

WATER PERMIT NO. 2353-2

Name of Applicant: SD Dept. of Game, Fish and Parks

Address: 523 E Capitol, Pierre SD

Phone: 605 773-3658

Amount of Water Claimed: 64.5 AF

Total Acres: NA

Source of Water Supply: unnamed tributary of Thunder Creek

Water to be used for: recreation and fish & wildlife

County: Tripp

Type of Waste Disposal System: NA

Location: 12 miles north of Winner

PRIORITY

Date Received: 2-2-1996

Fee: NA

Corrected Application Received:

Period of Annual Use: January 1 - December 31

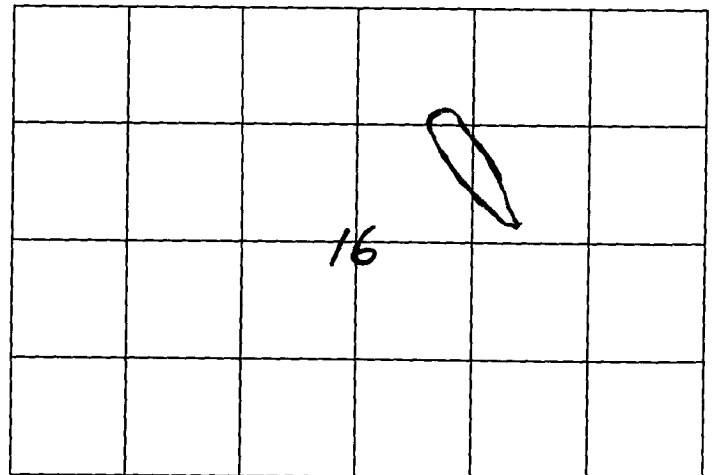
Remarks: Repair breached King Dam - originally covered by Vested Right No. 693-2

Diversion Point: NW 1/4 NE 1/4 Section 16-

T101N-R75W

Water Impounded: W 1/2 NE 1/4, SE 1/4 NE 1/4

Sec 16-T101N-R75W



Depth of Well: NA

Well Driller: NA

Remarks:

Type of Map: topo

Prepared by: Roger Smith, DU

Reviewed and the Number Assigned on: 2-5-96

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

FORM 2: Application for uses other than irrigation

(type or print)

Mail to:
Water Rights Division
Joe Foss Building
523 E Capitol
Pierre SD 57501-3181
605 773-3352

No. 2353-2 Hydrologic Unit 10140204
Basin White River
Newspaper Winner Advocate, Winner, SD
(office use only)



Application For Permit To Appropriate Water Within The State Of South Dakota

Check use of water:

☐ Municipal ☐ Suburban Housing ☒ Recreational ☐ Institutional
☐ Rural Water System ☐ Commercial ☒ Fish & Wildlife ☐ Geothermal Heat
☐ Domestic ☐ Industrial ☐ Other _____
(over 18 gpm)

Type of Application: ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
(check one) ☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☐ Amendment/Correction to Permit No. _____

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.) _____
Former Vested Right #693-2

1. Name of Applicant SD Game, Fish and Parks Phone 773-3658
(check one) ☒ Owner ☐ Tenant/lessee

Mailing Address 523 E Capitol Pierre State SD 57501
(Street, RR, or Box) (City) (Zip Code)

2. Amount of water claimed _____ *CFS or _____ **GPM 64.5 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply unnamed tributary of Thunder Creek

4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) NW 1/4 NE 1/4 Sec 16-T101N-R75W;
Water Impounded: W 1/2 NE 1/4, SE 1/4 NE 1/4, Sec. 16-T101N-R75W.

County Tripp

5. County or counties where water will be used Tripp

6. Annual period during which water is to be used January 1 - December 31

7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

Repair breached dam commonly referred to as King Dam.

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

STATE OF SOUTH DAKOTA)

County of Hughes)^{SS}

I, Don McIVER, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Signed Don McIVER

Subscribed and sworn to before me this 15 day of February 19 96

Monika Patten
Notary Public

My Commission Expires 7/1/2003

**SOUTH DAKOTA
WATER PERMIT NO. 2353-2**

Date of first receipt of application February 2, 1996.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2353-2 to the South Dakota Department of Game, Fish and Parks, 523 E Capitol, Pierre SD 57501 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 2353-2 appropriates 64.5 acre-feet of water annually by reconstructing King Dam located in the NW 1/4 NE 1/4 Section 16 with water impounded in a portion of the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 16; all in T101N-R75W. The permit authorizes impoundment of water sufficient to maintain water at the outlet elevation of 1758.0 feet mean sea level.
2. The water appropriated shall be used for the purpose of recreational use and to provide habitat for fish and wildlife propagation and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 - December 31
4. The date of approval of Permit No. 2353-2 is April 15, 1996.
5. The date from which applicant may claim right is February 2, 1996.
6. One-fifth of the construction is to be completed on or before October 15, 1998.
7. All construction is to be completed on or before April 15, 2001.
8. Water is to be put to beneficial use on or before April 15, 2005.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

