

No. 902-3
 Water Division No. 3 BIG SIOUX RIVER District
 (Blanks to be filled by the Engineer for the W. R. C.)
VESTED RIGHT

WATER RESOURCES COMM.

APPLICATION FOR PERMIT

To Appropriate Water within the State of South Dakota

(NOTE—Draw a line through item, not applicable.)

1. Name of applicant South Dakota Department of Game, Fish and Parks
 Postoffice address Pierrre, County Hughes, State South Dakota

I If a corporation _____

(a) Name of same _____

(b) Date and place of incorporation _____

(c) Amount of capital stock _____

(d) Amount paid in _____

(e) Names and addresses of directors _____

(NOTE—A certified copy of articles of incorporation must accompany the application.)

II. Method of accomplishing the work and financial resources of the applicant:

(a) Method of accomplishing work (Whether by contract, employment of others, or by direct labor)

(b) Cash on hand, \$ _____ (c) Treasury stock, \$ _____

(d) Bonds to be issued, \$ _____ (e) Other resources, \$ _____

2. Name of diversion work OAK LAKE - Brookings, South Dakota
As required to fill lake to outlet level - approximately 1800 acre

3. Amount of water claimed feet per year _____ cubic feet per second _____

4. Source of water supply Dry Draw
One point in the watershed located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Sec. 1

5. Location of point of diversion T. 112 R. 48

_____ on _____ bank _____ County.

6. Annual period or periods during which water is to be used all year round

7. To be used for:

I. Irrigation or domestic use: Gravity, overhead sprinkling or combination system? _____

(a) Number of acres to be irrigated _____ acres.

(b) Legal subdivisions to be irrigated _____

(NOTE—A list of lands to be irrigated, giving each subdivision and fraction with acreage thereof, should be written here, or may be appended as a part of this application. Same must also be shown on accompanying map.)

(c) Statement as to domestic use (giving location, etc.) To the ordinary high water mark of
the inundated portion of Sec. 18, T. 112 R. 47 and Sec. 12 & 13 T. 112 R. 48

II. Stockwatering, mining, milling, power, fish culture, fire protection and public recreation:

(a) Nature of use Public recreational purposes
 Name any of the above uses claimed

(b) Amount of power to be generated _____ horse power.

Amount claimed for engine cooling _____

(c) Location of plant _____

(d) Method of developing power _____

(e) Point where water will be returned to stream _____

8. Estimated cost of work:

(a) Head Gates, \$----- (b) Pumping plant, \$-----
 (c) Fluming, \$----- (d) Canal-earth, \$----- Rock, \$-----
 (e) Other structures ----- \$----- Total, \$-----

9. Description of diversion works:

I. Nature of works: (Reservoir, dam, ditch, flume, pumping plant, etc.)

II. Dimensions of works. **Information requested not applicable. Oak Lake is a meandered lake. Maximum depth is approximately 7 feet.**

(a) Dam: Height ----- feet; length at bottom ----- feet; length at top ----- feet; thickness at bottom ----- feet; thickness at top ----- feet; slope at front water face -----; slope at back face ----- material used in construction -----
 (b) Reservoir: Capacity when filled ----- acre feet. Surface area at highwater mark **600** acres.

DEPTH AT OUTLET-FEET	SURFACE AREA AT EACH DEPTH AT OUTLET--ACRES	FEET	ACRE-FEET CAPACITY

(c)* Head gate: Width ----- feet; height ----- feet; Material -----
 (d) Canal: Total length ----- miles.

LOCATION BELOW HEADGATE	DEPTH	BOTTOM WIDTH	WIDTH AT WATER-LINE	GRADE PER MILE
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet

(Give dimensions where reductions in size are made.)

10. Time required for completion of work ----- years. **Not applicable - a meandered lake**
 11. Time required for complete application of water to the proposed beneficial use ----- years.
 12. Choice of newspaper for publication of notice of intention to appropriate -----

STATE OF SOUTH DAKOTA

County of **Hughes** ----- } 83.

I, **Walter J. Fillmore**, being first duly sworn on my oath depose and say: That my relation to the above described undertaking is that of owner, that I have read the above foregoing statement, examined the map accompanying the same, and that I know of my own personal knowledge that the matters therein stated and shown are true.

Signed *Walter J. Fillmore*

Subscribed and sworn to before me this *10* day of *October* 19*61*.

Edmund H. Phillips
 Notary Public (or other qualified officer.)

2	1
11	12

1	6
12	7

DEPARTMENT OF GAME, FISH & PARKS
STATE OFFICE BUILDING
PIERRE, SOUTH DAKOTA ✓

Oak Lake
Brookings Co.
12, 13 - 112 - 48
18 - 112 - 47

Scale 8" = 1 mile

John Popow
Jan. 21, 1955

Remarks by State Water Resources Commission:

"Vested right" claimed'

STATE OF SOUTH DAKOTA

County of

Hughes

ss.

Pierre, South Dakota,

December 28, 1962

This is to certify that the foregoing application was received by the Commission at 2:30 o'clock

p.m. upon the 20th day of October, 1961.

State Water Resources Commission

By:

Dustin Jones
for Chief Engineer, Executive Officer

Number of permit

902-3

Date of first receipt of application

October 20

1961

Date of return to applicant for correction, amendments or changes required as follows:

19

Date of receipt of corrected application

19

Date from which applicant may claim right

1889

19

Approved

December 28, 1962

Recorded in Book

7

Page

332-

This is to certify that we have examined the foregoing application for a permit to appropriate water of the State of South Dakota, and we hereby grant the same as stated herein, subject, however, to the following limitations and conditions:

1st. The equivalent of at least one-fifth of the work above specified is ~~to be~~ completed ~~on or before~~

19

2nd. The whole of said work is ~~to be~~ completed ~~on or before~~

19

3rd. The limit of time for proof of beneficial use of water appropriated in accordance herewith is

completed

19

4th. The water appropriated shall be used for the purpose of

public recreation

5th. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.

