

WATER PERMIT NO. 2597-2

Name of Applicant: US Fish & Wildlife Service

Address: PO Box 25486, Denver Federal Center, Denver CO

Phone: 303 236-5322

Amount of Water Claimed: 0.04 cfs

Total Acres: NA

Source of Water Supply: groundwater (one well)

Water to be used for: domestic

County: Bennett

Type of Waste Disposal System:

Location: 8 miles southeast of Martin

PRIORITY

Date Received: 7-12-06

Application/License Fee: \$100

Corrected Application Received:

Period of Annual Use: January 1 – December 31

Remarks: For water supplies at shop, office and quarters at LaCreek Nat'l Refuge

Diversion Point: NE ¼ NW ¼ Sec 16-T36N-R36W

Land to be Irrigated:

Depth of Well: 200

Well Driller: : Grooms Drilling, Inc.

Remarks:

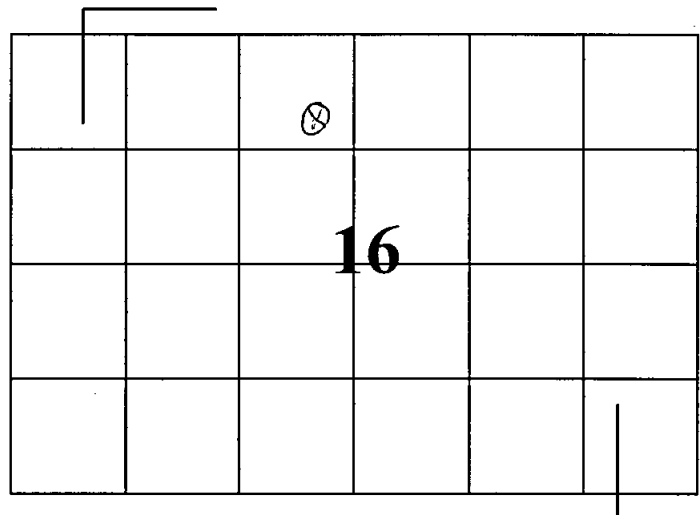
Type of Map: topo

Prepared by: Ernest Husmann, PE

Reviewed and the Number Assigned on: 8-7-06

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



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>2597-2</u>	(office use only) Hydrologic Unit <u>10140203</u>
	Basin <u>White River</u>	
	Newspaper <u>Bennett Co Booster II, Martin</u>	

RECEIVED
JUL 12 2006
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 <u>Domestic under 18 gpm</u> | |

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. _____

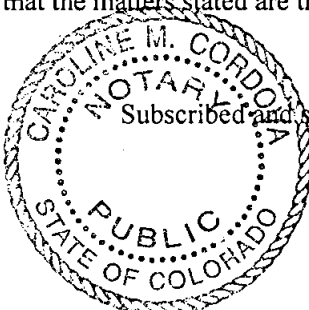
Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

1. Name of Applicant U.S. Fish and Wildlife Service Phone (303) 236-5322
(check one) ☐ Owner ☐ Tenant/lessee
Mailing Address P.O. Box 25486, Denver Federal Center, Denver State CO 80225
(Street, RR, or Box and City) (Zip Code)
2. Amount of water claimed 0.04 *CFS or 17.50 **GPM ***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 Groundwater
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Bennett
1 well NE1/4 NW1/4 Section 16-T36N-R36W
5. County or counties where water will be used Bennett
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)
Replace well drilled in 1935 that supplies water to the shop, office, and quarters at Lacreek National Wildlife Refuge. No original record of well was located in our files.

Colorado
STATE OF SOUTH DAKOTA
County of Jefferson 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, Megan Estep, 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 Megan Estep, agent
Subscribed and sworn to before me this 7 day of July 20 06

Caroline M. Cordova
Notary Public signature

135 Quitman St
Denver CO 80219

My Commission Expires
09/28/2008

**SOUTH DAKOTA
WATER PERMIT NO. 2597-2**

Date of first receipt of application July 12, 2006.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2597-2 to US Fish & Wildlife Service, PO Box 25486, Denver Federal Center, Denver CO 80225 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. 2597-2 appropriates 0.04 cubic feet of water per second from one well to be completed into the Arikaree Formation (200 feet deep) located in the NE ¼ NW ¼ Section 16-T36N-R36W.
2. The water appropriated shall be used for the purpose of domestic use at the shop, office and quarters at the LaCreek National Wildlife Refuge 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. 2597-2 is October 16, 2006.
5. The date from which applicant may claim right is July 12, 2006.
6. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATION

The well approved under this Permit will be located near domestic wells and other 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 or in adequate wells having prior water rights.

