

Considered: 3

WATER PERMIT NO. 5256-3

MAP No. same 773-3718

Name of Applicant SD Department of Game, Fish and Parks

Post Office Address 445 E Capital, Anderson Bldg., Pierre SD 57501

Amount of Water Claimed Fill Fish Lake to elevation 1427.2 feet msl Total Acres NA

Source of Water Supply runoff from drainage to Fish Lake

Water to be used for REC + FWP County Aurora

About 5 miles E of Plankinton.

PROOF OF PUBLICATION: Received _____ Not Received _____

APPLICATION: Approved _____ Subject to _____

F.F. & C.L. Adopted _____ Not Approved _____ Deferred _____

PRIORITY _____ Date Received Jan 9, 1989 Fee NA Remarks _____

Corrected Application Received _____ Period of Annual Use Jan 1 - Dec 31

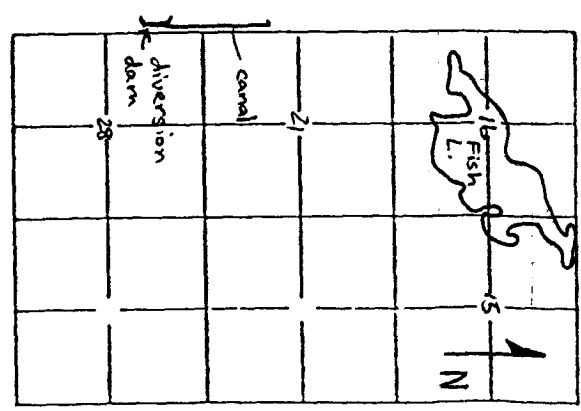
WATER QUALITY APPROVAL RECEIVED NA APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as Application YES _____ NO _____ REMARKS _____

Diversion Point runoff directly into Fish Lake and a diversion dam in the E 1/2 NE 1/4 section 29 -

T103N-R63W

Land to be Irrigated NA



Well Log: Driller NA Licensed YES _____ NO _____

Depth of Well _____ REMARKS _____

Type of Map topo PREPARED BY _____ Reviewed and the Number assigned on _____ By _____

(See instructions)

No. 5256-3 Hydrologic Unit 10160011
Basin James River
Newspaper SD Mail Box 367 Plankinton 57365 (TH)



Application For Soil/Water Compatibility Permit and Permit To Appropriate Water

Type of Application: ☐ New ☒ Vested Right ☐ Amend Permit No. _____
☐ Change Acreage ☐ Change diversion point(s) ☐ Add diversion point(s)
☐ Add Acreage ☐ Increase diversion rate ☐ Other _____

1. Name of Applicant S.D. Department of Game, Fish & Parks Phone No. 773-3718

Post Office Address 445 E. Capitol, Anderson Bldg. Pierre State South Dakota
(Street, RR or Box) (City) Zip Code

2. Amount of water claimed (c.f.s) sufficient water to fill lake to the outlet elevation of 1427.2
Total acres irrigated _____ annually.

3. Source of Water supply local drainage and diversion dam

4. Location of point of diversion outlet located in NW $\frac{1}{4}$, SE $\frac{1}{4}$, NE $\frac{1}{4}$, SE $\frac{1}{4}$ of Section 16, T103N,
R63W; diversion dam: E $\frac{1}{2}$ NE $\frac{1}{4}$ Sec 29-T103N-R63W

County Aurora

5. Counties where water will be used Aurora

6. Annual period during which water is to be used 1/1 - 12/31 annually

7. List below each forty acre subdivision, or lot, or fraction thereof and show number of acres to be irrigated in each.

Land Description	No. Acres Irr.

Land Description	No. Acres Irr.

Attach sheet if more space is needed

8. Type of Irrigation: Gravity: _____ Towline: _____ Center Pivot: _____ Gun: _____ Other: _____
(Specify) _____

9. Crops to be Irrigated: _____

10. Give a description of proposed project. (Attach sheet if more space is needed)

Recognition of an earthen embankment serving as an outlet structure that has been in place since 1954.

See OHWM investigation for Fish Lake, August 1988 for additional information.

Water will be used for wildlife and recreation.

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach maps, soils information and any other technical information.

STATE OF SOUTH DAKOTA)
County of Hughes) ss

I, S.D. Dept. of Game, Fish & Parks, the applicant, certify that I have read this application and examined the attached maps, that the water sample, if needed, has been taken by the required procedures and has not been adulterated or tampered with and is truly representative of the water to be used, and that the matters stated in this application are true and correct.

Signed James M. Koth Wildlife Biologist

Subscribed and sworn to before me this 6th day of January 1989

Wm. J. Catlin

Notary Public

my commission expires 9/1/95

SOUTH DAKOTA

VESTED WATER RIGHT NO. 5256-3

Date of Receipt of Claim January 9, 1989.

Date of Validation May 23, 1990.

The Water Management Board validated Vested Water Right Claim No. 5256-3 for the South Dakota Department of Game, Fish and Parks, 445 E. Capitol, Anderson Bldg, Pierre, SD 57501 with the following limitations, conditions and qualifications:

1. Vested Water Right No. 5256-3 claims sufficient runoff water annually to fill Fish Lake from 1425.1 feet mean sea level (fmsl), the outlet elevation existing prior to 1954, to an outlet elevation of 1426.0 fmsl. This will require the outlet elevation for Fish Lake to be lowered from 1427.2 fmsl to 1426.0 fmsl. Fish Lake is located primarily in Sections 15 & 16 T103N-R63W. Claim No. 5256-3 also includes a diversion dam located in the E1/2 NE1/4 Section 29 T103N-R63W and a diversion ditch on the section line Right-of-way between Sections 28 and 29, and Sections 20 and 21; all in T103N-R63W to divert water into Fish Lake. The drainage area located above the diversion dam is approximately 7.0 square miles and operation of the dam is regulated by the Department of Game, Fish and Parks. Runoff not diverted by the dam enters a slough area on the east side of Fish Lake. Applicable portions of Location Notice No. 6051-3 are incorporated into No. 5256-3 and the abandoned portions of Location Notice No. 6051-3 are cancelled.
2. The appropriated water is used to provide habitat for wildlife and for recreation and may not exceed the amount of water needed for beneficial use for recreation and wildlife.
3. The water is to be used during the following annual period: January 1 - December 31.
4. The priority date of the Vested Water Right is: August 25, 1954.
5. The water use system has been constructed and water has been applied to beneficial use.
6. Water Rights obtained in compliance with the laws of the State of South Dakota must not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. Validation of No. 5256-3 sets the outlet elevation for Fish Lake at 1426.0 fmsl.
2. That low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed when the diversion dam is used to divert water to Fish Lake.
3. That the outlet elevation be lowered to 1426.0 fmsl and that a concrete elevation reference marker be installed near the Fish Lake Outlet area.

WATER MANAGEMENT BOARD

By: _____

Chief Engineer

Division of Water Rights

Dept. of Water and Natural Resources

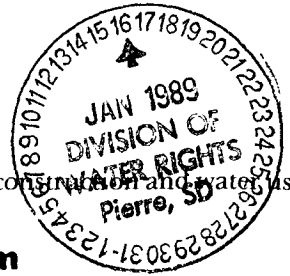
SEP 13 1990

_____ date

Affidavit of Water Use

No. _____

(Type or Print in Ink)



Note: This Form is supplemental to Form 2 and is to be used when an affidavit pertaining to construction and water use already constructed is needed, primarily with vested right claims.

**Affidavit Of Construction Of Water Use System
And Application Of Water To Beneficial Use**

Name of Applicant (Same as Form 2) S.D. Department of Game, Fish and Parks

Post Office Address 445 E. Capitol Pierre SD 57501
(Street, RR or Box) (State) (Zip Code)

A. Notice of Appropriation _____ Date of Posting _____

Date of recording _____ Recording date _____
Where Book Page

B. Date of start of construction of water supply system unknown - probably 1-2 months prior to completion
of works.C. Date that water was first applied to beneficial use 8-25-54 (works completed)

D. Name of owner of original water supply system S.D. Dept. of Game, Fish and Parks
Sufficient water to fill lake to outlet level

E. Amount of water originally applied to beneficial use 1427.2 msl from elevation 1425.1 msl.F. Present Use of Water - Amount of water now being used Same as above (E)Date that this water was first used Unknown - first occurrence of adequate runoff to fill lake.

G. Chronological History of Water Use

Location notice 6051-3 filed for the diversion structure dates
 the original construction of the earthen embankment serving as the outlet to
 Fish Lake.

Attach to this Form 2B any copies of notices, postings, filings, publications, affidavits, or other records that apply. You may also attach any written statement by you, or by others, that you deem pertinent.

State of South Dakota)

County of Hughes)
SS

I, S.D. Department of Game, Fish & Parks the applicant, certify that I have read the foregoing
(print or type)
 and that the matters therein stated are true.

Signed *James M. Kott*Subscribed and sworn to before me *January 16*, 19*89*

Gay L. Richter
 Notary Public or other qualified officer

I, the undersigned do hereby certify that I know about the water use system described above, that I have read the foregoing,
 and that the matters therein stated are true.

(Print name) 19_____
(Print name) 19

STATE OF SOUTH DAKOTA

VESTED RIGHT WATER LICENSE NO. 5256-3 FOR IRRIGATION

(1) SD Game, Fish & Parks Department of 445 E. Capitol, Pierre SD 57501 made Application No. 5256-3, January 9, 1989 for validation of a vested right claim to store sufficient runoff water annually to fill Fish Lake in, Aurora County, South Dakota to an elevation of 1426.0 fmsl for fish and wildlife propagation and recreational purposes. Vested Water Right No. 5256-3 was validated May 23, 1990 with a priority date of August 25, 1954. Construction of the described water supply system and application of water to beneficial use has been completed and complies with applicable provisions of South Dakota State Law.

The applicable portions of Location Notice No. 6051-3 are incorporated into Vested Right Water License No. 5256-3 with the abandoned portions of Location Notice No. 6051-3 cancelled.

(2) The applicant is entitled to store sufficient runoff water annually to fill Fish Lake to an outlet elevation of 1426.0 feet mean sea level (fmsl). Fish Lake is located primarily in Sections 15 and 16, T103N, R63W. The water is diverted into Fish Lake from a diversion dam located in the E1/2 NE1/4 Section 29 and a diversion ditch on the section line right of way between Sections 28 and 29 and Sections 20 and 21, all in T103N, R63W.

(3) Pursuant to Section 46-5-30.1 SD Department of Game, Fish & Parks of 445 E. Capitol, Pierre SD 57501 the holder(s) and/or owner(s) of Vested Water Right No. 5256-3 is issued a license to store sufficient runoff water annually to fill Fish Lake to an outlet elevation of 1426.0 fmsl with a priority date of August 25, 1954 from the location specified in (2) of this license. The water is to be used for the purposes of fish and wildlife propagation and recreation. This license is subject to any limitations, conditions or qualifications listed in Vested Water Right No. 5256-3 and subject to South Dakota State Law.



JOHN HATCH, Chief Engineer
Water Rights Division
Department of Water and Natural
Resources

SEP 13 1990



Spring 87

Fish Lake

Assoc 23 11-87

Upper township

John Fett



Spring '87

Fish Lake

NE Sec 28 103-63

Upper Township

John Fett



Spring '87

Fish Lake

NE Sec 28 103-63

Hoppentownship

John Fett

48 2 510 000 FEET

49

Map of Fish Lake Area

52 000000 E

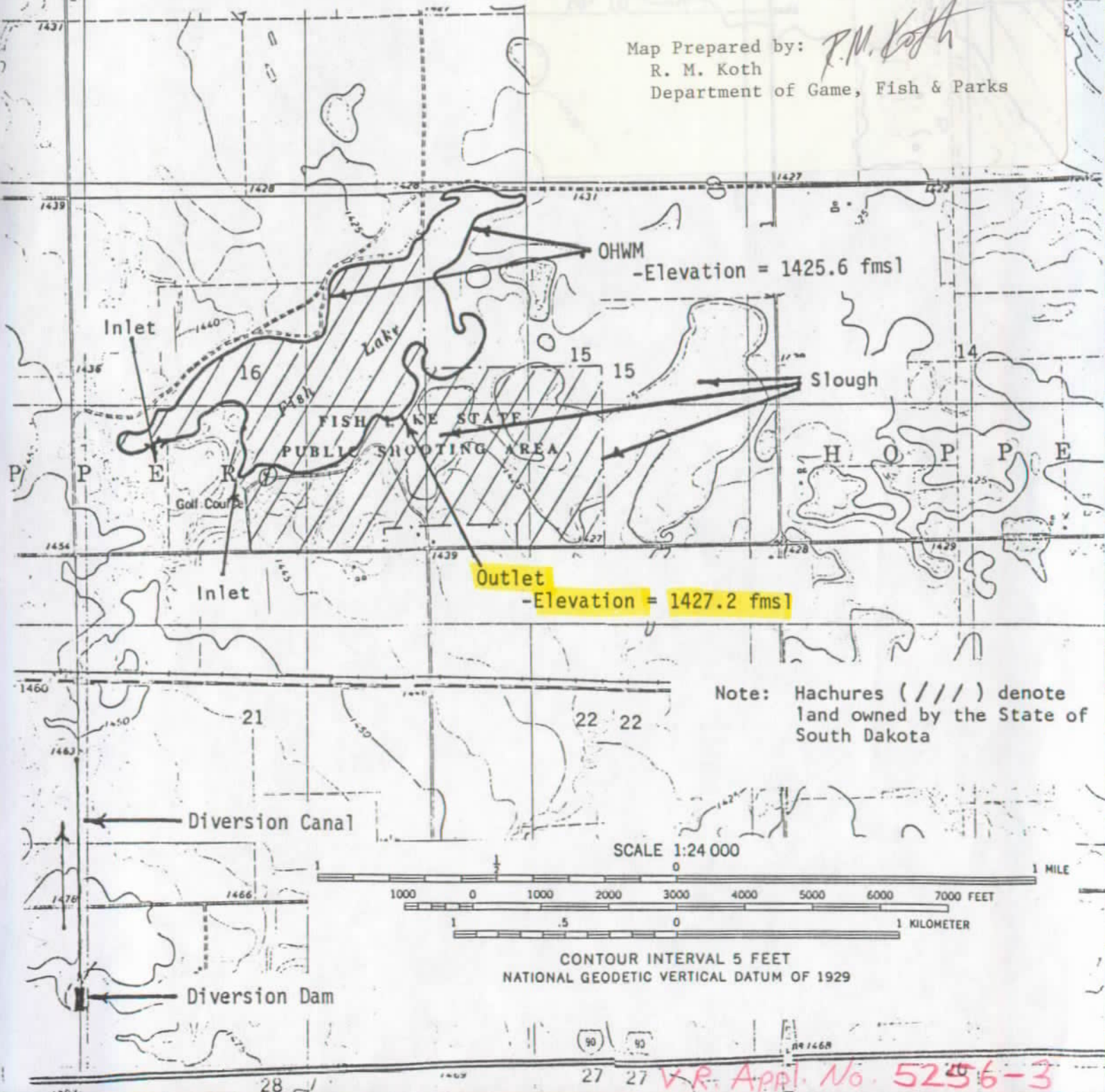
From:

OHWM Investigation
Fish Lake, Aurora County, Aug. 1988

Map Prepared by:

R. M. Koth

Department of Game, Fish & Parks



SOUTH DAKOTA
Department of
Water & Natural Resources

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

5256-3

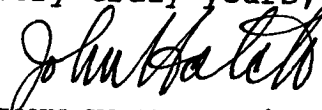
SEP 13 1990

Ron Koth
SD Department of Game, Fish & Parks
445 E. Capitol, Anderson Bldg
Pierre, SD 57501

Dear Mr. Koth:

Enclosed are your Validated Vested Water Right and Water License No. 5256-3. As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water.

Very truly yours,



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

enclosures

KNOW ALL MEN BY THESE PRESENTS:

County

That South Dakota Department of Game, Fish and Parks whose post office is Pierre, South Dakota, a citizen of the United States, above the age of 21 years, being in possession of the following described land, to-wit: Easements on Section Line Right-Of-Way between Sections 28 and 29, and Sections 20 and 21 Section _ Township 103 N Range 63 W B.H. M., in Aurora County, South Dakota, Availing itself of the right granted it under the provisions of Chapter 61.0133 SDC 1939 has located and claims the right to construct a certain dam across a dry draw situated in the NE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 29 Township 103 N Range 63 W and has located and claims the right to construct ditches and flumes for the purpose of directing flood waters from said dam for irrigation of the land first above described and for Live Stock Purposes, and claims the right of way across any land for the purpose of conveying water for said purposes.

Said locator claims for the above purpose 200 acre feet of water annually.

The estimated surface area of storage basin is 10 acres.

The estimated drainage area above the basin is 6000 acres.

The location of the point of diversion of the water from its natural course is as follows:

From the point of diversion, due north to the section corner is 750 feet,

If the project includes a ditch,

The ditch will run in a northerly direction to and on said land for a distance of 2,975 feet.

Said location was made on the 25 day of August, 1954.

Witness my hand and seal this 25 day of August, 1954.

A fee of one dollar is herewith enclosed for filing this Location Notice in the State Engineer's Office, as required by Section 55,1806 of the SDC of 1939.

Donald Driscoll
Locator

STATE OF SOUTH DAKOTA)
County of Aurora) S3

On the 25 day of August 1954, before me, W. C. Miller, a Notary Public in and for the County and State aforesaid, personally appeared Donald Driscoll to me personally known to be the person who executed the foregoing instrument and acknowledged that he executed the same for the uses and purposes therein set forth.

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

W. C. MILLER
NOTARY PUBLIC
SOUTH DAKOTA

W. C. Miller
Notary Public.

State of South Dakota)
County of Aurora) ss

Filed for record this 25 day of August, A. D. 1954, at 12 o'clock M., and recorded in Book 20 of Miscellaneous, page 501.

Fee \$1.80

SEAL

jkB

Ruby E. Long, Register of Deeds

Fish Lake, Aurora County

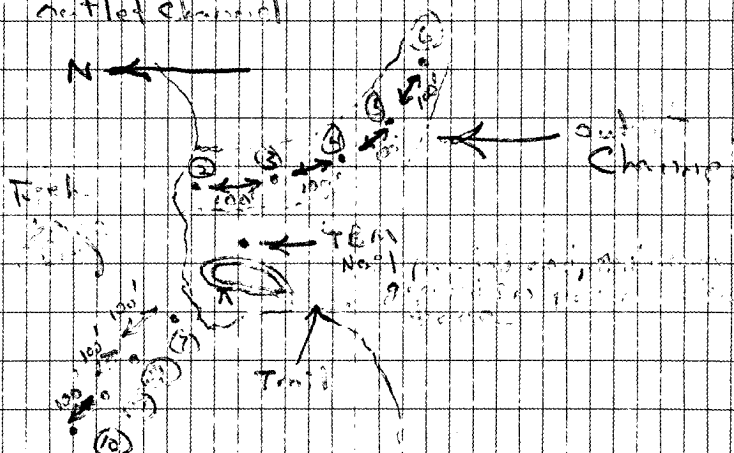
9/12/09 Lake is dry, Bottom of
Lake (Lake Bed) at elevation
1419.5 Fmsl

Also Survey of outlet Channel

DUCK WATER RESERVE DIVISION DATE 9/12/89 SURVEY AREA Annan
 PURPOSE OF INVESTIGATION Survey Fish Lake outlet, also 1/1
 determine Fish Lake Bottom elevation
 MEMBERS OF SURVEY PARTY D. Browne, S. Kazmierczak
 WEATHER CONDITIONS TEMP. 50°F WIND 3 mph & V clear
 TYPE OF SURVEY EQUIP. USED Automatic level, Philly rod
 SURVEY DOCUMENTED BY FURTHER BY SHEET ON TOPO MAP
 LOCAL REPRESENTATION OF SURVEY LOCATION NE1/4SW1/4 NE1/4SE1/4
 SECTION 16, T14N R103W AND 63W
 GENERAL COMMENTS:

STATION	BS	IS	SLOPE DISTANCE	HORIZONTAL DISTANCE	Elevation HEIGHT OVER
TBM goliath					1429.73
① at outlet	3.85				1433.58
② at outlet channel		7.14		0'	1426.44
③ outlet channel		8.05		+100'	1425.53
④ " "		7.84		+100'	1425.74
⑤ " "		7.50		+100'	1426.08
⑥ " "		8.52		+100'	≈ 1425.1
⑦ Bottom of Fish Lake	3.85				
⑧		12.86		0	1420.72
⑨		13.92		+100	1419.66
⑩		14.02		+100	1419.56
(10)		14.00		+100	1419.58

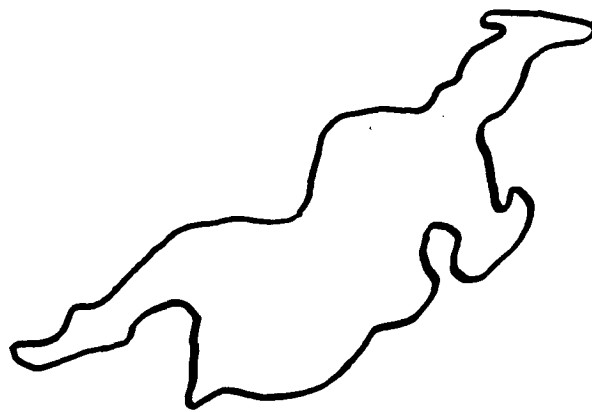
Survey to determine elevations along outlet channel



Lake bed of Fish Lake, Lake 10 Day

**ORDINARY HIGH WATER MARK
INVESTIGATION
FISH LAKE**

AUGUST 1988



AURORA COUNTY

DIVISION OF WATER RIGHTS

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ABSTRACT

This report contains the results of an investigation performed at the request of the Aurora County Board of Commissioners. An investigation was conducted to determine the elevation of the Ordinary High Water Mark and outlet for Fish Lake, Aurora County, South Dakota.

The primary factors involved in determining the Ordinary High Water Mark for Fish Lake were erosion, beach scarps, beaches, soil stratification, boulder lines and terrestrial vegetation.

Based on the findings in this report, the recommended Ordinary High Water Mark and outlet elevations are 1425.6 and 1425.1 feet above mean sea level, respectively.

INTRODUCTION

At the request of the Aurora County Board of Commissioners, received May 26, 1987, an investigation was conducted to establish the Ordinary High Water Mark (OHWM) and Outlet Elevation for Fish Lake, Aurora County.

State law provides that all navigable rivers and lakes are public highways within 50 feet landward from the water's nearest edge, provided that the outer boundary of such public highway may not expand beyond the OHWM and may not contract within the Ordinary Low Water Mark (OLWM). Thus, the public has the right to use a strip of land up to 50 feet wide below the OHWM beginning at the water's edge or the OLWM for public purposes.

Further, while the public may use the 50 foot strip of land for only "public" purposes, the private adjoining landowner may use the land for any purpose not inconsistent with the rights of the public. Such purposes ordinarily would include the right to graze and water livestock, to hay, or to build a boat dock.

The Water Management Board is required by South Dakota Codified Law (SDCL) 43-17-21 and 43-17-28 to establish the OHWM for public lakes. SDCL 43-17-1 provides that the ownership of land below the OHWM, and of land below the water of a navigable lake or stream, is regulated by the laws of the United States or by such laws of the state as the Legislature may enact.

A lake is "navigable" if its waters constitute "public waters" (Flisrand v. Madison (1915) 35 S.D.457, 152 N.W. 796). A lake is also "navigable" when, if maintained at the high-water mark, it is suitable for rowing, fishing, fowling and bathing (Anderson v. Ray (1916) 37 S.D.17, 156 N.W. 591).

