improved irrigation
 Improved irrigation structures
 Irrigation structures
 Supply and field distribution
 Irrigation dams
 Surface water irrigation

MEAGHER COUNTY

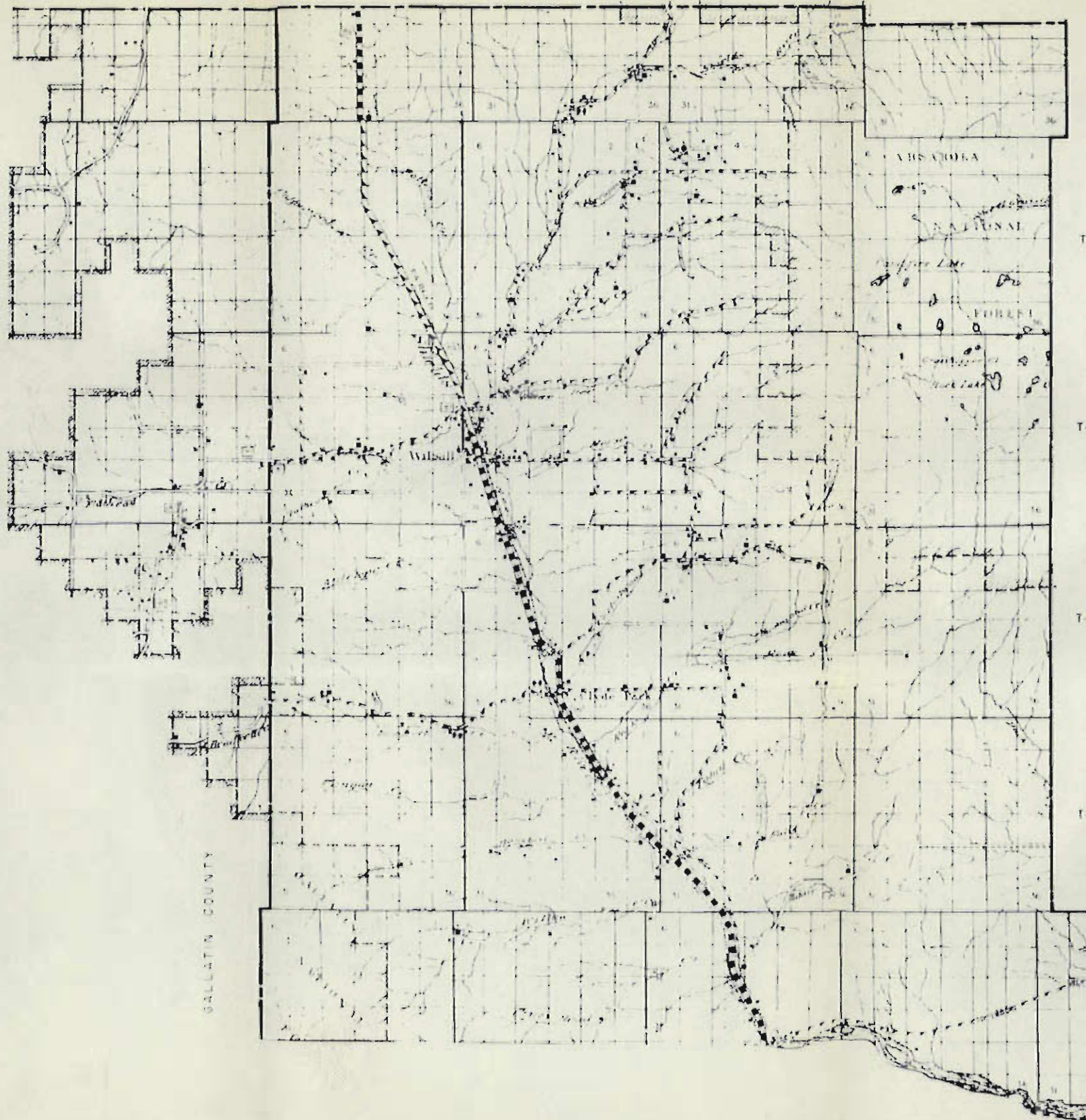
R-7E

R-8E

R-9E

R-10E

R-11E



VIBS AIOOLA

NATIONAL

FOREST

Wilson

Small Road

GALLATIN COUNTY

~~XXXXXXXXXXXX~~
Hans L. Bille

February 11, 1952

Mr. Truman C. Anderson
State Conservationist
Soil Conservation Service
P. O. Box 855
Bozeman, Montana

Dear Mr. Anderson:

We wish to take this opportunity to thank you for the pamphlet you sent us on Soil Conservation Districts. I am sure we will be able to get the information we want from this pamphlet.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

John D. Allen

February 11, 1942

Mr. Thomas G. Lamm
Federal Reserve Bank
1111 Pennsylvania Avenue
N.W.
Washington, D.C.

Dear Mr. Lamm:

We wish to take this opportunity to thank you for the information
on the investigation of the Federal Reserve Bank of New York
concerning the activities of the German agents in New York.

Very truly yours,

John D. Allen
Assistant Secretary

JDA:cb

XXXXXXXXXXXXX
Hans L. Bille

January 28, 1952

Mr. Truman C. Anderson
State Conservationist
Soil Conservation Service
P. O. Box 855
Bozeman, Montana

Dear Mr. Anderson:

I have your letter of January 25th and I will explain the type of material I would like to have for write-ups that would cover all counties in the State where the Soil Conservation Service are actively engaged.

This write-up in general should cover the following:

Why these districts are organized and what procedure is taken in organizing a district, who comprises the organization, and the type of work that is furnished by the Soil Conservation Service. This write-up that is prepared by you will be used in all of our reports.

I am writing E. C. Coey at Livingston and Sterle E. Dale at Hysham to get the specific information such as: When the District was organized, number of acres and number of farm operators, improvement or building of distribution systems, land levelling, drainage, etc. in irrigation development.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Post Office Box 855
Bozeman, Montana

January 25, 1952

Mr. Hans L. Bille
Assistant State Engineer
Billings, Montana

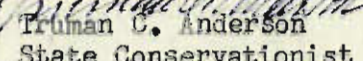
Dear Mr. Bille:

I have your letter of January 22, but I am at a loss regarding what sort of material you want in your Park County report.

In general I can say that the Shields Valley Soil Conservation District in that county comprises the area north of the Yellowstone River. The district was organized June 8, 1949 and comprises approximately three hundred and fifty-five operators, and covers 572,160 acres. The work in the district so far consists of irrigation development, such as improved use of the water through ditch improvement, land leveling, etc. As you know, there is also range and dry land farming in that section and some work is being done to improve dry land tillage methods and in better use of the range resources.

If there is something more specific that you wish regarding the district, I suggest that you write to our technician, E. C. Coey, at Livingston.