6th. The amount of the appropriation herein granted shall not exceed 1800 acre feet annually ~~cubic feet per second~~; neither shall it exceed the capacity of the above described system of diversion works, nor the least amount of water that experience may hereafter indicate as necessary for the production of crops in the exercise of the best husbandry; and further, said appropriation must be limited to not more than one-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually used for public recreation was

and beneficially ~~applied for irrigation~~ on or before

June 30, 55

said water to be used

during the following described annual period:

continuously

Witness my hand this

28th

day of

December

1962

State Water Resources Commission

By:

W. J. Jones

Chief Engineer, Executive Officer

Certificate of Construction Issued

December 28, 1962

Water License Issued

December 28, 1962

STATE OF SOUTH DAKOTA

WATER LICENSE No... 902-3....

WHEREAS, On the 20th day of October A. D. 1961

the Department of Game, Fish and Parks

of Pierre County of Hughes and State of
South Dakota duly made application (No. 902-3) to us for a Vested Right
annually of the waters of a dry draw
 County of Brookings, State of South Dakota, for public recreation
 purposes; and

WHEREAS, On the 28th day of December A. D. 1962
Vested Right recognizing
 Permit No. 902-3 was issued to said applicant... for the diversion of said water, ~~xxxxxx~~
 completion of the works of diversion therein described ~~xxxxxx~~
~~xxxxxx~~ and ~~xxxxxx~~ application to beneficial use of said
 water ~~xxxxxx~~ and,

WHEREAS, On the 20th day of October A. D. 1961
 the holder... of said permit duly made proof of the completion of adequate works for the diversion of 1,800 acre
feet annually ~~xxxxxx~~ of said waters, as evidenced by our Certificate No. 902-3
 dated December 28, 1962 confirming the completion of works of sufficient capacity for
 diverting and conveying to the place of intended use 1,800 acre feet annually
 priority of 1859 and,

WHEREAS, On the 20th day of October A. D. 1961
 proof was duly made of the application to beneficial use of 1,800 acre feet annually
 to be used in place for public recreation ~~xxxxxx~~ of said water;

NOW, THEREFORE, By the virtue of the authority vested in us by the laws of the State of South Dakota,
 We hereby grant and confirm to the Department of Game, Fish and Parks
 of Pierre Vested Right
 the holder and owner of said permit No. 902-3
 a water right, dating from 1889 to the use of 1,800 acre feet
annually
~~public recreation~~ of the waters of a dry draw
 In the County of Brookings and State of South Dakota, or so much thereof as may be
 necessary for the purposes hereinafter mentioned, to be diverted at a point in the SE 1/4 SW 1/4 Section 1,
T112N. R48W
 and ~~to be used for~~ stored in place
 for the purpose of public recreation

subject, however, to the laws of the State of South Dakota applicable to a license for the use of the waters of the State, and subject, also to the local or community customs, rules and regulations which have been or may be adopted from time to time by a majority of the users from a common source of supply, canal or lateral from which such water may be taken, when such rules and regulations have for their object the economical use of such water.

WITNESS, My hand and seal of our office at Pierre, South Dakota,
 this 23th day of December A. D. Nineteen
 Hundred and Sixty-Two

State Water Resources Commission

By:

J. W. GRIMES
 Chief Engineer, Executive Officer

STATE OF SOUTH DAKOTA

Water License No. _____

To _____

Source of Supply _____

County _____

Acres _____ c. f. s.

Point of Diversion _____

Place of Use _____

Purpose _____

Date of Permit _____

Recorded _____

In Book _____ of _____ Page _____

Permit No. 902-3Water Division No. 3 Big Sioux River Water District

Certificate of Completion of Works

TO ALL WHOM IT MAY CONCERN:

This is to Certify, That the Department of Game, Fish and Parks

of Pierre, County of Hughes, and State of South Dakota,
 the holder Vester Right of Permit No. 902-3, issued upon Application
 No. 902-3, bearing date of priority of 1989, authorizing the diversion of
1,800 acre feet annually ~~XXXXXX~~ of the waters of a dry draw

County of Brookings, State of South Dakota, at a point in the
SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 1, T112N, R48W

for public recreation
 purposes, has s fully complied with the provisions of the laws of the State of South Dakota relating to proof of
 completion of the works of diversion set out and described in said Permit; that said works are recognized as satisfactory

~~XXXXXX~~ condition for diverting and conveying to the place of intended use 1,800 acre feet annually ~~XXXXXX~~

~~XXXXXX~~ per second of water; and that the ~~XXXXXX~~ use of said water are described as follows,
 to-wit: to be used in place for public recreation

Witness my hand this 28th day of December A. D. 1962

State Water Resources Commission

By: J. W. ORIMES
 Chief Engineer, Executive Officer

Location No.

Water Division No. Water District

Proof of Application of Water to Beneficial Use

PETITION OF HOLDER

Ques. 1. State your name, residence, occupation and postoffice address.

Ans. South Dakota Department of Game, Fish and Parks, Pierre, South Dakota

Ques. 2. If acting in behalf of a corporation, state its name, principal place of business (if a foreign corporation, give name and postoffice of statutory agent,) your position with reference to same, and your authority for appearing in its behalf.

Ans.

Ques. 3. State date of posting and date of recording notice of appropriation.

Ans.

Ques. 4. State source of water supply and give exact location of point of diversion.

Ans. Dry Draw - One point in the watershed located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Sec. 1, T 112, R 48.

Ques. 5. Describe your works of diversion giving length and height of each dam, and state amount of water they are capable of conveying from point of diversion to place of use, and give name of canal or ditch or other works by which water is conducted to such place of use, and date of completion of same.

Ans. A meandered lake - depth 7 feet - 600 acres

Ques. 6. State for what purpose water is used and describe place of use. (If for irrigation, name each subdivision in which used, and number of acres in each subdivision that have ACTUALLY been irrigated with said water.)

Ans. Fish and wildlife propagation, conservation and recreation

Ques. 7. If for other than irrigation purpose, state how applied, amount of horse power generated, etc.