The OHWM according to SDCL 43-17-20(2) is defined in decisions rendered by the courts of this state. In the case of Flisrand v. Madison, 35 S.D.457, 152 N.W. 796. 800-801 (1915) the Court wrote:

Neither high or low water mark means the highest or lowest point reached by the waters of a lake during periods of extreme and continued freshets, or periods of extreme and continued drought, but does mean the high and low points of variation of such waters under ordinary conditions, unaffected by either extreme.

In the case of Anderson v. Ray, 37 S.D.17, 156 N.W. 591 (1916) the South Dakota Supreme Court wrote:

In the case of freshwater rivers and lakes - in which there is no ebb and flow of the tide, but which are subject to irregular and occasional changes of height, without fixed quantity of time, except that they are periodical, recurring with the wet or dry seasons of the year - high water mark, as a line between the riparian owner and the public, is to be determined by examining the bed and banks, and ascertaining where the presence and action of the water are so common and usual, and so long-continued in all ordinary

years, as to mark upon the soil of the bed a character distinct from that of the banks, in respect to vegetation, as well as respects the nature of the soil itself.

In the Waubay Lake decision, issued on January 17, 1986, the South Dakota Supreme Court stated the determination of these water marks is to be done on a case by case basis. The Court stated that:

" . . . under ordinary circumstances, the Ordinary High Water Mark will be set at a level where there is a distinct mark which evidences erosion, and changes in the character of the soil, and destruction of terrestrial vegetation, which have occurred under the ordinary and continuous conditions of the lake, disregarding periods of extreme and periodic freshets, and disregarding the highest water mark which does not evidence erosion and soil changes and destruction of vegetation occasioned under ordinary conditions. If a single distinct mark, occasioned under ordinary circumstances and evidencing all of the factors delineated above does not exist, i.e., there is conflicting evidence of the role of the Ordinary High Water Mark, it is the level where significant major, and substantial terrestrial vegetation ends, that the OHWM is to be set." (cites omitted)

GENERAL INFORMATION

Fish Lake is a 190 acre shallow lake capable of sustaining fish life only during periods of relatively wet years. A contour map of the lake bottom is not published; however, the lake has an estimated average depth of 3 feet, a maximum depth of 5 feet, and a storage capacity of approximately 525 acre feet (Hamilton, 1985). The lake is managed as a marginal fisheries water (sustains fish life three years out of five), for water fowl, furbearers, and associated upland and big game (Hanten, 1974).

Fish Lake is located within the James River Lowland Division of the Central Lowlands physiographic province. The landscape occurs as end moraines of the Mankato Substage of the Wisconsin Glaciation (Aurora County Soil Survey, 1980). The 20.5 square mile drainage basin for Fish Lake is characterized as being level to nearly level to having undulating slopes of 0 - 0.5% with some depressions. The drainage basin size was difficult to determine due to the very flat topography. Elevations within the drainage basin vary from 1585 to 1325 feet above mean sea level (fmsl).

Creeks in the drainage are ephemeral and generally flow only during late winter and spring of wet years as a result of snowmelt and from intense thunderstorms during the spring and summer months (Hamilton, 1985).

Fish Lake is located in Sections 15 and 16, T103N, R63W which is approximately 4 1/2 miles east and 1/4 mile north of Plankinton, Aurora County. The lake was never meandered by the U.S. Government and the deeded bed of the lake is owned by the State of South Dakota and by adjoining land owners.

Elevations in this report are referenced to a Coast and Geodetic Survey bench mark located about 4 miles east along the Chicago, Milwaukee, St. Paul & Pacific Railroad from Plankinton, Aurora County, about 10 rail sections (approximately 230 feet) west of trestle R 952 over a section-line road, 42 feet south of the center line of the track, and about two feet higher than the track. A standard disk, stamped "B 7 1925" and set in the top of a concrete post projecting about 3 inches above ground at elevation 1459.981 fmsl. A marker sign is placed next to the bench mark.

More than half of the acreage in Aurora County is cropland and about 42 percent supports native grass. Corn, oats, grain sorghum, smooth brome grass, and alfalfa are the main crops. Farming is diversified; livestock is the main source of income, but income from cash crops is also important. (Aurora County Soil Survey, 1980)

WATER RIGHTS

The South Dakota Department of Game, Fish and Parks holds Vested Water Right Claim No. 800-3 for Fish Lake with a priority date of 1889. The Vested Water Right Claim is licensed to use 1800 acre feet annually of the waters of Enemy Creek for public recreation purposes. Enemy Creek flows into Fish Lake.

Location Notice Number 6051, filed August 27, 1954 by Donald Driscoll of the State Engineers Office, is for a dam in the NE1/4 of Section 29, T103N, R63W with a surface area of 10 acres and a drainage area of 6000 acres. The purpose of the structure was to direct 200 acre-feet of flood waters from the dam annually for irrigation and livestock purposes via a diversion ditch. Diverted flood waters enter the Fish Lake drainage basin via the diversion ditch and supplement annual inflows to Fish Lake. Annual diversion records for the dam were not kept by the Department of Game, Fish and Parks. However, it is believed that the diversion ditch has directed water into Fish Lake during the mid 1950's, early 1960's, and mid 1980's (Heismeyer, 1988).

Fish Lake Country Club, Inc. holds Water Permit No. 2118-3 and No. 4530-3 with priority dates of September 23, 1974 and June 9, 1980 respectively. Water Permit No. 2118-3 permits 0.11 cfs of Fish Lake water to be used for irrigating 4 acres of trees, greens, and the Clubhouse area. A qualification on the permit states: "if in the opinion of the Water Rights Commission, the Fish Lake water level lowers to a critical level, the diversion of water under this permit is to be suspended until the water level raises to an acceptable level, in order to protect the interests of the public under the Department of Game, Fish, and Parks "Vested Right" filing No. 800-3".

Water Permit No. 4530-3 permits 0.69 cfs of groundwater to be used for irrigating 48.25 acres of grass greens on the Golf Course from a 34 inch diameter well 60 feet deep. Land covered under this permit is also covered under Permit No. 2118-3. Combinations of diversions under the two permits are not to exceed the statutory limit of 1 cfs for each 70 acres of land to be irrigated.

GEOLOGY

Fish Lake is located on the James River Lowland Division of the Central Lowlands physiographic province. The landscape around Fish Lake occurs as Pleistocene end moraines of the Mankato Substage of the Wisconsin Glaciation (Aurora County Soil Survey, 1980). The end moraines are composed of glacial drift which are chiefly till (Flint, 1955). Fish Lake is glacial in origin.

No major sand and gravel deposits are present in the Fish Lake drainage basin with only a small amount of alluvium found along Enemy Creek. The cumulative thickness of saturated sand and gravel found in the vicinity of Fish Lake ranges from 0-9 feet with the maximum thickness found in the alluvium of Enemy Creek. (Blaze, Hammond, 1980) Well logs in the vicinity suggest that there is no hydrologic connection of any consequence between Fish Lake and a glacial aquifer (Division Well Logs and Files) (see Appendix III for location of well logs).

A ground reconnaissance of the lake shoreline found exposed outcrops and cutbanks of glacial till. The glacial till on the southeastern edge of the lake is an unsorted and unstratified mixture of clay, silt, sand, gravel and boulders with sand and clay being the dominant matrix as evidenced by the well developed sand beach. Newspaper records indicate that the Department of Game, Fish and Parks may have trucked in 200 loads of beach sand and gravel during the winter of 1955.

The glacial till on the northwestern edge of the lake is unsorted and unstratified with a matrix dominated by gravels and boulders as evidenced by the moderately developed gravel and boulder pavements found along the shoreline.

SOILS INFORMATION

Soils in the 20.5 square mile drainage basin consist of the Houdek-Dudley-Hoven Association. Appendix IV shows the soils found around the perimeter of Fish Lake and in the drainage basin. The Houdek-Dudley-Hoven Association is on uplands that are characterized by many swales and depressions. Slopes generally are level to undulating but are steeper along entrenched drainageways. The drainage pattern is poorly defined in most areas where drainageways terminate in small depressions, but it is well defined along the larger drainageways. The

association is about 40 percent Houdek soils, 25 percent Dudley soils, 10 percent Hoven soils and 25 percent minor soils.

The well drained Houdek soils are on broad flats and on rises. Slopes dominantly are 0 to 6 percent but range to 9 percent along drainageways. The moderately well drained Dudley soils are on short, concave side slopes ranging from 0 to 6 percent. The poorly drained Hoven soils are in depressions with slopes less than 2 percent.

Runoff from soils in the Houdek-Dudley-Hoven Association is slow to ponded.

RUNOFF CALCULATIONS

Estimates of the magnitude and frequency of future flood volumes for the Fish Lake drainage basin were determined using the methods described in the U.S. Geological Survey publication, "TECHNIQUES FOR ESTIMATING FLOOD PEAKS, VOLUMES, AND HYDROGRAPHS ON SMALL STREAMS IN SOUTH DAKOTA," Water-Resources Investigations 80-80, September, 1980.

A limitation inherent with these estimates (Table 1) is that the estimating relations for runoff volume are not applicable to floods resulting from snowmelt runoff nor to floods where ice effects occur because only floods resulting from rainfall were considered in the modeling.

Table 1

Recurrence Interval (years)	Fish Lake Drainage Basin estimated runoff volume (acre-feet)	Diversion Dam Drainage Basin estimated runoff volume (acre-feet)
2	104	87
5	189	118
10	272	169
25	390	257
50	557	339
100	728	440

Estimates of the magnitude and frequency of future flood volumes for Fish Lake were also determined using the methods described in the U.S. Department of Agriculture, Soil Conservation Service publication, SOUTH DAKOTA ENGINEERING FIELD MANUAL FOR CONSERVATION PRACTICES, pp.2-11 - 2-29, January, 1971; U.S. Department of Agriculture, Soil Conservation Service, Soil Conservation Workshop, DESIGN HYDROGRAPHS FOR SOUTH DAKOTA, pp.1-5, Huron, SD, March 28-31, 1972; U.S. Department of Agriculture, Soil Conservation Service, NATIONAL ENGINEERING HANDBOOK, SECTION 4, HYDROLOGY, P. 21.3; and Ven Te Chow, HANDBOOK OF APPLIED HYDROLOGY, pp.21-27 - 21-32, 1964. The estimated flood volumes assuming average, below average, and above average beginning (antecedent) soil moisture conditions are listed in Tables 2-4.

Table 2

AVERAGE ANTECEDENT MOISTURE CONDITIONS		
24 hour storm Frequency (years)	Fish Lake Drainage basin estimated runoff volume (acre-feet)	Diversion Dam Drainage estimated runoff volume (acre-feet)
2	936	374
5	1584	637
10	2016	861
25	2232	1123
50	2736	1310
100	3024	1423

Table 3

BELOW AVERAGE ANTECEDENT MOISTURE CONDITIONS		
24 hour storm Frequency (years)	Fish Lake Drainage basin estimated runoff volume (acre-feet)	Diversion Dam Drainage estimated runoff volume (acre-feet)
2	360	112
5	792	300
10	1008	374
25	1368	524
50	1656	674
100	1944	824

Table 4

ABOVE AVERAGE ANTECEDENT MOISTURE CONDITIONS		
24 hour storm Frequency (years)	Fish Lake Drainage basin estimated runoff volume (acre-feet)	Diversion Dam Drainage estimated runoff volume (acre-feet)
2	1296	637
5	1944	936
10	2304	1123
25	2736	1348
50	3168	1573
100	3456	1722

Fish Lake has a surface area of 190 acres with an average depth of approximately 3 - 4 feet when the lake level is at 1425 - 1426 fmsl. Approximately 525 - 760 acre-feet of water is stored in Fish Lake when the lake level is at 1425 - 1426 fmsl.

WATER QUALITY DATA

Water quality data are not available prior to the annual measurements taken by the Division of Water Rights. The total dissolved solids content was estimated for Fish Lake using a conductivity meter. These measurements are shown in Table 5.

Table 5

Date	Total Dissolved Solids (ppm)
10-22-86	355
10-20-87	470
4-29-88	400

HISTORICAL WATER LEVELS

Historical water level measurements of Fish Lake are not available prior to the biannual lake level measurements taken by the Division of Water Rights. The measured Fish Lake stage elevations are shown in Table 6.

Table 6

<u>Date</u>	<u>Water Level of Fish Lake (fmsl)</u>
July 25, 1986	1426.6
October 22, 1986	1426.2
April 27, 1987	1427.1
October 20, 1987	1424.5
March 29, 1988	1424.6

MAN MADE INFLUENCES

Fish Lakes' natural drainage basin is approximately 13.5 square miles. In approximately the fall of 1954/winter of 1955, a diversion dam and canal (see Photo No. 1) were constructed by the Department of Game, Fish and Parks which has a drainage basin of approximately 7.0 square miles. Currently, the total drainage basin for Fish Lake is approximately 20.5 square miles.

Plans and specifications for the diversion dam and canal are microfilmed and on file with the Department of Game, Fish and Parks, Sigurd Anderson Building, Pierre, SD.

The diversion dam has the potential to supplement natural Fish Lake inflows by 31 - 84% depending upon the runoff method used, recurrence interval/storm frequency used, and soil moisture conditions (see Tables 1 - 4). As stated earlier, the diversion dam is believed to have diverted water during the mid 1950's, early 1960's, and mid 1980's. The Department of Game, Fish and Parks currently regulates when flows are by-passed or diverted. The by-passed flows enter the 164 acre slough which is adjacent to Fish Lake.

At the time the diversion dam and canal were constructed, an earthen embankment was constructed between Fish Lake and the 164 acre slough (Heismeyer, 1988) (see Appendix IV and Photo No. 2 for location of the earthen embankment).

Dugouts and dams in the Fish Lake drainage basin can potentially store 79 acre-feet of runoff annually (Division Files).

OUTLET

As discussed earlier under the MAN MADE INFLUENCES section of this report, the current outlet for Fish Lake is located between the lake and the adjacent slough. The outlet is a vegetative covered man-made earthen embankment (see Photo No. 2). The

location and elevation of the natural outlet for Fish Lake prior to construction of the embankment is not known.

Fish Lake Water levels increased during the early 1960's which caused flooding of adjacent land. It was reported that the earthen embankment between Fish Lake and the adjacent slough was lowered to an unknown elevation in an attempt to alleviate the flooding (Heismeyer, 1988). The present elevation of the earthen embankment crest located in the NW1/4 SE1/4 NE1/4 SE1/4 of Section 16, T103N, R63W is 1427.2 fmsl.

Vertical beach scarps of 2 - 5 feet in height along the perimeter of Fish Lake indicate that the lake is no longer in a natural state of equilibrium. A beach scarp is a vertical escarpment/cliff formed by water and wave erosion processes (see Photos No. 3 - 5). The beach scarps are found at the same elevation as the current earthen embankment crest (1427.2 fmsl). The beach scarps represent water level elevations that were produced by a combination of man-made and natural conditions.

FIELD INVESTIGATION

Field investigations were conducted at Fish Lake on October 14-16, 1987, April 27, and May 19, 1988.

Physical evidence used in identifying an OHWM is erosion, beach scarps, beaches, soil stratification, boulder lines and terrestrial vegetation.

Outcrops along the shoreline of Fish Lake consist primarily of glacial till with sand, silt and clay outcrops found adjacent to inlets to the lake. Erosion of the glacial till is obvious all around the lake. Vertical beach scarps of 2 - 5 feet in height are found along the perimeter of the lake. The base elevation of the beach scarps ranged from 1426.0 - 1427.3 fmsl on the northwestern side of the lake to 1427.0 - 1427.3 fmsl on the southeastern side of the lake (see Photos No. 3 - 5).

Soil stratification occurs around a lake when wave action washes the lake shore and leaves the larger parent materials (pebbles, cobbles, boulders) relatively stationary while the fine grained materials (sands, silts, clays, peats) are transported the greatest distance into the lake. A very distinct change in soil characteristics occurs at the base of the glacial till beach scarp. The glacial till below the beach scarp has been stratified with the largest parent materials found on the backshore (upper part of the beach). The foreshore (lower part of the beach) is dominated by sand and silt which progressively thickens toward the lake and conversely pinches out toward the beach scarp.

In the spring, lake shorelines can be acted upon by ice sheets/wind action which form ice pushed ridges. The lake ice melts first near the shores because of the relatively rapid

heating of the earthy material of the shore and the shallow bottom. An open lane of water is formed which is further widened by a rise in lake level from the water added by the melting snow of the surrounding slopes. If strong winds develop before the ice becomes rotten, the ice is blown about from side to side by the winds and pushed on the shores with almost irresistible force. The direction of shove is related to that of the winds and may vary along any shore even during a jam, if the winds shift considerably. The force of the push depends on the firmness and momentum of the ice, the latter being determined by the velocity and duration of the wind, the weight of the ice and to some extent the distance through which the ice is free to move. (Dionne, 1979)

Ice pushed ridges can be composed of foreshore and backshore materials. Ice pushed boulder lines are found at Fish Lake. Base elevations of boulder lines ranged from 1424.2 - 1426.1 fmsl with a median elevation of 1425.6 fmsl (see Photos No. 6 - 8). Terminal elevations of boulder lines ranged from 1425.2 - 1427.0 fmsl. A change in slope occurs at a boulder-cobble pavement contact on the west side of the lake at elevation 1425.6 fmsl (see Photo No. 9). Three boulders which are three feet in diameter are on the west side of the lake at elevation 1425.3 fmsl (see Photo No. 10).

Cottonwood and Willow trees are the significant and major terrestrial vegetation found around the perimeter of Fish Lake. A discussion on woody plants and their tolerance to flooding is included in this report as Appendix V (Schumacher, C. M., 1978). Trees have been undercut, uprooted, and killed by wave/ice action (see Photos No. 11 - 15). Dead trees were found at elevations of 1425.2 - 1425.8 fmsl. Live trees were found at elevations 1425.6 - 1426.5 fmsl with a median elevation of 1426.0 fmsl (see Photos No. 16 - 19). The majority of the live trees were found at elevations of 1425.6 - 1426.0 fmsl. It is interesting to note that seven live trees survived water inundation for a period of at least nine months during the summer and spring of 1986-1987.

Previous OHWM investigations have found OHWM characteristics (i.e., boulder lines and locations of live trees) similar to those found at Fish Lake (Division Files, OHWM investigations on: Lake Campbell, Oak Lake, and Oakwood Lakes in Brookings County; Lake Kampeska, and Pelican Lake in Codington County; Clear Lake in Deuel County; Brant Lake, Lake Madison in Lake County; Roy Lake in Marshall County; Wall Lake in Minnehaha County; Swan Lake in Turner County; and Swan Lake in Walworth County). In each of the previously mentioned OHWM investigations, the outlet elevation was established by the Water Management Board 0.5 feet below the OHWM elevation. Based upon the field evidence and previous OHWM investigations, the recommended natural OHWM elevation for Fish Lake is 1425.6 fmsl and the natural outlet elevation for Fish Lake is 1425.1 fmsl. The current crest elevation of the existing man-made earthen embankment is 1427.2 fmsl which is 2.1 feet higher than the recommended natural outlet elevation for Fish Lake.

CONCLUSIONS

Erosion lines around the entire lake are obvious along the beach scarps at elevations ranging from 1426.0 - 1427.3 fmsl on the northwestern side of the lake to 1427.0 - 1427.3 on the southeastern side of the lake. A distinct change in soil characteristics (soil stratification) occurs at and below the beach scarps. The beach scarps are related to the current man-made earthen embankment crest elevation of 1427.2 fmsl.

Base elevations of boulder lines ranged from 1424.2 - 1426.1 fmsl with a median elevation of 1425.6 fmsl. A change in slope occurs at a boulder-cobble pavement contact at elevation 1425.6 fmsl. The boulder lines are representative of natural lake conditions prior to construction of the man-made earthen embankment and do not appear to have been affected by man-made influences.

Live cottonwood and willow trees were found at elevations 1425.6 - 1426.5 fmsl with a median elevation of 1426.0 fmsl.

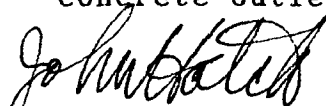
Based upon previous OHWM investigations and outlet elevations established by the Water Management Board, the field evidence indicates that the natural OHWM and outlet elevation for Fish Lake are 1425.6 and 1425.1 fmsl, respectively.

David S. Brown

David S. Brown
Natural Resources Engineer
DWNRR, Water Rights Division

RECOMMENDATION OF CHIEF ENGINEER

- 1) That the OHWM for Fish Lake, Aurora County be established at elevation 1425.6 fmsl.
- 2) That the outlet elevation for Fish Lake, Aurora County be set at 1425.1 fmsl and that Vested Water Right Claim No. 800-3 be amended to establish the outlet elevation at 1425.1 fmsl.
- 3) That Vested Water Right Claim No. 800-3 be amended to correct the amount of water claimed from 1800 acre feet annually to "sufficient water to fill Fish Lake annually to the outlet elevation of 1425.1 fmsl".
- 4) That Vested Water Right Claim No. 800-3 be amended with the qualification that No. 800-3 is subject to installation of a concrete outlet structure at elevation 1425.1 fmsl.


John Hatch, Chief Engineer
DWRN, Division of Water Rights

Bibliography

- Blaze, Douglas A.; Hammond, Richard H., Sand and Gravel Resources in Aurora County, South Dakota, South Dakota Geological Survey, Information Pamphlet No. 22, 1980.
- Chow, Ven Te, Handbook of Applied Hydrology, McGraw-Hill, Inc., 1964, pp. 21-27 - 21-32.
- Division of Water Rights, Well Logs and Files, Department of Water and Natural Resources, Foss Building, Pierre, South Dakota 57501.
- Flint, R. F., Pleistocene Geology of Eastern South Dakota, Geological Survey Professional Paper 262, 1955.
- Hamilton, Louis, J., Water Resources of Aurora and Jerauld Counties, South Dakota, U. S. Geological Survey, Water-Resources Investigations Report 84-4030, 1985.
- Hanten, Robert L., Inter-Department Correspondence to Donald Driscoll of the Department of Water and Natural Resources, South Dakota Department of Game, Fish and Parks, November 7, 1974.
- Heismeyer, Gerald L., Personal Communication, South Dakota Department of Game, Fish and Parks, Aurora County Conservation Officer, April 29, 1988.
- Jean-Claude Dionne, Ice action in the Lacustrine Environment: a Review with Particular Reference to Subarctic Quebec, Canada, Earth-Science Reviews, 15(3), 1979, pp. 185 - 212.
- Schumacher, C. M., Tolerance of South Dakota Plants to Flooding and to Wet Soils, U. S. Department of Agriculture, Soil Conservation Service, Huron, South Dakota, July, 1978, pp. 27 - 33.
- U. S. Department of Agriculture, Design Hydrographs for South Dakota, Soil Conservation Service Workshop, Huron, South Dakota, March 28-31, 1972, pp. 1 - 5.
- U. S. Department of Agriculture, National Engineering Handbook, Section 4, Hydrology, Soil Conservation Service, 1965, Reprinted with minor revisions, 1972, NEH Notice 4-103, June 1981, p. 21.3.
- U. S. Department of Agriculture, Soil Survey of Aurora County, South Dakota, Soil Conservation Service, September, 1980.
- U. S. Department of Agriculture, South Dakota Engineering Field Manual for Conservation Practices, Soil Conservation Service, January, 1971, pp. 2-11 - 2-29.
- U. S. Geological Survey, Techniques for Estimating Flood Peaks, Volumes, and Hydrographs, Water-Resources Investigations 80-80, September, 1980.

Trade in Plunkington and save

UNLIMITED

On only Mallards and Pintails, but occasionally small numbers of many other species. Occasional small flocks of Mallards, Murrelets, jaegers, gulls, and raptors, quacking, honking, and rustling of wings. The words of old timers, this is the ducks' duck concentration, was the first heard since very early times, way back in the 60's.