Very truly yours,


Truman C. Anderson
State Conservationist

*Contact
Mr. Long*



~~XXXXXXXXXXXX~~
Hans L. Bille

January 22, 1952

Mr. Truman Anderson, State Director
Soil Conservation Service
Bozeman, Montana

Dear Mr. Anderson:

In our Water Resources Survey report for the counties we have completed it is necessary to include a write-up on the Soil Conservation Districts. As you are familiar with these various districts I would like to have you prepare a write-up on this subject for Park County, Montana, and also a similar write-up for Treasure County, Montana. You will receive credit in our reports for any information you might wish to submit for the write-up.

As we are now preparing these reports for publication, we would appreciate receiving the above information as soon as possible.

Thanking you, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Post Office Box 855
Bozeman, Montana

February 5, 1952

Mr. Hans L. Bille
Assistant State Engineer
Billings, Montana


Dear Mr. Bille:

Perhaps the attached bulletin will give you a better synopsis of what soil conservation districts are and what they are doing than I could do in a letter.

There are now fifty-six soil conservation districts legally organized and twenty-three cooperative state grazing districts are also conducting conservation programs with technical assistance from the Soil Conservation Service. As you perhaps already know we attempt to obtain necessary inventories through various types of surveys by which we can determine the condition of the resources and recommended improvements on those resources. The Soil Conservation Service merely gives technical assistance and the farmers and ranchers have to pay for the actual conservation work themselves.

You will note that the attached bulletin is somewhat ancient and does not include all of the presently organized districts, but approximately 85% of the land area and about the same percentage of farms and ranches are now within conservation districts.

Very truly yours,


Truman C. Anderson
State Conservationist

attachment (1)



STATE OF MONTANA



DEPARTMENT OF

FISH AND GAME

Helena, Montana
February 14, 1952

Hans L. Bille
Assistant State Engineer
Billings, Montana

Dear Sir:

We have reviewed the report and writeup of the Big Timber Station as submitted by Forest Keller. We feel that this is very good coverage and are pleased with his efforts in this direction.

Mr. Keller is our Field Superintendent for the district which embraces the Emigrant hatchery. We are therefore asking him to write up the resume on the Emigrant fish hatchery and submit it to you for printing in the Park County Water Resources Report.

This next year we will have under our Dingell-Johnson Federal Aid Program a fishery biologist in this same district. He is Mr. Boyd Ophiem and he would appreciate copies of your water resources report for the following counties if they are available: Beaverhead, Madison, Gallatin, Broadwater, Park, Sweetgrass, Stillwater, Carbon, Meagher and Jefferson.

Kindly send what you have if this is agreeable with you to Mr. Boyd Ophiem, Montana Fish and Game Department, Helena, Montana. We have reviewed many of the county reports and they are extremely valuable in our work and we wish to compliment you on the fine job of assembling this knowledge for the use of those agencies engaged in related projects.

Yours very truly,

WALTER M. ALLEN
SUPT. OF FISHERIES

WA:mk

cc: George Miller
Forest Keller
Water Control Board, Helena

~~XXXXXXXXXX~~
Hans L. Bille

January 23, 1952

Mr. Walter Allen
Superintendent of Fisheries
Sam Mitchell Building
Helena, Montana

Dear Mr. Allen:

In our Water Resources Survey report for the counties we have completed it is necessary to include a write-up under "General Information About the County", on such subjects as Transportation, Climate, Soils, Crops, Livestock, Forests and any project that may be of interest. These subjects involve many phases of work in order to gather the necessary data to make the information both complete and comprehensive. As you are familiar with the work of the State Fish Hatchery in Park County, Montana, I would like to have you prepare a write-up on this subject.

I am sending you a copy of the Sweet Grass County report that contains a similar write-up on the Big Timber State Fish Hatchery Unit. You will receive credit for any write-ups in our report. We will need this information soon as we are preparing our Park County reports for publication.

Thanking you for the above information, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab
enc.

XXXXXXXXXXXXXXXXXXXX
Hans L. Bille

February 5, 1952

Mr. Carl Arthun, Secretary
Shields Canal Company
Shields Route
Livingston, Montana

Dear Mr. Arthun:

I would like to have some information on the water rights for the Shields Canal Company. Below is a list of the water rights that we have listed as belonging to the Shields Canal Company:

Bought from Clyde F. Kirby:

60 inches of the 80 inch right decreed to Thomas Toston on 4-1-1887
All of the 60 inch right decreed to Thomas Toston on 5-15-1888
25 inches of the 50 inch right decreed to Thomas Toston on 5-1-1894
100 inches of the 200 inch right decreed to Thomas Toston on 1-1-1910

Bought from T. F. Lennemann:

All of the 150 inch right decreed to H.J.Staubach & Geo. H. Brown on 4-1-1891
All of the 250 inch right decreed to H.J.Staubach & Geo. H. Brown on 5-2-1902

This makes a total of 245 inches that the Shields Canal Company have acquired from Clyde F. Kirby and 400 inches from T. F. Lennemann, or a total of 645 inches. Are these all the rights owned by the Shields Canal Company at the present time? If there are any other rights that belong to the Company will you please send me this information, stating whether they are decreed or appropriated rights, the name of the person to whom decreed or appropriated, the number of miner's inches and the date.

When our field men were classifying the land under the canal system this summer some person under the canal mentioned the name of Webb M. Brogan as having sold some rights to the Shields Canal Company; also, there was mentioned a filing on all unappropriated waters of Flathead Creek. We have no information at all on Brogan or the filing made on the unappropriated waters.

In the Shields Canal Company we have the number of stockholders, inches of water and shares listed as follows:

	<u>Inches</u>	<u>Shares</u>
Webb M. Brogan	100	100
Carl Arthun	160	160
Ed Carrell	50	50
Clyde Kirby	250	250
Pete Hetland	200	200
T. F. Lennemann	300	300
Shields River Park Ranch Co.	200	200
Jas. Pepper	40	40
Len & Darrel Arthun	<u>150</u>	<u>150</u>
	1450	1450

As you have issued 1450 shares of stock, which are equivalent to 1450 inches of water, and actually have deccred rights for 645 inches, this would leave a balance of 805 shares of stock, or 805 inches of water, that have been issued by the Company. Will you please advise where this 805 inches of water, which you have issued stock on, comes from.

We would appreciate receiving the above information as soon as possible and are enclosing a stamped, self-addressed envelope for your convenience.

Thanking you in advance for the above information, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab
enc.



STATE OF MONTANA

STATE WATER CONSERVATION BOARD

GOVERNOR JOHN W. BONNER, CHAIRMAN
O. S. WARDEN, VICE CHAIRMAN & SEC'Y
GREAT FALLS
C. H. RAYMOND, HAMILTON
FRED E. BUCK, HELENA
JOHN B. DAVID, VANALIA

R. H. FIFIELD, CHIEF ENGINEER
HELENA
R. J. KELLY, ASS'T SECRETARY
HELENA

HELENA, MONTANA

December 20, 1951

re.....