WATER MANAGEMENT BOARD

By: Garland Erbele

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

NOV 01 2006

date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 8 inches Depth 250 feet
- b) Casing Type steel Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack _____ 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 1500' On property owned by others _____

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

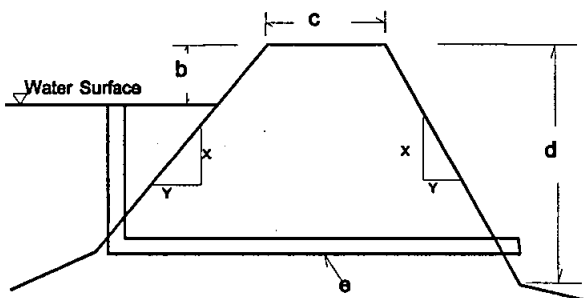
3. Dugout Information

- 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 _____
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres

59082

ABOVE THIS LINE

EXPIRATION
☒ DATE
CHECKED

10/07/

X

The issuer of the card identified on this item is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the agreement governing the use of such card.

↑ PLEASE DO NOT WRITE ABOVE THIS LINE ↓				
QTY.	CLASS	DESCRIPTION	PRICE	AMOUNT
1		INV 20411-8306		100.00
		APPLICATION FEE		
DATE 08/08/06		AUTHORIZATION 025489		
REFERENCE NO. 100		SERVER TAX		
ID-FOLIO/CHECK NO./LIC. NO. STATE		REG./DEPT.	CLECK	TIP
				MISC.
  5462745			TOTAL	100.00