The especially heavy concentration of ducks at Fish Lake last week was due in part to the cold snap which froze the water surface north of here so that the ducks walked out the "final spasm of winter" in this area.

McDonald says that Game & Fish are going to reduce the bullhead population of Fish Lake by spring, using the trapped bullheads to stock lakes in need of them. Northern pike will be planted at Fish Lake.

MONTH

Chile Lake.

5500

Officials from Tulsa State

THE UNIVERSITY OF CHICAGO

at the "deport during the day"

will appear on the program

2000-2001

THE JAY SISTERS

ROAD OFFICIALS

Member of the Milwaukee

Dr. J. N. Jacoby

2007-11-06

OBITUARY

FRANK RICHARDSON

Funeral services were held on March 25 at 2:30 a. m. at the Presbyterian Church, 514 N. River Street, with Rev. J. H. McCall, pastor. Burial was in the cemetery at Frank Richardson. Officiating for Frank Richardson were done at his home Sunday, March 24.

Frank Richardson was born April 11, 1885 at Evansville, W. Va. He and Charles Richardson were at the age of nine years he came to Detroit, Mich. He was one of the best known and best loved of these three families, the Goodrich and Henry Richardson, and the Goodrich and Henry Richardson families. He was a member of the P. O. was located in the last Post-Master where the Bloomfield P. O. was located. He was located in the last Post-Master where the Bloomfield P. O. was located. He was located in the last Post-Master where the Bloomfield P. O. was located.

Frank was married April 8, 1931, to Ella Palmer, and to this union were born Evelyn Ouellette and Evelyn White. From the farm, in 1906, they moved to Vermillion, where he clerked in the Gunderson Hardware. When he became a rural carrier for

Overton County and built up the farm they owned. In 1933 they moved to Plankinton, where he worked as night watch man at the State Training School for 5 years.

Besides his wife, he leaves "a large family" of 11 children, including his daughter Evelyn Welch and his granddaughters, Jane and Michael. Since in Planktonia the "wretched" are "not" members of the church, and "now" have "scrapped" all the "wretched" members.

AT the services, "Hunged Cross" was sung. Mrs. A. V. DePea, Mrs. M. L. Gandy, Dr. C. V. And and L. ...

Albert, 34, of 1000 S. 10th St., Minneapolis, Minn., was in the family in Vermilion, where his parents and sister, with her husband, lived.

Contributors here were C. A. Allgood, Louis Hawkins, Albert Edwards, Ray Peterson, Frank Koester and Martin.

SENIOR PLAY

If such phrases as "Scotland Field," "covered," "after they don't defend," "as," and "blame," seem your best at you, open PHS. You will soon justified. — It is like cat in a bag.

Darlington, Conn.: Selling the "Blithedale" books on the way for the presentation, Friday, April 1. The play, written by Willard Massey, an English playwright is based upon a historical crime in England which accounts for these strange phrases. Added, often found in American plays, will also be unbalanced.

Supt. Willard H. Jordan, class adviser, has announced that the proceeds of the play will go toward the various school events and also for the annual.

CELEBRATING
1951
3 YEARS IN BUSINESS
FRIDAY, APRIL 1

FREE COFFEE & COOKIES
2:00 to 4:30 p. m.

and meet every day from 6:30 to 8:00. English pupils identified, and Mrs. Elaine Edwards is the secretary of the attendance club. The attendance club met last night and next Monday will be advised by the school principal of the school.

The record crowd attended the well-performed by the grades of the Plainmont School. March 10. The principal, Mr. J. H. Lee, reported that the grades amounted to \$117.40. The teachers decided at grade teachers' meeting Monday evening that the record be used in each grade. The record was used in each grade.

Word Of Thanks

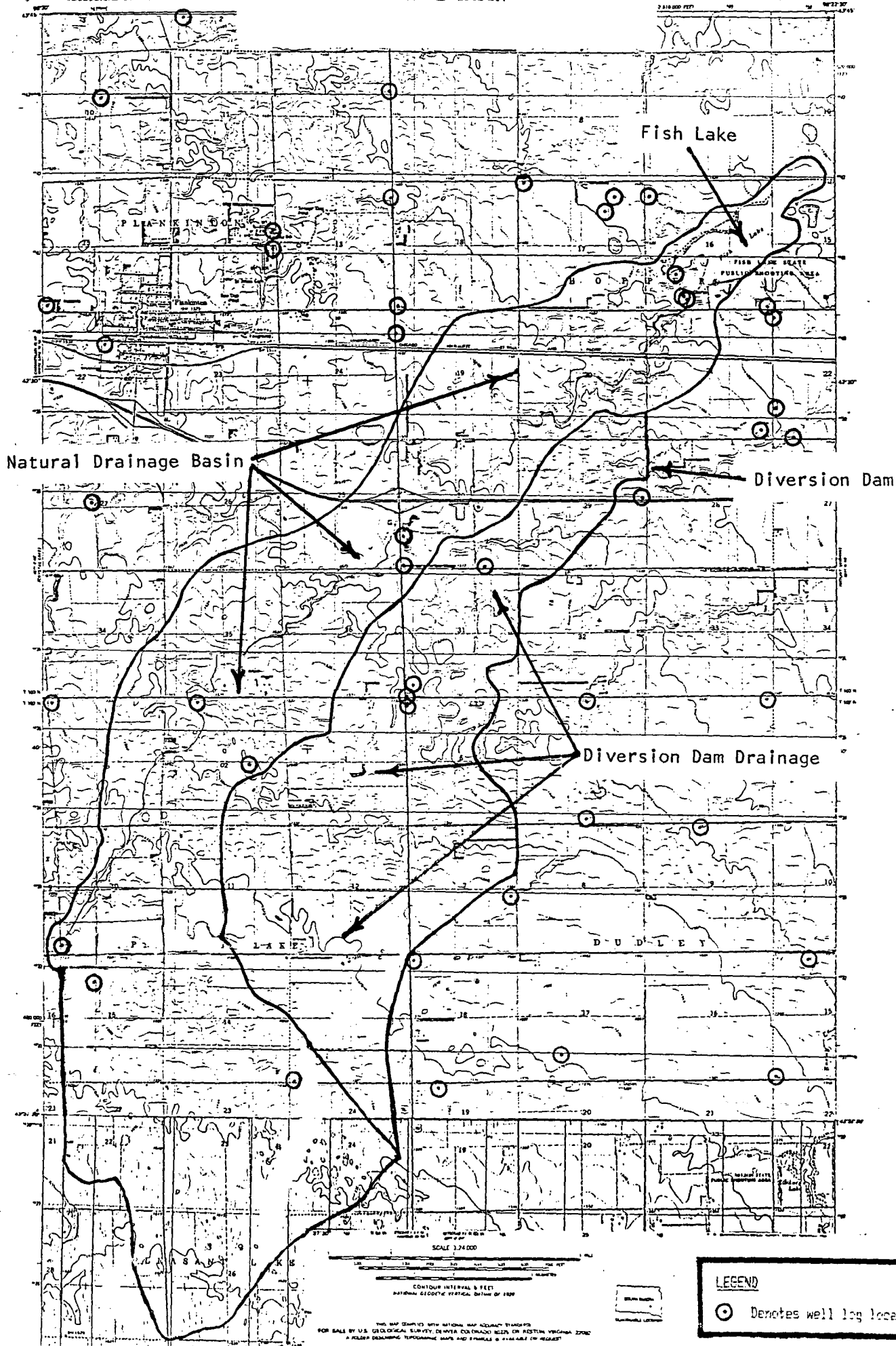
I wish to gratefully thank you for the many kind words and letters given up in this behalf by my dear husband.

Sincerely,
Mrs. J. H. Smith

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

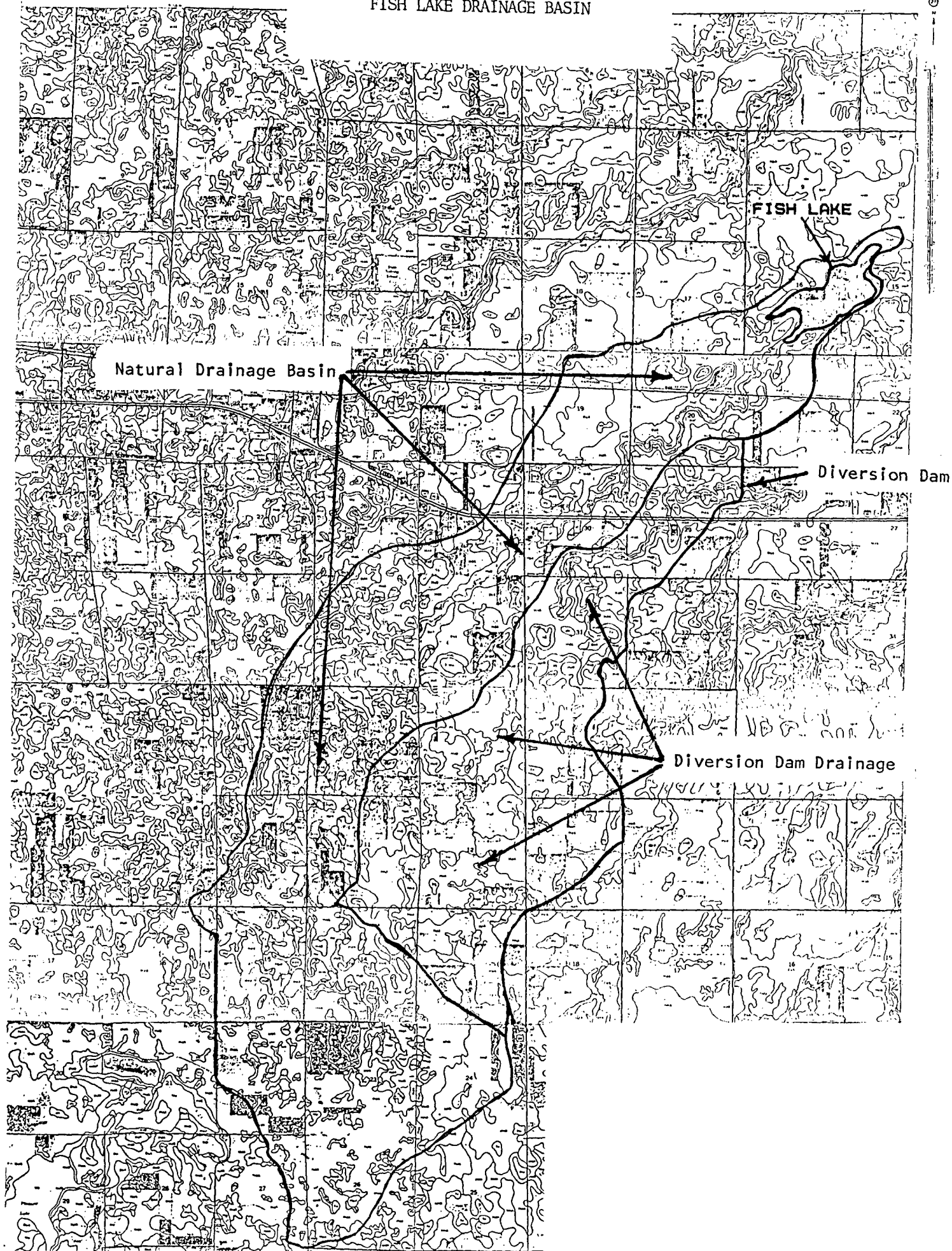
DRAINAGE BASIN

PLANKINTON QUADRANGLE
SOUTH DAKOTA-AURORA CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



SOILS MAP OF
FISH LAKE DRAINAGE BASIN

AURORA COUNTY, SOUTH DAKOTA - SHEET NUMBER 26

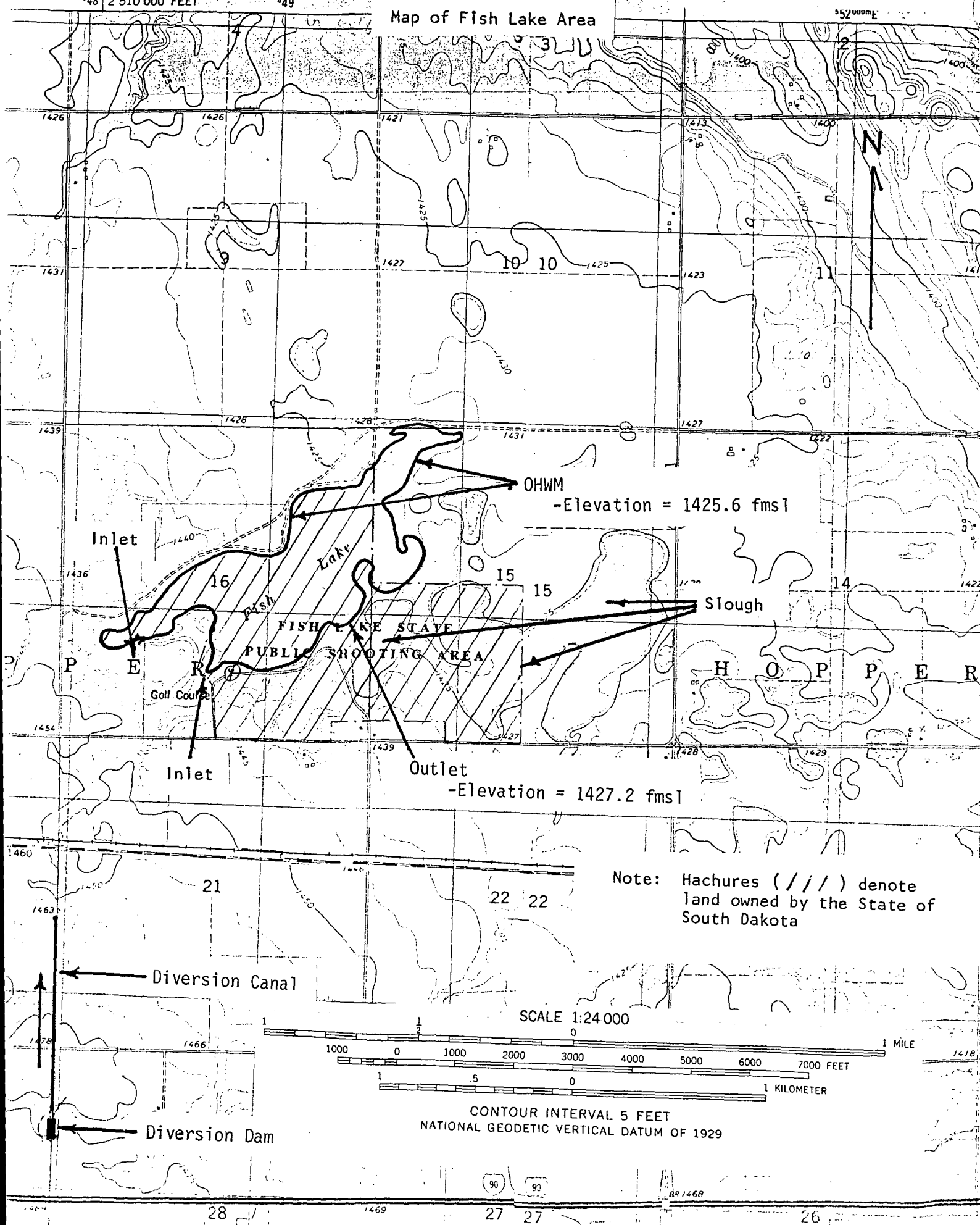


548 2 510 000 FEET

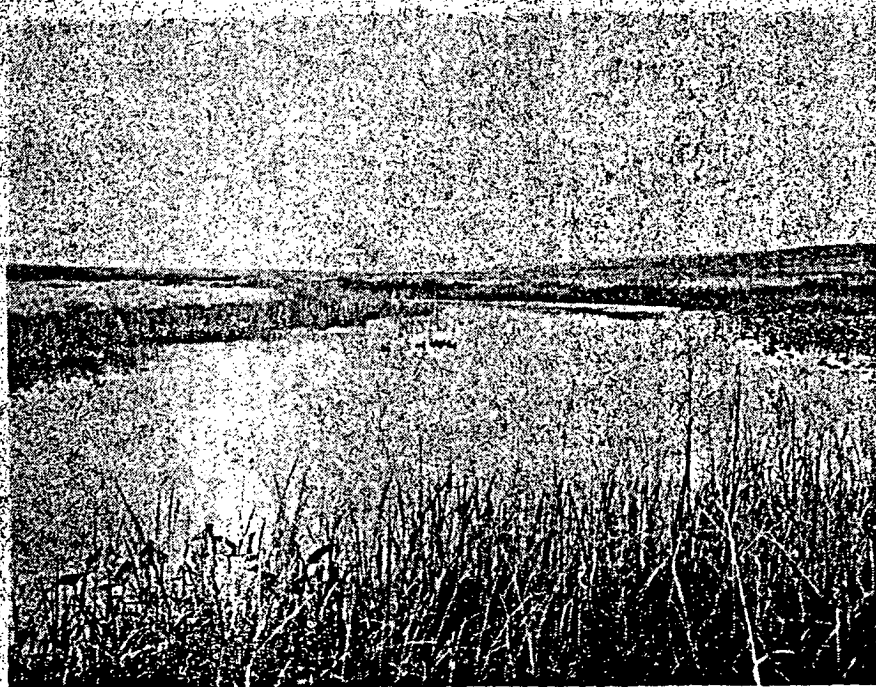
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Map of Fish Lake Area

552 000 M



TOLERANCE OF SOUTH DAKOTA PLANTS TO FLOODING AND TO WET SOILS



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE
HURON, SOUTH DAKOTA 57350

WOODY PLANTS

More attention by foresters in South Dakota has been given to the effects of drought on woody plants than to the effects of too much water. This seems very reasonable when comparing the less critical need for trees on waterlogged soils with the need for trees on the windswept, droughty uplands.

There are wet soils, often around manmade structures, where for aesthetic, recreational or wildlife habitat purposes it would be very advantageous to introduce trees or shrubs. For this reason a better understanding of the effects of flooding on woody plants will be of some practical value to conservationists and land managers in South Dakota.

As with herbaceous plants it is known that some woody plants tolerate longer periods of flooding than do others. For example, hardwoods (deciduous) species generally show greater tolerance than do the conifers. It is considered very probable that differences in tolerance may also occur within a species, due to genetic variation which has occurred over a considerable period of time. However, the guide developed in this paper will be confined to pointing out differences in tolerance between species.

It is equally important that other factors affecting tolerance of woody plants to flooding be considered. Some of these factors may be quite variable and difficult to predict but effects from all these factors must be anticipated.

1. Time of flooding:

Flooding is only critical when it occurs during the growing season, unless the flooding causes severe erosion or deposition. Studies have shown this to be true both for seedlings and mature trees. For example, McAlpine (1961) reported that seedlings of tuliptree (*Liriodendron tulipifera*) withstood dormant season flooding very well, but died after four days' flooding in May and after three days' flooding in June.

2. Duration of flooding:

The duration of flooding becomes critical when flooding occurs during the growing season. Studies on several reservoirs show that even the more tolerant species generally can withstand repeated flooding for only 40 to 45 percent of the growing season. Gill (1970) states that year-round root inundation can be tolerated in isolated years. The period over which flooding can occur without it resulting in critical injury is a common criteria for describing tolerance of species.

3. Depth of flooding:

Possibility of injury of woody species increases as depth of flooding progresses from soil saturation, to partial inundation, to complete inundation. Most injury is caused by saturation of the rooting zone with water. When this occurs oxygen is excluded from the root system, there may be a buildup of carbon dioxide and there may be adverse effects from toxic by-products of decomposition. As the water level rises to submerge the plant other essential functions are affected by reduced light intensity and interference with stomatal functions. The study by Hall and Smith (1955) points out that when two flood tolerant species occurring side by side are flooded the taller of the two species may survive if the top of the taller plant projects above the water.

4. Type of floodwater:

Moving water is generally less injurious than is stagnant water, because of the better oxygen distribution in the moving water. Water temperature is also a factor and as water temperature rises the danger of injury increases.

5. Age and size of plants:

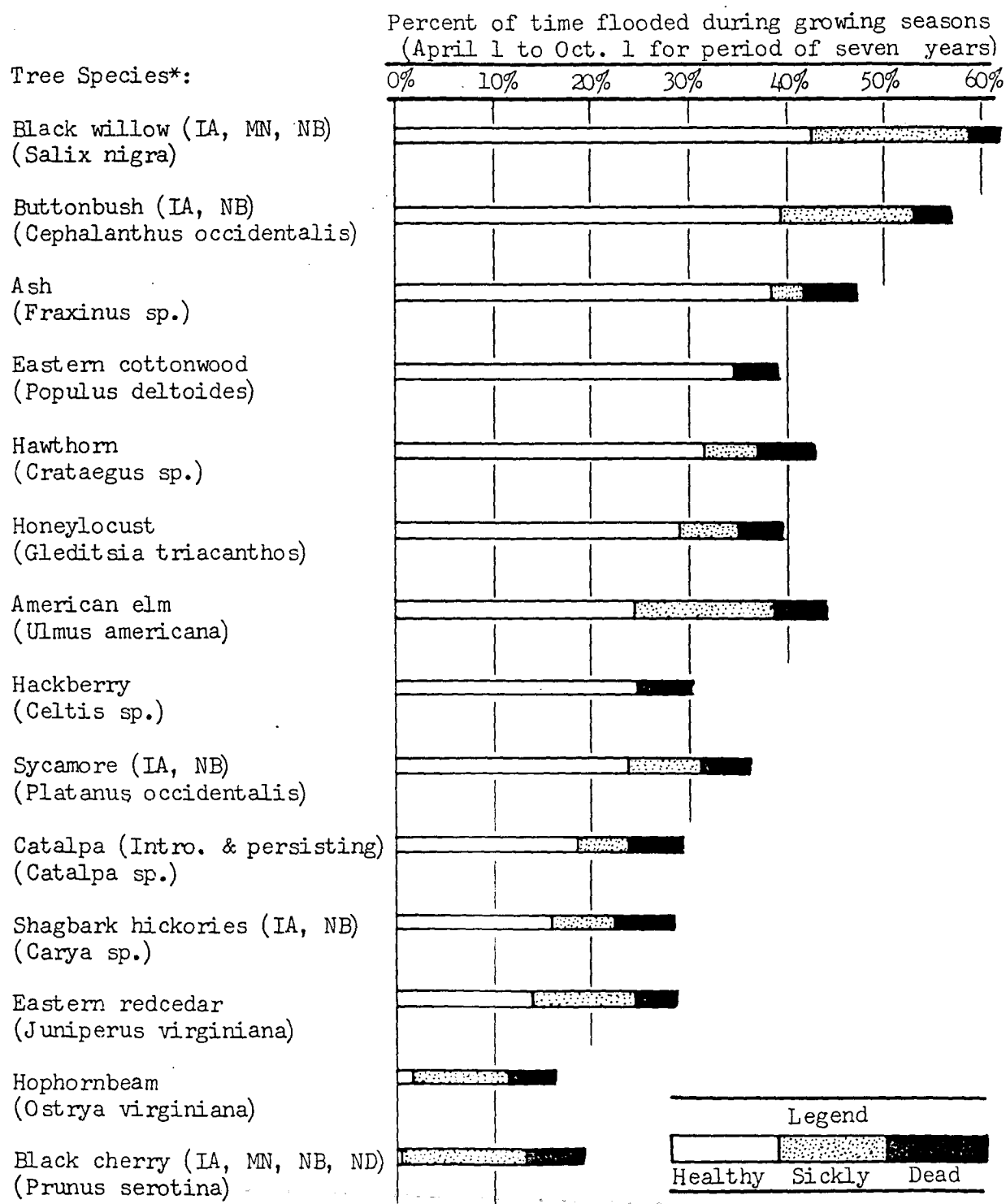
Size and, in this context, age are factors in that the shorter the plant the more apt it is to be completely inundated. Gill (1970) suggests that mature, vigorous individuals suffer less flooding damage than do either seedlings or overmature specimens of the same species.