Mr. Hans L. Bille
Assistant Engineer
Billings, Montana

Dear Mr. Bille:

Beg to acknowledge receipt of your letter of December 6 with reference to certain information in connection with the Hysham Pumping Project. In answer to your question No. 1: would advise that as of November 24, 1951, the cost of the project is as follows:

- (a) Main canal system, pump plants, pumps and caretaker's house, \$387,199.67
- (b) Power line, transformers and voltage regulators \$ 39,372.75
- (c) Distribution laterals and waste ways \$ 55,744.91

Grand total: \$482,317.33

No. 2: The above mentioned funds were provided out of the appropriation made by the legislature for post war construction fund and no loan or grant was made or bonds issued.

No. 3: The contractor for the main canals and pumping plants was D. M. Manning. The contract was awarded March 11, 1948 and substantially completed on December 1, 1949. The contractor on the power line was Line Builders Inc. of Billings. The contract was awarded October 20, 1949 and accepted by the Board as complete on March 4, 1950.

No. 4: Under the terms of the water marketing contract between the Water Users' Association and the Board, the Association agreed to pay the Board an amount equivalent to \$1.75 per acre for contracts in effect in any one year with payments to continue for fifty years.

No. 5: The number of water purchase contracts presently outstanding is thirty-nine land owners and cover 4455 acres. The amount per acre is \$1.75 as above mentioned.

Mr. Hans L. Bille

-2-

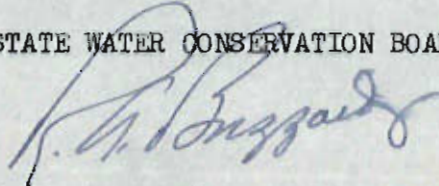
December 20, 1951

In connection with this I talked the matter over with Mr. Buck and it is his desire that your report contain no figures as to construction costs.

Trusting the foregoing gives you the desired information, I am

Very truly yours,

STATE WATER CONSERVATION BOARD



R. A. Buzzard
Supervisor of Projects

RAB/1



STATE OF MONTANA
HIGHWAY COMMISSION
HELENA

February 23, 1952

Mr. Hans L. Bille
Assistant State Engineer
Billings, Montana

Dear Mr. Bille:

Reference is made to your letter of February 20, 1952, requesting a copy of the Montana Federal Aid Road Log.

We wish to advise that the 1951 Log will be completed some time about the middle of March and a copy will be mailed to you at that time.

Very truly yours,

A handwritten signature in cursive script, appearing to read "W. E. Bawden", written over a horizontal line.

W. E. Bawden
Planning Survey Engineer

WEB:ned
HTB

~~XXXXXXXXXXXX~~
Hans L. Bille

February 20, 1952

Mr. W. E. Bowden
Planning Engineer
State Highway Planning Survey
Helena, Montana

Dear Mr. Bowden:

Will you please send us a copy of the newly revised Montana Federal Aid Road Log, for use in our office.

Thanking you in advance, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLE/ab

XXXXXXXXXXXX

March 10, 1952

Mr. Lenix Badger
County Extension Agent
Livingston, Montana

Dear Mr. Badger:

We wish to take this opportunity to thank you for the information you recently sent us on Crops and Livestock in Park County. This material will be used in our Water Resources Survey report for Park County and you will be given credit for same.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLE/ab

XXXXXXXXXXXX
Hans L. Bille

January 29, 1952

Mr. Lenix Badger
County Extension Agent
Livingston, Montana

Dear Mr. Badger:

I have a copy of a letter written you by Mr. N. E. Beers, Assistant Director of the Extension Service, asking for a report that would cover General Information About Park County and would include such subjects as Transportation, Climate, Soil, Crops and Livestock. I believe Mr. Beers misunderstood the meaning of my letter. What I would like to have is a write-up on Crops and another write-up on Livestock in Park County.

These two write-ups will include some detailed information as to the up-to-date figures on Crops and Livestock in the County.

You will be given credit for these write-ups in our report.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF MONTANA

ADDRESS REPLY TO:
EXTENSION SERVICE
BOZEMAN, MONTANA

January 28, 1952

Mr. Lenix Badger
County Extension Agent
Livingston, Montana

Dear Lenix:

Today I have a letter from Hans L. Bille, Assistant State Engineer, Billings, Montana, asking for information about Park County. What he would like is a brief statement entitled "General Information about Park County." Such subjects as transportation, climate, soils, crops, and livestock should be included.

I think you can do this without too much trouble, and I am sure it will be appreciated by Mr. Bille if it can be done within the next few days. Mr. Bille states that this does not have to be a detailed report, but one of general information.

Thanks for your cooperation.

Very truly yours,

N. E. Beers
Assistant Director

NEB:ct
cc to Hans L. Bille

MONTANA STATE COLLEGE
AND U. S. DEPARTMENT OF AGRICULTURE
COOPERATING

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF MONTANA

ADDRESS REPLY TO:
EXTENSION SERVICE
BOZEMAN, MONTANA

January 28, 1952

Mr. Hans L. Bille
Assistant State Engineer
Billings, Montana

Dear Mr. Bille:

I am writing a letter to Lenix Badger, our county agent in Livingston, asking him to prepare and send you general information about the county, with particular emphasis on crops and livestock.

We don't have a county agent in Treasure County, but I am writing to the county agent, Harley Roath at Forsyth, who does some work in Treasure County, asking if he can comply with your request.

Hoping you will receive these reports promptly, I am

Very truly yours,
N E Beers
N. E. Beers
Assistant Director

NEB:ct
Enc.

Second Letter

MONTANA STATE COLLEGE,
U. S. DEPARTMENT OF AGRICULTURE
PARK COUNTY COOPERATING

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF MONTANA

EXTENSION SERVICE
COUNTY AGENT WORK
LIVINGSTON, MONTANA

March 7, 1952

Mr. Hans L. Bille
Assistant State Engineer
Billings, Montana

Dear Mr. Bille:

Listed below is a summary of the basic agricultural facts of Park County. In addition to these facts I will make a few general remarks that might be helpful.

The predominate crops raised here in Park County are alfalfa and grass hay, wheat, oats, barley and seed peas.

The dairy products produced in the county are Grade A milk for bottling and distribution in Livingston and in the immediate area, and Class 2 milk which is used in the manufacture of ice-cream and also cream which goes into butter.

Poultry products here consist of broilers, eggs, baby chicks, and hatching eggs.

The forest products sold consist primarily of saw timber, fence posts, and corral posts.

Cattle and calves sold are primarily of the three major beef breeds in the following order; herefords, angus, and shorthorn. There are also approximately 3000 head of registered beef cattle here in Park County. This figure is made up from your three major breeds.

The swine population is relatively low with the majority being marketed through two local packing plants. Sheep and lamb numbers are at an all time low with a considerable number of sheep men now operating cattle. The sheep population in 1935 consisted of 135,000 head for the county. Practically all the horses and mules sold here are for slaughter.

Irrigated land consists of 55,460 acres with approximately 100,000 additional acres of crop land devoted to the raising of dry land grains.

