

WATER PERMIT NO. 6357-3

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

Address: 523 E Capitol, Pierre SD

Phone: 605 773-3387

Amount of Water Claimed: 0.89 cfs

Total Acres: NA

Source of Water Supply: Blue Dog Lake

Water to be used for: fish & wildlife propagation

County: Day

Type of Waste Disposal System:

Location: Blue Dog Lake

PRIORITY

Date Received: 8-16-2002

Application/License Fee: \$NA

Corrected Application Received:

Period of Annual Use: January 1 – December 31

Remarks: Increases the diversion rate authorized by Water Right No. 4470-3

Diversion Point: SE ¼ SW ¼ Sec 21-T122N-R54W

Land to be Irrigated: NA

Depth of Well: NA

Well Driller: : NA

Remarks:

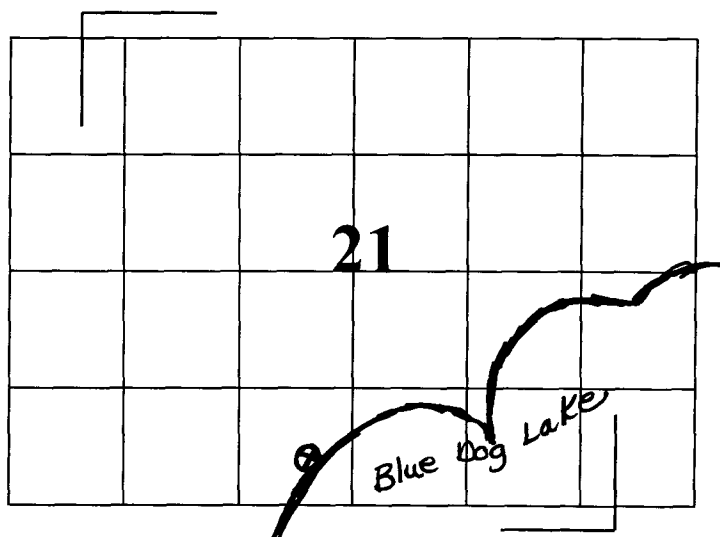
Type of Map: aerial

Prepared by: Mark Rath

Reviewed and the Number Assigned on: 8-28-2002

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



**SOUTH DAKOTA
WATER PERMIT NO. 6357-3**

Date of first receipt of application August 16, 2002.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6357-3 to 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. 6357-3 appropriates 0.89 cubic feet of water per second (cfs) by increasing the diversion rate authorized by Water Right No. 4470-3. Water Right No. 4470-3 appropriates 3.57 cfs from Blue Dog Lake for use at the Blue Dog State Fish Hatchery. This permit also correctly identifies the location of the diversion point as being in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 21-T122N-R54W. This permit increases the water appropriation from the lake from 3.57 cfs to 4.46 cfs.
2. The water appropriated shall be used for the purpose of supplying water 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. 6357-3 is October 24, 2002.
5. The date from which applicant may claim right is August 16, 2002.
6. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

WATER MANAGEMENT BOARD

By: Garland Erbele

Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

MAR 12 2003

date



FORM 2: Application for uses other than irrigation
(type or print)

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>6357-3</u> (office use only) Hydrologic Unit <u>10160010</u>
	Basin <u>James River</u>
	Newspaper <u>Reporter & Farmer, Webster</u>

RECEIVED
AUG 16 2002
WATER RIGHTS PROGRAM

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

Check use(s) of water:

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

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.) _____

- Name of Applicant South Dakota Department of Game, Fish & Parks Phone 605-773-3387
(check one) ☐ Owner ☐ Tenant/lessee
Mailing Address 523 East Capitol Avenue; Pierre State SD 57501
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 0.89 *CFS or **GPM ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply Blue Dog Lake
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
2,350 feet east and 430 feet north of the SW corner of Section 21, T122N, R54W (SE 1/4 SW 1/4)
County Day
- County or counties where water will be used Day
- Annual period during which water is to be used January 1- December 31
- 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)

This application will add diversion authority for an additional 0.89 cfs from Blue Dog Lake beyond the 3.57 cfs authorized by permit No. 4470-3. The water will be used in fish rearing ponds which are located in the S 1/2 SW 1/4, the SW 1/4 NE 1/4, and the NW 1/4 SE 1/4 of Section 21, T122N, R54W.

STATE OF SOUTH DAKOTA)
County of Hughes SS

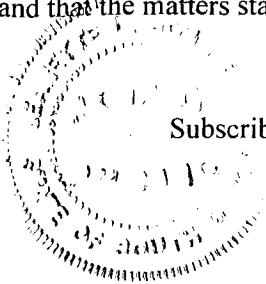
Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

I, DENNIS LINKENHOLZ, 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.