SALES SLIP
ORIGINAL

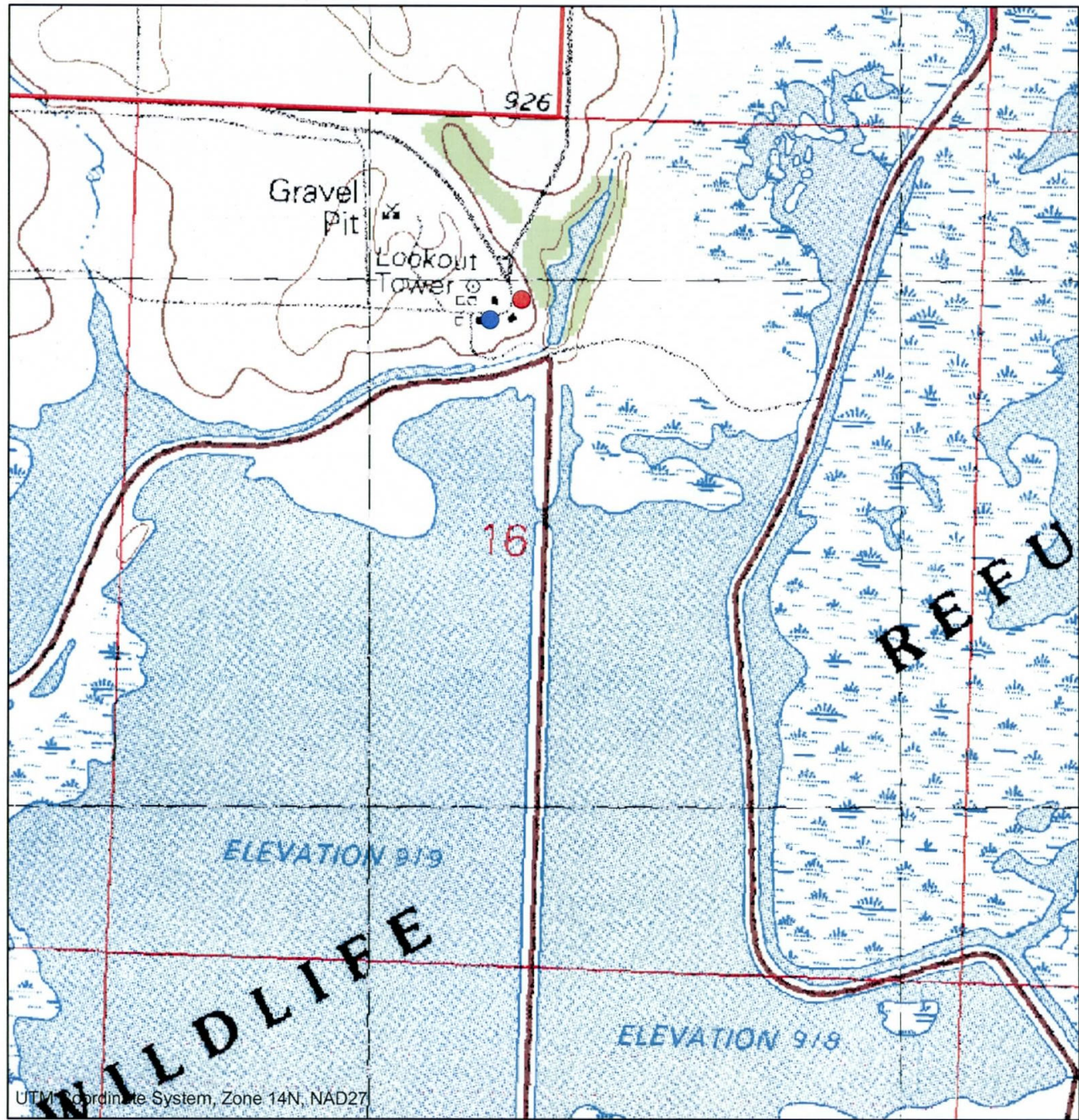


U.S. Fish & Wildlife Service

Lacreek National Wildlife Refuge

Martin, SD

Domestic Well Replacement



0 500 1,000 2,000
Feet

Drawing No. 6R-SD-492-WR-P-40.0

This map correctly represents the
works for the accompanying application

- Existing Domestic Well
- Replacement Domestic Well
- + Lacreek NWR

PRODUCED BY:
U.S. FISH & WILDLIFE SERVICE, REGION 6
DIVISION OF WATER RESOURCES
LAKEWOOD, COLORADO
303-236-5322

June 16, 2006



[Handwritten signature]



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Mountain-Prairie Region

RECEIVED

JUL 12 2006

WATER RIGHTS
PROGRAM

IN REPLY REFER TO:

BA WTR
WTR SD
Mail Stop 60189

MAILING ADDRESS:
Post Office Box 25486
Denver Federal Center
Denver, Colorado 80225-0486

STREET LOCATION:
134 Union Blvd.
Lakewood, Colorado 80228-1807

JUL 07 2006

Mr. Garland Erbele
Chief Engineer
South Dakota Department of Environment
and Natural Resources
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

Dear Mr. Erbele:

Enclosed is an Application for Permit to Appropriate Water (Forms 2 and 2A) for a replacement domestic well. We have been unable to locate a record of well for the original well that was drilled in 1935. Also enclosed is a map signed by a registered professional engineer. We will provide a well log or driller's test log as soon as it is available.

Please notify this office of the newspaper selected, prior to publication of Notice of Application, so payment arrangements can be made.

Please contact Carrie Cordova for payment of the filing fee and inspection fee via credit card in the amount of \$200. If you have any questions or require further information, please Carrie Cordova of my staff at 303-236-5399. Thank you for your assistance in this matter.

Sincerely,

Megan Estep
Chief, Division of Water Resources

Enclosures

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

* INVOICE *

Invoice No. 20411-8306

mail receipt
Attention: Carrie Cordova
US Fish & Wildlife Service
PO Box 25486
Denver Federal Center
Denver CO 80225

Application/License filing fee for application in Bennett County.

PLEASE PAY THIS AMOUNT:

\$100.00

GLENDA MARKS
Secretary
Water Rights Program
(605) 773-3352

WATER PERMIT APPLICATION NO. 2597-2
US FISH & WILDLIFE SERVICE
APRIL 3, 2002

Water Permit Application No. 2597-2 proposes to appropriate 0.04 cubic feet of water per second (18 gallons per minute) from one well completed into the Arikaree Formation (200 feet deep) located in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec.16, T36N-R36W, Bennett County. The water is for domestic use at the shop, office and quarters at the LaCreek National Wildlife Refuge.

AQUIFER: Arikaree (ARKR)

The High Plains Aquifer consists of the upper sandstone units of the Arikaree Formation, the Ogallala Formation, and the Sand Hills Formation, and any terrace or alluvial deposits, all of which are hydraulically connected (Kolm, 1983). The High Plains aquifer underlies 4,750 square miles of South Dakota and contains an estimated 700 million acre feet of water in the state (Gutentag, 1984). The upper members of the High Plains aquifer have been almost entirely eroded away in this area, leaving only the Arikaree Formation. The Arikaree Formation consists mainly of clayey siltstones and sandstones. The Arikaree Formation underlies approximately 755,840 acres of Bennett County and contains an estimated 2,267,520 acre-feet of recoverable water in storage in the county (Allen and others, 1985). The saturated thickness of the aquifer is estimated to be 200-400 feet in this area. (Kolm, 1983). The aquifer is under unconfined conditions with the water table controlled locally by topography. Precipitation is the principal source of recharge to the aquifer. The annual recharge rate has been estimated to be 8 percent of the precipitation rate, or about 1.3 in./yr to 1.8 in./yr (Kolm, 1983). Natural discharge occurs to streams and springs, and directly to the atmosphere by evapotranspiration.

WATER AVAILABILITY:

Water Rights Program monitors 38 observation wells completed into the Arikaree Formation, of which 22 are located in Bennett County. Water Rights' Observation Wells BT-77F, BT-78E, BT-78F, and BT-78G are located within approximately five miles of the well used for this application. These observation wells are read monthly and hydrographs of the water levels (figures 1-4) show only slight fluctuations due to existing pumping and changes in climatic conditions (Water Rights, 2006b).