Hans L. Bille

BASIC AGRICULTURE FACTS OF PARK COUNTY

Number of Farms	564
Land in Farms, acres	841,104
Average size of farm, acres	1,491.3
Value of land and buildings - average per farm	26,326
Irrigated land in farms, acres	55,460


POPULATION

Horses and Mules	3,643
Cattle and Calves	38,633
Hogs	1,629
Sheep	30,897
Poultry	27,952

AGRICULTURE INCOME

All crops sold (hay, wheat, oats, peas and barley)	\$1,192,101.00
Dairy products sold	224,438.00
Poultry and Poultry products sold	99,779.00
Forest products sold	35,448.00
Cattle and calves sold	2,364,796.00
Hogs and pigs sold	89,800.00
Sheep and lambs sold	509,967.00
Wool sold	242,967.00
Horses and Mules sold	<u>7,465.00</u>
<u>Total Agriculture Income</u>	\$4,766,761.00

Very truly yours,


Lenix Badger
County Extension Agent

LB:mw

~~XXXXXXXXXXXX~~
Hans L. Bille

March 10, 1952

Mr. Frank Brooking
Clerk & Recorder
Park County
Livingston, Montana

Dear Mr. Brooking:

Will you please advise me the day, month and year that the State Water Conservation Board filed a declaration of intention to store 50 cubic feet of the unappropriated waters of Flathead Creek. This declaration is on file in Volume 25, Page 563 of Miscellaneous Records in Park County, Montana.

Thanking you for the above information, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLE/ab



FRED E. BUCK, STATE ENGINEER
HANS L. BILLE, ASSISTANT

STATE OF MONTANA

STATE ENGINEER

SAM W. MITCHELL BUILDING

HELENA, MONTANA

February 1, 1952

Mr. Hans L. Bille
Assistant State Engineer
Box 873
Billings, Montana

Dear Hans:

Find enclosed Articles of Incorporation of the Livingston Ditch Water Users' Association as amended. I believe this completes all the information that you asked for in your letter of January 25. It might be well to proof-read the enclosed Articles with those on file in the County Clerk's Office. I was unable to find the original in this office and therefore I think it should be checked against the official records.

If there is anything further you wish in regard to getting out the next reports please advise.

With kindest personal wishes, I am

Very truly yours,

A handwritten signature in cursive script, appearing to read "Fred E. Buck".

STATE ENGINEER

XXXXXXXXXXXXX

February 5, 1952

Mr. Fred E. Buck
State Engineer
Sam W. Mitchell Building
Helena, Montana

Dear Mr. Buck:

I have received the information you sent for the Park Branch Canal and the Livingston Ditch.

Mr. Carl Owens reported for work Friday, February 1st. I have started him out checking some of the mapping work on Park County so that he will know what type of information we need when we start the field work.

I will need the Articles of Incorporation for the Livingston Ditch Water User's Association that you said you would mail to me within the next day or so.

I explained to you in my last letter about not including the decreed water rights in our report. I believe I explained some of the reasons why they should be left out--the main reason being that there are too many of these rights in the counties we are working in now to list even in the condensed form that we have been using. As some mention should be made of the water rights in the county I thought perhaps I would include a list of the streams that have decreed rights and a list of the streams having only appropriated rights. I would like your opinion regarding this matter.

We have completed the mapping plates for our report book in Park County and are now making a thorough check and making corrections of the errors found in drawing up these maps. We are also compiling the summary of irrigated land by river basins and planimentering the acreages for each individual farm unit in Park County. The write-ups for the report in Treasure County will be completed soon, and I am also working on the write-ups for Park County.

Considerable work is being done on the water rights and forms and pictures for Gallatin County so that this material will be ready when field work starts this spring.

I believe the reports and map books for Treasure and Park Counties will be completed on schedule so that they will be published and available at the end of this fiscal year. The written reports on these two counties will be submitted to you for your final approval.

I want to thank you for the write-ups and other data that you have contributed

for both Park and Treasure Counties.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLE/ab



FRED E. BUCK, STATE ENGINEER
HANS L. BILLE, ASSISTANT

STATE OF MONTANA

STATE ENGINEER

SAM W. MITCHELL BUILDING

HELENA, MONTANA

January 31, 1952

Mr. Hans L. Bille
Assistant State Engineer
Box 873
Billings, Montana

Dear Hans:

Complying with your request of the 25th, I am enclosing a transcript of the water rights for both the Park Branch Canal and the Livingston Ditch. These were taken from the agreement between the Board and the trustee bank.

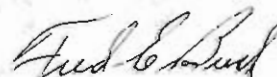
Also enclosed is a short story about the Shields Canal. I have attempted to give you the information but it is not written in very good language as I have dictated it and did not rewrite it.

You also ask for the Articles of Incorporation for the Livingston Ditch Water Users Association. I will dig that out in the next day or so and mail it to you.

There was also Articles of Incorporation filed for the Shields Canal Users Association which was filed with the Secretary of State October 8, 1948. I presume you have a copy of the same as you did not request it.

In our printed reports I do not believe it is necessary to include the sworn statement after the Articles of Incorporation of any water users association. As for example, look at page 28 of the Meagher County report, the statement just above the picture. And the same thing appears again at the bottom of page 32. By leaving these out we can save considerable space and they do not add anything to the report.

Very truly yours,


STATE ENGINEER

~~xxxxxxxxxxxx~~
Hans L. Bille

February 6, 1952

Mr. Orville Campbell
Clerk & Recorder
Hysham, Montana

Dear Mr. Campbell:

The Box Elder Irrigation District dissolved some twenty years ago and are now operating as a mutual ditch. Would you supply me with the date when the County took tax title to the lands under the Box Elder Irrigation District project?

I am enclosing a stamped self-addressed envelope for your convenience.

Thanking you in advance for the above information, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab
enc.

~~XXXXXXXXXX~~
Hans L. Bille

March 10, 1952

Mr. E. C. Coey
Work Unit Conservationist
Box 501
Livingston, Montana

Dear Mr. Coey:

In reply to your letter of March 5th, we wish to advise that we have received the requested information on the Shields Valley Soil Conservation District from Mr. Hughes.

We want to thank you for the pamphlet which you sent on the Shields Valley Soil Conservation District.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

UNITED STATES
DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Bop 501

Livingston Montana
January 31, 1952

Mr. Hans L. Bille
Assistant State Engineer
Billings, Montana

Dear Mr. Bille:

Mr. C. Max Hughes, District Conservationist, Soil Conservation Service, Three Forks Montana will answer your letter to me requesting a report on irrigation inventory and development for the Shoshone Valley Soil Conservation District of Park County. Our inventory of the irrigation potential is not completed and our development program has just started. Mr. Hughes has prepared one report on this subject for the district and I am sure he can give you the best information we have. When you are in Livingston feel free to stop in and examine our records.

Very truly yours
L. C. Coe W. N. C.