Applicant's signature Dennis Linkenholtz

Subscribed and sworn to before me this 16th day of August 20 02

Jeanette L. Lounnean
My commission expires 6-12-07



REPORT ON WATER PERMIT APPLICATION NO. 6357-3
South Dakota Department of Game, Fish and Parks
September 18, 2002

Application No. 6357-3, South Dakota Department of Game, Fish and Parks, proposes to appropriate an additional 0.89 cubic feet of water per second from Blue Dog Lake to supplement the existing diversion of 3.57 cfs authorized by Permit No. 4470-3. There is also a requested change in the authorized lake diversion point which is located in the SE1/4 SW1/4 of Section 21 T122N-R54W. The water is used for fish and wildlife propagation at the Blue Dog State Fish Hatchery. The proposed project is located 1 mile north of the town of Waubay in Day County.

Review of the Proposed Project

An August 2001 inspection of Water Permit No. 4470-3 found the Blue Dog Lake diversion point to be in the wrong location and the diversion rate from Blue Dog Lake for the fish hatchery to be greater than authorized. This application is to increase the authorized diversion rate from 3.57 cfs to 4.46 cfs and corrected the location of the lake intake.

Review of Existing Water Rights

There is one other existing water right for surface water from Blue Dog Lake. It is also held by the South Dakota Department of Game, Fish and Parks and is for maintaining Blue Dog Lake at the outlet elevation. Water for this application is available from Blue Dog Lake.

Conclusions

1. This application proposes to appropriate an additional 0.89 cubic feet of water per second from Blue Dog Lake. This water permit would supplement the existing diversion of 3.57 cfs authorized by Permit No. 4470-3 for fish and wildlife production at the Blue Dog State Fish Hatchery.
2. There is also a requested change in the authorized lake diversion point which is located in the SE1/4 SW1/4 of Section 21 T122N-R54W.
3. Water for this application is available from Blue Dog Lake.



Mark D. Rath
Natural Resources Engineering Specialist



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6357-3, South Dakota 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. 6357-3, South Dakota Department of Game, Fish and Parks, c/o Dennis Unkenholz, 523 E. Capitol Avenue, Pierre SD 57501.

The Chief Engineer is recommending APPROVAL of Application No. 6357-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest.

See report on application for additional information.

Garland Erbele, Chief Engineer
September 26, 2002



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

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

September 27, 2002

SD Department of Game, Fish & Parks
%Dennis Unkenholz
523 E Capitol Avenue
Pierre, SD 57501

Dear Mr. Unkenholz:

Water Permit Application No. 6357-3 for fish and wildlife propagation 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 Reporter & Farmer printed at Webster, SD (Ph # 605-345-3356). You will need to contact the newspaper and authorize publication of this notice. 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. Upon receiving authorization, 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 also 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 57501-3182
www.state.sd.us/denr

September 27, 2002

Reporter & Farmer
PO Box 30
Webster, SD 57274-0030

ATTENTION: Legal Public Notice

Enclosed is a Notice of Hearing on Application No. 6357-3 to Appropriate Water to be published twice. Please publish the first notice on October 7, 2002 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 & Parks, % Dennis Unkenholz, 523 E. Capitol Ave., Pierre, SD 57501 (Ph # 605-773-3387).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Any fax should be sent to the attention of Karen Schlaak at (605) 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

No. 6357-3

Date _____

We are in receipt of your letter of September 27, 2002 enclosing Notice of Hearing to Appropriate Water by Application No. 6357-3 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 October 7, 2002 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6357-3 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 0.89 cubic feet of water per second (cfs) by increasing the diversion rate authorized by Water Right No. 4470-3. Water Right No. 4470-3 appropriates 3.57 cfs from Blue Dog Lake for use at the Blue Dog State Fish Hatchery. This notice also serves to correctly identify the location of the diversion point as being in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 21-T122N-R54W. This application increases the water appropriation from the lake from 3.57 cfs to 4.46 cfs.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6357-3 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 October 24, 2002.

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. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

AFFIDAVIT OF PUBLICATION

County of Day
State of South Dakota, } ss.

John Suhr, of said county and state being duly sworn on oath, says: That the Reporter & Farmer is a legal weekly newspaper of general circulation, and an official newspaper as required by Session Laws of 1893, printed and published in Webster, in said county and state, by the Day County Printing Company and has been such newspaper during the time hereinafter mentioned, that I, John Suhr, the undersigned, am publisher of said newspaper, and have personal knowledge of all facts stated in this affidavit and that the advertisement headed Notice of Application to Appropriate Water, a printed copy of which is hereunto attached, was printed and published in the said newspaper two successive and complete issues as follows:

First Publication Oct. 7, 2002;
Second Publication Oct. 14, 2002;
Third Publication ;
Fourth Publication ;
Fifth Publication ;

That the full amount of fees for publication of the annexed notice is \$44.40 and inures solely to the Reporter & Farmer, published by The Day County Printing company, that no arrangement or understanding for a division thereof has been made with any other person, and that no part thereof has been agreed to be paid any person whomsoever.