Ans. Used in place of lake or reservoir

Ques. 8. What is the minimum amount of water required for the use specified above?

Ans. As required to fill lake to outlet level - approximately 1800 acre feet per year

Ques. 9. If you are not the person or representative of the corporation to whom above mentioned permit was originally issued, please state how ownership was acquired by present holder.

Ans.

Ques. 10. State when, how, in what amount and to what extent, the water diverted under above mentioned permit has been used.

Ans. A meandered lake. Used by the public for uses specified except for that
amount lost by evaporation and seepage.

(Sign) W. J. McElmer

I hereby certify that the foregoing testimony was read to the above subscriber before its signing, that I believe him to be the person he represents himself to be, and that said testimony was subscribed and sworn to before me, at my office in XXXXX Pierre, County of Hughes

State of South Dakota, on this 30 day of October, A. D. 1961

Edna B. McElmer
} Witnesses. 11-6-65

I, the undersigned, do hereby certify that I am a duly qualified elector residing in the immediate vicinity of the diversion works designated in the foregoing testimony, that I have no interest in the works, water or land above described, that I have read the foregoing testimony and that I know of my own personal knowledge that the matters therein stated are true.

Location No. -----

**PROOF OF APPLICATION OF
WATER TO BENEFICIAL USE**

PLANTION OF HOLDER

Amount of Water ----- c. f. s.

Source -----

County -----

Purpose -----

Place of Use -----

Date of recording -----

Received and filed -----

Water Rights Division - DVNR
Conversation or File Documentation

File No. 902-3

NAME OF PERSON OR FILE: SD Dept of Game, Fish and Parks - Oak Lake

ADDRESS: _____ COUNTY _____

DATE: _____ TELEPHONE _____

RE: Ordinary High Water Mark Determination

COMMENTS:

April 14 & 15, 1983 - Water Management Board Minutes

Mr. Rylance MOVED, SECONDED by Mr. Harms that the Ordinary High Water Mark for
Oak Lake be established at an elevation of 1802.3 feet msl and that Vested Right
No. 902-3 be clarified to require the outlet structure for Oak Lake to be main-
tained at an elevation of 1801.8 feet msl. MOTION CARRIED.

For more information see the OHWM file.

File in Permit or other file as necessary. Use to document conversations and what the other party was told; why action or decision was made.

4/82

NAME: _____



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

September 21, 1988

Richard Beringson, Secretary
Department of Game, Fish and Parks
Anderson Building
445 E Capitol
Pierre SD 57501

Dear Mr. Beringson:

I am writing to notify you that pursuant to the Notice of Intent to Validate Vested Water Right Claims dated June 20, 1988 that I intend to oppose validation of all Department of Game, Fish and Parks Vested Water Right Claims for lakes for the following reasons:

1. Until the outlet elevation for each lake is surveyed and the outlet elevation is set by the Water Management Board.
2. To allow the Vested Water Right Claim to be amended, if necessary, as follows:
 - a) Include the outlet elevation;
 - b) To correct the amount of water claimed;
 - c) To add the qualification that a vested claim is subject where necessary to installation of a concrete outlet structure to assure retention of the outlet as the established elevation; and
 - d) To add any amendments and qualifications necessary to clarify a Vested Right Claim.

Also, that I intend to oppose validation of all Department of Game, Fish and Parks Vested Water Right Claims for dams to allow the Vested Water Right Claim to be amended, if necessary, as follows:

1. To include the spillway elevation;
2. To correct the amount of water claimed; and
3. To add any amendments and qualifications necessary to clarify a Vested Right Claim.

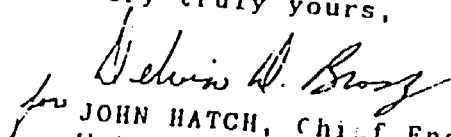


September 21, 1988
Richard Beringson, Secretary
Page 2

We will be working with your staff on these validations. We have already discussed setting outlet elevations before validating claims for lakes. Although the work necessary to complete the validation process will take several years to complete, the results should be of benefit to the public and to your Department. As the work is completed to validate each claim, the claim will be presented to the Water Management Board for validation.

Please advise if you have any questions.

Very truly yours,


for JOHN HATCH, Chief Engineer
Water Rights Division
605 773-3352

cc: Ron Koth, Department of Game, Fish and Parks

ORDINARY HIGH WATER MARK INVESTIGATION FOR

OAK LAKE



BROOKINGS
COUNTY

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OAK LAKE

ABSTRACT

This report contains the results of an investigation performed to determine the Ordinary High Water Mark (OHWM) for Oak Lake in Brookings County. The primary factors involved in calculating the OHWM were: Oak Lake's hydrological characteristics and elevations of erosion lines and trees found at the upper limit of its lake bed.

Based on the findings in this report, the OHWM for Oak Lake has been determined to have been established at an elevation of 1802.3 feet mean sea level (msl).

INTRODUCTION

Authority and Administrator

The Water Management Board is mandated by Law, SDCL 43-17-21, to establish the Ordinary High Water Mark on public lakes in South Dakota. The Board is to perform this in accordance with SDCL 43-17-1 thru 43-17-3; 43-17-20 thru 43-17-26, and Board Rules ARSD 74:02:03:11 and 74:02:03:12. This report contains the results of the investigation conducted by the Department of Water and Natural Resources, Water Rights Division to determine the elevation of the OHWM and outlet structure for Oak Lake.

Explanation of OHWM

The ordinary high water mark is coordinated with the upper limits of the bed of a lake. The determination of the OHWM is derived from the examination of the upper limits of the bed of the lake. This examination is conducted to ascertain where the continuous presence and action of the water has left a distinct mark; either by erosion, destruction of terrestrial vegetation, or some other easily recognized characteristic. In examining a lake for the determination of this level, it is necessary to consider the size, watershed, topography, soil and general characteristics of the lake (refer to Appendix A).