Earl C. Lewis
Box 501

Franklin Madison
March 5, 1952

Mr. Tom F. Bille
Assistant State Engineer
Bellingham, Washington

Dear Mr. Bille:

I had you receive Mr. Hugh's reply to your
letter of Jan 29? I checked through my file
this morning and I can not find an
acknowledgment from you that you had
received this information. In case you
did not I have a copy of it which we
can reproduce.

Also we have just had our annual
report printed and I thought you might
get something out of it you might use.

If there is any other information we have
that you think you could use please feel
free to make your request. We would
like to have you stop in at our office
in Bellingham when you are in town
Very truly yours
Earl C. Lewis
March 5, 1952

XXXXXXXXXXXXX
Hans L. Bille

January 28, 1952

Mr. Edward C. Coey
Work Unit Conservationist
Soil Conservation Service
Livingston, Montana

Dear Mr. Coey:

I was referred to you by Mr. Truman C. Anderson, State Conservationist, to have you prepare a write-up on the Soil Conservation District in Park County, which will be used in our Water Resources Survey report.

This write-up should include the name of the District, when the District was organized, number of farmers, area covered, and the work in the District such as: ditch improvement, land levelling, drainage, etc. If just a part of this work has been completed I would like to know what per cent has been done and how much there is left to be done. I am only interested in the activities of the District pertaining to irrigation development.

As we are now preparing our reports for publication we would appreciate receiving this information as soon as possible.

Thanking you, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

~~XXXXXXXXXX~~
Hans L. Bille

March 10, 1952

Mr. C. Max Hughes
District Conservationist
Box 408
Three Forks, Montana

Dear Mr. Hughes:

We wish to take this opportunity to thank you for the information you recently sent us on the Shields Valley Soil Conservation District. This material will be used in our Water Resources Survey report for Park County and you will be given credit for same.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Box 408
 Three Forks, Montana
 February 1, 1952

Mr. Hans L. Bille
 Assistant State Engineer
 Billings, Montana

Dear Mr. Bille:

Mr. Coey has referred your letter of January 28, to me for reply.

1. Name of District - Shields Valley Soil Conservation District.
2. Date Voted In - April 30, 1949.
3. Supervisors Organized: - October 21, 1949.
4. No. of Operators - 355
5. Area Covered - 572,162 acres. The district covers northern portion of Park County (See enclosed map.)
6. District work - The district has been in operation only two years so only a small portion of the total conservation work has been completed.

The following is a summary of the work to date and an estimate of the amount remaining to be done.

<u>Practice</u>	<u>Unit</u>	<u>Amt. Completed</u>	<u>Est. of Amt. to Be Done</u>
1. Stock Water Pond	No.	1 ✓	70
2. Drainage	Acres	38 ✓	2,000
	Cu Yds.	1,300	200,000
3. Land Leveling	Acres	41 ✓	3,500
4. Irrigation Structures	No.	9 ✓	500
5. New Or Improved Ditches	Miles	24 ✓	150
6. Storage Dams	No.	1	60
	Cu.Yds.	6,700	400,000
Irrigation Wells	No.	0	30
7. Irrigation Pumps	No.	1	35



I hope these figures will be of value to you. Our estimates are based on present information. As we work in the district we will become more familiar with the needs of the area. Construction work is also dependent upon the financial condition of the farmers and ranchers.

Very truly yours,

C. Max Hughes
C. MAX HUGHES
District Conservationist

~~XXXXXXXXXXXX~~
Hans L. Bille

February 11, 1952

Mr. Sterle E. Dale
Work Unit Conservationist
Soil Conservation Service
Hysham, Montana

Dear Mr. Dale:

We wish to take this opportunity to thank you for the write-up you recently sent us on the Treasure County Soil Conservation District. This material will be used in our Water Resources Survey report for Treasure County and you will be given credit for same.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

XXXXXXXXXXXX
Hans L. Bille

January 28, 1952

Mr. Sterle E. Dale
Work Unit Conservationist
Soil Conservation Service
Hysham, Montana

Dear Mr. Dale:

I was referred to you by Mr. Truman C. Anderson, State Conservationist, to have you prepare a write-up on the Soil Conservation District in Treasure County, which will be used in our Water Resources Survey report.

This write-up should include the name of the District, when the District was organized, number of farmers, area covered, and the work in the District such as: ditch improvement, land levelling, drainage, etc. If just a part of this work has been completed I would like to know what per cent has been done and how much there is left to be done. I am only interested in the activities of the District pertaining to irrigation development.

As we are now preparing our reports for publication we would appreciate receiving this information as soon as possible.

Thanking you, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Hysham, Montana
February 5, 1952

Mr. Hans L. Bille
Assistant State Engineer
Billings, Montana

Dear Mr. Bille:

I regret that being out of my office all last week prevented me from giving your request more prompt attention. However, attached is a brief write-up on Treasure County Soil Conservation District's activities in the field of irrigation and irrigation conservation. In the event that I have not handled this assignment with the desired result please feel free to return it if time permits and I will attempt to alter it in the desired manner.

Very truly yours,

Sterle E. Dale
Work Unit Conservationist
Soil Conservation Service



XXXXXXXXXXXXXXXXXXXX
Hans L. Bille

January 29, 1952

Mr. Clarence Engle
Hysham, Montana

Dear Mr. Engle:

To complete our report of Treasure County I am in need of some information on the history and present status of the Box Elder Irrigation District. Mr. Arne Myse, Secretary-Treasurer of the Box Elder Ditch, informed me they are now operating as a "Mutual Ditch", but was unable to tell when the change took place (date) or why the change was made.

I will appreciate receiving any information you might have that will clear up the status of this system.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

~~XXXXXXXXXXXXXXXXXXXX~~
Hans L. Bille

January 22, 1952

Mr. E. E. Fenton, Secretary
Yellowstone Irrigation District
Hysham, Montana

Dear Mr. Fenton:

The last time I was in Hysham I talked to you about certain construction and maintenance costs of the Yellowstone Irrigation District, and was wondering if you now have this information in your files as of December 31, 1951. If so, would you please advise us of the following so that we can complete our write-up for the Treasure County Water Resources Survey report.

The unpaid balance on the R.F.C. Loan as of December 31, 1951.

The amount the District had on hand in the bond and interest fund as of December 31, 1951, and also in the reserve fund for bond payments.

The amount in the operation and maintenance fund and the amount in the repair fund as of December 31, 1951.

We would also like to know the assessed acres in the Yellowstone Irrigation District in Treasure County and also in Rosebud County after the irrigable acreage was re-classified, and the year the re-classifying was completed.

Thanking you for this information, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

Grace Heath

Herb
H.S. Flatt.

