

1. Considered: \_\_\_\_\_, 19\_\_\_\_ Water Right No. 1281-1
2. Name of Applicant Department of Game, Fish and Parks
3. Post Office Address Anderson Building, Pierre, S.D. 57501
4. Amount of Water Claimed \_\_\_\_\_ maximum acre feet 540
5. Source of Water Supply \_\_\_\_\_
6. Water to be used for \_\_\_\_\_ REC \_\_\_\_\_ acres to be irrigated \_\_\_\_\_
7. County Meade about \_\_\_\_\_ miles CITY LIMITS of STURGIS
8. PROOF OF PUBLICATION: Received 1st 6-16-83 Not Received \_\_\_\_\_
- APPLICATION: Approved 10-5-83 Subject to revised qualification
- Not Approved \_\_\_\_\_ Action Deferred \_\_\_\_\_
- Automatic extension requested - Hearing will be 10-5-83*
- Dated Received 4/27/83 Application complete-yes \_\_\_\_\_ no \_\_\_\_\_ FEE \_\_\_\_\_
- Remarks \_\_\_\_\_

PRIORITY  
4-27-83

Corrected Application received \_\_\_\_\_ Period of Annual Use 1/1 thru 12/31

WATER QUALITY Received yes \_\_\_\_\_ no \_\_\_\_\_ APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as application-yes \_\_\_\_\_ no \_\_\_\_\_ Remarks \_\_\_\_\_

Disapproved \_\_\_\_\_ Returned \_\_\_\_\_

					*
				10	

Diversion Point \_\_\_\_\_

NE $\frac{1}{4}$  NE $\frac{1}{4}$  Sec. 10-5N-5E

Land to be irrigated \_\_\_\_\_

WELL LOG Driller \_\_\_\_\_ Licensed - yes \_\_\_\_\_ no \_\_\_\_\_

Depth \_\_\_\_\_

Remarks \_\_\_\_\_

MAP Map No. 1281-1 Map located in Water Right xx Map file \_\_\_\_\_  
 Type of Map drawn Prepared by SCS and our office

+++++

REVIEWED This Application was received within 30 days of the date received, accepted as complete, Number assigned and written up for advertisement before the Board on:

6/3/83

Betty Westlund  
(Signed)

+++++

PROTESTS Letters/Petitions in File - yes \_\_\_\_\_ no \_\_\_\_\_ Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

REMARKS Date Final Decision, including F.F. & C. of Law were adopted \_\_\_\_\_

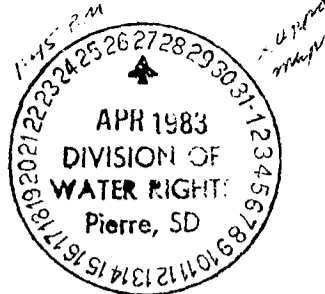
OF LAW, Date Final Decision mailed to parties and/or parties notified that Final Decision was

FINAL DECISIONS adopted \_\_\_\_\_

ETC. Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



No. 1281-1

Map No. 1281-1 Water Division No. 1 BELLE FOURCHE RIVER District  
Above for Office Use 10120202

# APPLICATION FOR PERMIT To Appropriate Water within the State of South Dakota

Check one of the following:

New  Vested Right \_\_\_\_\_ Future Use \_\_\_\_\_

Change in Diversion \_\_\_\_\_ Additional Diversion  (For Water Right No. 933-1)

Change in Acreage \_\_\_\_\_ Additional Acreage \_\_\_\_\_

1. Name of Applicant SD Dept. of Game, Fish & Parks Phone No. 773-3384

Post Office Address Anderson Bldg. Pierre State South Dakota 57501  
(Street, RR, or Box) (Town) (Zip Code)

If a corporation show date and place of incorporation \_\_\_\_\_

2. Method of accomplishing work (contract, employment of others, or by direct labor) Direct labor

3. Name of diversion work Bear Butte Lake - Ft. Meade Diversion Pipeline

4. Amount of water claimed (cubic feet per second) 540 ac. ft. or whatever necessary to fill the lake each year.

5. Source of water supply Overflow from Fort Meade Water Supply Reservoir

6. Location of point of diversion NE 1/4 NE 1/4 Section 10, Range 5E, Township 5N

County Meade

7. Annual period or periods during which water is to be used Year around.

8. Use to be made of water, (irrigation, industrial, municipal, commercial, recreation, etc.) Public recreation

9. For irrigation use, Total number of acres to be irrigated N/A

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

Land Description	No. Acres Irr.

Land Description	No. Acres Irr.

Attach sheet if more space is needed

10. Time required to complete construction of water supply system 1 years. Additional time required to complete application of water to the proposed beneficial use none years.

11. Choice of county newspaper for publication of Notice of Intent to Appropriate Water Sturgis

12. Principal Features of the Proposed Water Supply System.

A. Works proposed to divert water from its natural source.

Existing Fort Meade Veterans Administration Medical Center Storage Reservoir.