6. Soils factors:

In general woody plants tolerate more flooding if growing on sandy soils than they do on clays. The effects of poor soil aeration are more acute on heavy soils. Because of better permeability and drainage the soil saturation effect, after flooding, is not as enduring on sandy sites. Also, plants growing on sandy soils have a much branched and well developed root system.

The differences in flooding tolerance between species have been surveyed on several flooded reservoirs. One such survey, involving many species that grow in South Dakota, was reported by Hall and Smith (1955). This study was conducted from September 1, 1944 to July 1, 1952 on the West Sandy dikeing and dewatering project located in Henry County, Tennessee. Tolerance was measured by correlating survival with the percent of time flooded during all of the growing seasons. The results for woody plants that grow in South Dakota, or neighboring states, are shown in Figure 1.

Figure 1. Tolerance of Woody Plants to Repeated Annual Flooding
(Hall & Smith 1955) Dewatering Project in Tennessee.



*Species shown are native in South Dakota or surrounding states as indicated.

Table 1. Mortality of Trees When Flooded in Spring of 1973 (Harris 1975)
Flood Pools of Lakes near Tulsa, Oklahoma

Condition of Trees After Flooding	Keystone Lake Flooded 73-83 days				Oologah Lake Flooded 67-92 days		
	Alive	Dead	Under Stress		Alive	Dead	Under Stress
Tree species:							
Willow sp. (<i>Salix</i> sp.)	100%	0%	0%		100%	0%	0%
Cottonwood (<i>Populus deltoides</i>)	100	0	0		98	0	2
Boxelder (<i>Acer negundo</i>)	99	1	0		97	3	
Green ash (<i>Fraxinus pennsylvanica</i>)	99	1	0		94	2	+
Silver maple (<i>Acer saccharinum</i>)	98	2	0		--	--	--
American elm (<i>Ulmus americana</i>)	95	5	0		66	21	13
Hackberry (<i>Celtis occidentalis</i>)	91	9	0		61	13	26
Mulberry (<i>Morus rubra</i>)	66	22	12		80	5	15
Hawthorn sp. (<i>Crataegus</i> sp.)	69	18	13		--	--	--
Catalpa (<i>Catalpa speciosa</i>)	--	--	--		60	30	10
Redcedar (<i>Juniperus virginiana</i>)	45	55	0		--	--	--
Honeylocust (<i>Gleditsia trianthos</i>)	--	--	--		43	55	2
Black locust (<i>Robinia pseudoacacia</i>)	0	95	5		6	94	0

Another study, by Harris (1975), was made following a 1973 spring flood of flood pools behind two structures put in by the U. S. Army Corps of Engineers in the mid-1960s. These flood pools, both near Tulsa, Oklahoma, were flooded for the first time in 1973. Flooding started in early spring and water in the lakes returned to normal level by the middle of June. Mortality of trees was determined from normal lake level to a height 10 feet above normal lake level. At Keystone Lake the duration of flooding was 73 days at the 10-foot level and water receded to normal pool level in 87+ days. At Oologah Lake the duration of flooding was 67 days at the 10-foot level and water receded to normal pool level in 92+ days. The mortality, as determined for species of trees that grow in South Dakota, is shown in Table 1.

A guide to flood tolerance of woody plants can also be developed by observing plant distribution on flood plains and around the lakes and marshes in South Dakota. For example, the dead snags of both young and mature trees behind the Missouri River dams testify to the fact that total submergence for several years is fatal. With a knowledge of flood plain species, and observation of the habitat in which they grow, a flood tolerance grouping, shown in Table 2, has been developed.

Table 2. Natural Occurrence of Woody Plants on South Dakota Flood Plains

1. Flooding is most frequent and of very long duration:

- a) Shrubs that grow along streams, lakes and marshes or in wet meadows.

Sandbar willow	<i>Salix exigua</i>
Bog willow	<i>Salix candida</i>
Diamond willow	<i>Salix rigida</i>
Meadow willow	<i>Salix petiolaris</i>
Indigobush	<i>Amorpha fruticosa</i>

- b) Occurring where wetness is slightly less than (a) are tree willows and woody vines.

Peachleaf willow	<i>Salix amygdaloides</i>
Riverbank grape	<i>Vitis riparia</i>
Poisonivy	<i>Toxicodendron rydbergii</i>
Virginia creeper	<i>Parthenocissus quinquefolia</i>

2. Flooding is less frequent and of shorter duration - duration may still be classified as very long (more than one month):

- a) Occurring on sandy soils that may have a high water table.

Eastern cottonwood	<i>Populus deltoides</i>
Redosier dogwood	<i>Cornus stolonifera</i>

- b) Occurring on less sandy soils which do not have such a high water table.

Boxelder	<i>Acer negundo</i>
Green ash	<i>Fraxinus pennsylvanica</i>
Pricklyash	<i>Zanthoxylum americanum</i>
Wild rose	<i>Rosa arkansana</i>
Gooseberry	<i>Ribes missouriense</i>
Bittersweet	<i>Celastrus scandens</i>

- c) Introduced species that tolerate this degree of flooding.

White poplar	<i>Populus alba</i>
Lombardy poplar	<i>Populus nigra</i>

3. Flooding is occasional and duration is for a long period.

- a) Occurring on moderately well drained flood plains.

American elm	<i>Ulmus americana</i>
Slippery elm	<i>Ulmus rubra</i>
Hackberry	<i>Celtis occidentalis</i>
American plum	<i>Prunus americana</i>

- b) Introduced species that tolerate this degree of flooding.

Russianolive	<i>Elaeagnus angustifolia</i>
--------------	-------------------------------

4. Broad flood plains that are occasionally flooded for long periods (7 days to 1 month) but where soils are richer, more mature, and better drained.

Honeylocust	<i>Gleditsia triacanthos</i>
Black walnut	<i>Juglans nigra</i>
Kentucky coffeetree	<i>Gymnocladus dioica</i>
Silver maple	<i>Acer saccharinum</i>
American linden	<i>Tilia americana</i>

5. Species which in eastern South Dakota are more apt to occur on steeper slopes and sides of ravines but further west may occur on flood plains.

Bur oak	<i>Quercus macrocarpa</i>
Eastern redcedar	<i>Juniperus virginiana</i>
Buffaloberry	<i>Shepherdia argentea</i>
Western snowberry	<i>Symphoricarpos occidentalis</i>
Smooth sumac	<i>Rhus glabra</i>

Using the data shown in Figure 1 and Table 1 and the observations presented in Table 2 as guidelines, it should be possible to select species that will tolerate predicted amounts of flooding. This will be of value when planning tree and shrub plantings made for aesthetic, recreational or wildlife habitat purposes in flood plain or flood pool areas..

References: Woody Plants

Gill, C.J. 1970. The flooding tolerance of woody species - A* review. For. Abs. 31:671-688.

Hall, T.F. and G.E. Smith. 1955. Effects of flooding on woody** plants, West Sandy dewatering project, Kentucky Reservoir. J. For. 53:281-285.

Harris, Marc D. 1975. Effects of initial flooding on forest vegetation at two Oklahoma lakes. J. Soil Water Cons. 30:294-295.

McAlpine, R.B. 1961. Yellow-poplar seedlings intolerant to flooding. J. For. 59:566-568.

Van Bruggen, Theodore. 1976. The vascular plants of South* Dakota. Ia. St. Univ. Press, Ames, Ia. 538 p.

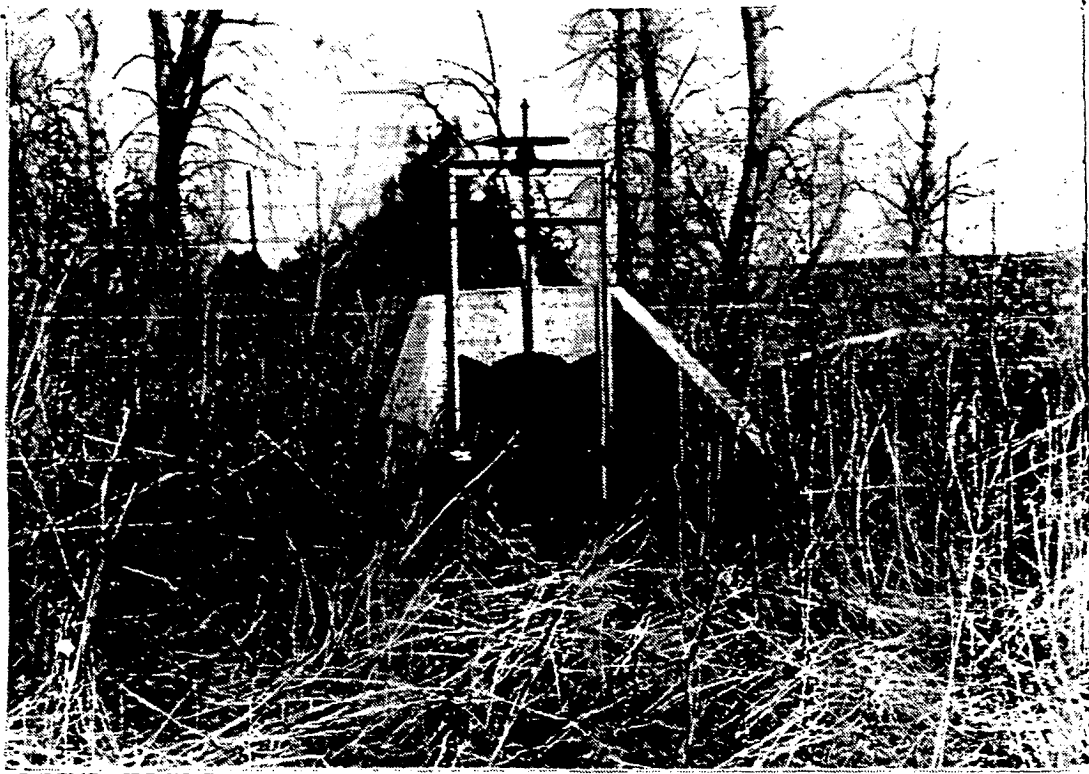


Photo No. 1 Department of Game Fish and Parks diversion dam, NE $\frac{1}{4}$ NE $\frac{1}{4}$
Section 29, T103N R63W



Photo No. 2 Earthen Outlet at elevation 1427.2 ft msl, NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$
Section 16, T103N R63W

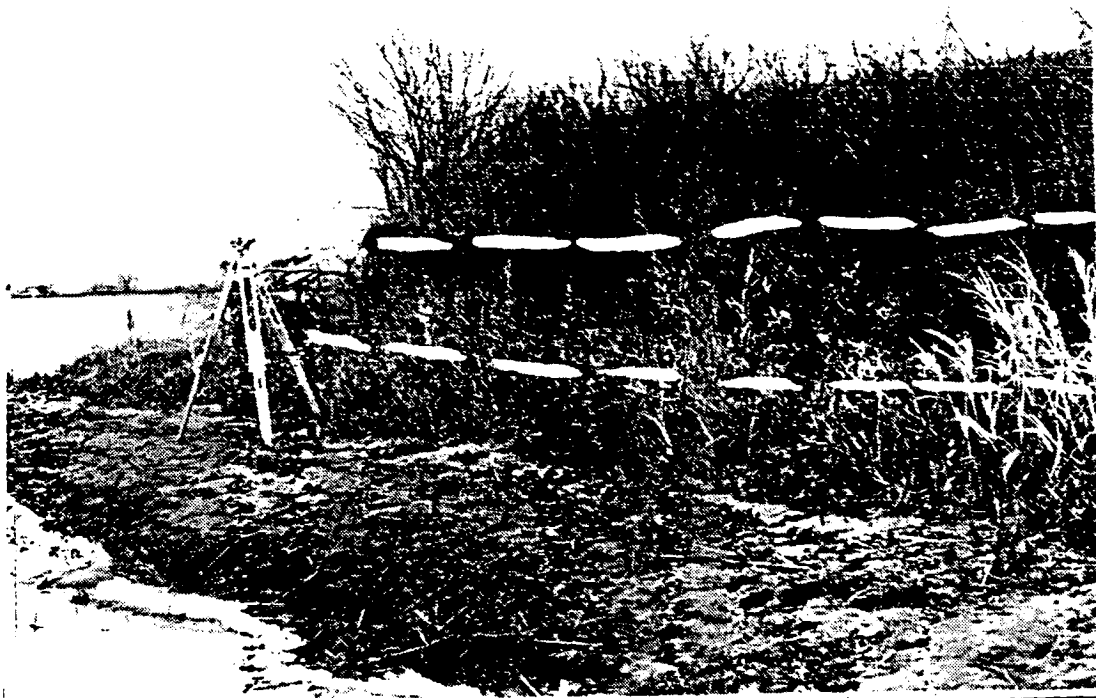


Photo No. 3 Beach Scarp at elevation 1426.9, SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 16,
T103N R63W



Photo No. 4 Beach scarp at elevation 1427.3, NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 16,
T103N R63W

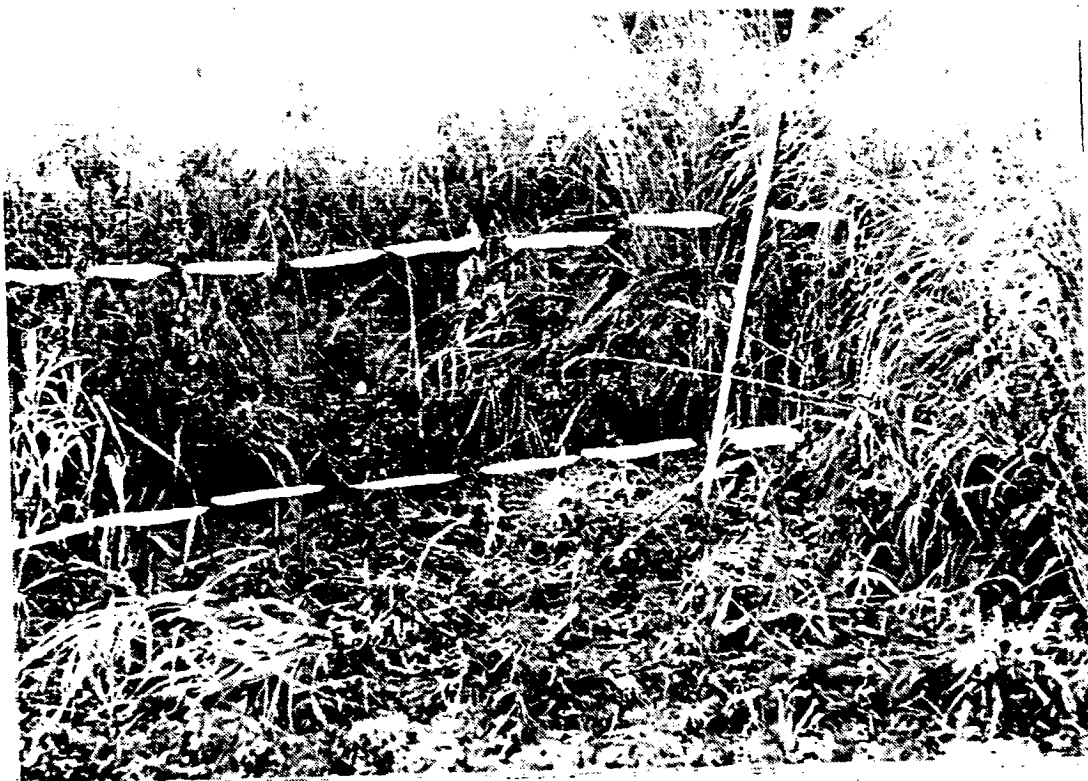


Photo No. 5 Beach Scarp at elevation 1426.6, NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 16,
T103N R63W



Photo No. 6 Boulder line elevation 1425.6 NW $\frac{1}{4}$ NE $\frac{1}{4}$
SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 16, T103N R63W



Photo No. 7 Boulder line at elevation 1425.6 ft msl, NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$
Section 16, T103N R63W



Photo No. 8 Boulder line at elevation 1425.9 ft msl, SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$
Section 16 T103N R63W



Photo No. 9 Change in slope at boulder-cobble pavement contact at elevation 1425.6 ft msl, NW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 16, T103N R63W



Photo No. 10 Three 3 foot diameter boulders at elevation 1425.3 ft msl, NW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 16, T103N, R63W



Photo No. 11 Dead trees at elevation 1425.2 ft msl, NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$
Section 15, T103N R63W



Photo No. 12 Dead trees at elevation 1426.0 ft msl, SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$
Section 16 T103N R63W



Photo No. 13 Dead Trees at elevation 1425.5 ft msl, NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$
Section 16, T103N R63W



Photo No. 14 Dead Trees at varying elevations, SW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 16
T103N R63W



Photo No. 15 Live 22 year old 2.0 foot diameter Cottonwood tree at elevation 1425.5 ft msl, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 16 T103N R63W



Photo No. 16 Live 39 year old 2.2 foot diameter Cottonwood tree at elevation 1426.0 ft msl SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 16 T103N R63W

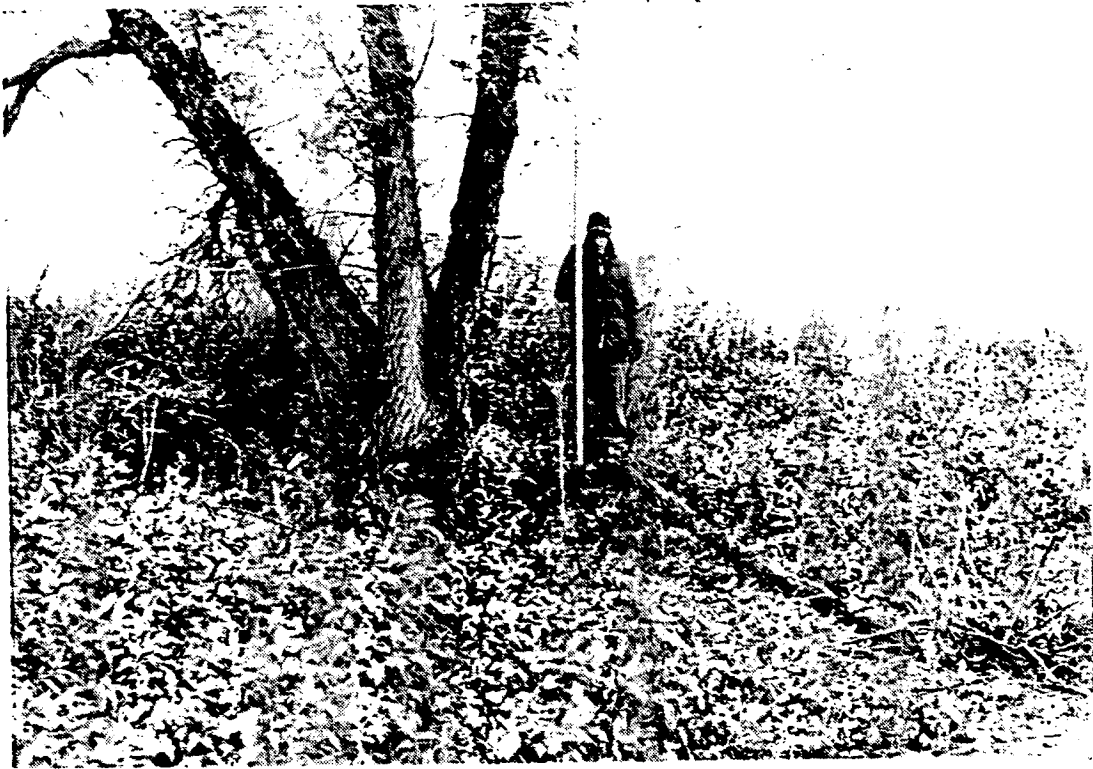


Photo No. 17 Live 1.1 foot diameter tree at elevation 1426.0 ft msl,
SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 16, T103N R63W



Photo No. 18 Live 1.6 foot diameter 30 year old Cottonwood tree at
elevation 1425.6 ft msl NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 16, T103N R63W



Photo No. 19 Live 3.2 foot diameter 39+ year old Cottonwood tree at elevation 1425.6 ft msl, NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 16 T103N R63W

ADDENDUM TO FISH LAKE, AURORA COUNTY, OHWM REPORT
November 3, 1988

On October 12, 1988, Tom Brandner and David Brown, Division Engineers, made a supplemental field investigation of the Fish Lake outlet area. The purpose of the supplemental investigation was to determine the elevation of the natural outlet for Fish Lake by coring the soil in the outlet area.

The current man-made outlet for Fish Lake is an earthen embankment constructed in the fall of 1954/winter of 1955. The crest elevation of the current outlet is 1427.2 fmsl.

The field investigation assumed that the natural outlet area is located where the existing man-made outlet is. Intuitively, this appears to be a reasonable assumption because it is likely that the earthen embankment was constructed over the lowest point between Fish Lake and the adjacent slough.

A manually powered soil auger was used to obtain soil samples in the outlet area. Two, 5 feet deep, three inch diameter holes, spaced 15 feet apart were dug in the outlet area. Both of the soil cores showed the following soil profile.

<u>Soil Depth</u> <u>(feet)</u>	<u>Soil</u> <u>Description</u>
0 - 2	Black to gray silty clay, moist, moderately hard, organic; gray silty clay, friable and carbonaceous in the lower 1/3 of the section.
2 - 4 1/2	Gray sandy loam, friable and carbonaceous at upper boundary; moderate to coarse sand, wet, clean, moderately well sorted (visually classified).
4 1/2 - 5	Moderate to coarse sand, wet, clean, moderately well sorted; gray loam, bedrock (glacial till).

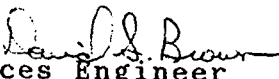
Both of the soil cores showed a moderately well sorted clean sand layer below the existing outlet between elevations 1422.87 and 1425.2 fmsl (± 0.2 feet). The sand layer is clean and moderately well sorted which indicates substantial lacustrine (lake) and/or glacial energy was available in the depositional environment of the sand layer. In other words, the sand layer appears to be a result of lake water wave action and/or from glacial melt water when the lake was formed.

It is not known how the man-made earthen embankment was constructed. Specifically, it is not known if any excavation took place in the outlet area prior to construction of the earthen embankment.

The top of the sand layer is approximately 0.5 feet below the recommended Ordinary High Water Mark (OHWM) (see OHWM report for Fish Lake, Aurora County, 1988). Based upon previous OHWM investigations (Division Files) where the lake outlet is used on a relatively frequent (geologic time frame) basis, one would expect the OHWM to be located approximately 0.5 feet above the lake outlet.

Conclusions

1. A 2 - 2 1/2 feet thick moderately well sorted clean sand layer exists at elevation 1422.7 - 1425.2 fmsl ($\pm$ 0.2 feet).
2. The recommended OHWM for Fish Lake, Aurora County is at elevation 1425.6 fmsl and the recommended outlet elevation for Fish Lake is at elevation 1425.1 fmsl.

David S. Brown 
Natural Resources Engineer
DWNR, Water Rights Division

run
THIS PROGRAM CALCULATES THE DISCHARGE FROM A TRAPAZODIAL
SPILLWAY WHEN THE SLOPE, FLOW DEPTH, SIDE SLOPES, AND
THE BOTTOM WIDTH ARE KNOWN.

WHAT IS THE DAM NAME?

? fish lake outlet improvements

WHAT IS THE SIDE SLOPE X:Y WITH Y=1?

? 2

WHAT IS THE BOTTOM WIDTH OF THE SPILLWAY?

? 100

WHAT IS THE SLOPE OF THE SPILLWAY CHANNEL?

? .002

WHAT IS THE MANNINGS N?

? .035

WHAT IS THE DEPTH OF FLOW?

? .5

DO YOU WISH THIS ROUTED TO THE PRINTER?