1126 N 30th St

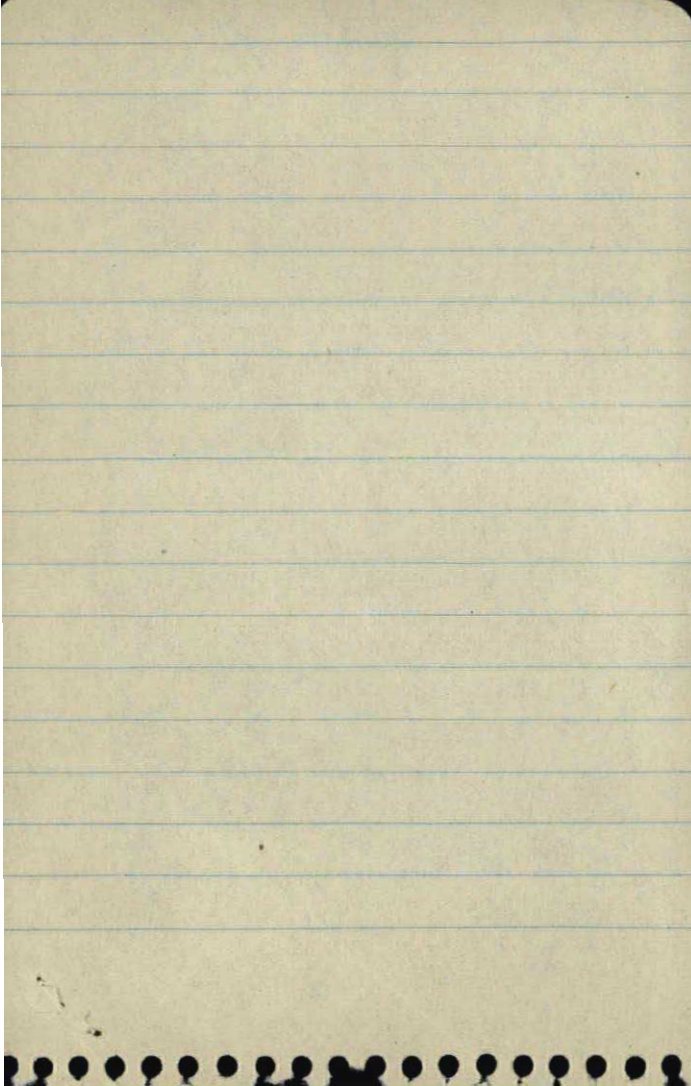
Box 311

owns Beartooth Ranch near
Red Lodge

on N 34th

1167 Menlo Drive

~~Altadena~~ Altadena, Calif.



~~XXXXXXXXXXXX~~
Hans L. Bille

February 6, 1952

Mr. H. S. Flatt
1167 Menlo Drive
Altadena, California

Dear Mr. Flatt:

Mr. E. J. McCormick of Hysham made reference to you as the person who would be able to supply me with some information on the history of the Box Elder Irrigation District.

Some of the information Mr. McCormick gave me was that the Box Elder Irrigation District came to an end some twenty years ago. Would you be able to verify this statement and give me the approximate date when the County took tax title to the lands under the District? Mr. McCormick also said that the Federal Land Bank had become a large owner, and that you and two or three remaining farmers helped the Land Bank work out a plan to purchase the Bonds and buy back the lands from the County.

The present status of the Box Elder Ditch Project is that they are now operating as a "Mutual" Ditch.

I will appreciate receiving any information you have on the date the District dissolved and the reorganization of the Project to its present status. Enclosed is a stamped, self-addressed envelope for your convenience.

Thanking you in advance for the above information, I am,

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab
enc,

~~XXXXXXXXXX~~
Hans L. Bille

March 10, 1952

Mr. L. F. Gieseke
Res. Prof. in chg. of
Soil Surveys
Montana State College
Bozeman, Montana

Dear Mr. Gieseke:

We wish to take this opportunity to thank you for the write-up on Soils which you recently sent us for Park and Treasure counties. This material will be used in our Water Resources Survey report for the above counties and you will be given credit for same.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

MONTANA STATE COLLEGE
AGRICULTURAL EXPERIMENT STATION
BOZEMAN

DEPARTMENT OF AGRONOMY
AND SOILS

February 19, 1952

Mr. Hans L. Bille
Assistant State Engineer
Old Roosevelt School Building
Billings, Montana

Dear Mr. Bille:

Enclosed find my write-up on the soils of Park County.

Yours very truly,



L. F. Gieseke
Res. Prof. in Chg. of
Soil Surveys

LFG:jw
Enc. 1

MONTANA STATE COLLEGE
AGRICULTURAL EXPERIMENT STATION
BOZEMAN

DEPARTMENT OF AGRONOMY
AND SOILS

February 13, 1952

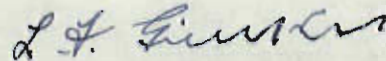
Mr. Hans Bille
Asst. State Engineer
Billings, Montana

Dear Mr. Bille:

Enclosed find my write-up on the soils of Treasure
County.

Park County write-up will appear in a few days.

Sincerely yours,



L. F. Gieseke
Res. Prof. in Chg. of
Soil Surveys

LFG:jw
Enc.

MONTANA STATE COLLEGE
AGRICULTURAL EXPERIMENT STATION
BOZEMAN

DEPARTMENT OF AGRONOMY
AND SOILS

February 4, 1952

Mr. Hans Bille
State Engineer
Billings, Montana

Dear Mr. Bille:

Last week I received your letter and report on the water
resources survey of Sweet Grass County.

Some time this week, I will prepare a soil report on Treasure
and Park Counties. I remain:

Very truly yours,

L. F. Gieseke

L. F. Gieseke
Res. Prof. in Chg. of
Soil Surveys

LFG:jw

XXXXXXXXXXXX
Hans L. Bille

January 22, 1952

Mr. L. F. Kieseker
Associate Agronomist
Montana Agricultural Experiment Station
Montana State College
Bozeman, Montana

Dear Mr. Kieseker:

In our Water Resources Survey report for the counties we have completed it is necessary to include a write-up under "General Information About the County", on such subjects as Transportation, Climate, Soils, Crops, Livestock and Forests. These subjects involve many phases of work in order to gather the necessary data to make the information both complete and comprehensive. As you are familiar with the soil studies I would like to have you prepare a write-up on this subject for Park County, Montana, and also a similar write-up for Treasure County, Montana. This does not have to be a detailed report as we are more interested in the general information.

I am sending you a copy of the Sweet Grass County report that contains a similar write-up on "Soils". You will receive credit for any write-ups in our reports. We will need these articles soon as we are preparing our Park County and Treasure County reports for publication.

Thanking you for the above information, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab
enc.

~~XXXXXXXXXXXX~~
Hans L. Bille

February 5, 1952

Mr. James A. Keane, State Director
Farm Homes Administration
Bozeman, Montana

Dear Mr. Keane:

I would like to have some information and details on the loan that was made to the Shields Canal Company in Park County. Although some of this information is confidential and will not be printed in our write-up for this Ditch Company in our report, I am unable to mention it in the write-up unless I know some of the facts like the amount, the date the loan was made, what it was to be used for, and any other information you would care to give me. I believe this money was used to pay for the construction work that the State Water Conservation Board had done on the canal, and perhaps part of it was used to pay for completing the canal system.