Subscribed and sworn to before me this 14th day of
October, 2002.

LeAnn M. Suhr
Day County, South Dakota
My Commission Expires May 15, 2005

Notary Public, Day County, South Dakota

Notice of appl

(First Oct. 7) NOTICE OF APPLICATION NO. 6357-3 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 0.89 cubic feet of water per second (cfs) by increasing the diversion rate authorized by Water Right No. 4470-3. Water Right No. 4470-3 appropriates 3.57 cfs from Blue Dog Lake for use at the Blue Dog State Fish Hatchery. This notice also serves to correctly identify the location of the diversion point as being in the SE1/4SW1/4 Section 21-T122N-R54W. This application increases the water appropriation from the lake from 3.57 cfs to 4.46 cfs.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6357-3 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

ication

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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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.

Steven M. Pirner, Secretary
Department of Environment and
Natural Resources
(Last Oct. 14)

Permit No. 6357-3
Big Sioux River - Water District

Contact Person & Address: Jerry Broughton, Manager of Blue Dog State Fish Hatchery

Related Permits: 4470-3 & 4385-3

Report Of Examination Of Works

On, August 14, 2001, I made a thorough examination of the water use system constructed by South Dakota Department of Game Fish and Parks of 523 E Capitol Ave, Pierre SD holder of Permit Nos. 4385-3, bearing the priority of March 1, 1979 authorizing the diversion of 3.57 cu. ft. per second of the waters of groundwater, Coteau Lakes Aquifer; 4470-3, bearing the priority of February 27, 1980 authorizing the diversion of 3.57 cu. ft. per second of the waters of surface water, Blue Dog Lake; and 6357-3, bearing the priority of August 16, 2002, authorizing the diversion of an additional 0.89 cu. ft. per second of the waters of surface water, Blue Dog Lake for Fish Culture purposes, in Day County.

The system is in the following condition good. The points of diversion are located all from the SW corner of Section 21 T122N-R54W: for Well #1 3850 ft east and 1250 ft north with a longitude of -97.31021 and a latitude of 45.35879 ; for Well #2 3425 ft east and 1250 ft north with a longitude of -97.31186 and a latitude of 45.35881 ; for Well #3 4160 ft east and 1050 ft north with a longitude of -97.30890 and a latitude of 45.35811; and for the lake intake 2350 ft east and 430 ft north with a longitude of -97.31593 and a latitude of 45.35647; The works are capable of diverting and conveying to the place of use 2.23 cu. ft. per second of water from the wells (ground water) and 4.46 cu. ft. per second of water from the lake (surface water) which is to be used for fish culture. Water has been put to beneficial and the license should be issued for 2.23 cu. ft. per second of water from the wells (ground water) and 4.46 cu. ft. per second of water from the lake (surface water).

Review of Permit Qualifications And Regulations:

- 1) Special qualifications to permit being abided by yes
- 2) All structures, wells and lands on map yes
- 3) Exceptions to compliance are: no

Report On the Specifics of the System

Diversion Point Information:

Well Information:

- | | |
|--|-------------------------------------|
| 1) Well Drilling Firm: <u>Minnesota Drillers</u> | 2) No. of Wells <u>3</u> |
| 3) Depth(s) <u>56</u> feet | 4) Well log is available <u>yes</u> |

Casing:

- | | |
|------------------------------|--------------------------|
| 1) Diameter <u>12</u> inches | 2) Length <u>36</u> feet |
| 3) Type <u>steel</u> | |

Screen:

- | | |
|--------------------------------|--------------------------|
| 1) Type <u>stainless steel</u> | 2) Length <u>20</u> feet |
| 3) Static water level ? feet | |

Pump: for Wells #1 & #2

- 1) Make Layne
- 2) Model ?
- 3) Size ?
- 4) Capacity 500 GPM

Motor:

- 1) Make US Electrical
- 2) Model No. 256TP
- 3) Horsepower rating 20 hp

Pump: Well #3

- 1) Make Fairbanks-Morse
- 2) Model 13H
- 3) Size ?
- 4) Capacity 1000 GPM

Motor:

- 1) Make US Electrical
- 2) Model No. 324TP
- 3) Horsepower rating 40 hp

System capacity of the Wells is limited to the piping system which can only handle 1000 gpm.