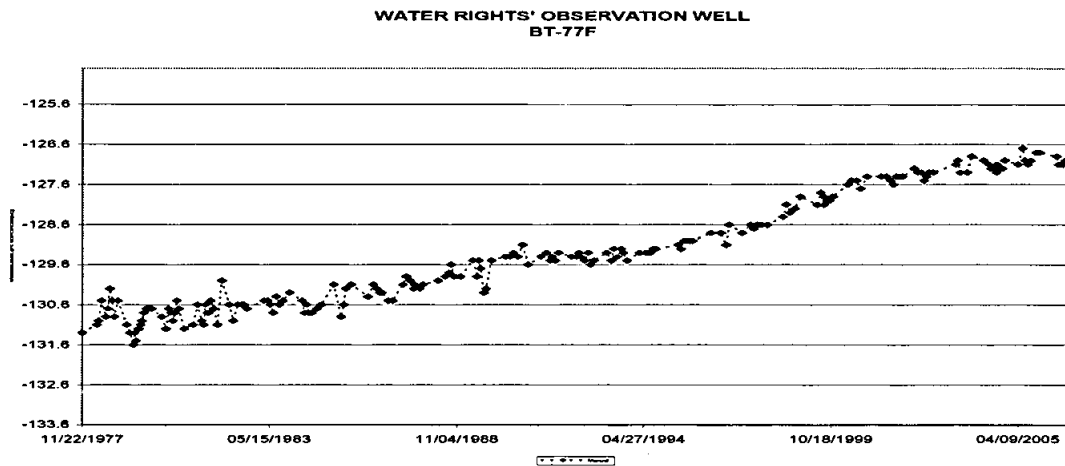


Figure 1. Water Rights' Observation well located approximately three and three-fourths miles northwest of the well proposed to supply this application.

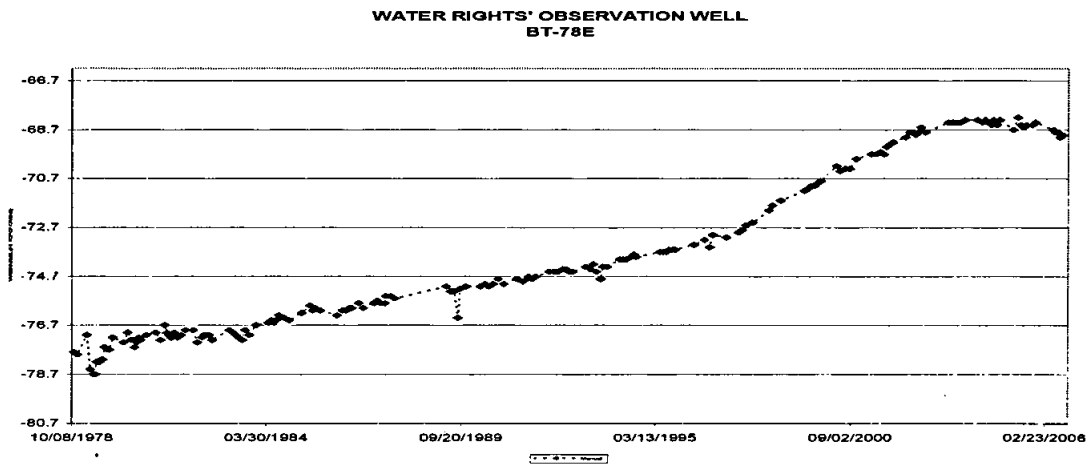


Figure 2. Water Rights' Observation well located approximately four miles northwest of the well proposed to supply this application.

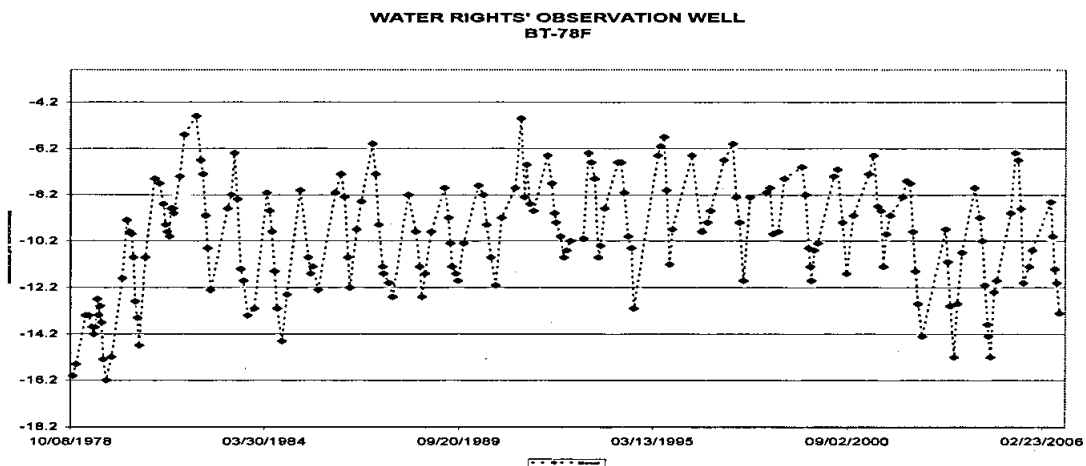


Figure 3. Water Rights' Observation well located approximately two and one-half miles southeast of the well proposed to supply this application.