Date of Investigation

The principal field investigation for this report was conducted in October 1982. The examination of the shoreline, banks, and vegetation of Oak Lake was performed. The shoreline areas selected for study were those least affected by individuals.

INVESTIGATION

Location

Oak Lake is located in the northeast corner of Brookings County. It is within Sections 1, 12, and 13 of T112N, R48W and Sections 7 and 18 of T112N, R47W. (See Appendix A)

Lake Characteristics

Oak Lake is located on the eastern slopes of the Coteau des Prairie. The overflow water from Oak Lake flows to the northeast into Fish Lake in Deuel County then the east into Minnesota.

The Lake has a watershed area of 4,480 acres² and a surface area of 390 acres. Oak Lake receives its recharge water mainly from watershed runoff and limited aquifer connection. The lake has a maximum depth of 6 feet and a 4 foot average depth. It has a volume of 1,560 acre-feet (see Oak Lake Data Appendix A).

Elevation References

Elevations in this report are referenced to a United States Geological Survey bench mark. The bench mark is located at the intersection of Brookings County roads 29 and 44, Sections 17, 18, 19, and 20, T112N, R47W, 29 feet north and 37 feet west of the crossroads. It is a standard brass tablet set in a concrete post, 3 feet south of a power pole marked REA 37. The bench mark is stamped "6 DWB 1965 1873", set at an elevation of 1872.564 feet msl.

OHWM Indicators

A. Shoreline Trees

Trees, which are the largest and most permanent expression of upland growth, are used to determine a relationship between the growth characteristics of the trees at various elevations and the OHWM elevation. Records of ordinary high water levels are reflected in the well established trees growing along the upper limits of a lake's bed. Cottonwood, ash, and willow are the most predominant trees that grow along the shores of South Dakota's lakes. Experimentation and research have shown that most trees will not survive if water levels exceed one half to one tree diameter below the base elevation of the tree for more than 25% of the growing season. Consideration must be given to the characteristics of the soil, slope of the ground, and the effects of water and ice on the shoreline and bank.

B. Tree Categories

The trees along the shoreline of Oak Lake are divided into three categories:

1. The first category of trees are those where their lakeside base elevation (the elevation where the soil meets the trunk of the lakeside of the tree) is below the OHWM (see Appendix B). This is apparent in the erosion of the soil and the destruction and decay of the tree. The destruction and decay is caused by the zone of soil saturation

smothering part of the root system. These trees survive because part of their root system is above the zone of saturation.

2. The second category of trees are those where their lakeside base elevation is from zero to one half foot above the OHWM (see Appendix C). These trees show signs of butt swell and erosion. The root system is surfacely exposed and growing away from the lake.
3. The third category of trees are those with a lakeside base elevation approximately one foot above the OHWM (see Appendix D). These trees show lesser degrees of butt swell, little or no root erosion, and some surface roots.

C. Erosion Marks

Erosion marks were found between elevations of 1802.1 and 1802.6 feet msl. Between these elevations there was an apparent change in the soil characteristics and types of vegetation. Examples of changes in vegetation types and the slope of the shoreline and bank can be seen in Appendix E.

Outlet Structures

The outlet channel is located on the east shoreline in the center of Section 12, T112N, R48W. There is no permanent structure in the channel. The highest point in the channel is 1801.8 feet msl (see Appendix F).

Water Level

There are no water level records available for Oak Lake. At the time of the investigation the water level was 1801.7 feet msl.

Water Rights

There has been a "Vested" Water Right issued relating to the Waters of Oak Lake. The Vested Water Right No. 902-3 was issued to the Department of Game, Fish and Parks. This Vested Right has a priority date of 1889. It allows for the annual recharge of 1,800 acre-feet of water or as required to fill to the lake to outlet level. This is to replace the annual evaporation.

CONCLUSIONS

Based on the study of Oak Lake's hydrological characteristics and elevations of erosion lines and trees found at the upper limits of its lake bed, the Ordinary High Water Mark has been determined to be at an elevation of 1802.3 feet msl.

The present OHWM indicates that the outlet structure has been maintained at an elevation of 1801.8 feet msl.

RECOMMENDATIONS

The Water Rights Division recommends to the Water Management Board:

1. That the Ordinary High Water Mark for Oak Lake be established at an elevation of 1802.3 feet msl.
2. That Vested Right No. 902-3 be clarified to allow the water level at Oak Lake to be maintained at an elevation no higher than 1801.8 feet msl.

Jerry E. Steffen, Natural Resources Engineer
Water Rights Division
Department of Water and Natural Resources

For information regarding OHWM bench marks established at Oak Lake, contact the Department of Water and Natural Resources, Water Rights Division, Pierre, South Dakota 57501.

APPENDICES

Appendix A.....	Oak Lake Data County Map Topographic Map Bathymetric Map
Appendix B.....	Trees Growing Below the OHWM
Appendix C	Trees Growing At The OHWM
Appendix D.....	Trees Growing Above The OHWM
Appendix E.....	Erosion Marks
Appendix F.....	Outlet Structure