Pump: at the lake intake there are 3 identical pumps

- 1) Make Fairbanks-Morse
- 2) Model ?
- 3) Size ?
- 4) Capacity 1000 GPM

Motor:

- 1) Make US Electrical
- 2) Model No. 324TP
- 3) Horsepower rating 40 hp

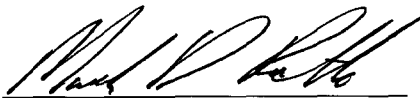
System capacity of 2000 gpm at the lake intake is limited to the use of only 2 of the 3 pumps at any given time the 3rd pump is for emergency standby purposes if one of the other pumps goes down.

DISTRIBUTION LINES OR CANALS:

- 1) Type PVC

POND INFORMATION:

There are several holding ponds at the fish hatchery; four – 1/4 acre ponds; four – 1/2 acre ponds; ten - 1 acre ponds; twenty - 2 acre ponds with a capacity of 450 ac-ft



Mark D. Rath
Natural Resources Engineering Specialist
DENR, Water Rights Program

10-25-2002

Date

07-92

Date: 9-13-99

APPENDIX C

PRODUCTION TEST WELLS
BLUE DOG LAKE
DAY COUNTY, SOUTH DAKOTA

GENERAL INFORMATION

Well Driller: Minnesota Drillers
Method: Reverse Rotary

Well No. 1.

Log	0' - 2'	Topsoil
	2' - 17'	Sandy Yellow Clay
	17' - 21'	Sand & Gravel
	21' - 23'	Clay
	23' - 26'	Medium to Coarse Sand
	26' - 40'	Fine Sand
	40' - 48'	Coarse Gravel
	48' - 60'	Medium to Coarse Gravel
	60' - 68'	Grey Clay

Well Construction - 20 feet of 12-inch pipe size, stainless steel screen from 36' to 56'. 12" casing to 3 feet above ground level.

Well No. 2.

Log	0' - 2'	Topsoil
	2' - 15'	Sandy Yellow Clay
	15' - 17'	Grey Clay
	17' - 21'	Sand
	21' - 26'	Grey Clay
	26' - 45'	Coarse Sand
	45' - 50'	Medium Sand

Well Construction - 20 feet of 12" pipe size, stainless steel screen from 36' to 56'. 12" casing to 3 feet above ground level.

Pilot Hole No. 3.

Log	0' - 2'	Topsoil
	2' - 14'	Sandy Yellow Clay
	14' - 32'	Gray Clay
	32' - 49'	Sand