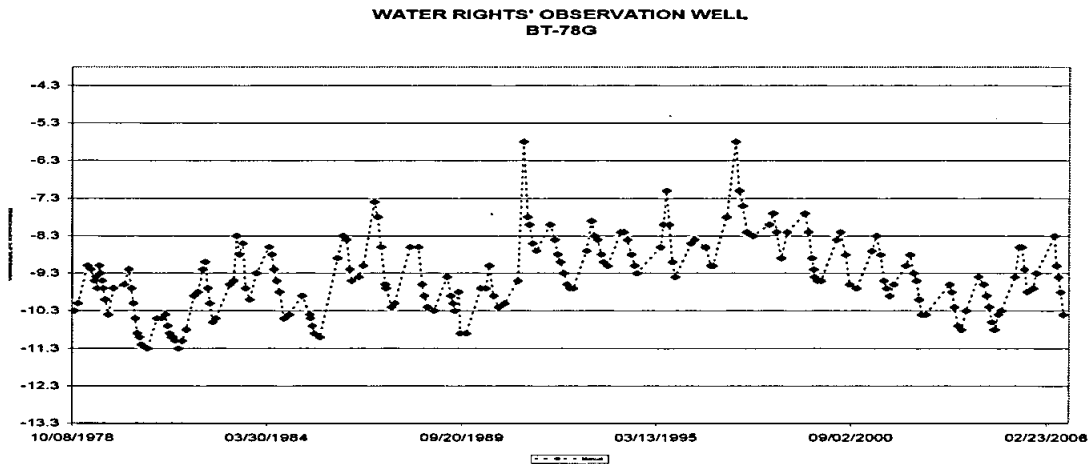


Figure 4. Water Rights' Observation well located approximately four and one-half miles northeast of the well proposed to supply this application.

There are 29 permits/rights which appropriate water from the Arikaree aquifer in South Dakota. There are 18 permits/rights from the Arikaree in Bennett County. Irrigation is the major water use from the aquifer with 14 permits/rights appropriating water in the county. The pumpage reported from the Arikaree for irrigation from Bennett County in 2005 was 1,643.54ac-ft (Water Rights, 2006d).

AFFECTS ON EXISTING RIGHTS:

Since the Arikaree aquifer is under unconfined conditions, drawdown from pumping an individual well is not expected to be significant very far from the well. The nearest well supplying an appropriation from the Arikaree is for Water Permit No. 2478-2 and is located about one-half mile northwest of the well that is to be used to supply this application. Interference at this distance is not expected to be a concern.

CONCLUSIONS:

1. The Arikaree aquifer is a viable aquifer in this area, and water is available for this appropriation.
2. Well interference should not be a problem in this area.

Ken Buhler
Natural Resources Engineering Specialist

James A. Goodman, P.E.
Natural Resources Engineering Director

- Allen, J.C., Iles, D.L., Petres, A.K., 1985, Analysis of Groundwater and Streamflow Data, Western Dakotas Region of South Dakota, Task 3A.B.C. and 4A.B.:Groundwater Resource Inventory: Final Report, US Army Corps of Engineers Contract DAWC 45-82-C-015, SD DENR- Geological Survey, Vermillion SD
- Gutentag,E.D., Heimes,F.J., Krothe,N.C., Luckey,R.R., and Weeks,J.B., 1984, Geohydrology of the High Plains Aquifer in Parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: U.S. Geological Survey Professional Paper 1400-B, 63 p.
- Kohlm, K.E., and Case, H.L.III, 1983, A Two-Dimensional, Finite-Difference Model of the High Plains Aquifer in Southern South Dakota, Water-Resources Investigations Report 83-4175, 39 p.
- Water Rights Program, 2006a, Domestic Well Log Files, DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501
- Water Rights Program, 2006b, Observation Well Files, DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501
- Water Rights Program, 2006c, Water Permit/Right Files," DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501
- Water Rights Program, 2006d, 2005 Irrigation Summary by Aquifer, DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
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. 2597-2, US Fish and Wildlife Service**

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. 2597-2, US Fish and Wildlife Service, c/o Megan Estep, PO Box 25486, Denver Federal Center, Denver CO 80225.

The Chief Engineer is recommending APPROVAL of Application No. 2597-2 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 with the following qualification:

The well approved under this Permit will be located near domestic wells and other 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 or in adequate wells having prior water rights.

See report on application for additional information.

Garland Erbele, Chief Engineer
September 14, 2006

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OCT 16 2006

WATER RIGHTS
PROGRAM

Affidavit of Publication

State of South Dakota }
County of Bennett } ss.