? y

manning's n= .035

velocity= 1.18703

flow= 59.945 cfs

fish lake outlet improvements

FLOW DEPTH= .5 FT

AREA= 50.5 FT²

WETTED PERIMETER= 102.2361

HYDRAULIC RADIUS= .4939549

MANNINGS N= .035

VELOCITY= 1.18703 FT/SEC

FLOW= 59.945 CFS

DO YOU WISH ANOTHER CALULATION VARYING ONLY FLOW DEPTH?

? y

$$\frac{V^2}{2g} = 0.02$$

OK

run

THIS PROGRAM CALCULATES THE DISCHARGE FROM A TRAPAZODIAL
SPILLWAY WHEN THE SLOPE, FLOW DEPTH, SIDE SLOPES, AND
THE BOTTOM WIDTH ARE KNOWN.

WHAT IS THE DAM NAME?

? FISH LAKE OUTLETS SPILLWAY IMPROVEMENTS

WHAT IS THE SIDE SLOPE X:Y WITH Y=1?

? 2

WHAT IS THE BOTTOM WIDTH OF THE SPILLWAY?

? 150

WHAT IS THE SLOPE OF THE SPILLWAY CHANNEL?

? .002

WHAT IS THE MANNINGS N?

? .035

WHAT IS THE DEPTH OF FLOW?

? .5

DO YOU WISH THIS ROUTED TO THE PRINTER?

? y

manning's n= .035

velocity= 1.190205

flow= 89.86048 cfs

FISH LAKE OUTLETS SPILLWAY IMPROVEMENTS

FLOW DEPTH= .5 FT

AREA= 75.5 FT²

WETTED PERIMETER= 152.2361

HYDRAULIC RADIUS= .4959403

MANNINGS N= .035

VELOCITY= 1.190205 FT/SEC

FLOW= 89.86048 CFS

DO YOU WISH ANOTHER CALULATION VARYING ONLY FLOW DEPTH?

? y

WHAT IS THE DEPTH OF FLOW?

? .7

DO YOU WISH THIS ROUTED TO THE PRINTER?

? y

manning's n= .035

velocity= 1.485983

flow= 157.4845 cfs

FISH LAKE OUTLETS SPILLWAY IMPROVEMENTS

FLOW DEPTH= .7 FT

AREA= 105.98 FT²

WETTED PERIMETER= 153.1305

HYDRAULIC RADIUS= .6920895

MANNINGS N= .035

VELOCITY= 1.485983 FT/SEC

FLOW= 157.4845 CFS

DO YOU WISH ANOTHER CALULATION VARYING ONLY FLOW DEPTH?

? y

$$\frac{V^2}{2g} = 0.02$$

$$\frac{V^2}{2g} = 0.03$$

WHAT IS THE DEPTH OF FLOW?
? 1.0
DO YOU WISH THIS ROUTED TO THE PRINTER?
? Y
mannings n= .035
velocity= 1.878449
flow= 285.5242 cfs
FISH LAKE OUTLETS SPILLWAY IMPROVEMENTS
FLOW DEPTH= 1 FT
AREA= 152 FT^2
WETTED PERIMETER= 154.4721
HYDRAULIC RADIUS= .9839962 *2/29 0.06*
MANNINGS N= .035
VELOCITY= 1.878449 FT/SEC
FLOW= 285.5242 CFS
DO YOU WISH ANOTHER CALULATION VARYING ONLY FLOW DEPTH?
? Y
WHAT IS THE DEPTH OF FLOW?
? 1.3
DO YOU WISH THIS ROUTED TO THE PRINTER?
? Y
mannings n= .035
velocity= 2.230098
flow= 442.4068 cfs
FISH LAKE OUTLETS SPILLWAY IMPROVEMENTS
FLOW DEPTH= 1.3 FT
AREA= 198.38 FT^2
WETTED PERIMETER= 155.8138
HYDRAULIC RADIUS= 1.273187
MANNINGS N= .035
VELOCITY= 2.230098 FT/SEC
FLOW= 442.4068 CFS
DO YOU WISH ANOTHER CALULATION VARYING ONLY FLOW DEPTH?
? Y
WHAT IS THE DEPTH OF FLOW?
? .2
DO YOU WISH THIS ROUTED TO THE PRINTER?
? Y
mannings n= .035
velocity= .6486383
flow= 19.51104 cfs
FISH LAKE OUTLETS SPILLWAY IMPROVEMENTS
FLOW DEPTH= .2 FT
AREA= 30.08 FT^2
WETTED PERIMETER= 150.8944
HYDRAULIC RADIUS= .1993447
MANNINGS N= .035
VELOCITY= .6486383 FT/SEC
FLOW= 19.51104 CFS
DO YOU WISH ANOTHER CALULATION VARYING ONLY FLOW DEPTH?
? Y
WHAT IS THE DEPTH OF FLOW?
? .
DO YOU WISH THIS ROUTED TO THE PRINTER?
? Y
mannings n= .035
velocity= 0
flow= 0 cfs
FISH LAKE OUTLETS SPILLWAY IMPROVEMENTS
FLOW DEPTH= 0 FT
AREA= 0 FT^2
WETTED PERIMETER= 150
HYDRAULIC RADIUS= 0
MANNINGS N= .035
VELOCITY= 0 FT/SEC
FLOW= 0 CFS
DO YOU WISH ANOTHER CALULATION VARYING ONLY FLOW DEPTH?
? Y
WHAT IS THE DEPTH OF FLOW?
? .3
DO YOU WISH THIS ROUTED TO THE PRINTER?
? Y
mannings n= .035
velocity= .8488045
flow= 38.34899 cfs
FISH LAKE OUTLETS SPILLWAY IMPROVEMENTS
FLOW DEPTH= .3 FT
AREA= 45.18 FT^2
WETTED PERIMETER= 151.3417
HYDRAULIC RADIUS= .2985299
MANNINGS N= .035
VELOCITY= .8488045 FT/SEC
FLOW= 38.34899 CFS
DO YOU WISH ANOTHER CALULATION VARYING ONLY FLOW DEPTH?
? Y
WHAT IS THE DEPTH OF FLOW?
? .4
2860 from start

? .4
DO YOU WISH THIS ROUTED TO THE PRINTER?
? Y

mannings n= .035

velocity= 1.026945

flow= 61.94534 cfs

FISH LAKE OUTLETS SPILLWAY IMPROVEMENTS

FLOW DEPTH= .4 FT

AREA= 60.32 FT²

WETTED PERIMETER= 151.7889

HYDRAULIC RADIUS= .3973942

MANNINGS N= .035

VELOCITY= 1.026945 FT/SEC

FLOW= 61.94534 CFS

DO YOU WISH ANOTHER CALULATION VARYING ONLY FLOW DEPTH?

REPORT ON VESTED WATER RIGHT CLAIM

No. 5256-3

January 13, 1989

On December 7, 1989, the Ordinary High Water Mark for Fish Lake, Aurora County was established (at elevation = 1425.6 feet mean sea level (fmsl)) by the Water Management Board. Establishing the outlet elevation for Fish Lake was deferred until the South Dakota Department of Game, Fish and Parks submitted a Vested Water Right Claim for the existing outlet.

Fish Lake is located in Sections 15 and 16, T103N, R62W in Aurora county. Fish Lake has a surface area of approximately 190 acres, a maximum depth of 5 feet, and a maximum storage capacity of approximately 1000 acre feet. Creeks draining into the lake are ephemeral and generally flow only during late winter and spring of wet years as a result of snowmelt and later in spring and summer as a result of intense thunderstorms (Hamilton, 1985).

Vested Water Right Application No. 5256-3 claims sufficient runoff water annually to fill Fish Lake from the outlet elevation existing prior to 1954 (elevation 1425.1 fmsl), to the present outlet (elevation 1427.2 fmsl) with a claimed priority date of August 25, 1954. Natural runoff into Fish Lake can be supplemented by use of a diversion dam and ditch located in the NE 1/4 NE 1/4 of Section 29, and on the section line Right-of-Way between Sections 28 and 29, and Sections 20 and 21, all in T103N, R63W. Natural runoff and diverted runoff is used for: recreational purposes, provide habitat for wildlife and livestock purposes.

Location Notice (dated August 25, 1954) No. 6051-3 indicates that the diversion dam was constructed by the Department of Game, Fish and Parks (see Appendix I). Location Notice No. 6051-3 claims 200 acres feet of water annually for a dam across a dry draw in NE 1/4 NE 1/4 of Section 29, T103N, R63N and construction of ditches and flumes for the purpose of directing flood waters from the dam for irrigation and livestock purposes.

Newspaper records (see Appendix II) indicate that a dam was constructed prior to March 31, 1955. The "dam" in the newspaper article appears to reference a dam constructed in the outlet of Fish Lake.

It is reported that the earthen "dam" was lowered to an unknown elevation in an attempt to alleviate flooding around Fish Lake during the early 1960's (Heismeyer, 1988). The present elevation of the earthen "dam" crest located in the NW 1/4 SE 1/4 NE 1/4 SE 1/4 of Section 16, T103N, R63W is 1427.2 fmsl (Brown, 1988). The natural outlet for Fish Lake prior to construction of the "dam" is believed to be at elevation 1425.1 fmsl (see Appendix III).

SDCL 46-1-9 (1) & (13) defines a "Vested Right" as:

(1) The right of a riparian owner to continue to use water actually applied to any beneficial use on March 2, 1955, or within three years immediately prior to that date to the extent of the existing beneficial use made of the water.

(3) The right of a riparian owner to take and use water for beneficial purposes if the riparian owner was engaged in the construction of works for the actual application of water to a beneficial use on March 2, 1955, provided the works were completed and water was applied to use within a reasonable time thereafter.

Conclusions

1. Vested Water Right Claim No. 5256-3 is a valid claim. A August 25, 1954 priority date can be claimed for the diversion dam, diversion canal and existing outlet elevation (1427.2 fmsl).
2. Prior to 1954, the outlet elevation for Fish Lake is believed to have been at elevation 1425.1 fsml.
3. Natural runoff and diverted runoff is used for: recreational purposes, to provide habitat for wildlife and livestock purposes.



DAVID S BROWN
Natural Resources Engineer

Bibliography

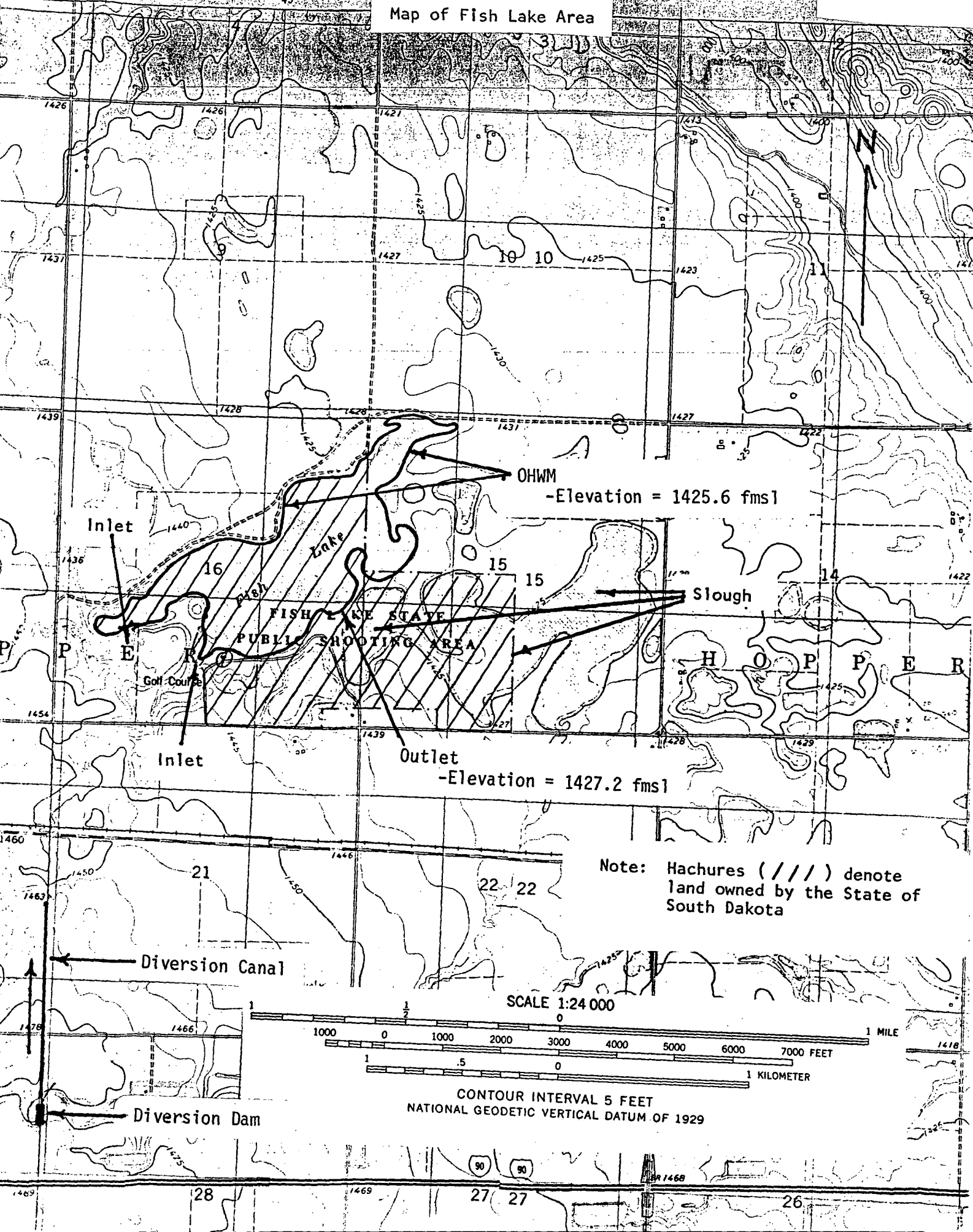
Brown, David S. Ordinary High Water Mark Investigation, Fish Lake, Aurora County, South Dakota Department of Water and Natural Resources, Water Rights Division, August 1988, p. 9.

Hamilton, Louis, J., Water Resources of Aurora and Jerauld Counties, South Dakota, U.S. Geological Survey, Water-Resources Investigations Report 84-4030, 1985.

Heismeyer, Gerald L., Personal Communication, South Dakota Department of Game, Fish and Parks, Aurora County Conservation Officer, April 29, 1988.

2 510 000 FEET

Map of Fish Lake Area



LOCATION NOTICE

KNOW ALL MEN BY THESE PRESENTS RECEIPT NO. 16223That South Dakota Department of Game, Fish and Parkswhose post office is Platte, South Dakota, a CELESTIAL BODILY CHIEF

above the age of 21 years, being in possession of the following described land, to-wit:

on Section Line Right-of-way between Sections 22 and 23, and Sections 23 and 24

Section 23 Township 200 N Range 61 W R. 14 W.in Aurora County, South Dakota, Availing 1/2 of the rightgranted 16 under the provisions of Chapter 61 6123 RSM 1920 has located andclaims the right to construct a certain dam across a dry draw situated in the SE1/4 of the SE 1/4 of Section 22 Township 200 N Range 61 W

and has located and claims the right to construct ditches and flumes for the purpose of diverting said waters from said dam for irrigation of the land first above described and for Live Stock Purposes, and claims the right of way across any land for the purpose of conveying water for said purposes.

Said locator claims for the above purposes 200 acre feet of water annually
 the estimated surface area of storage basin is 1/2 acre.
 The estimated drainage area above the basin is 1/2 acre.
 The location of the point of diversion of the water from its natural channel is below

From the point of diversion, due north to the section corner is 750 feet.

If the project includes a ditch,

The ditch will run in a Northward direction to and on said land for a distance of 2.75 feetSaid location was made on the 28 day of August 1964Witness my hand and seal this 28 day of August 1964

A fee of one dollar is herewith enclosed for filing this Location Notice in the State Engineer's Office as required by Section 66.1805 of the SDC of 1920.

Ronald Duvall
 Location

STATE OF SOUTH DAKOTA,

County of AuroraOn the 28 day of August19 64, before me R. B. Hills, a Notary Public in and for theCounty and State aforesaid, personally appeared Ronald Duvall

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

Appendix III

ADDENDUM TO FISH LAKE, AURORA COUNTY, OHWM REPORT
November 3, 1988

On October 12, 1988, Tom Brandner and David Brown, Division Engineers, made a supplemental field investigation of the Fish Lake outlet area. The purpose of the supplemental investigation was to determine the elevation of the natural outlet for Fish Lake by coring the soil in the outlet area.

The current man-made outlet for Fish Lake is an earthen embankment constructed in the fall of 1954/winter of 1955. The crest elevation of the current outlet is 1427.2 fmsl.

The field investigation assumed that the natural outlet area is located where the existing man-made outlet is. Intuitively, this appears to be a reasonable assumption because it is likely that the earthen embankment was constructed over the lowest point between Fish Lake and the adjacent slough.

A manually powered soil auger was used to obtain soil samples in the outlet area. Two, 5 feet deep, three inch diameter holes, spaced 15 feet apart were dug in the outlet area. Both of the soil cores showed the following soil profile.

<u>Soil Depth</u> <u>(feet)</u>	<u>Soil</u> <u>Description</u>
0 - 2	Black to gray silty clay, moist, moderately hard, organic; gray silty clay, friable and carbonaceous in the lower 1/3 of the section.
2 - 4 1/2	Gray sandy loam, friable and carbonaceous at upper boundary; moderate to coarse sand, wet, clean, moderately well sorted (visually classified).
4 1/2 - 5	Moderate to coarse sand, wet, clean, moderately well sorted; gray loam, bedrock (glacial till).

Both of the soil cores showed a moderately well sorted clean sand layer below the existing outlet between elevations 1422.57 and 1425.2 fmsl (± 0.2 feet). The sand layer is clean and moderately well sorted which indicates substantial lacustrine (lake) and/or glacial energy was available in the depositional environment of the sand layer. In other words, the sand layer appears to be a result of lake water wave action and/or from glacial melt water when the lake was formed.

It is not known how the man-made earthen embankment was constructed. Specifically, it is not known if any excavation took place in the outlet area prior to construction of the earthen embankment.

The top of the sand layer is approximately 0.5 feet below the recommended Ordinary High Water Mark (OHWM) (see OHWM report for Fish Lake, Aurora County, 1988). Based upon previous OHWM investigations (Division Files) where the lake outlet is used on a relatively frequent (geologic time frame) basis, one would expect the OHWM to be located approximately 0.5 feet above the lake outlet.

Conclusions

1. A 2 - 2 1/2 feet thick moderately well sorted clean sand layer exists at elevation 1422.7 - 1425.2 fmsl ($\pm$ 0.2 feet).
2. The recommended OHWM for Fish Lake, Aurora County is at elevation 1425.6 fmsl and the recommended outlet elevation for Fish Lake is at elevation 1425.1 fmsl.

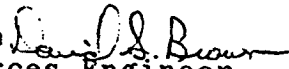
David S. Brown 
Natural Resources Engineer
DWNR, Water Rights Division



Photo No. 1 Department of Game Fish and Parks diversion dam, NE $\frac{1}{4}$ NE $\frac{1}{4}$
Section 29, T103N R63W



Photo No. 2 Earthen Outlet at elevation 1427.2 ft msl, NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$
Section 16, T103N R63W

RECOMMENDATION OF CHIEF ENGINEER FOR VALIDATION OF VESTED WATER
RIGHT CLAIM NO. 5256-3, Department of Game, Fish and Parks

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Validation of Vested Water Right Claim No. 5256-3, Department of Game, Fish & Parks, 445 East Capitol, Pierre SD.

The Chief Engineer is recommending VALIDATION of Application No. 5256-3 and as follows:

1. For sufficient runoff water annually to fill Fish Lake, Aurora County from the outlet elevation existing prior to 1954 (1425.1 fmsl) to elevation 1427.2 fmsl;
2. For a diversion dam located in the NE 1/4 NE 1/4 of Section 29, and a diversion ditch on the section line Right-of-way between Sections 28 and 29, and Sections 20 and 21, all in T103N R63W; and
3. That the applicable portions of Location Notice No. 6051-3 be incorporated into No. 5256-3 and that the abandoned portions of Location Notice No. 6051-3 are cancelled;

because 1) water has been appropriated as described for recreational purposes, wildlife habitat purposes and livestock use with a priority date of August 25, 1954, 2) the use has been developed without unlawful impairment of existing rights, 3) the use is a beneficial use and 4) it is in the public interest with the following qualifications to Validation:

1. Validation of No. 5256-3 sets the outlet elevation for Fish Lake at 1427.2 fsml.
2. That low flows as needed for downstream domestic use, including livestock watering, and prior water rights must be by-passed when the diversion dam is used to divert water to Fish Lake.
3. That a concrete elevation reference marker be installed near the Fish Lake outlet area.

See the attached report for additional information.


JOHN HATCH, Chief Engineer
January 20, 1989

RECOMMENDATION OF CHIEF ENGINEER FOR VALIDATION OF VESTED WATER
RIGHT CLAIM NO. 800-3, Department of Game, Fish and Parks

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Validation of Vested Water Right Claim No. 800-3, Department of Game, Fish & Parks, 445 East Capitol, Pierre SD.

The Chief Engineer is recommending VALIDATION of Claim No. 800-3 because 1) water has been appropriated as described for fish and wildlife propagation and conservation and recreation purposes with a priority date of November 2, 1889, 2) the use has been developed without unlawful impairment of existing rights, 3) the use is a beneficial use and 4) it is in the public interest with the following qualification:

That Vested Water Right Claim No. 800-3 be amended to correct the amount of water claimed from 1800 acre feet annually to "sufficient water to fill Fish Lake annually to elevation of 1425.1 fmsl".

See the attached report for additional information.



JOHN HATCH, Chief Engineer
January 20, 1989



Department of Water & Natural Resources

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

January 8, 1989

NOTICE

TO: Richard Beringson, Secretary
Department of Game, Fish and Parks
445 E Capitol
Pierre SD 57501
and Parties of Record

FROM: John Hatch, Chief Engineer
Water Rights Division
605 773-3352

A handwritten signature in dark ink, appearing to read "John Hatch", written over the printed name and title.

SUBJECT: Adoption of Findings of Fact, Conclusions of Law and
Final Decision

This is to notify you that a Final Decision, including Findings of Fact, Conclusions of Law were adopted by the Water Management Board for deferral of Vested Water Right Claim No. 5256-3 and recognized Vested Water Right Claim No. 800-3 which was considered at the December 6-7, 1989 meeting.

A copy of the signed final Decision, Findings and Conclusion is enclosed for the applicant. Copies will be furnished to anyone else upon request. South Dakota Statutes provide that the decision of the Board may be appealed to the Courts.

CERTIFICATION

I hereby certify that on January 8, 1990 I have personally deposited with the U.S. Mail postage prepaid envelopes containing a Notice on Adoption of Findings of Fact, Conclusions of Law and Final Decision on Permit No. 5256-3 and 800-3 to those persons listed on the Parties of Record sheet and the following:

Ron Koth, Department of Game, Fish and Parks, Anderson Bldg.
Susan Steele, Attorney, Box 577, Plankinton SD 57368

Karen Schlaak
KAREN SCHLAAK
Senior Secretary

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 9th day of January, 1989⁹⁰.



John Bald
Notary Public

Feb. 10, 1989

John Hatch, Chief Engineer
Water Rights Divison, Foss Building
523 E. Capitol
Pierre, S. Dak. 57501



Richard Beringason, Secretary Dept.
Game Fish & Parks
445 E. Capitol
Pierre, S. Dak. 57501



We the under signed, hereby request a delay in the hearing set for March 1, 1989 to validate Game, Fish & parks vested water right application No. 5256-3 to appropriate water to fill Fish Lake to elevation 1427.2. We need more time to determine the impact on natural drainage, roads, bridges, farmsteads, private lands etc, in Hopper township.

