

No. *U. S. 319-2*

**Office of State Engineer
DOCUMENT FILE**

*Dept. Agri. Resettlement Admin.
Jackson Co.*

Sec. 11, T. 2, S. R. 13 E

Priority: O. S. 25, 1937

44.50 acre ft. appropriated

Ray Brown

CERTIFICATE OF CONSTRUCTION OF WORKS

and

APPROPRIATION

U. S. Water Right No. 319-2

LM-31-1 Job No. 122-41
Name of Project

Mad River Water District

TO ALL WHOM IT MAY CONCERN:

This is to Certify, that the United States of America, Department of
Agriculture, Resettlement Administration, has complied with the
State Laws and has been issued a withdrawal No. US 319 bearing date of
October 25, 1937 withdrawing from further appropriation 44.50 acre-
feet per annum of water for storage; of the waters of Dry Draw in the
County of Jackson, State of South Dakota, at a point S. 39°45' E.
1010' from the NW Cor. Sec. 11, T.25., R.18E.

for stockwater purposes;
has fully complied with the provisions of the laws of the State of South
Dakota relating to completion of the works set out and described in
Section 61.0137, that said works are completed in accordance with infor-
mation filed in the office of the State Engineer, and 44.50 acre-feet
per year is thereby appropriated for the above purposes bearing date of
priority of October 25, 1937.

Witness my hand this 13th day of September 1939.

State Engineer.

Form A

CERTIFICATE OF WITHDRAWAL
of
WATER FOR APPROPRIATION
to the
UNITED STATES OF AMERICA
DEPARTMENT OF AGRICULTURE
RESETTLEMENT ADMINISTRATION

Withdrawal No. W 3 319

LD 30-1 Job No. 224-41
Name of Project

Water Division No. 2
Bad River Water District
Day Draw
Source of Appropriation-Stream

Jackson
County

The United States of America, Department of Agriculture, Resettlement Administration, having filed "Notice of Intention" to utilize certain heretofore unappropriated public waters of the State of South Dakota, in accordance with the requirements of the statutes of the State of South Dakota, such statutes and authority being contained in Section 61.0137 1939 Revised Code of South Dakota, now therefore;

This is to certify that there is hereby reserved, of the heretofore unappropriated waters of Bad River District, the annual amount of 44.50 acre-feet of water to maintain storage in No. 41 reservoir created by damming said stream at a point described as follows: S. 29 45'E 1010 feet distant from the NW Corner of Section 11, Township 28, Range 10E to the West. The purpose of such storage is for stock water (ord of dam

This is to certify that there is hereby reserved, of the heretofore unappropriated waters of _____ a maximum of _____ cubic feet per second to be diverted through the _____ ditch, canal or pipe line at a point located on the _____ bank _____ feet distant from the _____ Corner of Section _____ Township _____, Range _____ for the purpose of _____ during the months of _____.

This certificate and withdrawal shall in no manner prejudice, alter, amend or affect the rights of any prior appropriator or prior appropriation of water, nor of any application for appropriation pending on the date of this certificate, but the rights and privileges of any and all such prior appropriators or applicants for appropriation of water shall remain inviolate and intact, the same as if the within withdrawal had not been made.

This certificate shall be and is subject to cancellation in accordance with the provisions of the statutes hereinbefore referred to and under the authority of which this certificate is issued.

In accordance with the provisions of the statutes hereinbefore referred to, this certificate is executed at the State Capitol at Pierre, South Dakota, this 25th day of October 1937.

State Engineer

RA-7LU-28

DESCRIPTION OF EARTH IMPOUNDING DAM
RESERVOIR AND SPILLWAY DAM NO. 226

JOB NUMBER 226 - 41

Resettlement Administration
Lincoln, Nebraska

Region VII

Project South Dakota LD-SD-1
State Number

A. Location of Dam and Reservoir Tract 1074

NW $\frac{1}{4}$ of the Sec. 11; Township 2 S; Range 18 E;
of the Black Hills Meridian: County Jackson.

B. General Data

1. Area of drainage basin above dam: 0.5 sq. miles.

(Note: For areas greater than 5 sq. miles give size to nearest sq. mi.;
for areas smaller than 5 sq. miles give area to nearest tenth.)

2. Average annual precipitation on water shed in inches: 15.81

3. Give amount of rainfall in inches and duration of the heaviest downpour
that can be expected based upon reliable records or information of the
vicinity.

a. 5.18 inches.

R =

c =

b. 24 hours minutes.

S =

N =

c. U. S. Weather Bureau Records

Source of information.

4. Give description of water shed.

a. The slopes are sod-covered, ~~cultivated~~, ~~bare~~.

Clean grass slopes - 12'/1000' slope

(Note: Answer (a) by striking out words not needed. Only a general
description is wanted. If desired, a word or two may be given
in the space that is provided.)

b. Average length of drainage basin 1.0 miles.

c. Average width of drainage basin 0.5 miles.