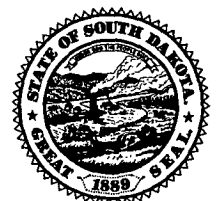
1. Water Permit No. 2353-2 authorizes a dam with a storage capacity of 64.5 acre-feet of water and sufficient water annually to maintain the water level to an outlet elevation of 1758.0 feet mean sea level.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

WATER MANAGEMENT BOARD

By: 
John Hatch, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

MAY 16 1996

date



Supplemental Information

(type or print in ink)



1. Well Information - Proposed construction

- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack Thickness _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
- On applicants property _____ On property owned by others _____

2. Dugout Information Estimates

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

3. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below. The locations of each dam should be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam please give their name and address

Roger C. Smith PE-4325

Ducks Unlimited

Bismarck, ND 58501

b) Freeboard 6' (from primary)

c) Crest Width 12'

Crest Length 300' (212' reconstructed)

d) Height 25'

e) Primary Outlet Capacity see design report
If Pipe, diameter 84" riser, 48" barrel

f) Secondary Spillway Capacity see design report
Spillway width 30' rubble masonry
already existing.

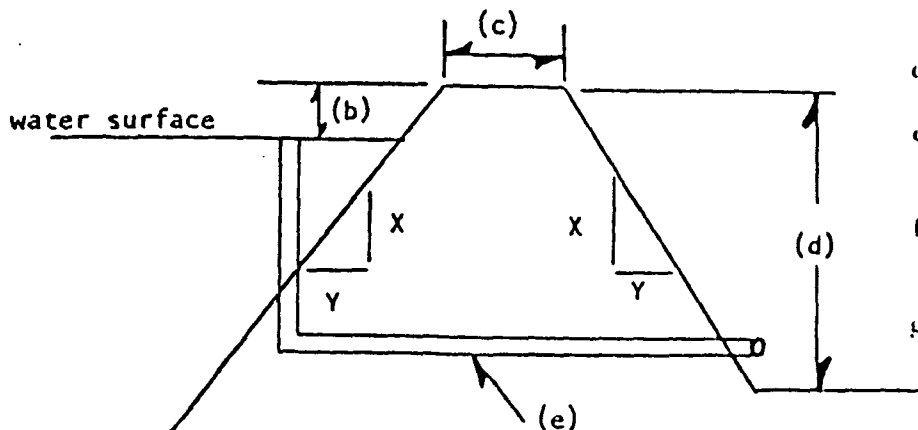
g) X & Y Slope
Upstream 3:1

Downstream 3:1

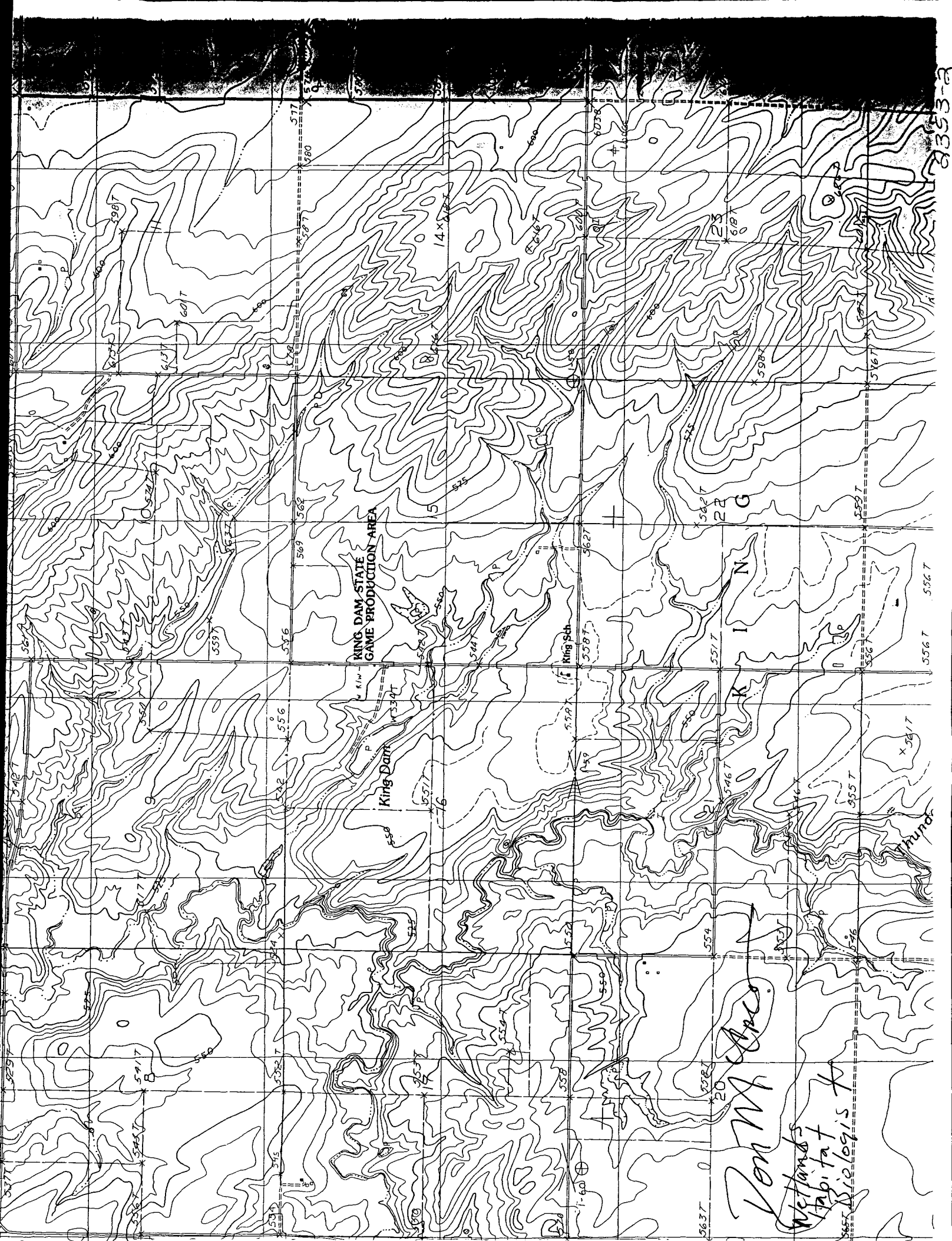
Surface Area of Impoundment 11.2 AC

Storage 64.5 @ FSL acre feet

Drainage area above dam 1.48 sq mi



Don McKe...
Signature of Applicant



KING DAM STATE
GAME PRODUCTION AREA

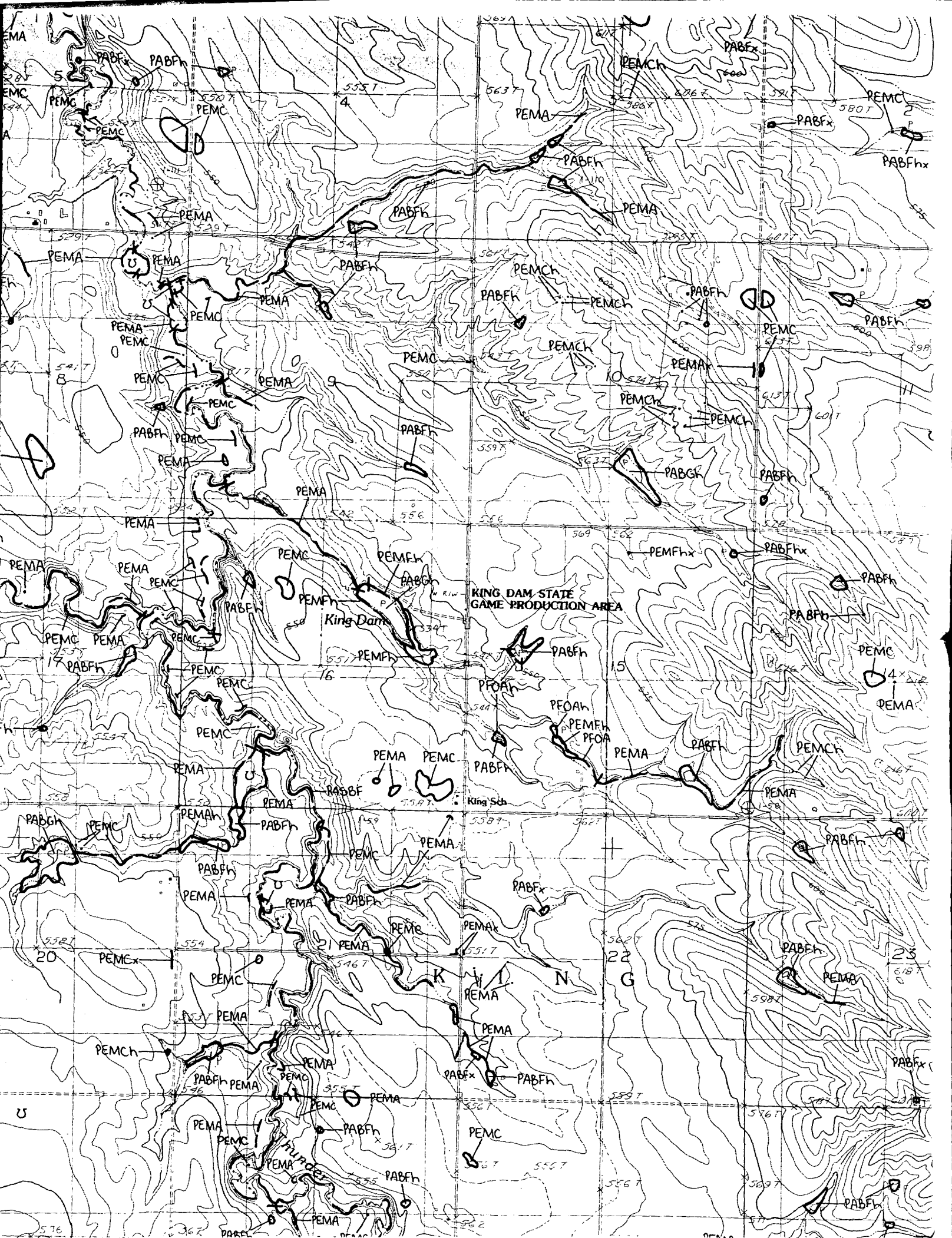
King Dam

King Sub

Vern M. Arco

Wetlands
Habitat
Biologists

2353-3





DEPARTMENT OF GAME, FISH AND PARKS

Foss Building
523 East Capitol
Pierre, South Dakota 57501-3182



2-1-96

Tim Schaal
DENR-Water Rights
Foss Building
Pierre, SD 57501

Dear Tim,

Included for your review is a water rights application for a Ducks Unlimited/Game, Fish and Parks wetland project. We are planning on rebuilding a breached dam in Tripp County commonly referred to as King Dam.

I have included a copy of the water rights application, vested water right #693-2, DU Design Report, topo map, NWI map, and aerial photo. Annual water to be claimed is 64.5 acre feet. Also, a dam safety review will need to be completed, and I believe I have included the necessary information you will need for that in the design report.

If you need any additional information, please let me know. Thanks.

Sincerely,

Don McCrea
Wetlands Habitat Biologist

Water Permit Application No. 2353-2
Dept. of Game, Fish & Parks
King Dam