Blue Dog State Fish Hatchery



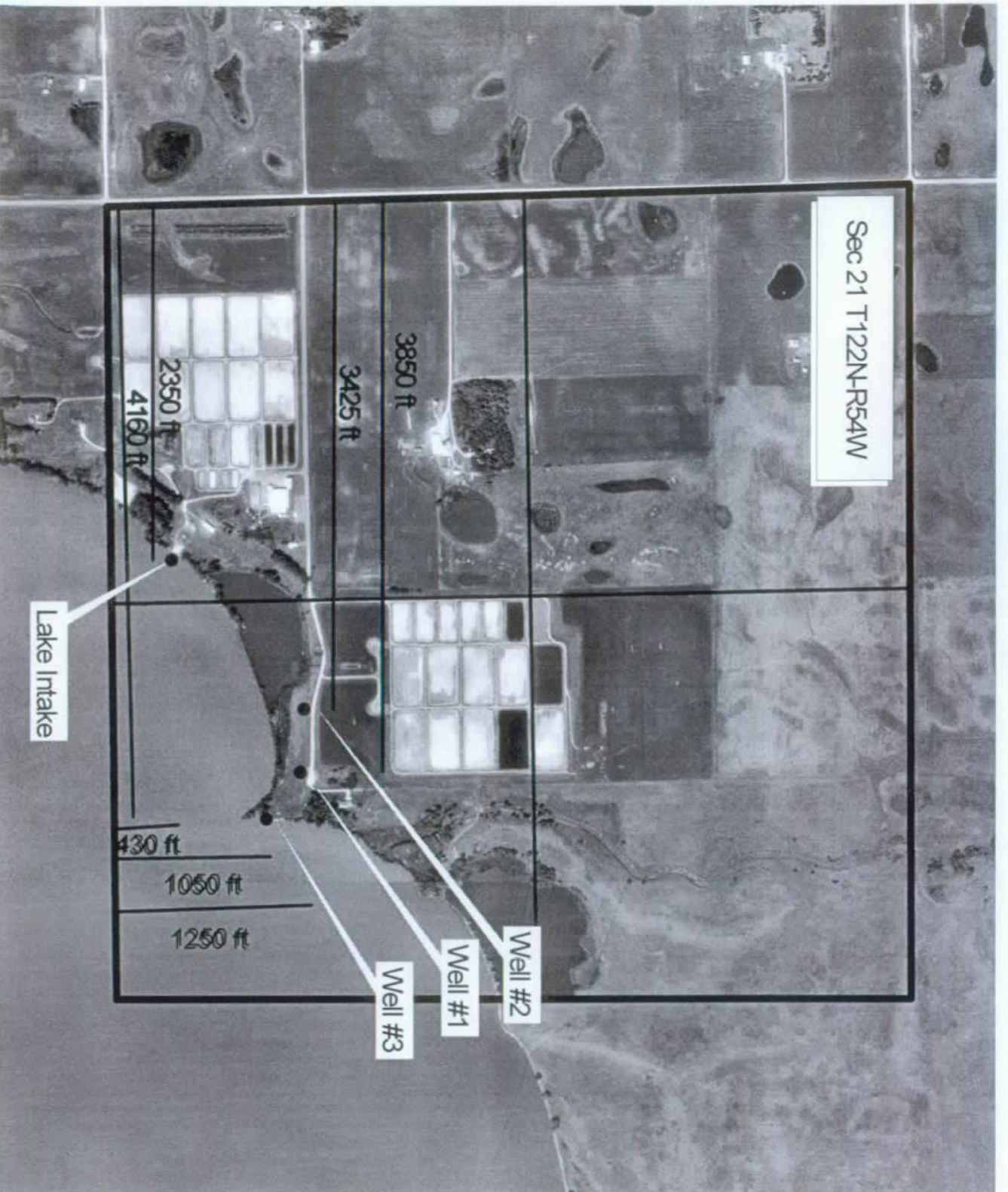
South Dakota



Mark D Rath

Mark D Rath
SD DENR

8-22-2002



Sec 21 T122N-R54W

3850 ft

3425 ft

2350 ft

4160 ft

430 ft

1050 ft

1250 ft

Well #2

Well #1

Well #3

Lake Intake

0.5

0

0.5

1 Miles

6357-3

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 6357-3

(1) The South Dakota Department of Game, Fish and Parks, 523 E Capitol, Pierre SD 57501 made Application No. 6357-3, August 16, 2002 for a water permit to divert an additional 0.89 cubic feet of water per second (cfs) from Blue Dog Lake, Day County, South Dakota for fish and wildlife propagation purposes. Permit No. 6357-3, with a priority date of August 16, 2002 was approved October 24, 2002 and issued to the applicant for diversion of water with construction of the described water supply system completed and the application to beneficial use of water completed.

Permits associated with this water use system:

Water Permit No. 4385-3 – with a priority date of March 1, 1979, authorizes diversion of 3.57 cfs from 3 wells;

Water Permit No. 4470-3 – with a priority date of February 27, 1980, authorizes diversion of 3.57 cfs from Blue Dog Lake;

The applicable portions of Nos. 4385-3 and 4470-3 have been incorporated into this license.

(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Incorporated Water Right No. 6357-3 is issued a license, bearing priority dates of March 1, 1979 (2.23 cfs from 3 wells), February 27, 1980 (3.57 cfs from Blue Dog Lake) and August 16, 2002 (0.89 cfs from Blue Dog Lake for fish and wildlife propagation purposes at the Blue Dog State Fish Hatchery.

The diversion points are located as follows: all from the southwest corner of Section 21-T122N-R54W

Well # 1 – 3,850 feet east and 1,250 feet north (SW $\frac{1}{4}$ SE $\frac{1}{4}$);

Well # 2 – 3,425 feet east and 1,250 feet north (SW $\frac{1}{4}$ SE $\frac{1}{4}$);

Well #3 – 4,160 feet east and 1,250 feet north (SE $\frac{1}{4}$ SE $\frac{1}{4}$);

Blue Dog Lake Intake – 2,350 feet east and 430 feet north (SE $\frac{1}{4}$ SW $\frac{1}{4}$).

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Incorporated Water Permit No. 6357-3 including the following qualification:

- The wells approved under this Permit will be located near domestic wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells.

Garland Erbele

Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

MAR 12 2003

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

MAR 12 2003

6357-3

SD Dept of Game Fish & Parks
523 E Capitol
Pierre SD 57501

Dear Sir:

Enclosed is Water Permit and Water License No. 6357-3. The water license is the final water right document completing your 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.