Interested parties:

Daniel E Johnson
drainage board member
RT2 Box 74A Plankinton to Dak
57368

Hopper Township
Board of Supervisors

John W. Smith, Supervisor
Gene Madsen, Supervisor
John Loville, Supervisor
Larry Ljesdal, Clerk
RR1 Box 17 Plankinton, S.D.
57368

Feb. 16, 1989
(date)

page 1

Parties of Record before Water Management Board regarding Vested
Water Right Claim No. 5256-3, SD Dept of Game, Fish
and Parks

Proponents:

Richard Beringson, Secretary
SD Dept of Game, Fish & Parks
445 E Capitol
Pierre SD 57501

Concerned:

Darrel E Johnson
Route 2, Box 74A
Plankinton SD 57368

John M Miller, Supervisor

Plankinton SD 57368

Gene Malde, Supervisor

RR 2

Plankinton SD 57368

John Saville, Supervisor

Plankinton SD 57368

Gary Gjesdal

Route 1, Box 17

Plankinton SD 57368

 **Department of
Water & Natural Resources**

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

January 12, 1989

Ron Koth, Wildlife Biologist
SD Department of Game, Fish and Parks
445 E Capitol
Pierre SD 57501

Dear Ron:

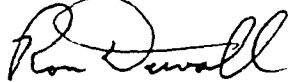
This letter is in response to Game, Fish and Park's vested right claim application for Fish Lake. The following information needs to be submitted to complete the application:

- 1) An Affidavit of Water Use form needs to be submitted with the vested right claim. Enclosed is an Affidavit form for your use.
- 2) The enclosed maps also need to be signed by someone representing the applicant that prepares maps as part of their duties.

The vested right claim can not be advertised for a hearing until the application is complete. Please have the maps signed and the Affidavit completed and return both as soon as possible. I have also enclosed applications for nonirrigation uses for your use in the future.

Please contact me if you have any questions.

Sincerely,



Ron Duvall
Natural Resources Engineer
605 773-3352

enc.





Department of Water & Natural Resources

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

January 23, 1989

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT THE
NEWSPAPER RIGHT AWAY.

Ron Koth
Department of Game, Fish and Parks
445 E Capitol
Pierre SD 57501

Dear Mr. Koth:

Application No. 5256-3 for a vested water right claim has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of your claim has been sent to the Publisher of the South Dakota Mail printed at Plankinton SD. For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your notice of hearing to validate a vested right and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. We must receive Proof of Publication before the application can be considered by the Water Management Board.

Sincerely,

Ron Duvall
Natural Resources Engineer
605 773-3352

enclosures





Department of Water & Natural Resources

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

January 23, 1989

South Dakota Mail
Box 367
Plankinton SD 57368

Dear Sir:

Enclosed is a Notice of Hearing to Validate Vested Right Application No. 5256-3 to be published twice. Please publish the notice on or before February 2, 1989 with the second publication 7 days later.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is the Department of Game, Fish and Parks, 445 E Capitol, Pierre SD 57501.

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. The permit application cannot be considered by the Water Management Board until proof of publication has been received.

Sincerely,

Ron Duvall
Natural Resources Engineer
605 773-3352

enclosures

CUT HERE

FIRST TRANSMITTAL NOTICE

TO: ATTN: Ron Duvall
Water Rights Division
Joe Foss Building
Pierre SD 57501-3181

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to Validate A Vested Right Application which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name _____

Newspaper _____



Instruction to Newspaper - Publish first Notice on or before February 2, 1989 with 2nd publication 7 days later. The applicant is responsible for payment.

NOTICE OF HEARING To Validate
Vested Water Right Application No. 5256-3 to Appropriate Water

Notice is given that the Department of Game, Fish and Parks, 445 E Capitol, Pierre SD has filed an application to validate a vested water right claim Application No. 5256-3 is for sufficient runoff water annually to fill Fish Lake from the outlet elevation existing prior to 1954 (1425.1 feet mean sea level) to the present outlet elevation of 1427.2 feet mean sea level (fmsl) with a claimed priority date of August 25, 1954. Fish Lake is located primarily in Sections 15, 16-T103N-R63W in Aurora County. Application No. 5256-3 is also for a diversion dam located in the E 1/2 NE 1/4 Section 29-T103N-R63W to divert water into Fish Lake. The drainage area above the diversion dam is approximately 7.0 square miles and operation of the dam is regulated by the Department of Game, Fish and Parks. Runoff not diverted by the dam enters a slough area on the east side of Fish Lake. An August 25, 1954 priority date is claimed for the diversion dam and for the present Fish Lake outlet elevation. Water is used for recreational purposes and wildlife habitat purposes. Validation of No. 5256-3 will set the outlet elevation for Fish Lake at 1427.2 fmsl.

Pursuant to SDCL 46-2A-2, the Chief Engineer of the Water Rights Division recommends VALIDATION of Vested Water Right Application No. 5256-3 and that applicable portions of Location Notice No. 6051-3 be incorporated into Application No. 5256-3 and that abandoned portions of Notice No. 6051-3 be cancelled because 1) water has been appropriated as described for recreational purposes, wildlife habitat purposes and livestock use with a priority date of August 25, 1954, 2) the use has been developed without unlawful impairment of existing rights, 3) it is a beneficial use of water and 4) it is in the public interest. This application will be considered by the Water Management Board at the Howard Johnson's, Roosevelt Room, 1-90 at LaCrosse, Rapid City SD on March 1, 1989 at 10:00 am. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve validation, 2) approve the validation with qualifications, 3) defer or 4) deny validation of the application based on the facts presented at the public hearing.

Any interested person that intends to participate in the hearing before the Board by presenting evidence or cross-examining witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and Chief Engineer by February 17, 1989. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)". The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application and the signature and mailing address of the petitioner or legal counsel if legal counsel is obtained. The applicant need not file a petition. Contact the Water Rights Division to request information on this application or to assure access to the hearing by the handicapped.

This hearing is an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. The time of the hearing will also be automatically delayed for at least twenty days upon written request to the Chief Engineer from the applicant or a petitioner. The request for a delay must be received by February 17, 1989.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-18; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31, 46-5-49; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15 and 74:02:01:19 thru 74:02:01:22.

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA)
(ss
COUNTY OF AURORA)

Edward Van Genderen, of said County and State, being first duly sworn, on his oath says:

The South Dakota Mail is a weekly newspaper of general circulation, printed and published in Plankinton, in Aurora County and State of South Dakota by Edward Van Genderen and has been such newspaper during the times hereinafter mentioned; that the said newspaper is a legal newspaper, that it has a bona-fide circulation of more than 200 copies weekly, that it has been published within said County of Aurora in the English language for more than fifty-two successive weeks next prior to the publication of the notice hereinafter mentioned, and has been printed during said period and at the present time, in whole or part in an office maintained at the said place of publication; and that I, the undersigned, am Publisher of said newspaper, in charge of the advertising department thereof, and have personal knowledge of all facts stated in this affidavit; that the advertisement headed

notice of Hearing

a printed copy of which is hereto attached, was printed and published in the

said newspaper for *2 times*; that said notice was published in the issues of said paper on the dates as follows, to-wit:

The first publication being made on *Feb. 2*, 19*89*;
the second publication on *Feb 9*, 19*89*;
the third publication on _____, 19____;
the fourth publication on _____, 19____;
and subsequent publication on _____, 19____;

that \$ *51.30* the full amount of the fee charged for publication of the annexed notice, inures solely to the benefit of the publishers of the said newspaper; that no arrangement or understanding for a division thereof has been made with any person, and that no part thereof has been agreed to be paid to any person whomsoever.

Edward Van Genderen

Subscribed and sworn to before me this *9*

day of *Feb.*, 19*89*

Gordon Gordon

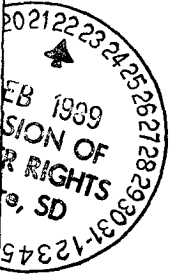
Notary Public, Aurora County

My Commission expires Jan 18 1992

To Validate
Vested Water Right
Application No. 5256-3
to Appropriate Water

Notice is given that the Department of Game, Fish and Parks, 445 E Capital, Pierre, SD has filed an application to validate a vested water right claim. Application No. 5256-3 is for sufficient runoff water annually to fill Fish Lake from the outlet elevation existing prior to 1954 (1425.1 feet mean sea level) to the present outlet elevation of 1427.2 feet mean sea level (fmsl) with a claimed priority date of August 25, 1954. Fish Lake is located primarily in Sections 15, 16-T103N-R63W in Aurora County. Application No. 5256-3 is also for a diversion dam located in the E 1/2 NE 1/4 Section 29-T103N-R63W to divert water into Fish Lake. The drainage area above the diversion dam is approximately 7.0 square miles and operation of the dam is regulated by the Department of Game, Fish and Parks. Runoff not diverted by the dam enters a slough area on the east side of Fish Lake. An August 25, 1954 priority date is claimed for the diversion dam and for the present Fish Lake outlet elevation. Water is used for recreational purposes and wildlife habitat purposes. Validation of No. 5256-3 will set the outlet elevation for Fish Lake at 1427.2 fmsl.

Pursuant to SDCL 46-2A-2, the Chief Engineer of the Water Rights Division recommends VALIDATION of Vested Water Right Application No. 5256-3 and that applicable portion of Location Notice No. 6051-3 be incorporated into Application No. 5256-3 and that abandoned portions of Notice No. 6051-3 be cancelled because 1) water has been appropriated as described for recreational purposes, wildlife habitat purposes and livestock use with a priority date of August 25, 1954, 2) the use has been developed without unlawful impairment of existing rights, 3) it is a beneficial use of water and 4) it is in the public interest. This application will be considered by the Water Management Board at the Howard Johnson's, Roosevelt Room, I-90 at LaCrosse, Rapid City SD on March 1, 1989 at 10:00 am. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve validation, 2) approve the validation with qualifications, 3) defer or 4) deny validation of the application based on the facts presented at the public hearing.



**PRINTER'S AFFIDAVIT OF
PUBLICATION**

IN _____ COURT
STATE OF SOUTH DAKOTA)
(ss
COUNTY OF AURORA)

Filed in the _____ on the _____
day of _____, 19____

Attorney for

Publication Fee ----- \$

Notary Fee - - - - - \$

Total - - - - - \$

Received Payment:

Any interested person that intends to participate in the hearing before the Board by presenting evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and Chief Engineer by February 17, 1989. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E Capital, Pierre SD 57501 (605-773-3352)". The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application and the signature and mailing address of the petitioner or legal counsel if legal counsel is obtained. The applicant need not file a petition. Contact the Water Rights Division to request information on this application or to assure access to the hearing by the handicapped.

This hearing is an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. The time of the hearing will also be automatically delayed for at least twenty days upon written request to the Chief Engineer from the applicant or petitioner. The request for a delay must be received by February 17, 1989.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A10, 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-18; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31, 46-5-49; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15 and 74:02:01:19 thru 74:02:01:22.



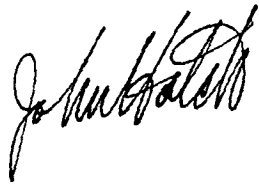
Department of Water & Natural Resources

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

January 30, 1989

NOTICE

TO: Richard Beringson, Secretary
Department of Game, Fish & Parks
445 E Capitol
Pierre SD 57501

FROM: John Hatch, Chief Engineer 
Water Rights Division
605 773-3352

SUBJECT: Consider Validation of Vested Water Right Claim No.
800-3, SD Department of Game, Fish and Parks for Fish
Lake in Aurora County

The Water Management Board will consider validation of Vested Water Right Claim No. 800-3 at 10:00 am on March 1, 1989, in the Roosevelt Room, Howard Johnson's, I-90 and LaCrosse, Rapid City SD. Consideration of validation of Claim No. 800-3 is scheduled to be considered with Vested Right Claim No. 5256-3 for Fish Lake. The agenda time is an estimate. The actual time of hearing may be later than 10:00 am due to prior agenda items.

Applicable provisions of the Notice published June 2 and 9, 1988 in the South Dakota Mail, Plankinton SD for Claim No. 800-3 will still apply at the March 1, 1989 hearing.

cc: Larry Donovan, Assistant Attorney General
Ron Koth, Dept. Game, Fish & Parks



CERTIFICATION

I hereby certify that on January 30, 1989 I have personally deposited with the U.S. Mail postage prepaid envelopes containing a Notice to Consider Validation of Vested Water Right Claim No. 800-3, Fish Lake addressed to those people on the attached list.

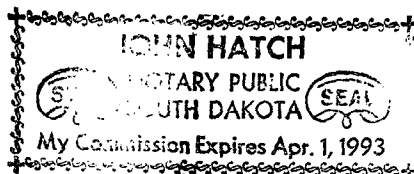
Sent interoffice mail:

Richard Beringson, Secretary, Dept. of Game, Fish and Parks
Ron Koth, Dept. of Game, Fish and Parks

Karen Schlaak
KAREN SCHLAACK
Senior Secretary

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 1st day of February, 1989.



John Hatch
Notary Public

Record#	NAME	ADDRESS	CITY
1	Gerry Heismeyer, Conservation Off.	Box 187	Plankinton SD 57368-0187
2	Tom Clemens, Dist. Conservationist	Box 227	Plankinton SD 57368
3	Richard Beringson, Secretary	Dept. of Game, Fish & Parks	Anderson Building
4	Darline Heines, Auditor	PO Box 397	Plankinton SD 57368
5	Aurora County Commission	PO Box 397	Plankinton SD 57368
6	Lloyd N & Viola Nickles	PO Box 183	Plankinton SD 57368
7	Jesse E Hawkins c/o Hopper Import	1891 Sante Fe Ave	Long Beach CA 90810
8	Lars, Lena & Marlin Gjesdal	Rt 1, Box 16	Plankinton SD 577368
9	Gilbert C & Pearl Olsen	Plankinton SD 57368	
10	Walter & Margaret Miller	603 N Main	Plankinton SD 57368
11	Martin Schoenfeld	Plankinton SD 57368	
12	Evelyn E Saville	209 N Duff	Plankinton SD 57368
13	John Saville	Plankinton SD 57368	
14	David Saville	Plankinton SD 57368	
15	Fish Lake County Club, Inc.	Lex Weller, President	Plankinton SD 57368



Department of Water & Natural Resources

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

February 17, 1989

NOTICE

TO: Richard Beringson, Secretary
Department of Game, Fish & Parks
445 E Capitol
Pierre SD 57501
and Parties of Record (see attached list)

FROM: *for* John Hatch, Chief Engineer *Delvin U. Buzg*
Water Rights Division
605 773-3352

SUBJECT: Delay of Hearing on Vested Water Right Claim No. 5256-3
and Vested Water Right Claim No. 800-3, Dept. of Game,
Fish & Parks

A petition dated February 10, 1989, has been received by the Division of Water Rights. The petition requests a delay in the hearing for Vested Water Right Claim No. 5256-3. The hearing on Claim No. 5256-3 is automatically delayed pursuant to SDCL 46-4A-4 and 46-2A-5 and will NOT be held on March 1, 1989. The hearing on Claim No. 800-3 is also delayed to allow consideration of both claims by the Water Management Board at the same Board meeting.

The Water Management Board will consider Claim Nos. 5256-3 and 800-3 on May 10, 1989 at 9:15 am, in Room 216, Joe Foss Building, 523 E Capitol, Pierre SD. The agenda time is an estimate. The actual time of hearing may be later than 9:15 am due to prior agenda items. Applicable provisions of the Notice of Hearings published June 2 and 9, 1988 and February 2 and 9, 1989 in the South Dakota Mail will still apply at the May 10, 1989 hearing.

cc: Larry Donovan, Assistant Attorney General
Ron Koth, Dept. of Game, Fish & Parks



CERTIFICATION

I hereby certify that on February 17, 1989 I have personally deposited with the U.S. Mail postage prepaid envelopes containing a Notice of Delay of Hearing on Vested Right Claim Nos. 800-3 and 5256-3 addressed as shown on the Parties of Record sheet.

Baren Schlack

KAREN SCHLAAK
Senior Secretary

STATE OF SOUTH DAKOTA)
COUNTY OF HUGHES) SS

Sworn to, before me, this 22nd day of February, 1989.



John H. Hales
Notary Public



Department of Water & Natural Resources

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

May 12, 1989

NOTICE

TO: Richard Beringson, Secretary
Department of Game, Fish & Parks
445 E Capitol
Pierre SD 57501
and Parties of Record (see attached list)

FROM: John Hatch, Chief Engineer *John Hatch*
Water Rights Division
605 773-3352

SUBJECT: Deferral of Vested Water Right Claim No. 5256-3 and
Recognized Vested Water Right Claim No. 800-3, Dept. of
Game, Fish & Parks

The Water Management Board deferred consideration of Vested Water Right Claim No. 5256-3 and Vested Right Claim No. 800-3 at the May 10, 1989 Board meeting to allow time to review a survey of the Fish Lake area completed by Pierce and Harris Engineering, Huron SD. Copies of the survey and file information on Claim Nos. 5256-3 and 800-3 can be reviewed at the Water Rights Division office.

The Board will now consider Claim Nos. 5256-3 and 800-3 on September 27, 1989 at 9:15 am, in Room 216, Joe Foss Building, 523 E Capitol, Pierre SD. The agenda time is an estimate. The actual time of hearing may be later than 9:15 am due to prior agenda items. Applicable provisions of the Notice of Hearings published June 2 and 9, 1988 and February 2 and 9, 1989 in the South Dakota Mail will still apply at the September 27, 1989 hearing.

cc: John Haak, Assistant Attorney General
Ron Koth, Dept. of Game, Fish & Parks



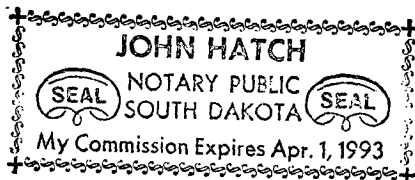
CERTIFICATION

I hereby certify that on May 12, 1989 I have personally deposited with the U.S. Mail postage prepaid envelopes containing a Notice on Deferral of Vested Right Claim No. 5256-3 and Recognized Vested Right Claim No. 800-3 addressed as shown on the Parties of Record sheet.

Karen Schlaak
KAREN SCHLAACK
Senior Secretary

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 15th day of May, 1989.



John Bates
Notary Public



Department of Water & Natural Resources

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

July 21, 1989

Ron Koth
Department of Game, Fish and Parks
Anderson Building
Pierre SD 57501

Dear Ron:

As you requested, enclosed are single event (rainstorm) runoff volume and peak discharge estimates concerning the Fish Lake drainage basin in Aurora County.

Annual yield runoff volumes for the Fish Lake drainage were not calculated. Annual yield runoff volumes were not calculated because of the inherent difficulty of determining lake elevations based upon the following variables: volume of water added to lake by direct precipitation (choosing a surface area and spatial distribution of rainfall over an entire year), lake surface evaporation (evaporation is a non-uniform rate and volume of water evaporated changes with changes in surface area), and uncertainties in the time distribution of annual yield runoff events.

The **single event runoff volume** estimates indicate that Fish Lake can be expected to fill to the present outlet elevation of 1427.2 fmsl on the average of approximately once every 20 years. In other words, there is approximately a 5% chance of occurrence that Fish Lake will "overflow" on a yearly basis from a rainstorm.

Historically, Fish Lake has experienced "flooding" problems during the early 1960's and most recently during 1986 and early 1987. Although it may just be coincidental, the historical 20 - 25 year gap between "flooding" problems adds credibility to the projected runoff volume estimates.

Water levels in Fish Lake have dropped dramatically over the past three years. The Division has measured the water level of Fish Lake during the past three years and I have listed them in Table 1 for your information.



July 21, 1989
Ron Koth
Page 2

Table 1

<u>Date</u>	<u>Water Level (fmsl)</u>
7-25-86	1426.6
10-22-86	1426.2
4-27-87	1427.1
10-14-87	1424.5
10-20-87	1424.5
4-27-88	1424.7
4-29-88	1424.6
9-30-88	1422.4
10-12-88	1422.3
5-15-89	1421.8
9-12-89	1419.5 (D-y) 9/27/89 David Brown

water level up to outlet

It is believed that the bottom of the lake bed is approximately at elevation 1420.8 fmsl (+ or - 0.5 feet). The present outlet elevation for Fish Lake is at elevation 1427.2 fmsl.

Possibly the enclosed information will be of benefit. The runoff calculations have not been checked, perhaps the Department of Game, Fish and Parks Engineering Division would wish to review the enclosed runoff estimates.

Please return all the enclosures after you are through with them since they are all original copies.

If I may be of further assistance, please give me a call.

Very truly yours,

David S. Brown

David S. Brown
Natural Resources Engineer
Water Rights Division, DWNR

enclosures

Why Two Applications?
The priority issue

Can't go in that
people haven't been notified
-Brown

 **Department of
Water & Natural Resources**

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

August 21, 1989

Darrel Johnson, Chairman
Aurora County Commissioners
P.O. Box 397
Plankinton, South Dakota 57368

Dear Mr. Johnson:

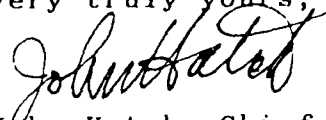
I am writing in response to your August 16, 1989 letter requesting a copy of the Department of Game, Fish and Parks proposal for maintaining a particular water level in Fish Lake, Aurora County. We have not received a proposal from the Department of Game, Fish and Parks to alter the existing outlet for Fish Lake, Aurora County. Consequently, I am unable to forward you any new information concerning the outlet of Fish Lake.

We believe that the Department of Game, Fish and Parks has a valid Vested Water Right Claim (Permit No. 5256-3) for the existing Fish Lake outlet (elevation of 1427.2 feet above mean sea level).

Any proposal to lower the existing outlet should be initiated by the Department of Game, Fish and Parks. I recommend that you contact Ron Koth, Department of Game, Fish and Parks, concerning this matter (605 773-5511).

If you have any further questions or if we may be of further assistance, please let us know.

Very truly yours,


John Hatch, Chief Engineer
Water Rights Division
(605) 773-3352

cc: Ron Koth, Department of Game, Fish and Parks
Tim Bjork, Department of Water and Natural Resources



AURORA COUNTY COMMISSIONERS

P.O. BOX 397

PLANKINTON, SOUTH DAKOTA 57368

PHONE: (605) 942-7752

MEETING DATES

1st and 3rd Tuesday - 10:00 A.M.

SPECIAL MEETINGS

Subject to Call

August 16, 1989

Richard Bearingson, Secretary
Department of Game Fish & Parks
Pierre, SD 57501

John Hatch, Chief Engineer
Department of Water & Natural Resources
Joe Foss Building
523 East Capitol
Pierre, SD 57501



Gentlemen:

The Board of County Commissioners of Aurora County has received notification of rescheduling the hearing before the Board of Water Management, relating to setting the ordinary high water mark of Fish Lake, and determining the water level that will be permitted to be maintained in the lake. It is our understanding that this hearing was previously postponed in order to allow the Department of Game, Fish & Parks time to make a proposal for maintaining a particular water level in the lake.

The Board of County Commissioners would request that we be provided with a copy of the Department's proposal, as soon as possible, and, in any event, at least two weeks prior to the scheduled hearing date. This is so that we can review the proposal and make a decision as to what position the Board of County Commissioners will take at the time of the hearing.

Thank you very much for your attention to this.

Very Truly Yours,

A handwritten signature in cursive script that reads "Darrel Johnson".