Top of Dam Elev. - 1764.0
2nd Spillway Elev. - 1761.5
P. Spillway Elev. - 1758.0 } 25 ft.
DISTOE Elev. - 1739.0
Normal Capacity - 64.5 Ac-Ft
Int. Capacity - ~~1189~~ Ac-Ft
Max. Capacity - 152 Ac-Ft

Cat. 3 - Low Hazard Dam

EFL Height x Int. Cap. = $22.5 \times \frac{110}{89} = \frac{2475}{2002} < 3000 \therefore$ 25yr Frequency
Min Spillway Design

From USGS, WRI 80-80 - "Tech. for Estimating Flood Peaks ... in South Dakota"

DA = 1.48 mi.²
Slope = 100 ft/mi.^{1/2}
Si = 2.05

$$Q_{25} = 83.4 A^{.60} S^{.44} S_i^{-.72}$$

$$= 83.4 (1.48)^{.60} (100)^{.44} (2.05)^{-.72}$$

$$= 83.4 (1.21) (7.59) (0.60)$$

$$Q_{25} = 482 \text{ cfs}$$

$$Q_{50} = 106 A^{.63} S^{.45} S_i^{-.69}$$

$$= 106 (1.48)^{.63} (100)^{.45} (2.05)^{-.69}$$

$$= 106 (1.28) (7.94) (0.61)$$

$$Q_{50} = 656 \text{ cfs}$$

$$Q_{100} = 132 A^{.65} S^{.46} S_i^{-.67}$$

$$= 132 (1.48)^{.65} (100)^{.46} (2.05)^{-.67}$$

$$= 132 (1.29) (8.32) (0.62)$$

$$Q_{100} = 876 \text{ cfs}$$

Ducks Unlimited designed King Dam to have a CMP drop inlet Primary spillway with an 84" Riser / 48" Barrel and will use the original cobble stone structure as the secondary spillway. DU uses TR-20 to route $Q_{25} = 523 \text{ cfs}$ thru the dam with 3.37 ft. freeboard. Q_{50} peak = 704 cfs with 2.48 ft freeboard and Q_{100} peak = 963 cfs thru the dam with 1.22 ft freeboard.