Mandy K. Scherer

being duly sworn, says: the Bennett County Booster II is, and during all the times hereinafter mentioned was, a weekly legal newspaper as defined in SDCL 17-2-2, as amended published at Martin, Bennett County, South Dakota; that affiant is and during all of said times was, an employee of the publisher of such newspaper and has personal knowledge of the facts stated in this affidavit; that the notice, order or advertisement, a printed copy of which is attached, was

published in said newspaper for 2 successive issues, bearing the following dates:

September 27, 2006

October 4, 2006

_____, 20____

_____, 20____

_____, 20____

_____, 20____

that the full amount of the fee charged for publishing

the same, to-wit, the sum of \$ 44.73, inures solely to the benefit of the publisher of said newspaper; that no agreement or understanding for the division of the fee has been made with any person, and that no part of the fee has been agreed to be paid to any other person.

Mandy K. Scherer

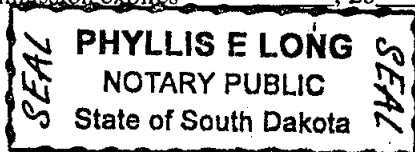
Subscribed and sworn to before me this 13th day

of October, 2006.

Phyllis E. Long

Notary Public
County of Bennett, South Dakota

My commission expires 20



My Commission Expires
August 30, 2012

Notice of Application

No. 2597-2 to Appropriate Water

Notice is given that the US Fish and Wildlife Service, c/o Megan Estep, PO Box 25486, Denver Federal Center, Denver, CO 80225 has filed an application for a water permit to appropriate 0.04 cubic feet of water per second from one well to be completed into the Arikaree Formation (200 feet deep) located in the NE1/4NW1/4 Section 16-T36N-R36W. The water is for domestic use at the shop, office and quarters at the Lacreek National Wildlife Refuge.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2597-2 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 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 (605 773-3342)" 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 16, 2006.

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. 2tc-10/4



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

September 14, 2006

Bennett Co. Booster II
PO Box 610
Martin SD 57551-0610

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 2597-2 to Appropriate Water to be published twice. Please publish the first notice on September 27, 2006 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

Please BILL the APPLICANT for the cost of publication. The APPLICANT is US Fish & Wildlife Service, % Megan Estep, PO Box 25486, Denver Federal Center, Denver CO 80225 (Ph # 303-236-5322).

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-----

No. 2597-2

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

Date _____

We are in receipt of your letter of September 14, 2006 enclosing Notice to Appropriate Water by Application No. 2597-2 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 September 27, 2006 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 2597-2 to Appropriate Water

Notice is given that the US Fish and Wildlife Service, c/o Megan Estep, PO Box 25486, Denver Federal Center, Denver CO 80225 has filed an application for a water permit to appropriate 0.04 cubic feet of water per second from one well to be completed into the Arikaree Formation (200 feet deep) located in the NE ¼ NW ¼ Section 16-T36N-R36W. The water is for domestic use at the shop, office and quarters at the LaCreek National Wildlife Refuge.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2597-2 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 October 16, 2006.

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.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
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 14, 2006

US Fish & Wildlife Service
% Megan Estep
PO Box 25486
Denver Federal Center
Denver CO 80225

Dear Ms. Estep:

Water Permit Application No. 2597-2 for domestic use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Bennett Co Booster II printed at Martin, SD (Ph # 605-685-6866). 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 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. 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**

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

NOV 01 2008

US Fish & Wildlife Service
% Megan Estep
PO Box 25486
Denver Federal Center
Denver CO 80225

Dear Ms. Estep:

Enclosed is Water Permit No. 2597-2 authorizing your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

We will schedule an inspection so that the Water License may be issued to you, thus completing your acquisition of a Water Right.

Sincerely,

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

enclosures



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Mountain-Prairie Region

IN REPLY REFER TO:

BA WTR
WR SD
Mail Stop 60189

MAILING ADDRESS:

Post Office Box 25486
Denver Federal Center
Denver, Colorado 80225-0486

STREET LOCATION:

134 Union Blvd.
Lakewood, Colorado 80228-1807

Garland Erbele, Chief Engineer
Water Rights Program
South Dakota Department of Environment and
Natural Resources
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3182

DEC 26 2006

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JAN - 2 2007
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PROGRAM

Ref: Water Permit No. 2597-2

Dear Mr. Erbele:

The well construction at Lacreek National Wildlife Refuge under Water Permit No. 2597-2 is complete. Enclosed is a Water Well Completion Report that was completed by the contractor. At this time, the Service requests an inspection so a Water License can be issued. The inspection fee was paid in advance; please refer to Invoice No. 20411-8306.

If you have questions or require additional information, please contact me at (303) 236-5399.