5. Maximum run-off of drainage area at the damsite: 94.5
cu. ft. per second.

(over)

C. Description of Dam

1. Height above low point of valley at centerline of dam: 18.9 ft.
 2. Length along centerline at top of dam: 351.8 ft.
 3. Width of top: 10 ft.
 4. Upstream slope: 4 ft. horizontally to 1 ft. vertically.
 5. Downstream slope: 3 ft. horizontally to 1 ft. vertically.
 6. Volume in embankment: 9334 cu. yds.
 7. Distance above high-water line to top of dam: 5 ft.
 8. Distance above water surface to top of dam when spillway is discharging maximum run-off: 3.1 ft.
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-

D. Description of Spillway

1. Bottom width: 25 ft.
2. Slope of sides: 1 1/2 : 1 (Give ratio horizontal to vertical.)
3. Gradient of spillway ditch: 0.1 ft. per hundred ft.
4. Maximum ^{possible} discharge: 152.4 cu. ft. per second.
5. Depth of water in spillway at time of maximum discharge: 2.5 ft.

(Note: The surface of water in the spillway must be at least 30" below the top of the dam when the spillway is discharging the maximum run-off of the drainage basin.)

E. Description of Reservoir

1. Area when filled to level of spillway: 7.18 acres.
2. Area when half-full: 3.19 acres.
3. Area at depth of two feet: 0.16 acres.
4. Volume when filled to level of spillway: 44.50 acre-ft.
5. Volume when half-full: 8.45 acre-foot.
6. Volume at depth of two feet: 0.16 acre-foot.
7. Average depth when full: 6.95 feet.

(over)

The diagram illustrates a two-dimensional lattice structure. It consists of a grid of points. Arrows indicate interactions between nearest and next-nearest neighbors. The lattice constant is labeled 'a', and the distance between next-nearest neighbors is labeled 'b'.

—

whose post office is Rapid City , South Dakota, a citizen of the United States, above the age of 21 years, being in possession of the following described land in the name of the United States, to wit:

Tract 1074 NW 1/4
_____, Section 11, Township 2 S,
Range 18 E, B. H. M., in Jackson County, South Dakota.
Availing him self of the right granted him under the provisions of Chapter 2,
Article 1, Paragraph 8239 of the Revised Code of 1919, has located and claims the
right to construct a certain dam across a dry draw situated in the NW 1/4 of the
NW 1/4 of section 11, Township 2 S, range 18 E, B.H.M., for Live
Stock Purposes.

Said locator claims for the above purpose 1956420 cubic feet of water plus losses due to annual evaporation during the following described annual periods January 1st to December 31st, inclusive, each year.

Said location was made on the 14 th day of May, 1966.

Witness my hand and seal this 30th day of June, 1957.

Ross Macintosh,
Locator, Project Manager
Resettlement Administration,
U. S. Department of Agriculture

STATE OF SOUTH DAKOTA)
County of Pennington) ss

On the 30th day of June, 1957, before me _____

for the County and State aforesaid, personally appeared Oscar Hernstad a Notary Public in and

Project Manager to me personally known to be the person who executed the foregoing instrument and acknowledged that he executed the same for the use and purposes therein set forth.

Witness my hand and official seal the day and date above written.

F. S. Hawley
Rotary Club

My Commission Expires: July 10, 1939

RECEIVED (D)

OCT 25 1937

OFFICE OF STATE ENGINEER
PIERRE, S. DAK.

PETITION

TO DEAN W. LOUCKES
STATE ENGINEER
STATE OF SOUTH DAKOTA
PIERRE, SOUTH DAKOTA

Comes now Oscar Hermstad, Project Manager, Bad Lands - Fall River Land Adjustment Project, Resettlement Administration, U.S. Department of Agriculture, whose post office is Rapid City, South Dakota, a citizen of the United States, above the age of 21 years, being in possession of the following described land in the name of the United States, being desirous of obtaining a certificate from the State Engineer in accordance with Sec. 8239, Revised Code of the State of South Dakota, so petitions the State Engineer to wit:

In support of said petition, your affiant deposes and says:

(1) That notice of appropriation, copy of which is hereto annexed and made a part of this petition was posted under date of July 15, 1937, and recorded under date of September 7, 1937.

(2) That the dam referred to in said notice was completed under date of July 9, 1936.

(3) That said dam is 351.8 feet in length and 18.9 feet in height.

(4) That said dam is located upon the land described as follows:

NW¹ & NW² of Section 11, Twp 2 South, Rge 18 East,
BHM, Jackson County, South Dakota.

(5) That said land is to be used for Stock Water purposes.

Wherefore your affiant respectfully requests that a certificate be issued to him in accordance with the law in such case made and provided.

FOR HENRY A. V. I. E

SECRETARY USDA

Oscar Hermstad.

Subscribed and sworn to before me this 23rd day of Sept., 1937.

H. J. [Signature]
Notary Public

My commission expires: July 10, 1939.

RECEIVED

OCT 25 1937

OFFICE OF STATE ENGINEER
PIERRE, S. DAK.

SECRETARY BOARD

FOR HEALTHY

UNIT OF SECTION II

(1) This unit was to be organized by the time of the next meeting of the board.

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(20) The unit was to be organized by the time of the next meeting of the board.