Section 74:02:08:09

1. Topo Map - OK
2. Dam Axis Profile - OK
3. Dam Max. X-Sec. - OK
4. Area - Capacity - OK
5. Outlet Details - OK
6. Spillway Rating - OK
7. Spillway Details - OK
8. Specs. - Std. - OK
9. EPP - Cat 3 N/A - OK

SCS Annual Yield

$$DA = 1.48 \text{ mi.}^2 = 950 \text{ Ac.}$$

$$ISO = 2\frac{1}{2}$$

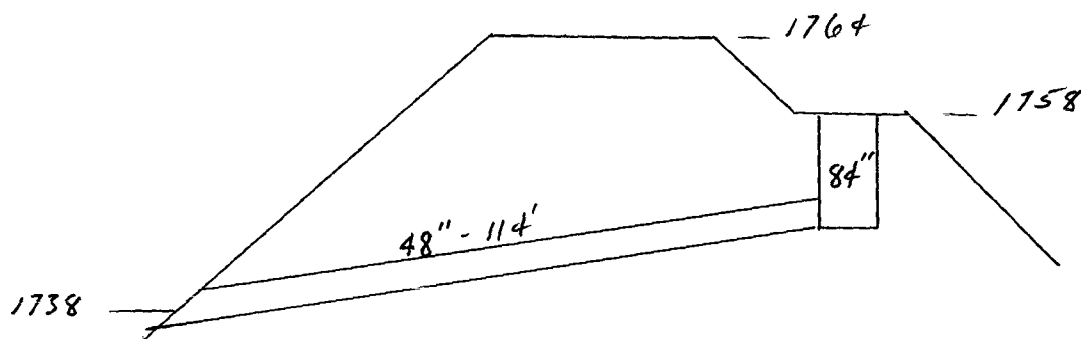
$$CN = 74$$

$$50\% \text{ chance} = 0.41$$

$$0.41 \times 950 / 12 = \underline{32 \text{ Ac.-Ft.}}$$

$$10\% \text{ chance} = 2.0$$

$$2.0 \times 950 / 12 = \underline{158 \text{ Ac.-Ft.}}$$



Weir Control $Q = C L H^{3/2}$
 $C = 3$
 $L = \pi r^2 = 22 \text{ ft}$

Orifice Control $Q = a \sqrt{\frac{2gH}{1 + K_m + K_p}}$

$L = 114 \quad K_p = 0.0168$
 $a = 12.56 \quad K_m = 1$

$Q = 12.56 \sqrt{\frac{64.4 H}{3.92}}$

Elev.	H	Q	Control	Combined
1758	0	0	0	0
58.5	.5	23	23	23
59	1	66	66	66
59.5	1.5	121	121	121
60	2	187	187	187
60.25	2.25	222	222	242
60.5	2.5	261	242	242
61	3	343	244	244
61.5	3.5	432	246	246
62	4	528	249	249
62.5	4.5	630	252	351
63	5	738	254	435
63.5	5.5	851	257	537
64	6	970	260	650

Elev.	H (20+)	Q
1758	0	0
58.5	20.5	230
59	21	233
59.5	21.5	236
60	22	238
60.5	22.5	242
61	23	244
61.5	23.5	246
62	24	249
62.5	24.5	252
63	25	254
63.5	25.5	257
64	26	260

2nd Spillway $Q = C L H^{2/3}$
 $C = 3.3$
 $L = 30$

Elev.	H.	Q
1761.5	0	0
62	.5	35
62.5	1	99
63	1.5	181
63.5	2	280
64	2.5	390



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

March 4, 1996

Roger Smith, P.E.
Regional Engineer
Ducks Unlimited, Inc.
3502 Franklin Avenue
Bismarck, ND 58501-0761

Dear Mr. Smith:

We have reviewed the plans and specifications for the King Dam Project located in Section 16-T101N-R75W, in Tripp County. The plans and specifications as submitted are approved. Approval of the plans and specifications does not authorize construction of the dam. Construction may not begin until Water Permit Application No. 2353-2 is approved.

Our review was to determine compliance with the requirements of the Water Management Board Safety of Dams Rules, Chapter 74:02:08. Approval of these plans and specifications does not release the Department of Game, Fish and Parks as owner of the dam from the responsibility for operating and maintaining the dam in good repair to ensure the safety of the dam.

King Dam will be classified as a small size Category 3, Low Hazard dam with a dam height of 25 feet, a normal storage capacity of 64.5 acre-feet and a maximum storage capacity of 152 acre-feet.

If you have any questions, please feel free to contact us.