Appendix A

Lake Campbell Data

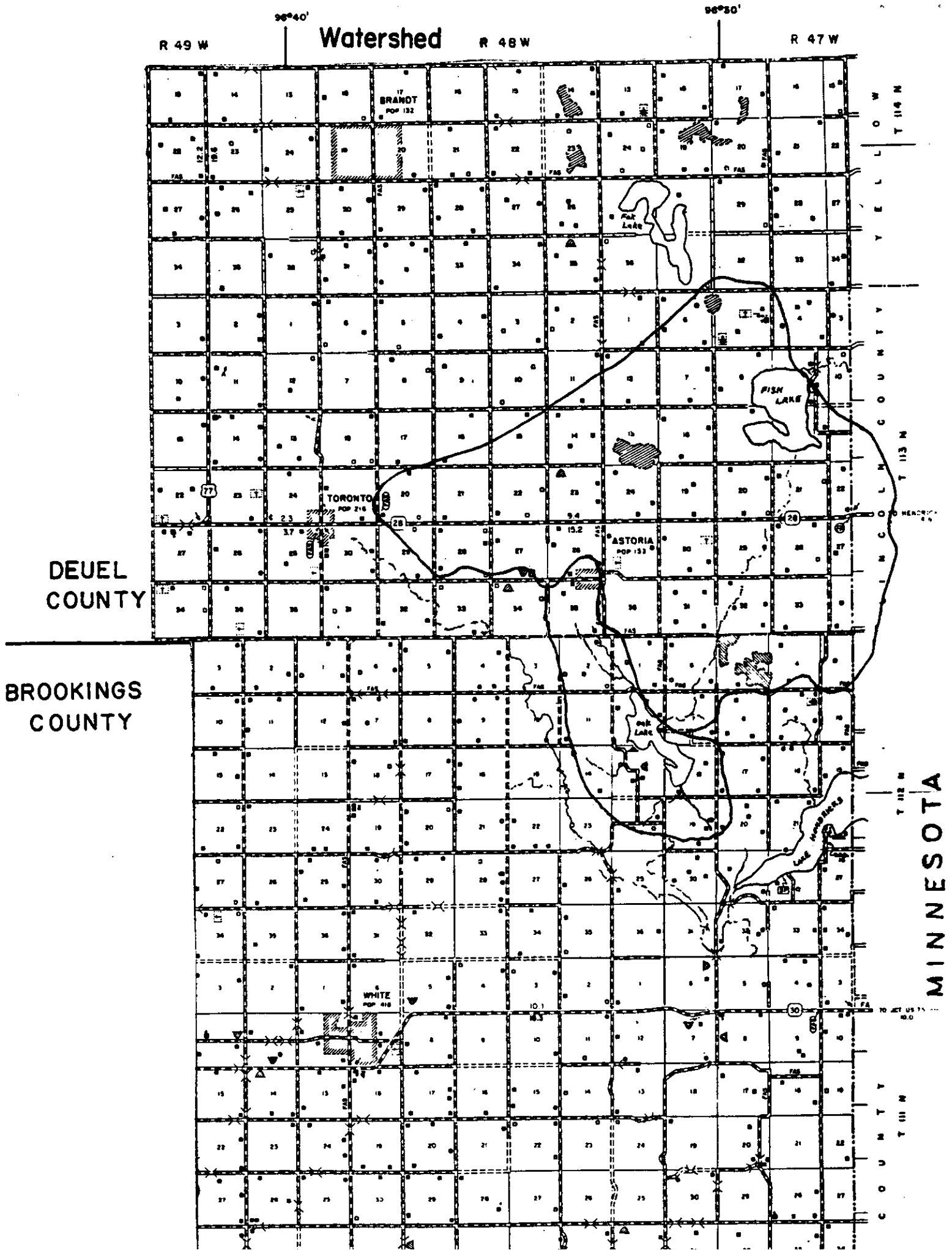
Surface Area.....	390 acres ²
Watershed Area.....	4,480 acres ²
Maximum Depth.....	6 feet
Mean Depth.....	4 feet
Volume.....	1,560 acre feet
Aquifer Connection.....	Limited ²
Outlet Elevation.....	1801.8 feet msl
OHWM Elevation.....	1802.3 feet msl
Water Right.....	No. 902-3

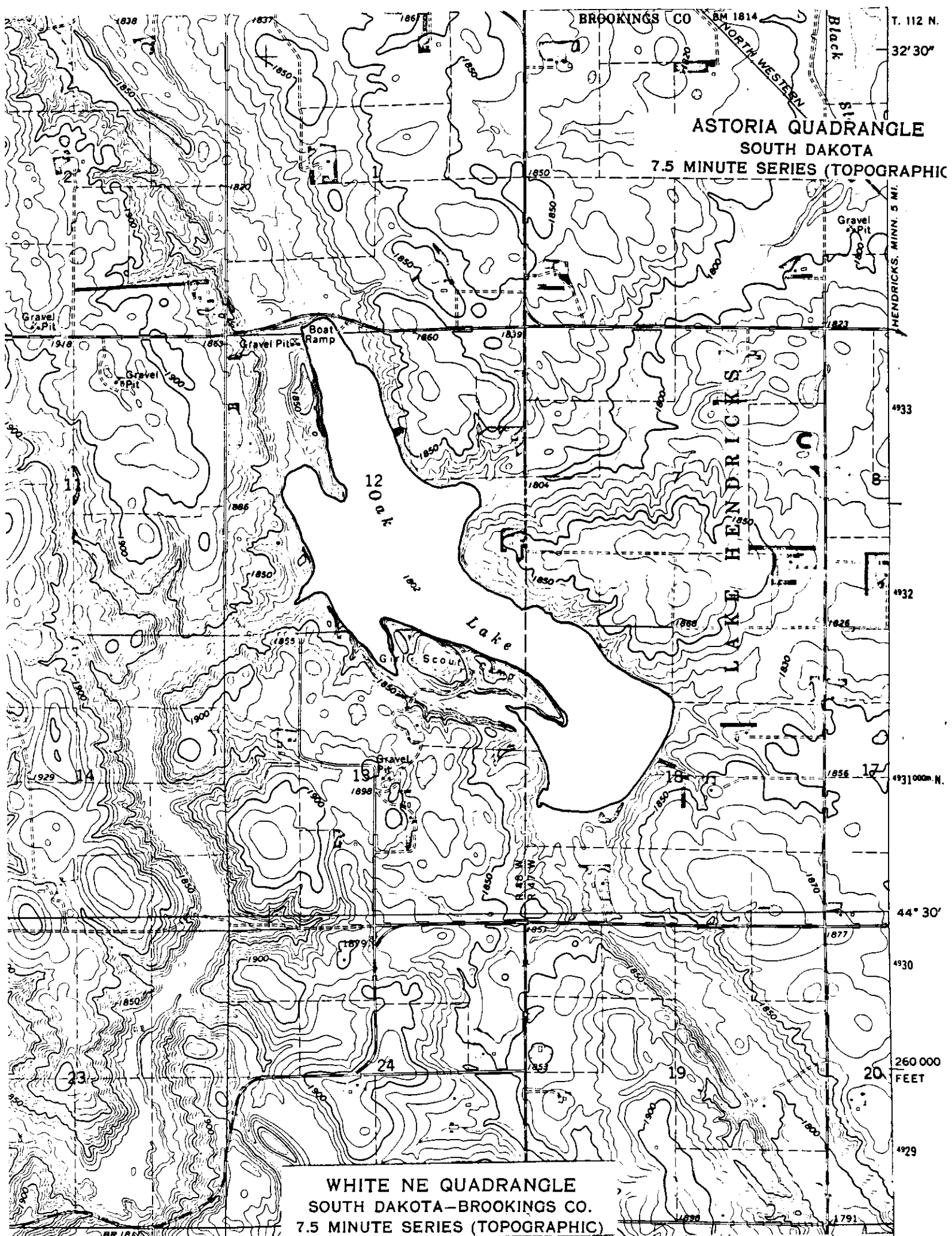
Held by Game, Fish and Parks
Dept., for the annual recharge
of 1,170 acre-feet,
priority date of 1889.