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

NOTE: The applicable portions of No. 4385-3 and 4470-3 are incorporated into Water License No. 6357-3.

enclosures

SD EForm - 1585LD V3

FORM 2: Application for uses other than irrigation
(type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>6357-3</u> (office use only) Hydrologic Unit _____
	Basin _____
	Newspaper _____

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

Check use(s) of water:

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

Type of Application:
(check one)

☐ New	☐ Vested Right (Use predates Mar 2, 1955)	☐ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____		
☒ Amendment/Correction to Permit No. <u>6357-3</u>		

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

Pursuant to SDCL 46-5-13.1, change the location of well No. 3 authorized by Water Right No. 6357-3.

1. Name of Applicant SD Department of Game, Fish and Parks Phone _____
(check one) ☒ Owner ☐ Tenant/lesseeMailing Address 523 E Capitol Avenue Pierre SD 57501
(Address) (City) (State) (Zip Code)2. Amount of water claimed no add'l *CFS or _____ **GPM _____ ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable3. Source of water supply groundwater4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Day
S 1/2 SE 1/4 Section 21, T122N, R54W (approximately 200 to 250 feet north of existing Well No. 3)5. County or counties where water will be used Day6. 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)

Due to rising well levels of Blue Dog Lake, the department has determined that the best alternative is to move the location of well No. 3. The department recognized the proximity of three wells to each other but operate them on an alternating basis. Well Nos. 1 and 2 will remain in their present location.

STATE OF SOUTH DAKOTA)
County of HUGHES) SS

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

I, ANTHONY P. LEIF, 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.Applicant's signature [Signature]Subscribed and sworn to before me this 2nd day of August, 2011Notary Public signature [Signature]

2010-01

(SEAL)

Richard J. Neill
Notary Public
State of South Dakota
Commission Expires 6/5/16

Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 18 inch Depth 50 - 60
- b) Casing Type PVC Diameter 12 inch Thickness SDR-21
- c) Screen Type stainless steel Diameter 12 inch Thickness johnsonSST
- d) Gravel Pack pearock Length of Gravel Pack 25 feet
- e) Depth to Top of Water Bearing Material 25 feet
- f) Depth to Water (ground surface to water level) 15 feet
- g) Distance to nearest existing domestic well:

On applicant's property 150 feet On property owned by others unknown

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field)
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

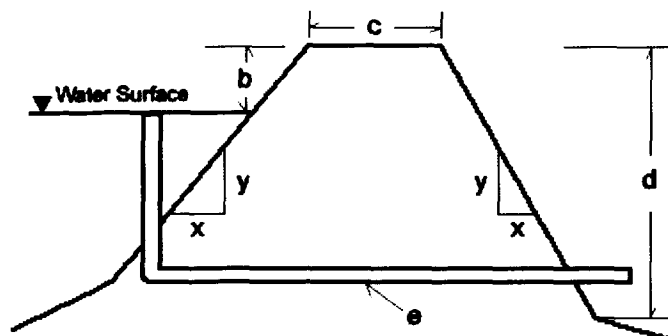
3. Dugout Information

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

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to 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:



- b) Freeboard _____
- c) Crest Width _____
Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
If pipe, diameter _____
- f) Secondary Spillway Capacity _____
Spillway Width _____
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres



Approval of a Change of Diversion Point

NAME: South Dakota Department of Game, Fish and Parks

ADDRESS: 523 E Capitol Avenue, Joe Foss Building, Pierre SD 57501

DATE: August 5, 2011 **COUNTY:** Day **TELEPHONE:**

BACKGROUND:

Water Right No. 6357-3 appropriates 2.23 cubic feet of water per second(cfs) from three wells and 4.46 cfs from Blue Dog Lake for fish and wildlife propagation purposes at Blue Dog State Fish Hatchery. Wells designated and Nos. 1 and 2 are located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ while Well No. 3 is in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 21, T122N, R54W.

The SD Department of Game, Fish and Parks requested to move the location of Well No. 3 due to rising water levels at Blue Dog Lake. The location of Well Nos. 1 and 2 will remain the same. Well No. 3 will be moved approximately 300 feet northwest of its present location but will remain in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 21. The new well will be approximately 75 feet east of existing Well No. 1. The attached map generated using ArcMap and the 2010 FSA aerial photo shows the original location and newly requested location.

Steve Ellingson with Game, Fish and Parks in verbal communication stated that Well Nos. 1 and 3 will not be operated at the same time. Instead the wells are used on a rotational basis. This appears to be proved up based on what the wells were capable of producing when the licensing investigation was conducted in 2002. The appropriation from groundwater is 2.23 cfs (1,000 gpm) while the capacity of the wells are # 1 = 500 gpm, #2 = 500 gpm and # 3 = 1,000 gpm. That investigation reports states the system capacity of the wells is limited to the piping system which can only convey 1,000 gpm.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

- **Developed water source same as permitted source and no additional water appropriated**

The water source authorized by Water Right No. 6357-3 is not specified in the water right but the wells are 30 – 60 feet deep. Presumably the source can be classified as the Coteau Lakes Aquifer. The Coteau Lakes Aquifer is a group a unconsolidated sand and gravel outwash deposits that are at or near the surface in this area. The deposits may or may not be connected with each other and in places is probably hydrologically connected to surface water bodies (Buhler, 1996, Water Permit Application No. 5964-3). Based on this information and the fact the new well will be approximately the same depth as the existing wells, the water source will not change.