DARREL JOHNSON, Chairman
Aurora County Board of Commissioners

DJ:JRS:lmc

South Dakota
Department of
Game, Fish and Parks

Division of Wildlife
Sigurd Anderson Building
445 East Capitol
Pierre, South Dakota 57501-3185
(605) 773-3381

September 14, 1989

Mr. Darrel Johnson
Aurora County Commission
P.O. Box 397
Plankinton, SD 57368

Dear Mr. Johnson:

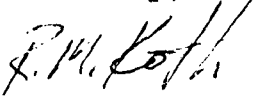
Per our telephone conversations of 09-07-89 regarding the Fish Lake outlet and Fish Lake diversion channel, the Department of Game, Fish and Parks has the following proposal.

The Department plans to install a new or modified outlet structure that will maintain a maximum full service level in Fish Lake of 1426.0 msl. This is a reduction of 1.2' from the existing outlet elevation of 1427.2 msl. This reduction will reduce the fishery potential of the lake but because of the infrequency of the lake reaching 1427.2 msl, no significant change from the actual fishery values will be realized. We also do not know what criteria were used to evaluate the construction of the existing outlet berm at 1427.2 msl. We plan to pursue this outlet level reduction through proper permitting procedures administered by the Department of Water and Natural Resources (DWNR) and Board of Water Management. This process follows administrative procedure so I would not expect official action regarding a request to lower the outlet until the Board of Water Management and staff of DWNR has reviewed plans and specifications for the proposed work and a public hearing is held to discuss the proposal. To date, Game, Fish and Parks has not prepared those plans. The commitment to action, however, has been made.

The hearing before the Board of Water Management, September 26, 27, is therefore not significant, in my opinion, as GF&P will be required to make a formal proposal to DWNR regarding the outlet level reduction. That request would then be acted on by the Board following legal advertisement and a public hearing.

Regarding the diversion channel, Wildlife Conservation Officer Heismeyer will be contacting the Aurora County Commission with an offer to cost share the proposed work through a Conservation Partners project.

Sincerely,

A handwritten signature in dark ink, appearing to read "R. M. Koth", with a long, sweeping horizontal stroke extending to the right.

Ronald M. Koth
Water Permits Coordinator

RMK/ld

cc: George Vandel
Dave McGuigan
Floyd Gaarder
Arden Peterson
Jerry Heismeyer

SOUTH Dakota Department of
Water & Natural Resources

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

September 18, 1989

Susan Steele
Deputy States Attorney
Box 577
Plankinton SD 57368

Dear Ms. Steele:

Enclosed is the information which you requested pertaining to
Water Permit Application No. 5256-3, SD Department of Game, Fish
and Parks.

Sincerely,



DAVID S BROWN
Natural Resources Engineer
605 773-3352

enclosures



 **Department of
Water & Natural Resources**

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

October 4, 1989

NOTICE

TO: Richard Beringson, Secretary
Department of Game, Fish and Parks
445 E Capitol
Pierre SD 57501
and Parties of Record

FROM: John Hatch, Chief Engineer 
Water Rights Division
605 773-3352

SUBJECT: Preparation of Findings of Fact, Conclusions of Law and
Final Decision

The Water Management Board has directed John Guhin, the Board's attorney to prepare proposed Findings of Fact, Conclusions of Law and a Final Decision on deferral of Vested Water Right Claim No. 5256-3 and recognized Vested Water Right Claim No. 800-3. The Board will consider the proposed Findings, Conclusions and Final Decision at 1:00 pm, December 6, 1989, Room 216, Joe Foss Building, Pierre SD. The agenda time is an estimate. The actual time of consideration may be delayed due to prior agenda items.

The Board has requested that a copy of the proposed Findings, Conclusions and Final Decision be mailed to each Board member and all Parties of Record and their attorneys (copy enclosed) by November 16, 1989. Any comments pertaining to the proposed Findings, Conclusions and Decision are to be mailed to each Board member, the Board attorney and all Parties of Record and their attorneys by November 24, 1989.

The public hearing for the Vested Water Right Claims was completed September 27, 1989. No additional testimony will be received on December 6, 1989.

cc: Ron Koth, Dept. of Game, Fish & Parks
Susan Steele, Attorney



CERTIFICATION

I hereby certify that on October 4, 1989 I have personally deposited with the U.S. Mail postage prepaid envelopes containing a Notice on Preparation of Findings of Fact, Conclusions of Law and Final Decision on Permit No. 5256-3 and 800-3 to those persons listed on the Parties of Record sheet and the following:

Ron Koth, Department of Game, Fish and Parks, Anderson Bldg.
Susan Steele, Attorney, Box 577, Plankinton SD 57368

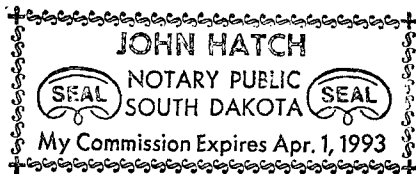
Karen Schraak

KAREN SCHLAAK
Senior Secretary

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 5th day of October, 1989.

John Huffalsh
Notary Public



OFFICES OF THE
STATES ATTORNEY
AURORA COUNTY
PLANKINTON, SOUTH DAKOTA
57368
Phone 605 - 942-7725



October 12, 1989

John Hatch, Chief Engineer
Water Rights Division
S.D. Department of Water & Natural Resources
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

Dear Mr. Hatch:

I have received a notice from your office, dated October 4, 1989, regarding deferral of Vested Water Right Claim No. 5256-3 and Vested Water Right Claim No. 800-3. At this time, I am seeking clarification of some of the statements contained in that notice. Additionally, I am requesting that your notice and this response be included as part of the official record for Claim No. 5256-3.

The third paragraph of the notice states, "The public hearing for the Vested Water Right Claims was completed September 27, 1989. No additional testimony will be received on December 6, 1989." Inasmuch as these statements are contrary to my recollection of the rulings of the Board on September 27th, I would at this time inquire as to the foundation or basis upon which these statements are included in your notice.

In his initial comments at the hearing before the Water Management Board on September 27, 1989, Mr. Ron Koth requested that consideration of the above referenced Vested Water Right Claims be deferred until a future time. It was my understanding at that time and continues to be my understanding that consideration of the matter was deferred by the Board. It was further my understanding that testimony was heard by the parties who were present only because they would perhaps be unavailable at the future hearing. Additionally, Mr. Koth indicated that the Department of Game, Fish and Parks would be preparing an alternative proposal for future consideration.

As you are aware, several procedural and substantive legal objections to Claim No. 5256-3 were raised at the September 27th hearing. After the Board had voted to defer the matter, Mr. Freeman asked that the Board's attorney, Mr. Guhin, draft Findings of Fact and Conclusions of Law

John Hatch
October 12, 1989
Page 2

regarding the issues raised. To the best of my recollection, there was no express ruling by the Board that no further testimony would be considered at a future meeting. My understanding was that the Board wanted their attorney to conduct the necessary legal research regarding the issues that had been raised and that those matters and any other additional matters would be considered at a future meeting. In fact, at the time of the September 27th hearing, I was informed by Mr. Guhin that the dates and locations of the next meeting were unconfirmed.

In light of all of the foregoing reasons, the statement that appears in your notice of October 4th regarding the completeness of the hearing on the 27th and the prohibition against additional testimony on December 6th is at best difficult to reconcile with Board actions regarding this matter on September 27th. Clarification, however, is important at this point in order that the parties may be advised on how best to proceed. For instance, is the Department of Game, Fish and Parks now prohibited from presenting an alternative proposal to the Board? Are all parties prohibited from offering further testimony? Further, what is the status of the evidentiary record? It is certainly the intent of the Aurora County Commissioners that the Pierce and Harris survey be part of the record. It was upon the presentation of that survey that the first postponement was granted last spring at the May meeting. References at the September hearing were also made to the Brown report which was prepared in preparation for the designation of the Ordinary High Water Mark. Is this document considered part of the evidentiary record?

In sum, Mr. Hatch, it was certainly my understanding, and I believe it was the understanding, based upon their comments, of the representatives of Game, Fish and Parks, that the matter of Claim No. 5256-3 had been deferred. Because of that, it is unsettling to see the statements in your notice of October 4th that no additional testimony will be received on the 6th of December. Clarification of this matter would benefit all parties.

Additionally, I am seeking clarification on the portion of the October 4th notice which deals with the procedure by which proposed Findings and Conclusions are to be distributed. The notice states that a copy of proposed Findings are to be mailed to each Board member and all parties by November 16, 1989. Does this statement apply also to any proposed Findings and Conclusions that may be prepared by myself on behalf the of Aurora County Commissioners? Your notice further states that any comments

John Hatch
October 12, 1989
Page 3

pertaining to proposed Findings and Conclusions are to be mailed to each Board member and the Board attorney and all parties by November 24, 1989. Is this directive to be interpreted such that any comments or objections prepared by my office are to be mailed directly to each member? Or are my comments or objections to be sent to your office for distribution? Additionally, would this same directive apply to any comments or objections that the Board's attorney may have to proposed Findings and Conclusions drafted by my office? In other words, would I also receive the Board's objections by November 24th?

Mr. Hatch, I look forward to receiving your response and clarification of these matters and I thank you for your assistance.

Sincerely,

Susan N. Steele

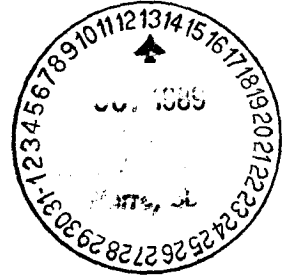
SUSAN N. STEELE, Deputy
Aurora County States Attorney

SNS:lmc
cc: Richard Beringson
Ron Koth
John Guhin
Darrell Johnson

*Ron
Please draft
letter of clarification*

JH

OFFICES OF THE
STATES ATTORNEY
AURORA COUNTY
PLANKINTON, SOUTH DAKOTA
57368
Phone 605 - 942-7725



October 12, 1989

Del Brosz
Water Rights Division
S.D. Department of Water & Natural Resources
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

Dear Mr. Brosz:

I am the Deputy States Attorney for Aurora County and am currently working with the County Commission regarding a matter that is before the Water Management Board: Vested Water Rights Claims number 800-3 and number 5256-3. This matter was addressed in part at the hearing held September 27, 1989 at the regular meeting of the Water Management Board. At this time, I would request of your office a copy of the minutes from the September 27th meeting of the Water Management Board and also a copy of the tape that would include the morning session of the Board. Please include the bill for the tape when it is sent and I will make sure that the same is given to the Aurora County Auditor for payment.

John Hatch has notified my office that this matter will be again considered on December 6th at 1:00 o'clock P.M. Please notify my office as to the amount of time that has been allocated to this matter. It is my concern that an insufficient amount of time may be allocated, which in turn would result in the Board feeling very pressed to conclude the matter before an adequate hearing has been conducted.

I look forward to receiving your response and I thank you for your assistance in this matter.

Sincerely,

SUSAN N. STEELE, Deputy
Aurora County States Attorney

SNS:lmc

**Department of
Water & Natural Resources**

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

October 19, 1989

Susan N Steele, Deputy States Attorney
Office of the States Attorney
Plankinton SD 57368

Dear Ms. Steele:

I am writing in response to your letters dated October 12, 1989 to Del Brosz and myself concerning Vested Water Right Claim Nos. 800-3 and 5256-3. The Brown report and the Pierce and Harris survey are both part of the evidentiary record.

The Board's consideration of Findings of Fact, Conclusions of Law and a Final Decision (FC&D) to validate Claim No. 800-3 and Defer Claim No. 5256-3 will be based upon the evidence presented at previous hearings. Although only arguments concerning the FC&D may be made at the FC&D hearing, when deferred claim No. 5256-3 is reconsidered at some future date, following notice, additional testimony or evidence can be presented at the reconsideration hearing. A second decision - i.e. approval, denial, or continued deferral, will be made following the reconsideration hearing. The reason for adoption of FC&D to Defer is to provide a legal basis for the Board's decision in the event the Board's decision to Defer No. 5256-3 is appealed.

Any or all parties of record may prepare separate FC&D and mail a copy of the proposed FC&D to each Board member and all other parties of record and their attorneys by November 16, 1989, as will John Guhin, the Board's attorney (see enclosed Board Rule 74:02:01:13.01). Comments on the proposed FC&D need to be mailed by November 24, 1989 to each Board member and the parties of record and their attorneys. The person preparing FC&D or commenting on someone's proposed FC&D is responsible for the distribution of the FC&D or comments to the Board members and parties of record and their attorneys. Responses to FC&D comments will be prepared by Mr. Guhin and presented at the FC&D hearing December 6, 1989. The mailing addresses were supplied with the Notice dated October 4, 1989.

In answer to your letter to Del Brosz, the official minutes (is only a summary) of the September 1989 Water Management Board meeting will not be available until after the Board approves the minutes at the December 6 & 7, 1989 Board meeting. A copy of the tape will be sent to you within a few days. A transcript of the September hearing can be ordered from the court reporter with the following address and phone number: Lynne Ormesher, Capital Reporting Services, PO Box 903, Pierre SD 57501, phone 605 773-3352.

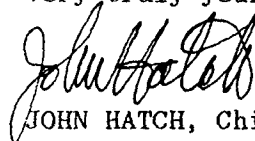


October 19, 1989
Susan N Steele
Page 2

Four sets of proposed FC&D's are scheduled for hearing at 1:00 pm along with the proposed FC&D's for Claim Nos. 800-3 and 5256-3. A time period of one half hour to one hour will be scheduled for the 1:00 pm agenda items. However, the Board may spend additional time, if necessary.

I hope I have answered your questions and clarified the FC&D procedure. If you have further questions, please contact Ron Duvall, staff engineer.

Very truly yours,

A handwritten signature in cursive script, appearing to read "John Hatch".

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

cc: John Guhin, Assistant Attorney General
John Haak, Assistant Attorney General



Department of Water & Natural Resources

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

October 30, 1989

Susan N Steele, Deputy States Attorney
Office of the States Attorney
Plankinton SD 57368

Dear Ms. Steele:

Enclosed is a copy of the tape from the September, 1989 Water Management Board meeting concerning Vested Right Claim No. 800-3 and Application No. 5256-3.

Sincerely,

Karen Schlaak

KAREN SCHLAACK
Senior Secretary
605 773-3352

enclosures



**South Dakota
Department of
Game, Fish and Parks**

November 8, 1989

Division of Wildlife
Sigurd Anderson Building
445 East Capitol
Pierre, South Dakota 57501-3185
(605) 773-3381

Mr. John Hatch, Chief Engineer
Division of Water Rights
S.D. Department of Water & Natural Resources
Foss Building
Pierre, SD 57501



Dear Mr. Hatch:

The South Dakota Department of Game, Fish and Parks (GF&P) requests that the validation of water right #5256-3 be amended to read as follows:

- (1) For sufficient runoff water annually to fill Fish Lake, Aurora County from the outlet elevation existing prior to 1954 (1425.1 msl) to elevation 1426.0 msl.

The above indicated change will provide for a lowering of the existing berm across the outlet now at 1427.2 msl to a lower elevation that will provide for a maximum full service elevation in Fish Lake of 1426.0 msl.

GF&P representatives met with the Aurora County Commission and Drainage Board on November 7, 1989 to discuss various options and concerns regarding the Fish Lake outlet elevation. The outcome of the meeting was that a maximum acceptable lake level in Fish Lake would be 1426.0 msl. To accomplish this mutually acceptable maximum lake level, GF&P would like to proceed with a fully noticed public hearing for the March 1990 Board of Water Management meeting. Pending approval of the lowered outlet level, GF&P plans to pursue an immediate elevation reduction of the outlet berm, if necessary, so that potential flooding will be minimized during the spring of 1990.

Please take appropriate action to amend water right claim #5256-3 and provide for a public hearing in March 1990. If you have any questions please contact me at 773-5511.

Sincerely,

Ronald M. Koth
Water Permits Coordinator

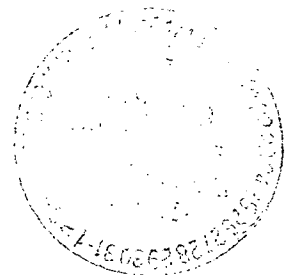
RMK/lid

cc: Aurora County Commission
Steele Law Office
Emmett Keyser
Floyd Gaarder
Jerry Heismeyer

STATE OF SOUTH DAKOTA

BEFORE THE WATER MANAGEMENT BOARD

IN THE MATTER OF)
VESTED WATER RIGHT) FINDINGS OF FACT,
CLAIM NUMBER 5256-3,) CONCLUSIONS OF LAW
FISH LAKE) AND FINAL DECISION



FINDINGS OF FACT

I

On December 7, 1988, the ordinary high water mark for Fish Lake, Aurora County was established at elevation 1425.6 feet mean sea level. The setting of the outlet elevation was deferred.

II

The physical outlet elevation is alleged to have been at 1425.1 feet msl.

III

In 1954 or thereafter, work was performed at Fish Lake which may have established a basis for legal claim that the outlet should be at a point higher than 1425.1 feet msl.

IV

Conflicting evidence has been introduced on the issue of the proper placement of the outlet elevation.

V

The present application for recognition of a vested right claims sufficient runoff water to fill Fish Lake from elevation 1425.1 feet msl to the present claimed elevation of 1427.2 feet msl with a priority date of August 25, 1954. The Board is unable to determine whether

to grant this water permit without determining the proper outlet elevation of Fish Lake.

VII

One of the parties to the controversy has proposed further discussions looking towards a compromise on the issue of the proper setting of the outlet elevation.

CONCLUSIONS OF LAW

I

The Board has jurisdiction over this matter.

II

The Board not been presented with sufficient evidence at this point to act upon the vested water right application.

III

It is proper, in the context of this case, to afford the parties additional opportunity to enter into discussions looking towards a compromise on the issue of the proper outlet elevation or looking towards a sharpening of the issues for presentation to the Board.

FINAL DECISION

The application for Vested Water Right Number 5256-3 is deferred until further order of the Board.

BY THE BOARD

Marian B. Gunderson

1-4-90

REVISED RECOMMENDATION OF CHIEF ENGINEER FOR VALIDATION OF
VESTED WATER RIGHT CLAIM NO. 5256-3,
Department of Game, Fish and Parks

Pursuant to SDCL 46-2A-2, the following is the revised recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Validation of Vested Water Right Claim No. 5256-3, Department of Game, Fish & Park, 445 East Capitol, Pierre SD.

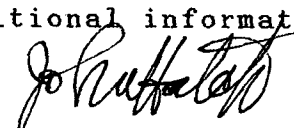
The Chief Engineer is recommending VALIDATION of Application No. 5256-3 and as follows:

1. For sufficient runoff water annually to fill Fish Lake, Aurora County from the outlet elevation existing prior to 1954 (1425.1 fmsl) to elevation 1426.0 fmsl;
2. For a diversion dam located in the NE 1/4 NE 1/4 of Section 29, and a diversion ditch on the section line Right-of-way between Sections 28 and 29, and Sections 20 and 21, all in T103N, R63W; and
3. That the applicable portions of Location Notice No. 6051-3 be incorporated into No. 5256-3 and that the abandoned portions of Location Notice No. 6051-3 are cancelled;

because 1) water has been appropriated as described for recreational purposes, wildlife habitat purposes and livestock use with a priority date of August 25, 1954, 2) the use has been developed without unlawful impairment of existing rights, 3) the use is a beneficial use and 4) it is in the public interest with the following qualifications to Validation:

1. Validation of No. 5256-3 sets the outlet elevation for Fish Lake at 1426.0 fmsl.
2. That low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed when the diversion dam is used to divert water to Fish Lake.
3. That the outlet elevation be lowered to 1426.0 fmsl and that a concrete elevation reference marker be installed near the Fish Lake Outlet area.

See the attached report for additional information.


JOHN HATCH, Chief Engineer
January 5, 1990

 **Department of
Water & Natural Resources**

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

January 11, 1990

Susan Steele
Box 577
Plankinton SD 57368

Dear Ms. Steele:

As requested, enclosed is a copy of the Findings of Fact,
Conclusions of Law and Final Decision on Vested Water Right Claim
No. 5256-3, for Fish Lake.

Sincerely,

Karen Schlaak

KAREN SCHLAAK
Senior Secretary
Water Rights Division
605 773-3352

enclosure





Department of Water & Natural Resources

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

January 30, 1990

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.

Ronald M. Koth
SD Department of Game, Fish & Parks
445 E. Capitol
Pierre, SD 57501

Dear Mr. Koth:

Vested Water Right Claim No. 5256-3 for recreational and fish & wildlife protection use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the South Dakota Mail printed at Plankinton SD. For your information, a copy of the notice and a copy of the Chief Engineer's recommendation is enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice of Hearing and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. We must receive Proof of Publication before the application can be considered by the Water Management Board.

Sincerely,

A handwritten signature in dark ink, appearing to read "Ron Duvall". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Ron Duvall
Natural Resources Engineer
605 773-3352

enclosures



Department of Water & Natural Resources

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

January 30, 1990

South Dakota Mail
Box 367
Plankinton, SD 57368-0367

ATTN: Legal Publications:

Enclosed is a Notice of Hearing on Application No. 5256-3 to be published twice. Please publish the first notice on or before February 8, 1990 with the second publication 7 days later.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is Department of Game, Fish & Parks, 445 E. Capitol, Pierre, SD 57501.

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. The permit application cannot be considered by the Water Management Board until proof of publication has been received.

Sincerely,

Ron Duvall
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

FIRST TRANSMITTAL NOTICE

TO: Ron Duvall
Water Rights Division
Joe Foss Building
Pierre SD 57501-3181

No. _____

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to Appropriate Water by Application No. _____ which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper

Instruction to Newspaper - Publish first Notice on or before February 8, 1990 with 2nd publication 7 days later. The applicant is responsible for payment.

NOTICE OF HEARING to Validate Amended
Vested Water Right Claim No. 5256-3 to Appropriate Water

Notice is given that the Department of Game, Fish & Parks, 445 E. Capitol, Pierre, SD 57501 has made an amendment to Vested Water Right Claim No. 5256-3 originally published on February 2 & 9, 1989 in the Plankinton South Dakota Mail for a hearing to consider validation of Claim No. 5256-3. This amendment to Claim No. 5256-3 is to change the current outlet elevation of Fish Lake from 1427.2 feet mean sea level (msl) to a lower elevation of 1426.0 feet msl. Fish Lake is located primarily in sections 15, 16-T103N-R63W in Aurora County. Therefore, amended Claim No. 5256-3 is now for sufficient runoff annually to fill Fish Lake from the outlet elevation existing prior to 1954 (1425.1 feet msl) to proposed outlet elevation 1426.0 feet msl with a claimed priority date of August 25, 1954. Validation of No. 5256-3, as amended, will require the outlet elevation for Fish Lake to be lowered from 1427.2 feet msl to 1426.0 feet msl. Claim No. 5256-3 is also for a diversion dam located in the E1/2 NE1/4 Section 29-T103N-R63W to divert water into Fish Lake. An August 25, 1954 priority date is also claimed for the diversion dam. The drainage area located above the diversion dam is approximately 7.0 square miles and operation of the dam is regulated by the Department of Game, Fish & Parks. Runoff not diverted by the dam enters a slough area on the east side of Fish Lake. Water impounded in Fish Lake is used for recreational and wildlife habitat purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer of the Water Rights Division recommends VALIDATION of Vested Water Right Claim No. 5256-3, as amended, and that applicable portions of Location Notice No. 6051-3 be incorporated into Claim No. 5256-3 and that abandoned portions of Notice No. 6051-3 be cancelled because 1) water has been appropriated as described for recreational purposes, wildlife habitat purposes and livestock use with a priority date of August 25, 1954, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water and 4) it is in the public interest. This application will be considered by the Water Management Board in the Roosevelt - Jefferson Room, Howard Johnson, 2211 LaCrosse, Rapid City, SD on March 7, 1990 at 10:30 am. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer or 4) deny this application based on the facts presented at the public hearing.