BIBLIOGRAPHY

- ²State Lakes Preservation Committee. A Plan for the Classification, Preservation, and Restoration of Lakes in Northeast South Dakota, July 1977, p. 71.

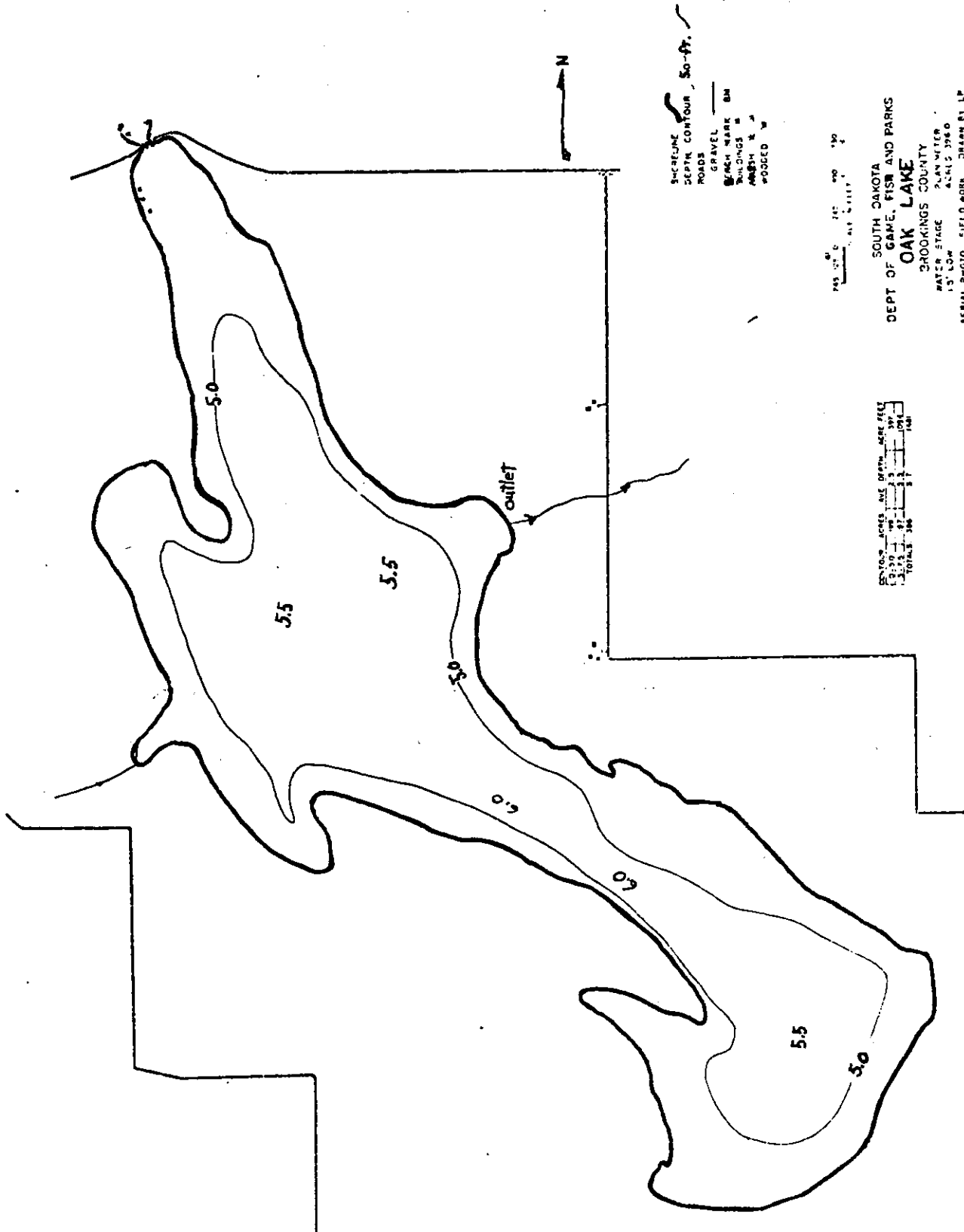
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WHITE NE QUADRANGLE
SOUTH DAKOTA-BROOKINGS CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

BATHYMETRIC MAP



SWEEPER
DEPTH CONTOUR 5.0-5.5
ROADS
GRASS
BEACH MARK BM
BUILDINGS
ANALYST E. J.
DODGE W.