Sincerely,

Carrie Cordova
Water Rights Specialist

Enclosure

Permit No. 2597-2
White River - Water District

Other permit/license(s) associated with project: **none**

Contact Person & Address: **Carrie Cordova, USFWS, PO Box 25486, Denver Federal Center, Denver CO 80225 (ph 303-236-5399)**

Report Of Examination Of Works

On, **September 22, 2010**, I made a thorough examination of the water use system constructed by **US Fish and Wildlife Service at Lacreek National Wildlife Refuge of PO Box 25486, Denver Federal Center, Denver CO 80225** holder of Permit No. **2597-2**, bearing the priority of **July 12, 2006** authorizing the diversion of **0.04** cu. ft. per second from the **Arikaree Aquifer** for **domestic use at the shop, office and quarters at the refuge headquarters**, in **Bennett** County.

The system is in the following condition **excellent**. The points of diversion are located in the **NE ¼ NW ¼ Section 16, T36N, R36W with the headquarter well approximately 1160 feet south and 2320 feet east from the NW corner (longitude of -101.56527 and a latitude of 43.10052) and the shop well approximately 1060 feet south and 1910 feet east from the NW corner (longitude of -101.56677 and a latitude of 43.10082) all in Section 16, T36N, R36W.** The works are capable of diverting and conveying to the place of use **0.038** cu. ft. per second of water (17 gallons per minute) and/ being used for **domestic uses**. Water has been put to beneficial use to the maximum extent and the license should be issued for **0.038** cfs.

Review of Permit Qualifications And Regulations:

- 1) Special qualifications to permit being abided by **Yes**
- 2) All structures, wells and lands on map **see report on additional diversion point**
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period **not applicable**
- 4) Exceptions to compliance are: **see report on additional diversion point**

Report On the Specifics of the System

Diversion Point Information:

Headquarter well

- | | |
|--|--|
| 1) Well Drilling Firm: <u>Babby well drilling</u> | 2) No. of Wells <u>first of two wells</u> |
| 3) Depth <u>120</u> feet | 4) Well log is available <u>yes</u> |

Casing:

- | | |
|--------------------------------------|---|
| 1) Diameter <u>4.5</u> inches | 2) Length <u>approx. 80</u> feet |
| 3) Type <u>plastic</u> | |

Screen:

- 1) Type PVC
- 2) Length 40 feet
- 3) Static water level 32 feet

Pump\ Motor:

- 1) Pump Make Schaefer Submersible
- 2) Pump Model
- 3) Capacity 10 GPM
- 4) Motor Make
- 5) Motor Model No.
- 6) Horsepower rating 1/2 hp

Shop well

- 1) Well Drilling Firm: Grooms Drilling Inc.
- 2) No. of Wells 2nd of two wells
- 3) Depth 200 feet
- 4) Well log is available yes

Casing:

- 1) Diameter 6 inches
- 2) Length 168 feet
- 3) Type plastic

Screen:

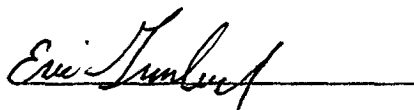
- 1) Type stainless steel
- 2) Length 32 feet
- 3) Static water level 34 feet

Pump\ Motor:

- 1) Pump Make unknown
- 2) Pump Model unknown
- 3) Capacity 7 GPM
- 4) Motor Make
- 5) Motor Model No.
- 6) Horsepower rating hp

Grooms Drilling is out of business according to USFWS and they are unable to get additional information other than what is on the completion report that the well pump rate will be 7 gpm

Distribution System: distribution system comprised of pipeline to serve headquarters, residence. Shop well uses for a bathroom, breakroom sink, RV hookup, washing vehicles and filling tanks.



Eric Gronlund PE
Natural Resources Engineer
DENR, Water Rights Program

12/10/11

Date

WATER PERMIT No. 2597-2, USFWS



Wells Located in the NE 1/4 NW 1/4 Section 16, T36N, R36W

Headquarter well - 1160' south and 2320' east of NW corner (lat/lon 43.1002 & -101.56527)

Shop well - 1060' south and 1910' east of NW corner (lat/lon 43.10082 & -101.56677)



Eric Gronlund

Eric Gronlund
Water Rights Program, DENR
605 773-3352

Request for Additional Diversion Point

NAME: US Fish and Wildlife Service – Lacreek National Wildlife Service

ADDRESS: PO Box 25486, DFC, Denver CO 80225-0486

DATE: December 13, 2010 **COUNTY:** Bennett **TELEPHONE:** 303 236-5399

Water Permit No. 2597-2 appropriates 0.04 cubic feet of water per second from one well to be completed into the Arikaree Formation (200 feet deep) located in the NE ¼ NW ¼ Section 16, T36N, R36W.

During a licensing investigation of the permit, two wells were found constructed. One well is known as the Headquarter well and produces 10 gallons per minute (gpm) while the second well is known as the Shop well and the best information available indicates production of 7 gpm. Well completion reports are on file for both wells.