Sincerely,

Gale N. Selken, P.E.
Natural Resources Engineer IV
for John Hatch, Chief Engineer
Water Rights Program
(605) 773-3352

c: Don McCrea, Department of Game, Fish & Parks
Jeff Peters, Department of Game, Fish & Parks

REPORT ON
WATER PERMIT APPLICATION NO. 2353-2
Department of Game, Fish & Parks
February 29, 1996

Water Permit Application No. 2353-2 has been filed by the Department of Game, Fish and Parks to reconstruct King Dam, located in the NW 1/4 NE 1/4 of Section 16-T101N-R75W, in Tripp County. Water Permit Application No. 2353-2 authorizes a dam with a storage capacity of 64.5 acre-feet of water and sufficient water annually to maintain the water level at the primary spillway elevation of 1758.0 feet mean sea level. The water will be used for recreational use, and to provide habitat for fish and wildlife propagation.

Discussion:

King Dam was originally constructed in 1935 by the Works Progress Administration (WPA). The original King Dam failed in 1986. The failure was caused by piping and foundation problems. The embankment material was mostly sand and the embankment had numerous trees and burrowing animals. The reconstructed King Dam will be classified as a Category 3, Low Hazard dam. It has been designed by Ducks Unlimited, Inc. and the plans and specifications have been reviewed and approved; however, construction of the dam can not begin until Water Permit Application No. 2353-2 is approved.

King Dam will be 25 feet high with a normal storage capacity of 64.5 acre-feet with a reservoir level at the primary spillway elevation, and a maximum storage capacity of 152 acre-feet with a reservoir level at the top of dam elevation. A dam of this size and hazard classification is required to have a minimum spillway design capable of passing a 25 year frequency event.

King Dam is designed to have a CMP drop inlet primary spillway with an 84 inch diameter riser with a 48 inch diameter barrel with 6.0 feet of available head. The original 30 foot wide cobblestone spillway will function as the secondary spillway with 2.5 feet of available head. King Dam will have a drainage area of 1.48 square miles. Ducks Unlimited uses the Soil Conservation Service TR-20 model to route a 25-year frequency event peak of 482 cfs through the embankment with 3.37 feet of freeboard remaining. A 100-year frequency event peak of 963 cfs is routed through the embankment with 1.22 feet of freeboard remaining. The drop inlet primary spillway structure has been designed to pass a 50-year frequency peak of 704 cfs through the primary spillway with only 14 cfs routed through the cobblestone secondary spillway.

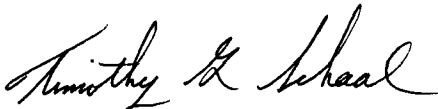
The annual yield for this drainage area with a 50 percent chance of occurrence, or 1 out of 2 years, is expected to be 32 acre-feet. The annual yield with a 10 percent chance, or 1 out of 10 years, is expected to be 158 acre-feet.

King Dam will be located on an unnamed tributary to Thunder Creek, about one-half mile upstream of the confluence of the tributary and the main creek channel, and about 10 miles upstream of the confluence of Thunder Creek and the White River. There are no existing Water Permits/Rights located downstream of King Dam on the unnamed tributary or Thunder Creek. If there were Permits, approval of Water Permit Application No. 2353-2 would have little effect on them since Thunder Creek has about 120 square miles of drainage above the confluence with the unnamed tributary. The Department of Game, Fish and Parks

holds Vested Right Claim No. 693-2 for the storage of 120 acre-feet of water in the original King Dam. Vested Right Claim No. 693-2 should be scheduled for cancellation, because the original dam has been breached since 1986.

Conclusions:

1. Water Permit Application No. 2353-2 should be approved since unappropriated water is available and approval should not have any adverse effect on existing Water Permits/Rights.
2. If approved, the low flow bypass requirement for downstream domestic use should be a qualification on Water Permit Application No. 2353-2.
3. Vested Right Claim No. 693-2 should be scheduled for cancellation.



Timothy G. Schaal, P.E.
Natural Resources Engineer III

Approved by:



Gale N. Selken, P.E.
Natural Resources Engineer IV

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2353-2, Department of Game, Fish and Parks**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 2353-2, Department of Game, Fish and Parks, %Don McCrea, 523 E. Capitol Ave., Pierre, SD 57501.

The Chief Engineer is recommending APPROVAL of Application No. 2353-2 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion has been developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. Water Permit No. 2353-2 authorizes a dam with a storage capacity of 64.5 acre feet of water and sufficient water annually to maintain the water level to outlet elevations of 1,758.0 feet mean sea level.
2. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.

See report on application for additional information.



JOHN HATCH, Chief Engineer
March 11, 1996



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

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

March 14, 1996

South Dakota Department of Game, Fish and Parks
%Don McCrea
523 E. Capitol
Pierre, SD 57501

Dear Mr. McCrea:

Water Permit Application No. 2353-2 for recreation and fish and wildlife 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 Winner Advocate printed at Winner, SD (Ph # (605) 842-1481). 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 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. The newspaper has been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

March 14, 1996

Winner Advocate
Box 71
Winner, SD 57580-0071

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 2353-2 to be published twice. Please publish the first notice on March 27, 1996, 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 South Dakota Department of Game, Fish and Parks, %Don McCrea, 523 E. Capitol, Pierre, SD 57501 (Ph # (605) 773-3658).