0 100 200 300 400 500
FEET

SOUTH DAKOTA
DEPT OF GAME, FISH AND PARKS
OAK LAKE
BROOKINGS COUNTY
WATER STAGE 2.45 METER
1.5' LOW 2.45 METER
AERIAL PHOTO FIELD WORK DRAWN BY LP
DATE 1954 DATE 2-0-63
SEC. 171213-8 Twp 17N Rge 4W 48E
3M

SECTION	ACRES	AREA	DEPTH	AREA	FEET
1	1.0	1.0	1.0	1.0	1.0
2	1.0	1.0	1.0	1.0	1.0
3	1.0	1.0	1.0	1.0	1.0
4	1.0	1.0	1.0	1.0	1.0
5	1.0	1.0	1.0	1.0	1.0
6	1.0	1.0	1.0	1.0	1.0
7	1.0	1.0	1.0	1.0	1.0
8	1.0	1.0	1.0	1.0	1.0
9	1.0	1.0	1.0	1.0	1.0
10	1.0	1.0	1.0	1.0	1.0
TOTALS	10.0	10.0	10.0	10.0	10.0

APPENDIX B

Trees Growing Below the OHWM



PHOTO NO. 1 Description: Cottonwood, Dia. 1.6 ft, Age 55 years
Water Level----1801.7

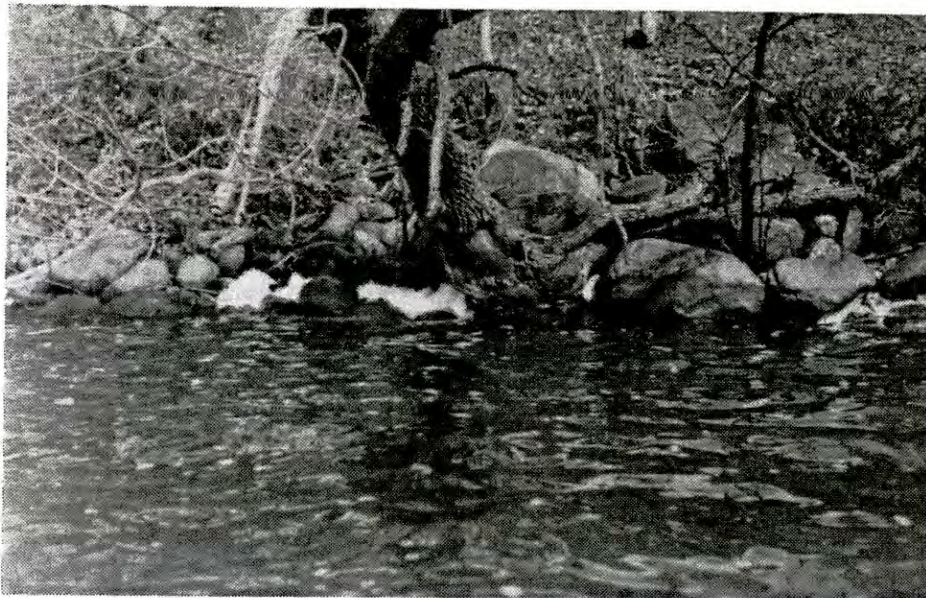


PHOTO NO. 2 Description: Dead Ash Tree (east side of lake)
Water Level at base of roots----1801.7



PHOTO NO. 3 Description: Oak, Dia. 1.0 ft, Age 60 years
Base Elevation: Lakeside----1802.1

APPENDIX C

Trees Growing at the OHWM



PHOTO NO. 4 Description: Cottonwood, Dia. 4.0 ft. Age 75 years
Base Elevations: Lakeside----1802.2
 Landside----1805.2



PHOTO NO. 5 Description: Oak, Dia. 0.6 ft. Age 45 years
Base Elevation: Lakeside----1802.3

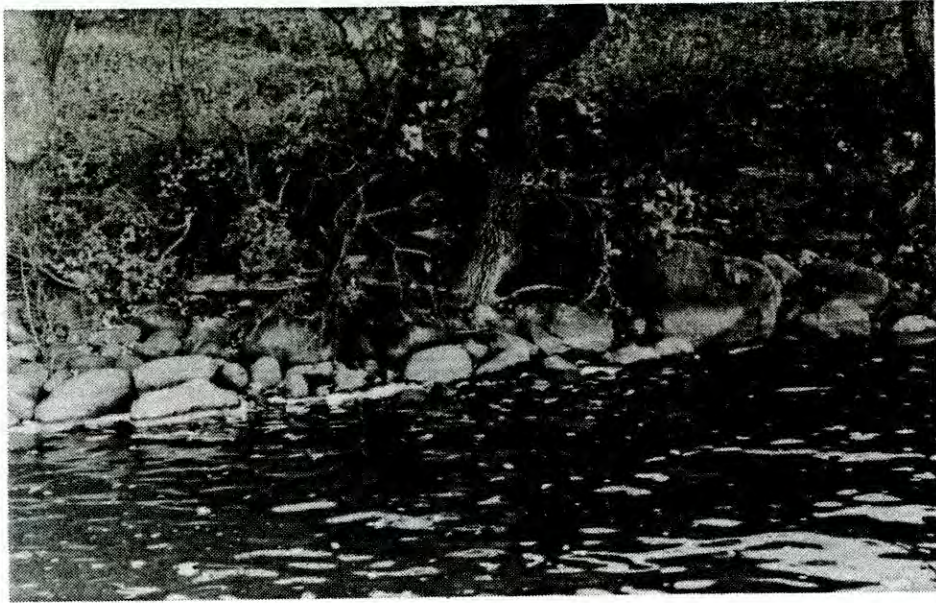


PHOTO NO. 6 Description: Oak, Dia. 0.8 ft. Age 55 years
Base Elevation: Lakeside----1802.4

APPENDIX C

Trees Growing Above the OHWM



PHOTO NO. 7

Description: Oak, Dia. 0.8 ft
Age 55 years

Base Elevation: Lakeside--1802.5



PHOTO NO. 8

Description: Willow, Dia. 0.8 ft. Age 45 years

Base Elevations: Lakeside----1802.6
Landside----1803.0



PHOTO NO. 9

Description: Cottonwood, Dia. 2.8 ft. Age 75 years
Base Elevations: Lakeside----1802.8
 Landside----1805.9