I would appreciate receiving the above information as soon as possible as we are working up the write-ups on the ditch companies for Park County. I am enclosing a stamped, self-addressed envelope for your convenience.

Thanking you in advance for the above information, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab
enc.

~~XXXXXXXXXXXX~~
Hans L. Bille

February 5, 1952

Mr. T. F. Lennemann:
Wilsall, Montana

Dear Mr. Lennemann:

I would like to have some information on the water rights for the Shields Canal Company. Below is a list of the water rights that we have listed as belonging to the Shields Canal Company:

Bought from Clyde F. Kirby:

60 inches of the 80 inch right decreed to Thomas Toston on 4-1-1887

All of the 60 inch right decreed to Thomas Toston on 5-15-1888

25 inches of the 50 inch right decreed to Thomas Toston on 5-1-1894

100 inches of the 200 inch right decreed to Thomas Toston on 1-1-1910

Bought from T. F. Lennemann:

All of the 150 inch right decreed to H.J. Staubach & Geo. H. Brown on 4-1-1891

All of the 250 inch right decreed to H.J. Staubach & Geo. H. Brown on 5-2-1902

This makes a total of 245 inches that the Shields Canal Company have acquired from Clyde F. Kirby and 400 inches from T. F. Lennemann, or a total of 645 inches. Are these all the rights owned by the Shields Canal Company at the present time? If there are any other rights that belong to the Company will you please send me this information, stating whether they are decreed or appropriated rights, the name of the person to whom decreed or appropriated, the number of miner's inches and the date.

When our field men were classifying the land under the canal system this summer some person under the canal mentioned the name of Webb M. Brogan as having sold some rights to the Shields Canal Company; also, there was mentioned a filing on all unappropriated waters of Flathead Creek. We have no information at all on Brogan or the filing made on the unappropriated waters.

In the Shields Canal Company we have the number of stockholders, inches of water and shares listed as follows:

	<u>Inches</u>	<u>Shares</u>
Webb M. Brogan	100	100
Carl Arthun	160	160
Ed Carrell	50	50
Clyde Kirby	250	250
Pete Hetland	200	200
T. F. Lennemann	300	300
Shields River Park Ranch Co.	200	200
Jas. Pepper	40	40
Len & Darrel Arthun	<u>150</u>	<u>150</u>
	1450	1450

As you have issued 1450 shares of stock, which are equivalent to 1450 inches of water, and actually have decreed rights for 645 inches, this would leave a balance of 805 shares of stock, or 805 inches of water, that have been issued by the Company. Will you please advise where this 805 inches of water, which you have issued stock on, comes from.

We would appreciate receiving the above information as soon as possible and are enclosing a stamped, self-addressed envelope for your convenience.

Thanking you in advance for the above information, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab
enc.



STATE OF MONTANA

STATE ENGINEER

FRED E. BUCK, STATE ENGINEER
~~GEORGE DRAVO~~, ASSISTANT
Hans L. Bille

BILLINGS, MONTANA

February 11, 1952

Mr. E. J. McCormick
Hysham, Montana

Dear Mr. McCormick:

We wish to take this opportunity to thank you for the information you sent us on the Box Elder Irrigation Company. We have been trying to contact Mr. Flatt in order to get any additional information that he might have.

Very truly yours,

Hans L. Bille

Hans L. Bille
Assistant State Engineer

HLB/ab

Mr H. S. Flatt will in Billings for a time, you may contact him at the Grand Hotel.

XXXXXXXXXXXX
Hans L. Bille

February 11, 1952

Mr. E. J. McCormick
Hysham, Montana

Dear Mr. McCormick:

We wish to take this opportunity to thank you for the information you sent us on the Box Elder Irrigation Company. We have been trying to contact Mr. Flatt in order to get any additional information that he might have.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLE/ab



STATE OF MONTANA

STATE ENGINEER

FRED E. BUCK, STATE ENGINEER
ASSISTANT
Hans L. Bille

BILLINGS, MONTANA

January 29, 1952

Mr. E. J. McCormick
Hysham, Montana

Dear Mr. McCormick:

To complete our report of Treasure County I am in need of some information on the history and present status of the Box Elder Irrigation District. Mr. Arne Myse, Secretary-Treasurer of the Box Elder Ditch, informed me they are now operating as a "Mutual Ditch", but was unable to tell when the change took place (date) or why the change was made.

I will appreciate receiving any information you might have that will clear up the status of this system.

Very truly yours,

Hans L. Bille

Hans L. Bille

Assistant State Engineer

J. O. Crandall

28
1929-
The ^{HSLB/ab} Box Elder Irrigation District came to an end some twenty years ago when the entire project went to tax deed. At that time the Federal Land Bank had become the large owner, soon after they worked out a plan and with the help of the two or three remaining farmers to purchase the bonds and buy the lands back from the county, they have sold their places and now the farmers contribute enough to employ a ditch man each season. Mr Ralph Sharp did before his death look after their funds, there are no officers but by working together and contributing much labor it has been kept working.

If you can contact Mr H. S. Flatt of Billings who was a land owner here at the time and helped the land bank to work it out he is the one that can give you the most information.

Yours very truly

~~XXXXXXXXXXXX~~
Hans L. Bille

January 29, 1952

Mr. E. J. McCormick
Hysham, Montana

Dear Mr. McCormick:

To complete our report of Treasure County I am in need of some information on the history and present status of the Box Elder Irrigation District. Mr. Arne Myse, Secretary-Treasurer of the Box Elder Ditch, informed me they are now operating as a "Mutual Ditch", but was unable to tell when the change took place (date) or why the change was made.

I will appreciate receiving any information you might have that will clear up the status of this system.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

~~XXXXXXXXXXXX~~
Hans L. Bille

February 11, 1952

Mr. Harley W. Roath
County Extension Agent
Forsyth, Montana

Dear Mr. Roath:

We wish to take this opportunity to thank you for the write-up you recently sent us on Crops and Livestock in Treasure County. This material will be used in our Water Resources Survey report and you will be given credit for same.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

~~XXXXXXXXXXXX~~
Hans L. Bille

January 29, 1952

Mr. Harley W. Roath
County Extension Agent
Forsyth, Montana

Dear Mr. Roath:

I have a copy of a letter written you by Mr. N. E. Beers, Assistant Director of the Extension Service, asking for a report that would cover General Information About Treasure County and would include such subjects as Transportation, Climate, Soil, Crops and Livestock. I believe Mr. Beers misunderstood the meaning of my letter. What I would like to have is a write-up on Crops and another write-up on Livestock in Treasure County.

These two write-ups will include some detailed information as to the up-to-date figures on Crops and Livestock in the County.