A copy of BOTH publications must be SENT to the WATER RIGHTS PROGRAM. 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. No action may be taken on the permit application until proof of publication has been received.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

FIRST TRANSMITTAL NOTICE

TO: Eric Gronlund
Water Rights Program
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 March 27, 1996, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 2353-2 to Appropriate Water

Notice is given that the South Dakota Department of Game, Fish and Parks, 523 E. Capitol, Pierre, SD 57501 has filed an application for a water permit to appropriate 64.5 acre-feet of water annually by reconstructing King Dam located in the NW 1/4 NE 1/4 Section 16 with water impounded in a portion of the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 16; all in T101N-R75W. This application requests impoundment of water sufficient to maintain water at the outlet elevation of 1758.0 feet mean sea level. Water is to be used for recreational purposes and to provide habitat for fish and wildlife propagation.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2353-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. The applicant must file a petition if contesting the chief engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by April 15, 1996.

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 the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
 County of Jrripp) ss

I, Carol Peterson

certify that the attached printed Notice was

taken from the Winner
Advocate

printed and published in Winner

County of Jrripp and State of

South Dakota. The notice was published in
 the newspaper on the following two dates:

March 27, 1996

April 3, 1996

Cost of Printing: \$36.91

Carol Peterson
 (Signature)

Office Manager
 (Title)

4-8-96
 (Date Signed)

my commission expires
August 21, 1999



Notice of application no. 2353-2 to appropriate water

Notice is given that the South Dakota Department of Game, Fish and Parks, 523 E. Capitol, Pierre, SD 57501 has filed an application for a water permit to appropriate 64.5 acre-feet of water annually by reconstructing King Dam located in the NW 1/4 NE 1/4 Section 16 with water impounded in a portion of the W 1/2 NE 1/4, SE 1/4 NE 1/4 Section 16; all in T101N-R75W. This application requests impoundment of water sufficient to maintain water at the outlet elevation of 1758.0 feet mean sea level. Water is to be used for recreational purposes and to provide habitat for fish and wildlife propagation.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2353-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

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Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.

(13-14 4096)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

MAY 16 1996

Don McCrea
Wetlands Habitat Biologist
South Dakota Department of Game, Fish and Parks
523 E. Capitol
Pierre, SD 57501

Dear Mr. McCrea:

Enclosed is Water Permit No. 2353-2 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

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

enclosures

PLEASE NOTE: Certain changes may be made to your water permit usually without affecting the priority date. The location of a point of diversion may be changed or additional points of diversion may be approved if the water source remains unchanged; no additional water is appropriated; and, if irrigating, no additional land is irrigated. The change may be allowed without application or publication, if the Water Rights Program is contacted and the chief engineer makes a finding that the change does not increase the potential for interference with existing diversions.

A new water permit application is required to change water sources, increase the permitted diversion rate, or increase the irrigated acreage. If the application is approved, the water permit will receive a new priority date.



NOTICE OF COMPLETION OF WORKS AND APPLICATION OF WATER TO BENEFICIAL USE

Date 10/21/96

TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM: Game, Fish & Parks 523 E. CAPITOL
(name) (address)

PIERRE SD 57501 605-773-3658
(city) (state) (zip) (phone)

I have completed the construction of the water diversion system and I have put the water to beneficial use to the maximum extent it is going to be used. I have not exceeded the amounts specified in Water Permit No. 2353-2.

Water Permit No. 2353-2 states that the diversion system is to be constructed by April 15, 2001, and that the water is put to beneficial use by
(date)

April 15, 2005.
(date)

The diversion system was completed on 10-1-96.
(date)

Applying the water to beneficial use was completed on 10-15-96.
(date)

You may schedule an inspection so that the Water License may be issued.

Don G. McEwen
(signature)
WETLANDS HABITAT BIOLOGIST

Permit No. 2353-2
White River - Water District

Report Of Examination Of Works And/Or Application of Water To Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, September 12, 1996, made a thorough examination of the water use system constructed by Department of Game, Fish & Parks of 523 E. Capitol, Pierre, SD 57501 holder of Permit No. 2353-2, bearing the priority of February 2, 1996 authorizing the storage of 64.5 acre-feet of the waters of unnamed tributary of Thunder Creek for recreation and fish & wildlife purposes, in Tripp County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water:

King Dam

B. Works used to transport water to place of use:

N/A .