No additional appropriation of water is requested or authorized by this action.

- **Review of Existing Diversions**

The two nearest water rights in the area are held by the city of Waubay just over a $\frac{1}{2}$ mile to the south. However, the wells held under Water Rights Nos. 1435-3 and 3101-3 are 240 feet deep (Prairie Coteau Aquifer) and 433 feet deep (Altamont Aquifer), respectively.

Water Rights in the area completed into the aquifer designated as Coteau Lakes are:

Water Right	Distance from Well No. 3	Depth	Use	Diversion
2795-3	3.25 miles east	38 feet	Irrigation	1.33 cfs
5964-3	3.1 mile south	54 feet	Irrigation	1.78 cfs
5223-3	3.1 miles northwest	70 feet	Irrigation	5.34 cfs

Given the distance of these water rights, the nature of these unconsolidated outwash deposits and the fact that this is a minor change in the location of an existing well, interference with existing water rights is unlikely.

The nearest domestic well in the area on file is approximately 2,600 feet to the northwest in the SW ¼ of Section 21. There are two well completion reports on file completed in 1958 and 1981 that are likely associated with a farmstead visible on the 2010 FSA aerial map. There is another domestic well in the NE ¼ of Section 20 just over a mile west Well No. 3 which is likely used at the farmstead visible in this quarter section.

There are two observation wells maintained by DENR in the area. DA-78C is completed into the Coteau Lake Aquifer located approximately 3.6 miles northwest of the wells for the hatchery. The hydrograph for this well show increasing water levels since being first installed in 1978. Annual fluctuations due to irrigation withdrawals by Water Right No. 5223-2 are visible along with the recharge that occurs once the irrigation season concludes. Increasing water levels in this observation well is likely attributable to it hydrologic connection to area lakes which have seen dramatic increase in water levels. The other observation well is DA-78D located 3.1 miles to the east of the hatchery. This well has also seen increase in water level since 1978, although not as dramatic as DA-78C.

CONCLUSION

- The change in the well location does not appropriate additional water.
- The well is to be completed into the Coteau Lake Aquifer.
- Interference is not expected to be a concern for water rights held by others.
- Existing domestic wells should not be adversely impacted by authorizing this change.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the change of diversion point (Well No. 3) be authorized under Water Permit No. 6357-3.