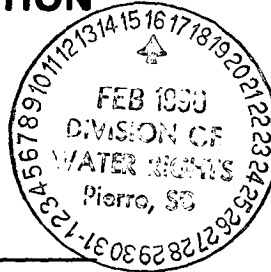
Any interested person that intends to participate in the hearing before the Board by presenting evidence or cross-examining witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and Chief Engineer by February 23, 1990. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)". The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application and the signature and mailing address of the petitioner or legal counsel if legal counsel is obtained. The applicant need not file a petition. Contact the Water Rights Division to request information on this application or to assure access to the hearing by the handicapped.

This hearing is an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. The time of the hearing will also be automatically delayed for at least twenty days upon written request to the Chief Engineer from the applicant or a petitioner. The request for a delay must be received by February 23, 1990.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-2A-18; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-5-49; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15 and 74:02:01:19 thru 74:02:01:22.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Aurora) ss.



NOTICE OF HEARING
to Validate Amended Vested
Water Right Claim No.5256-3
to Appropriate Water

I, Edward Van Benden

certify that the attached printed Notice was taken
from the South Dakota Mail

A newspaper which during the whole time of publication of
said notice herein after stated, has been and is printed and
published in the _____

City of Plankinton

County of Aurora and State of South Dakota;
that the said notice was published in said newspaper on the
following two dates:

FEB. 8, 1990

FEB. 15, 1990

Edward Van Benden
(Signature)

Business Mgr.
(Title)

FEB. 15, 1990
(Date Signed)

Cost of Printing: \$56.43

Notice is given that the Department of Game, Fish & Parks, 445 E. Capitol, Pierre, SD 57501 has made an amendment to Vested Water Right Claim No.5256-3 originally published on February 2 & 9, 1989 in the Plankinton South Dakota Mail for a hearing to consider validation of Claim No.5256-3. This amendment to Claim No.5256-3 is to change the current outlet elevation of Fish Lake from 1427.2 feet mean sea level (msl) to a lower elevation of 1426.0 feet msl. Fish Lake is located primarily in Sections 15, 16-T103N-R63W in Aurora County. Therefore, amended Claim No.5256-3 is now for sufficient runoff annually to fill Fish Lake from the outlet elevation existing prior to 1954 (1425.1 feet msl) to proposed outlet elevation 1426.0 feet msl with a claimed priority date of August 25, 1954. Validation of No.5256-3, as amended, will require the outlet elevation for Fish Lake to be lowered from 1427.2 feet msl to 1426.0 feet msl. Claim No.5256-3 is also for a diversion dam located in the E½ NE¼ Section 29-T103N-R63W to divert water into Fish Lake. An August 25, 1954 priority date is also claimed for the diversion dam. The drainage area located above the diversion dam is approximately 7.0 square miles and operation of the dam is regulated by the Department of Game, Fish & Parks. Runoff not diverted by the dam enters a slough area on the east side of Fish Lake. Water impounded in Fish Lake is used for recreational and wildlife habitat purposes.

Pursuant to SDCL 46-2A -2, the Chief Engineer of the Water Rights Division recommends VALIDATION of Vested Water Right Claim No.5256-3, as amended, and that applicable portions of Location Notice No.6051-3 be incorporated into Claim No.5256-3 and that abandoned portion of Notice No.6051-3 be cancelled because 1) water has been appropriated as described for recreational purposes, wildlife habitat purposes and livestock use with a priority date of August 25, 1954, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water and 4) it is in

the public interest. This application will be considered by the Water Management Board in the Roosevelt-Jefferson Room, Howard Johnson, 2211 LaCrosse, Rapid City, SD on March 7, 1990 at 10:30 am. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer or 4) deny this application based on the facts presented at the public hearing.

Any interested person that intends to participate in the hearing before the Board by presenting evidence or cross-examining witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and Chief Engineer by February 23, 1990. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E Capitol, Pierre, SD 57501 (605 773-3352)". The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application and the signature and mailing address of the petitioner or legal counsel if legal counsel is obtained. The applicant need not file a petition. Contact the Water Rights Division to request information on this application or to assure access to the hearing by the handicapped.

This hearing is an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. The time of the hearing will also be automatically delayed for at least twenty days upon written request to the Chief Engineer from the applicant or a petitioner. The request for a delay must be received by February 23, 1990.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-2A-18; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-5-49; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15 and 74:02:01:19 thru 74:02:01:22.

Sent copy of publication notice - Jan 31, 1990

Sent correct publication notice - Feb 6, 1990

Record#	NAME	ADDRESS	CITY
1	Gerry Heismeyer, Conservation Off.	Box 187	Plankinton SD 57368-0187
2	Tom Clemens, Dist. Conservationist	Box 227	Plankinton SD 57368
3	Richard Beringson, Secretary	Dept. of Game, Fish & Parks	Anderson Building
4	Darline Heines, Auditor	PO Box 397	Plankinton SD 57368
5	Aurora County Commission	PO Box 397	Plankinton SD 57368
6	Lloyd N & Viola Nickles	PO Box 183	Plankinton SD 57368
7	Jesse E Hawkins c/o Hopper Import	1891 Sante Fe Ave	Long Beach CA 90810
8	Lars, Lena & Marlin Gjesdal	Rt 1, Box 16	Plankinton SD 577368
9	Gilbert C & Pearl Olsen	Plankinton SD 57368	<i>ltr returned</i>
10	Walter & Margaret Miller	603 N Main	Plankinton SD 57368
11	Martin Schoenfeld	Plankinton SD 57368	
12	Evelyn E Saville	209 N Duff	Plankinton SD 57368
13	John Saville	Plankinton SD 57368	
14	David Saville	Plankinton SD 57368	
15	Fish Lake County Club, Inc.	Lex Weller, President	Plankinton SD 57368
16	Susan Steele, State Attorney	Box 577	Plankinton SD 57368
17	Darrel E Johnson	Rt 2, Box 74A	Plankinton SD 57368
18	John M Miller	Plankinton SD 57368	
19	Gene Malde	RR 2	Plankinton SD 57368
20	Gary Gjesdal	Rt 1, Box 17	Plankinton SD 57368

John Haak



JESSE E. HAWKINS
RR 3, BOX 37
P. O. BOX No. 666
PLANKINTON, S.D. 57368
(605 -- 9427505)

FEBRUARY 15, 1990

CHIEF ENGINEER
WATER RIGHTS DIVISION
FOSS BUILDING
523 E. CAPITOL
PIERRE, S.D. 57501

CC:DEPT OF GAME, FISH AND PARKS
445 E. CAPITOL
PIERRE, S.D. 57501

RE: VESTED WATER RIGHT
APPLICATION No. 5256-3
AND
AMENDED CLAIM No. 5256-3

GENTLEMEN:

REFERENCE IS MADE TO THE COPY OF INSTRUCTIONS TO NEWSPAPER TO PUBLISH FIRST NOTICE ON OR BEFORE FEBRUARY 2. NOTICE OF HEARING TO VALIDATE VESTED WATER RIGHT CLAIM No. 5256-3 TO APPROPRIATE WATER.

MY PROPERTY AND HOME IS LOCATED IN SE 1/4 SECTION 16 (FORMERLY THE HOPPER SCHOOL BUILDING AND FIVE ACRES) AUBORA COUNTY, HOPPER TOWNSHIP.

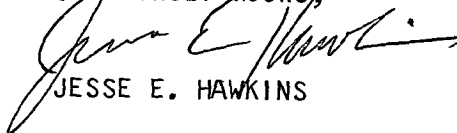
FISH LAKE SHOULD BE RAISED, NOT LOWERED. I AGREE WITH THE PROPOSED ELEVATION FOR FISH LAKE AT 1427.2 FMSL. THIS IS AN ACCEPTABLE LEVEL IN THE SPRING TO PREVENT THIS LAKE FROM GOING DRY IN THE FALL AS IT IS NOW.

IT CAN BE A NICE RECREATIONAL AREA WITH GOOD FISHING, BUT IF IT IS ALLOWED TO GO DRY ALL THE FISH DIE AND IT TAKES SEVERAL YEARS TO RESTOCK, THEREFORE, I AM IN COMPLETE AGREEMENT TO HAVE THE OUTLET ELEVATION FOR FISH LAKE SET AT 1427.2 FMSL AS PER VESTED WATER RIGHT APPLICATION No. 5256-3 DATED FEB. 2.

NOW, I HAVE SEEN A NEW NOTICE OF HEARING DATED FEBRUARY 8, 1990 TO VALIDATE AN AMENDED CLAIM No. 5256-3 TO LOWER THE ELEVATION TO 1426.0 MSL. THIS WOULD REDUCE THE LAKE TO A USELESS MUD-HOLE OR A DRY LAKE AS IT IS NOW AND KILL ALL THE FISH EVERY TIME THE LAKE GOES DRY, THEREFORE, I AM AGAINST THE NEW AMENDMENT TO No. 5256-3.

FISH LAKE SHOULD BE RAISED, NOT LOWERED.

VERY TRULY YOURS,


JESSE E. HAWKINS

P.S. PLEASE NOTE MY CORRECT
MAILING ADDRESS IS:
RR 3, BOX 37 P.O. BOX No. 666
PLANKINTON, S.D. 57368-0666

STEELE LAW OFFICE, P.C.

ATTORNEYS-AT-LAW
405 SOUTH MAIN STREET
BOX 577
PLANKINTON, S. D. 57368-0577

JOHN R. STEELE
SUSAN N. STEELE

TELEPHONE
(605) 942-7725

February 20, 1990



John Hatch, Chief Engineer
Water Rights Division, Foss Building
523 East Capitol
Pierre, SD 57501

Richard Beringson, Secretary
Department of Game, Fish and Parks
445 East Capitol
Pierre, SD 57501

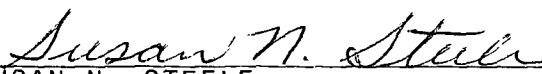
PETITION

As required by the Notice of Hearing to Validate Amended Vested Water Right Claim Number 5256-3 to appropriate water, this Petition is filed by interested parties intending to participate in the hearing before the Board by presenting evidence or cross-examining witnesses according to SDCL 1-26.

Petitioners, Mark Meier, James Von Eye, John Fett, Howard Fett, John Saville and David Saville, are interested in this application in that the vested water right claimed, by Number 5256-3, affects their existing rights of natural drainage; their use of public roads and bridges; and their use, as owners/operators, of private property.

Further, the Petitioners respectfully request that a continuance of this matter be granted. Due to a conflict in scheduling, Counsel for the Petitioners will be unable to attend the March 7, 1990 meeting of the Water Management Board. Accordingly, Petitioners request that this matter be scheduled for hearing at the May meeting of the Water Management Board, or at a time that is mutually agreeable to the Board, Applicant, and Petitioners.

Submitted by:


SUSAN N. STEELE
Counsel for Petitioners

OFFICES OF THE
STATES ATTORNEY
AURORA COUNTY
PLANKINTON, SOUTH DAKOTA
57368
Phone 605 - 942-7725



February 19, 1990

John Hatch, Chief Engineer
Water Rights Division, Foss Building
523 East Capitol
Pierre, SD 57501

Richard Beringson, Secretary
Department of Game, Fish and Parks
445 East Capitol
Pierre, SD 57501

PETITION

As required by the Notice of Hearing to Validate Amended Vested Water Right Claim Number 5256-3 to appropriate water, this Petition is filed by interested parties intending to participate in the hearing before the Board by presenting evidence or cross-examining witnesses according to SDCL 1-26.

Petitioners, the Aurora County Drainage Board and the Hopper Township Board of Supervisors, are interested in this application in that the vested water right claimed, by Number 5256-3, affects existing rights of natural drainage, roads, bridges, and private property.

Further, the Petitioners respectfully request that a continuance of this matter be granted. Due to a conflict in scheduling, Counsel for the Petitioners will be unable to attend the March 7, 1990 meeting of the Water Management Board. Accordingly, Petitioners request that this matter be scheduled for hearing at the May meeting of the Water Management Board, or at a time that is mutually agreeable to the Board, applicants, and Petitioners.

Submitted by:

Susan N. Steele
SUSAN N. STEELE, Deputy
Aurora County States Attorney
Counsel for Petitioners

February 23, 1990
(date)

page 1

Parties of Record before Water Management Board regarding amended
Vested Water Right Claim No. 5256-3, SD Dept.
of Game, Fish & Parks

Proponents :

Richard Beringson, Secretary
SD Dept. of Game, Fish & Parks
445 E Capital
Pierre SD 57501

Opponents :

Jesse E Hawkins
RR 3, Box 37
PO Box 666
Plankinton SD 57368-0666

Interested :

Mark Meier
James Von Eye
John Fett
Howard Fett
John Saville
David Saville
and the
Aurora Co. Drainage Board
Hopper Township Board of Supervisors
all represented by :
Susan N. Steele, attorney
Steele Law Office, P.C.
Box 577
Plankinton SD 57368-0577

Witnessed by _____
_____ May 1, 1990



Department of Water & Natural Resources

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

February 26, 1990

NOTICE

TO: Richard Beringson, Secretary
Department of Game, Fish and Parks
445 E Capitol
Pierre SD 57501
and Parties of Record (see attached sheet)

FROM: *for William H. Brown*
John Hatch, Chief Engineer
Water Rights Division
605 773-3352

SUBJECT: Automatic Delay of Hearing on Amended Vested Water
Right Claim No. 5256-3

Petitions regarding amended Vested Water Claim No. 5256-3 have been received from Jesse E Hawkins and Susan N Steele, attorney. The petitions from Susan N Steele request an automatic delay of the hearing. Therefore, the hearing on amended Claim No. 5256-3 is automatically delayed pursuant to SDCL 46-2A-4 and 46-2A-5 and will **NOT** be held on March 7, 1990.

Notice of the time and place of hearing will be given at a later date.

cc: Water Management Board
John Guhin, Assistant Attorney General
John Haak, Assistant Attorney General

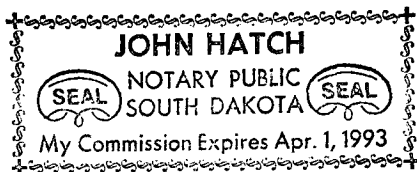
CERTIFICATION

I hereby certify that on February 26, 1990 I have personally deposited with the U.S. Mail postage prepaid envelopes containing a Notice of Hearing of Automatic Delay of Hearing on Amended Vested Water Rights Claim No. 5256-3 addressed as stated on the Parties of Record sheet dated February 23, 1990.

Karen Schlaak
KAREN SCHLAACK
Senior Secretary

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 5th day of March, 1990.



[Signature]
Notary Public



Department of Water & Natural Resources

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

March 21, 1990

NOTICE

TO: Richard Beringson, Secretary
Department of Game, Fish and Parks
445 E Capitol
Pierre SD 57501
and Parties of Record (see attached sheet)

FROM: John Hatch, Chief Engineer
Water Rights Division
605 773-3352

A handwritten signature in cursive script that reads "John Hatch".

SUBJECT: Hearing on Amended Vested Water Right Claim No. 5256-3

Claim No. 5256-3 was not considered at the March 7, 1990 Water Management Board meeting pursuant to a request for an automatic delay as specified in the Notice dated February 26, 1990.

The Water Management Board will now consider Claim No. 5256-3 at 9:15 am on May 23, 1990, Pelican Room, Ramkota Inn, Highway 212 West, Watertown SD. The agenda time is an estimate. The actual time of hearing may be later than 9:15 am due to prior agenda items. Applicable provisions of the Notice of Hearing published on February 8 and 15, 1990 in the Plankinton SD Mail will still apply at this hearing.

cc: John Haak, Assistant Attorney General

CERTIFICATION

I hereby certify that on March 21, 1990 I have personally deposited with the U.S. Mail postage prepaid envelopes containing a Notice of Hearing on Amended Vested Water Rights Claim No. 5256-3 addressed as stated on the Parties of Record sheet dated February 23, 1990.

Karen Schlaak
KAREN SCHLAACK
Senior Secretary

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 26th day of March, 1990.



John Hatch
Notary Public

April 27, 1990



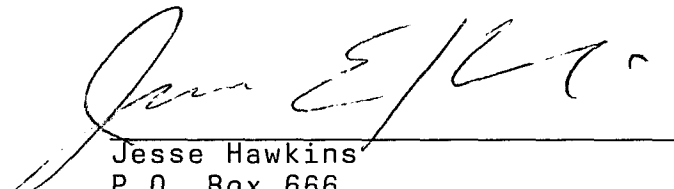
John Hatch, Chief Engineer
Water Rights Division
Foss Building
523 East Capitol
Pierre, SD 57501

Richard Beringson, Secretary
Department of Game, Fish and Parks
445 East Capitol
Pierre, SD 57501

WITHDRAWAL OF PETITION

AMENDED - JH
In February of 1990, I filed a Petition with your office in opposition to vested water right claim no. 5256-3. I no longer oppose that water right and do not intend to participate in the hearing before the Water Management Board. Accordingly, please withdraw my Petition in the above-referenced matter.

Submitted by:


Jesse Hawkins
P.O. Box 666
Plankinton, SD 57368

AGREEMENT REGARDING THE OPERATION OF
THE FISH LAKE WATER DIVERSION GATE

PARTIES

This Agreement is entered into this 15th day of May, 1990, by the Aurora County Commission, in its capacity as the Aurora County Drainage Board, County of Aurora, State of South Dakota, and the Department of Game, Fish and Parks of the State of South Dakota.

PURPOSE

The purpose of this Agreement is to provide working guidelines for the operation and regulation of a water diversion gate by the Department of Game, Fish and Parks located on the section line between the NE 1/4-29-103-63 and the NW 1/4-28-103-63 in Aurora County, South Dakota.

When closed, the diversion gate serves to divert water into Fish Lake. When the gate is opened, the water flows through a culvert to the east, onto the NW 1/4-28-103-63.

GOVERNING LAW

It is agreed that this Agreement shall be governed by, construed, and enforced in accordance with the laws and regulations of the State of South Dakota.

MODIFICATION OF AGREEMENT

Any modification of this Agreement or additional obligation assumed by either party in connection with this Agreement shall be binding only if evidenced in writing signed by each party or an authorized representative of each party.

GUIDELINES

I. Water levels are to be measured by the Department in late fall, at which time the diversion gate shall be:

A. Completely open if the lake level is above 1425.0 msl, and shall not be closed regardless of runoff flows.

B. Completely open if the lake level is between 1423.0-1425.0 msl. Watershed snowpack and precipitation will be monitored over the winter. Based on the best estimate of projected spring water delivery to the lake, the following actions may be taken:

1. If inflows are predicted to be high, the gate may remain open.
2. If inflows are predicted to be limited, the gate may be closed to no more than the half-way mark.



C. Completely closed if the lake levels are below 1423.0 msl. Watershed snowpack and precipitation will be monitored over the winter. Based on the best estimate of projected spring water delivery to the lake, the following actions may be taken:

1. If inflows are predicted to be high, the gate may be opened to the half-way mark.
2. If limited inflows are predicted, the gate may remain closed and monitored.

II. The procedure for changing diversion gate settings during periods of runoff shall include:

A. Notification shall be given to landowners downstream from the diversion gate for two miles, who are likely to be affected by the gate change, in sufficient time to allow them to prepare for higher water levels.

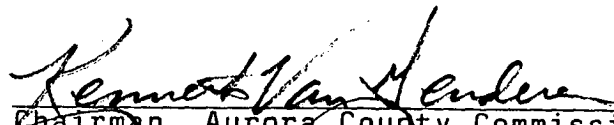
B. Changes in gate settings may be made in stages to allow a more gradual rise of water levels.

C. Changes in settings shall be made, as soon as possible, when runoff levels become unexpectedly high (Items II(A) and II(B) still apply.)

III. Gate settings made during the fall shall be reported to the Aurora County Commission at some time prior to any expected runoff occurring. Predictions of spring runoff shall be shared with the Commission at the appropriate times.

IV. Emergency situations shall be discussed with members of the Aurora County Commission and the Hopper Township Board. Concerns, complaints or suggestions presented by effected landowners shall be made known to the Department's representative and members of the above-mentioned entities, as soon as it is practical.

V. A contingency plan will be in place and provided to the Department of Game, Fish and Parks within 30 days of execution of this Agreement that provides for a designee of the Aurora County Commission to make necessary gate setting changes, in accordance with the above guidelines, in case a situation may arise that the Game, Fish and Parks representative is unavailable.


Chairman, Aurora County Commission


Secretary, Game, Fish and Parks

STATE OF SOUTH DAKOTA)
 :SS
COUNTY OF AURORA)

On this the 15th day of May, 1990, before me, Susan M. Steele, the undersigned officer, personally appeared Kenneth VanGenderen, Chairman of the Board of County Commissioners of Aurora County, South Dakota, known to me or satisfactorily proven to be the person and officer described in the foregoing instrument, and acknowledged that he executed the same in the capacity therein stated and for the purposes therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Susan M. Steele
Notary Public, South Dakota
My commission expires: 8-15-94

(SEAL)

STATE OF SOUTH DAKOTA)
 :SS
COUNTY OF Hughes)

On this 16th day of May, 1990, before me, Ray S. Rich, the undersigned officer, personally appeared Richard Beringson, Secretary of the Department of Game Fish and Parks of the State of South Dakota, known to me or satisfactorily proven to be the person and officer described in the foregoing instrument, and acknowledged that he executed the same in the capacity therein stated and for the purposes therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Ray S. Rich
Notary Public, South Dakota
My commission expires: June 18, 1992

(SEAL)



Department of Water & Natural Resources

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

May 31, 1990

NOTICE

TO: Richard Beringson, Secretary
Dept. of Game, Fish & Parks
445 E. Capitol
Pierre, SD 57501
and Parties of Record (see attached sheet)

FROM: John Hatch, Chief Engineer
Water Rights Division
605 773-3352 *John Hatch*

SUBJECT: Vested Water Right Claim No. 5256-3

This notice is in response to action taken by the Water Management Board at the hearing on May 23, 1990 to validate amended Vested Water Right Claim No. 5256-3. The Board validated the amended Vested Water Right Claim No. 5256-3 for sufficient runoff water annually to fill Fish Lake, Aurora County from the outlet elevation prior to 1954 (1425.1 msl) to elevation 1426.0 msl.

Decisions of the Board may be appealed to the Circuit and State Supreme Court as provided by law.

cc: Ron Koth

CERTIFICATION

I hereby certify that on May 31, 1990 I have personally deposited with the U.S. Mail postage prepaid envelopes containing a Notice on Vested Right Claim No. 5256-3 addressed on the Parties of Record sheet with a copy sent to:

Ron Koth, Department of Game, Fish and Parks

Karen Schlaak
KAREN SCHLAACK
Senior Secretary

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 1st day of June, 1990.

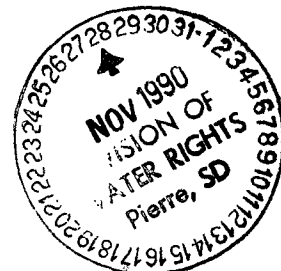


John Hatch
Notary Public

**South Dakota
Department of
Game, Fish and Parks**

Division of Wildlife
Sigurd Anderson Building
445 East Capitol
Pierre, South Dakota 57501-3185
(605) 773-3381

November 26, 1990



Mr. John Hatch, Chief Engineer
Division of Water Rights
S.D. Department of Water & Natural Resources
Foss Building
Pierre, SD 57501

Dear Mr. Hatch:

This brief correspondence is to inform your office that pursuant to the qualifications on South Dakota's Department of Game, Fish and Parks vested water right No. 5256-3, the outlet elevation for Fish Lake has been lowered to 1426.0 fmsl.

After contacting Dave Brown of your office, it is my understanding that the concrete elevation marker will be installed by your staff.

If you have any questions regarding these matters please call me at 773-6208.

Sincerely,

A handwritten signature in cursive script that reads "Timothy J. Olson".

Timothy J. Olson
Water Permits Coordinator

TJO/ld