C. Works used to apply water to beneficial use:

King Dam

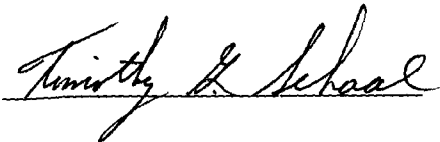
The system is in the following condition Good. The point of diversion is located 2050 feet west and 1150 feet south of the NE corner of Section 16-T101N-R75W (NW 1/4 NE 1/4). The works are capable of storing 64.5 acre-feet of water which is to be used for recreation and fish & wildlife. Water has been put to beneficial use to the maximum extent as follows:

Reconstruction of King Dam, 25 feet high, 64.5 acre-feet normal capacity & 152 acre-feet maximum capacity

the license should be issued for 64.5 acre-feet of storage.

Applicable permit qualifications have been complied with: Yes ☒

Exceptions to compliance are: none Date Report Completed: September 16, 1996



Timothy G. Schaal, P.E.
Natural Resources Engineer
DENR, Water Rights Program

REPORT ON INSPECTION OF PERMIT NO. 2353-2

Other permit(s) associated with the project: XXXX

DATE OF INSPECTION: September 12, 1996

NAME & ADDRESS OF INSPECTION CONTACT/ XXXX

RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE: XXXX

NAME & ADDRESS OF PERMIT HOLDER: SD Department of Game, Fish & Parks

DIVERSION POINT LEGAL LOCATION: 2050 feet west and 1150 feet south of the NE corner of Section 16-T101N-R75W (NW 1/4 NE 1/4)

DAM INFORMATION:

- 1) Height to crest 25 feet
- 2) Height to primary spillway 19 feet
- 3) Height to secondary spillway 22.5 feet
- 4) Crest width 12 feet
- 5) Crest length 300 feet
- 6) Spillway length XXX feet
- 7) Spillway width primary 7 ft. Diameter CMP, secondary 30 feet
- 8) Approx. storage (Normal) 64.5 acre-feet
- 9) Approx. storage (Maximum) 152 acre-feet
- 10) Date constructed: September 1996

PERMIT QUALIFICATIONS AND REGULATIONS:

- 1) Soil and water permit lands agree with lands being irrigated and lands listed on permit N/A
- 2) Special qualifications to permit being abided by yes
- 3) All structures, wells and lands on map yes
- 4) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period N/A

MAP NOT TO SCALE
THIS IS NOT AN OFFICIAL WETLAND MAP.

101-75

1A 57.0
NHRL

T3582

T657

(BOL)

King
Dam

5 35.5 NHRL

TI566

16

101-75

NC

Handwritten signature
September 16, 1975

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 2353-2

(1) The Department of Game, Fish and Parks, 523 E Capitol, Pierre SD 57501 made Application No. 2353-2, February 2, 1996 for a water permit to store 64.5 acre-feet of water from an unnamed tributary of Thunder Creek, Tripp County, South Dakota with sufficient water annually to maintain the water level to an elevation of 1758.0 feet mean sea level for recreation and fish & wildlife propagation purposes. Permit No. 2353-2, with a priority date of February 2, 1996 was approved April 15, 1996 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before April 15, 2001 and for the application to beneficial use of said water on or before April 15, 2005.

(2) It is certified that the applicant has complied with the provisions of South Dakota State Law relating to completion of the construction and repair of **King Dam** with a storage capacity of 64.5 acre-feet and is entitled to sufficient water annually to maintain the water level at the outlet elevation of 1758.0 feet mean sea level. The location of the dam is 2,050 feet west and 1,150 feet south of the northeast corner of Section 16-T101N-R75W (NW 1/4 NE 1/4).

(3) The applicant has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(4) Pursuant to South Dakota Water Law 46-5-30.1 the Department of Game, Fish and Parks, 523 E Capitol, Pierre SD 57501 the holder and/or owner of Water Permit No. 2353-2 is issued a license to appropriate water, the right to store 64.5 acre-feet of water in King Dam from an unnamed tributary of Thunder Creek with sufficient water annually to maintain the water level at an elevation of 1758.0 feet mean sea level with a priority date of February 2, 1996 from the location specified in (2) of this license, for recreation and fish & wildlife propagation purposes. This license is subject to any limitations or qualifications listed in Water Permit No. 2353-2 and subject to South Dakota State Law.



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

OCT 17 1996

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

OCT 17 1996

2353-2

Don McCrea
Department of Game, Fish and Parks
523 East Capitol
Pierre, SD 57501

Dear Mr. McCrea:

Enclosed is Water License No. 2353-2. Water License No. 2353-2 is the final document which completes the process of obtaining a water right.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Very truly yours,

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

ks
enclosures