APPENDIX E

Erosion Marks



PHOTO NO. 10 Erosion Line Elevations (left to right from tree)

1802.2	1802.3
1802.3	1802.6
1802.3	1802.4
1802.3	1802.5
1802.1	1802.5
1802.4	1802.6



PHOTO NO. 11 Erosion Line Elevations (east side)

left to right	1802.4	1802.3
	1802.5	1802.2
	1802.5	

APPENDIX F

Outlet Channel



PHOTO NO. 12

Outlet

Channel bottom elevation----1801.8

Channel in front of trash----1801.8

Trash buildup elevation----1802.0

Downstream of outlet elevation----1801.6

50 ft. downstream from outlet----1801.5

AGENDA

Water Management Board Meeting
April 14 & 15, 1983

PLACE: Nebraska Room, Howard Johnsons, 3300 W Russell, Sioux Falls SD

THURSDAY, April 14, 1983

- 8:30 am Call to Order
Approval of February 22, 1983 Conference Call minutes
Approval of February 24 & 25, 1983 minutes
Set October meeting time & place (October 6 & 7 in Pierre suggested)
Discussion of request to change July meeting date
Status & review of Water Rights Litigation & Legislation
Discussion of City of Huron proposal
Discussion of Existing future use permits without seven year review clause
Discussion of proposed Rule changes
- 9:00 am Vested Right Considerations
Request for Extension of Time
- 9:45 am Break
- 10:00 am Establishment of Ordinary High Water Marks & Clarify Department of Game,
Fish & Parks and other Water Rights
647-3 Lake Campbell - Brookings Co.
648-3 Lake Campbell - Moody Co.
902-3 Oak Lake - Brookings Co.
882-3 Punished Woman Lake - Codington Co.
1473-3 Clear Lake - Deuel Co.
1464-3 Fish Lake - Deuel Co.
864-3 Wall Lake - Minnehaha Co.
Swan Lake (New Vested Right claim 4944-3) - Turner Co.
- 12:00 noon Lunch
- 1:00 pm Consideration of Petition for a Declaratory Ruling submitted by
Oliver M Romey against Tom Landers and A & T Cattle Co. Inc. and
proposed Findings of Fact, Conclusions of Law and Final Decision
- 2:00 pm Consideration of Mr. Arends notification of Intent to Rescind for
purpose of reconsideration actions taken by the Water Management
Board February 25, 1983 at the end of the hearing on proposed rule
changes requested by petition from Homestake Mining Co. to make
certain changes in stream classification for Whitewood Creek
- Other business
- Recess for Day

FRIDAY, April 15, 1983

- 9:00 am Reconvene
Consideration of a Petition for Declaratory Ruling submitted by
the Friends of the Dakota Sandstone Aquifer against South Lincoln
Rural Water System
- Other business
- Adjourn

REPRODUCTION: REDUCTION 25%
ROLL NO. 10
DATE MICROFILMED 2-28-79
GENERAL OPERATOR

In answer to a question from Mr. Arend, Mr. Bruns stated if the dam is widened to 280 feet and put in a sluice-way for the silt, then they would like to raise the dam 6 inches.

Mr. Bruns showed the Board some pictures of the lake.

Mr. Steffen stated in the recommendation the wording "to be maintained at an elevation no higher than" the staff believes that Game, Fish and Parks has control of the management of the lake, and the staff does not believe we should say that Game, Fish and Parks has to maintain a lake at this level. They may maintain it at a lower elevation but no higher elevation. Mr. Steffen stated by widening and increasing the elevation of the dam more erosion will occur. No matter how wide the dam is, the water level should be maintained at that same level. Raising the outlet level 6 inches would cause a 6 inch increase in the OHWM and erosion around the lake.

Mr. Hatch stated if they wanted to raise the outlet level elevation it would take a separate new application from Game, Fish and Parks to raise that level. Part of the application would need to include the widening of the dam. There would have to be a public hearing before the Board.

Mr. Bruns stated since they did not receive the notice but thirty days ago, they did not have time for an Association meeting. The proposal of raising the six inches to the dam was only made by a few people who were interested.

Chairman Gunderson stated that would be future action for the Board's consideration.

Mr. Hatch read a letter of concurrence from Jack Merwin, Department of Game, Fish and Parks (copy on file).

Mr. Rylance MOVED, SECONDED by Mr. Walter that the Ordinary High Water Mark for Lake Campbell be established at an elevation of 1575.7 feet msl and that Vested Right Nos. 647-3 and 648-3 be clarified to require the outlet structure for Lake Campbell to be maintained at an elevation of 1575.2. MOTION CARRIED.

OAK LAKE

Jerry Steffen presented the report on Oak Lake (copy of file). Mr. Steffen read the recommendations by the staff on Oak Lake.

Mr. Hatch read a letter of concurrence from Jack Merwin, Department of Game, Fish and Parks (copy on file).

Mr. Rylance MOVED, SECONDED by Mr. Harms that the Ordinary High Water Mark for Oak Lake be established at an elevation of 1802.3 feet msl and that Vested Right No. 902-3 be clarified to require the outlet structure for Oak Lake to be maintained at an elevation of 1801.8 feet msl. MOTION CARRIED.

PUNISHED WOMAN LAKE

Jerry Steffen presented the report on Punished Woman Lake (copy on file). Mr. Steffen read the recommendations by the staff on Punished Woman Lake. Staff is recommending that the outlet elevation be established at its pre-1971

RECOMMENDATIONS: REDUCTION 26.1
ROLL NO. 10
DATE MICROFILMED 6-22-70
CHIEF OPERATOR



DENR
SOUTH DAKOTA

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
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Memo to File

Oak Lake in Brookings County

VWR No. 902-3

The OHWM was set by the Water Management Board on April 14, 1983.

OHWM elevation 1802.3 fmsl NGVD29

The outlet elevation was set by the Water Management Board on April 14, 1983

Outlet elevation 1801.8 fmsl NGVD29