On November 9, 2010, US Fish and Wildlife Service submitted a request for the shop well to be added as a additional diversion point to Permit No. 2597-2 pursuant to SDCL 46-6-13.1.

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 remains the Arikaree Aquifer. No additional water is to be appropriated by this request. The well authorized by Water Permit No. 2597-2 appropriates 0.04 cfs (18gpm). The diversion rate will not be exceeded. A licensing investigation was conducted and the combined capacity of the two wells is 17 gpm

- **Review of Existing Diversions**

The Water Rights Program's database of well completion reports was also reviewed for neighboring sections. The nearest domestic well on file is just over three miles northeast. To the west, the nearest domestic wells are just shy of four miles southwest and northwest.

The nearest water right using the Arikaree Aquifer is one half mile north of the USFWS wells. The next closest is three miles northwest of the Lacreek headquarters.

Given the distance and low diversion capacity of the USFWS wells, interference is not expected to be a concern.

CONCLUSION

- The additional well does not appropriate additional water.
- The additional well is completed into the Arikaree Aquifer.
- Interference is not expected to be a concern.
- Existing domestic wells will not be adversely impacted by authorizing this additional well.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the additional diversion point be authorized pursuant to SDCL 46-5-13.1.



Eric Gronlund, Natural Resources Engineer
Water Rights Program

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

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



Garland Erbele, Chief Engineer
Water Rights Program



United States Department of the Interior

FISH AND WILDLIFE SERVICE Mountain-Prairie Region



IN REPLY REFER TO:

MAILING ADDRESS:
P.O. Box 25486, DFC
Denver, Colorado 80225-0486

STREET LOCATION:
134 Union Boulevard
Lakewood, Colorado 80228-1807

BA WTR
WTR SD
Mail Stop 60189

Mr. Eric Gronlund
South Dakota Department of Environment
and Natural Resources
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

NOV 05 2010

RECEIVED

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WATER RIGHTS
PROGRAM

Ref: Headquarters Well Water Permit No. 2597-2 & Shop Well

Dear Mr. Gronlund:

The Service requests a shop well constructed in 2004 be added as an additional point of diversion under Permit No. 2597-2 pursuant to the South Dakota Codified Law 46-5-13.1. Carrie Cordova researched the shop well and was able to locate the Water Well Completion Report prepared by Grooms Drilling, Inc. (enclosed); it indicates a pump rate of 7 gpm. The company is no longer in business, therefore, additional information is not available. The well is used to furnish water for one bathroom, a sink in the breakroom, RV hookups (seldom used), washing maintenance vehicles, and filling tanks for prescribed fire burning and weed spraying.

Carrie contacted Babby Well Drilling who constructed the headquarters well and confirmed the capacity of the pump installed is 10 gpm.

The Service respectfully request that both wells be licensed under Water Permit No. 2597-2 for the additional described purposes, not to exceed 17 gpm.

Please notify Carrie at 303-236-5399, if you require additional information or have any questions. Thank you for your assistance in this matter.

Sincerely,

Megan A. Estep
Chief, Water Resources Division

Enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

FEB 11 2011

2597-2

US Fish & Wildlife Service
Carrie Cordova
PO Box 25486
Denver CO 80225

Dear Ms. Cordova:

Enclosed is Water License No. 2597-2. This is the final water right document completing your process of obtaining a Water Right. Also, included with your license is a map prepared by the staff engineer who conducted the investigation.

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. If you have any questions, please contact our office.

Sincerely,

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

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 2597-2

(1) US Fish and Wildlife Service, PO Box 25486, Denver Federal Center, Denver CO 80225 made Application No. 2597-2, July 12, 2006 for a water permit to divert 0.04 cubic feet of water per second from groundwater (one well), Bennett County, South Dakota for domestic use purposes. Permit No. 2597-2, with a priority date of July 12, 2006 was approved October 16, 2006 and issued to the applicant for diversion of water with construction of the described water supply system and for the application to beneficial use of water completed.

An investigation conducted for licensing purposes found an additional diversion point developed under Water Permit No. 2597-2. Pursuant to SDCL 46-5-13.1, the Chief Engineer makes a finding that the additional diversion point does not increase the potential for interference with existing water rights.

(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 Water Right No. 2597-2 is issued a license, bearing a priority date of July 12, 2006 to appropriate 0.038 cubic feet of water per second from groundwater (two wells) for domestic use purposes at LaCreek National Wildlife Refuge.

The diversion points are located: headquarter well – 1,160 feet south and 2,320 feet east from the northwest corner and shop well – 1,060 feet south and 1,910 feet east from the northwest corner; Section 16-T36N-R36W (NE ¼ NW ¼).

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Permit No. 2597-2 including the following now applicable qualification:

- The wells approved under this Permit will be located near domestic wells and other 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 or in adequate wells having prior water rights.



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

FEB 11 2011

date