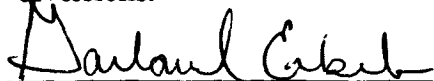


Eric Gronlund

Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

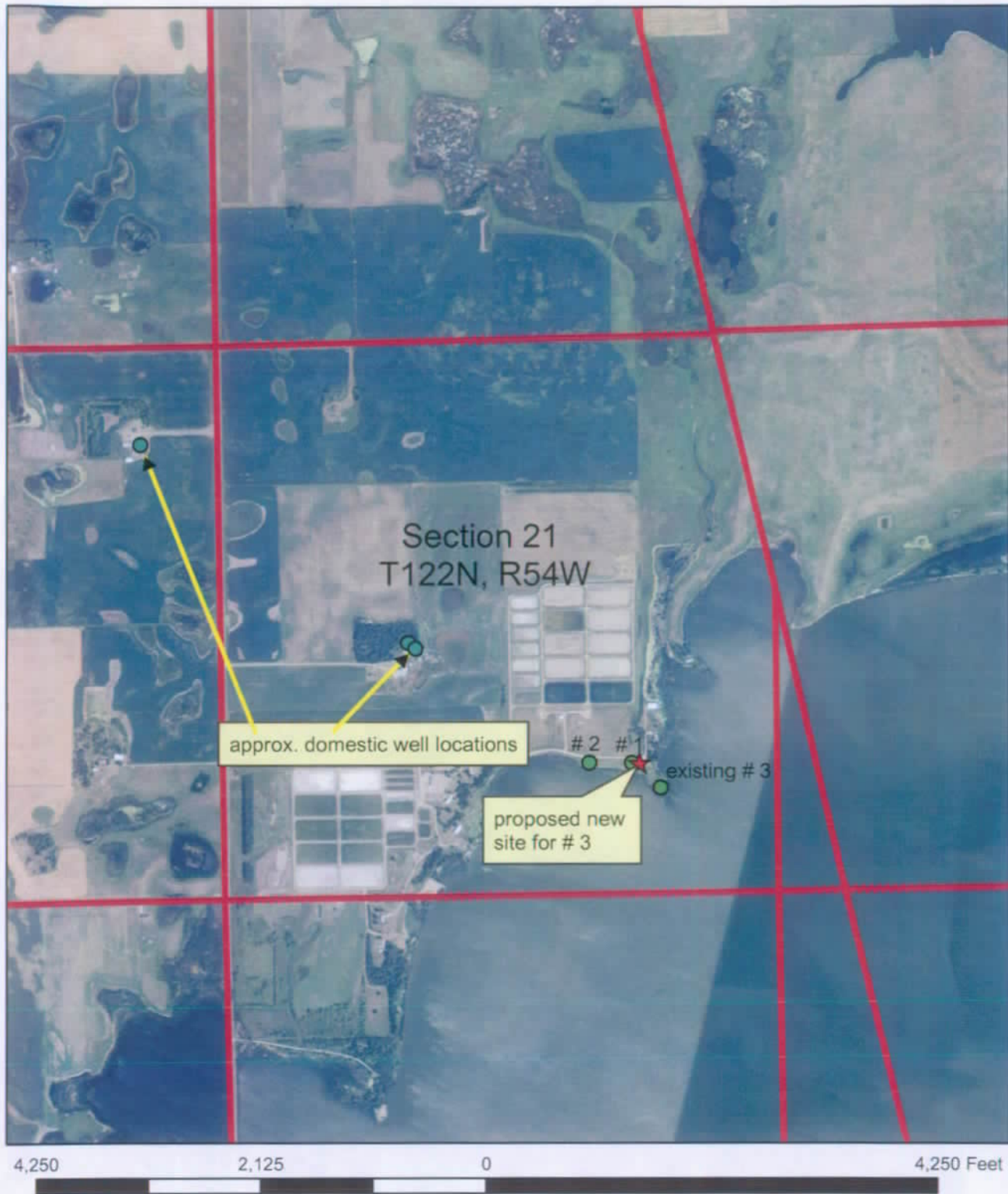
This change of diversion point does not increase the potential for adverse effects to existing diversions.



Garland Erbele, Chief Engineer

Water Rights Program

Request for Change of Well Location To Well No. 3 under Water Right No. 6357-3
Department of Game, Fish and Parks





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

August 10, 2011

Anthony P. Leif
SD Department of Game, Fish and Parks
523 E Capitol Avenue
Pierre SD 57501

Dear Mr. Leif:

South Dakota Department of Game, Fish and Parks has filed a request the change in location of Well No. 3 authorized by Water Right No. 6357-3 at Blue Dog State Fish Hatchery.

Water Right No. 6357-3 appropriates 2.23 cubic feet of water per second(cfs) from three wells and 4.46 cfs from Blue Dog Lake for fish and wildlife propagation purposes at Blue Dog State Fish Hatchery. Wells designated as Nos. 1 and 2 are located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ while Well No. 3 is in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 21, T122N, R54W. The request is to move Well No. 3 approximately 300 feet northwest of its present location due to rising water levels at Blue Dog Lake.

Upon review of the request and pursuant to SDCL 46-5-13.1, the change in the location of Well No. 3 is authorized without application or publication of a notice of hearing pursuant to SDCL 46-2A-4. No increase in the authorized diversion rate of 2.23 cfs from groundwater is authorized. If the total diversion rate increases, a new water right permit will need to be obtained.

Well No. 3 will be in close proximity to Well No. 1 with the potential for interference between the two wells. It is our understanding that the wells are operated on a rotational basis. The potential for interference is a management decision for the hatchery if both wells are to be operated at the same time.

If you have any questions, please contact Eric Gronlund at (605) 773-3352.

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program

**DEPARTMENT of GAME, FISH, AND PARKS**

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

October 28, 2011

Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment & Natural Resources
523 East Capitol Ave
Pierre SD 57501

Re: Water Right No. 6357-3
Change Location of Water Well #3
Blue Dog Fish Hatchery
Waubay SD

Dear Mr Erbele,

Game Fish & Parks requested a change in location of Water Well #3. This is a result of the rising elevation of Lake water which threatened the well pump and house.

August 10, 2011, we received a letter from you granting our request.

Please be informed we will not be changing the location of Well #3 because the test well in the location under consideration, did not develop the GPM needed.

We will raise the pump house, extend the pump shaft and construct a hard point with rip-rap to protect existing well #3

Sincerely

Steve Ellingson
Supervisor of Engineering, GFP

Cc Eric Gronlund, DENR
Will Saylor, Jerry Broughton, John Lott, SDGFP