You will be given credit for these write-ups in our report.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

MONTANA STATE COLLEGE
AND U. S. DEPARTMENT OF AGRICULTURE
COOPERATING

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF MONTANA
January 28, 1952

ADDRESS REPLY TO:
EXTENSION SERVICE
BOZEMAN, MONTANA

Mr. Harley W. Roath
County Extension Agent
Forsyth, Montana

Dear Harley:

Mr. Hans L. Bille, Assistant State Engineer at Billings, has requested this office to secure some general information on Treasure County. Not having an agent in Treasure County, I am wondering if you are in a position to write the report. Your report would be entitled "General Information about Treasure County" and would include such subjects as transportation, climate, soils, crops, and livestock.

This would be a brief report of general information rather than a detailed report of great length. Mr. Bille states that he could use the report quite soon, so if you have the information, please write it and mail it direct to him at Billings.

Very truly yours,

N. E. Beers
Assistant Director

NEB:ct
cc to Hans L. Bille



UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

P. O. Box 1696
Helena, Montana

February 19, 1952

Mr. Hans Bille, Asst. State Engr.
Roosevelt School Building
Billings, Montana

Dear Mr. Bille:

Mr. Bekkedahl of our Billings office informs me you wish information regarding gaging stations operated in Park County. A station listing giving some details supplemented by enclosures and references is furnished. If you need further details, please inquire. The listing follows:

Yellowstone River near Horr, Mont. Aug. 1899-Oct. 1903.

Details on location and discharge given in W.S.P. 917 or Mont. Agr. Exp. Sta. Spec. Report No. 10, Part 2, Vol. I. From Livingston quadrangle map, it is presumed the station was in the NW $\frac{1}{4}$ sec. 5, T. 9 S., R. E.

Yellowstone River at Corwin Springs, Mont. Sept. 1910-

See W.S. Papers for location, drainage area. Average discharge 1910-50, 2,988 sec. ft. Extremes shown in W.S.P. 917 still hold.

Yellowstone River near Livingston, Mont. Mar. 1938-

Recording gage placed in operation Feb. 4, 1951, location unchanged. Print of manuscript description for 1950 enclosed.

Bear Creek at Jardine, Mont. Oct. 1946 to January 1949.

Prints of station sketch and manuscript description enclosed. Drainage area not determined. Average discharge in 1947, 73.6 second feet, in 1948, 60.0 second feet.

Gardiner River near Mammoth, Yellowstone National Park.

Operated by Boise, Idaho district on state line. See W.S.P. for location details and etc., or correspond with T. R. Newell, District Engineer, U. S. Geological Survey, 429 Federal Building, Boise, Idaho. Average discharge 1938-49, 198 second feet.

February 19, 1952

Mill Creek near Pray, Mont. Mar. 22, 1951-

Advance station description enclosed. Drainage area not determined. Records for period ending Sept. 1951, show a minimum discharge of 24 second feet late in March, and a maximum of 1160 second feet. The average discharge April to September 1951 is about 230 second feet. The short period of record available probably represents a fairly high level of flow.

Shields River near Wilsall, Mont. May 1935-

Print of station sketch and manuscript description enclosed.

Shields River near Clyde Park, Mont. , 1934-

Print of manuscript description enclosed. Recording gage at same site placed in operation Jan. 6, 1951.

Brackett Creek near Clyde Park, Mont. , 1934-

Print of manuscript description enclosed.

Canyon Creek near Chadbourn, Mont. Mar.-June, 1923.

In NW $\frac{1}{4}$ sec. 14, T. 1 N., R. 9 E., half a mile above mouth and 3 miles northwest of Chadbourn. Vertical staff gage on wing wall of highway bridge. Record very fragmentary for lack of gage readings. Published in W.S.P. 566.

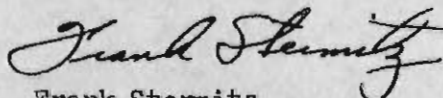
Bangtail Creek near Chadbourn, Mont. Mar.-June, 1923,

See W.S.P. 917 or Exp. Sta. Report above.

Willow Creek near Chadbourn, Mont. Mar.-June, 1923.

In SE $\frac{1}{4}$ sec. 36, T. 1 N., R. 9 E., on highway bridge $1\frac{1}{2}$ miles above mouth and 2 miles south of Chadbourn. Record fragmentary. Published in W.S.P. 566.

Very truly yours,



Frank Stermitz
District Engineer

Encl.

cc: E. H. Bekkedahl

XXXXXXXXXXXXX
Hans L. Bille

January 23, 1952

Mr. R. B. Tootell
Director of Extension Service
Montana State College
Bozeman, Montana

Dear Mr. Tootell:

In our Water Resources Survey report for the counties we have completed it is necessary to include a write-up under "General Information About the County", on such subjects as Transportation, Climate, Soils, Crops and Livestock. These subjects involve many phases of work in order to gather the necessary data to make the information both complete and comprehensive. We would greatly appreciate it if you would have the County Agents prepare a write-up on Crops and Livestock for Park County, Montana, and also a similar write-up for Treasure County, Montana. This does not have to be a detailed report as we are only interested in general information. All of the other reports published to date have similar write-ups. You will receive credit for these articles in our reports.

As we are now preparing these reports for publication, we would appreciate receiving the above information as soon as possible.

Thanking you, I am

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab

P. O. Box 873

~~XXXXXXXXXXXX~~

Hans L. Bille,

December 20, 1951

Mr. Ed Verhelst, Secretary
Big Horn Project, Inc.
Big Horn, Montana

Dear Mr. Verhelst:

To complete our report for the Big Horn-Tullock Project I am in need of some additional information concerning the water users on the project who are buying water from you. As secretary of the Big Horn Project, Inc. I am sure you will be able to answer the following questions and supply the needed information.

On the project, other than D. M. Manning and Guy L. Bradbrook, I have listed three other water users who buy water from the Big Horn-Tullock Water Users' Association. They are: Angelo Ponessa, Geo. and Emil Bogonovich and Steve Mauro. Is this a complete list of the water users buying water from your Association? If not, please list any other users.

What is the cost of water to these users per irrigated acre?

Do these water users pay an O & M or Debt & Service charge? If so, how much was paid for each item in 1951?

Also, I would like to know the size, capacity and type of pumps used on the project. One of these pumping units is being used by Angelo Ponessa and Emil and George Bogonovich. The other two pumping units are used on lands owned by the Big Horn Project, Inc. (Manning, Bradbrook and Verhelst).

Thanking you in advance for this information, I am

Very truly yours

Hans L. Bille
Assistant State Engineer

~~XXXXXXXXXXXX~~
Hans L. Bille

January 29, 1952

Mr. Ellis Williams
County Assessor
Hysham, Montana

Dear Mr. Williams:

To complete our report of Treasure County I am in need of some information on the history and present status of the Box Elder Irrigation District. Mr. Arne Myse, Secretary-Treasurer of the Box Elder Ditch, informed me they are now operating as a "Mutual Ditch", but was unable to tell when the change took place (date) or why the change was made.

I will appreciate receiving any information you might have that will clear up the status of this system.

Very truly yours,

Hans L. Bille
Assistant State Engineer

HLB/ab