B. Works proposed to transport water to place of use. 8" pipeline from Storage Reservoir to natural drainage & diversion channel (in place) to Bear Butte Lake. Diversion capability will also be incorporated to place water into Fort Meade Dam enroute on Bear Butte Drainage as desired.

C. Works proposed to apply water to beneficial use. Bear Butte Lake - 180 surface acres - 13 feet deep State owned lake, managed for fishing, swimming, boating, camping, State Park, Wildlife Refuge. Ft. Meade Dam is a small stock watering Dam on the drainage which with a dependable water supply, can supply additional recreation benefits.

Estimated Total Cost \$ 6,000.00

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map. (see instructions concerning preparation.)

STATE OF SOUTH DAKOTA )  
  )ss.  
County of Hughes )

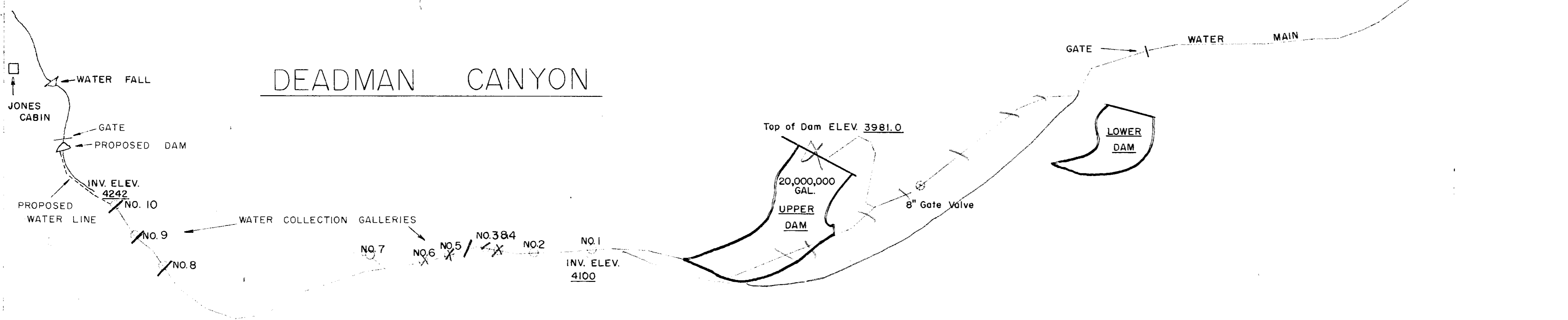
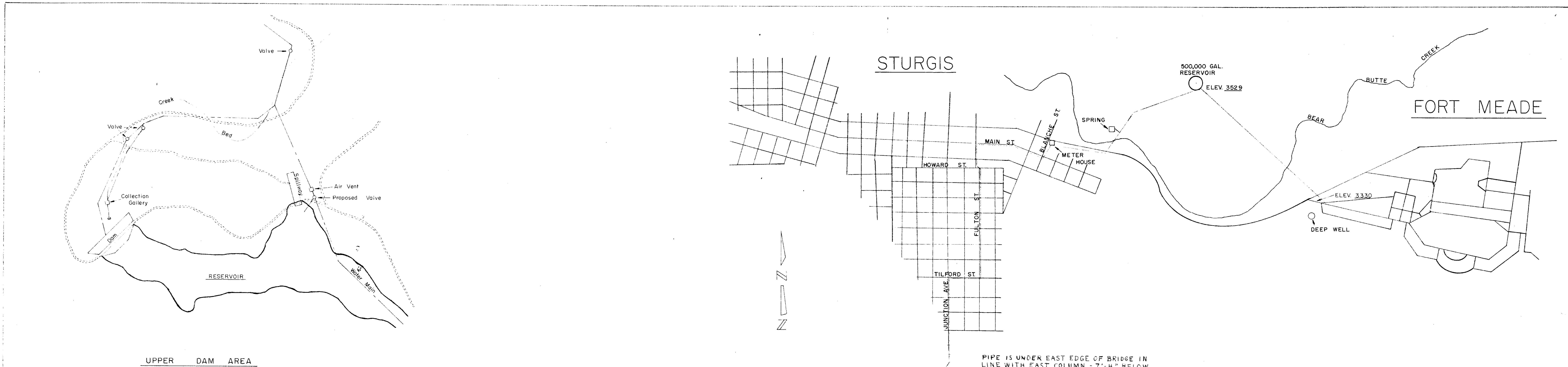
Jack Merwin, Secretary  
Dept. of Game, Fish & Parks

I, \_\_\_\_\_ the applicant, certify that I have read the foregoing application and have examined the attached map and that the matters therein stated are true and that I intend, and am able to complete the necessary construction.

Signed Jack Merwin

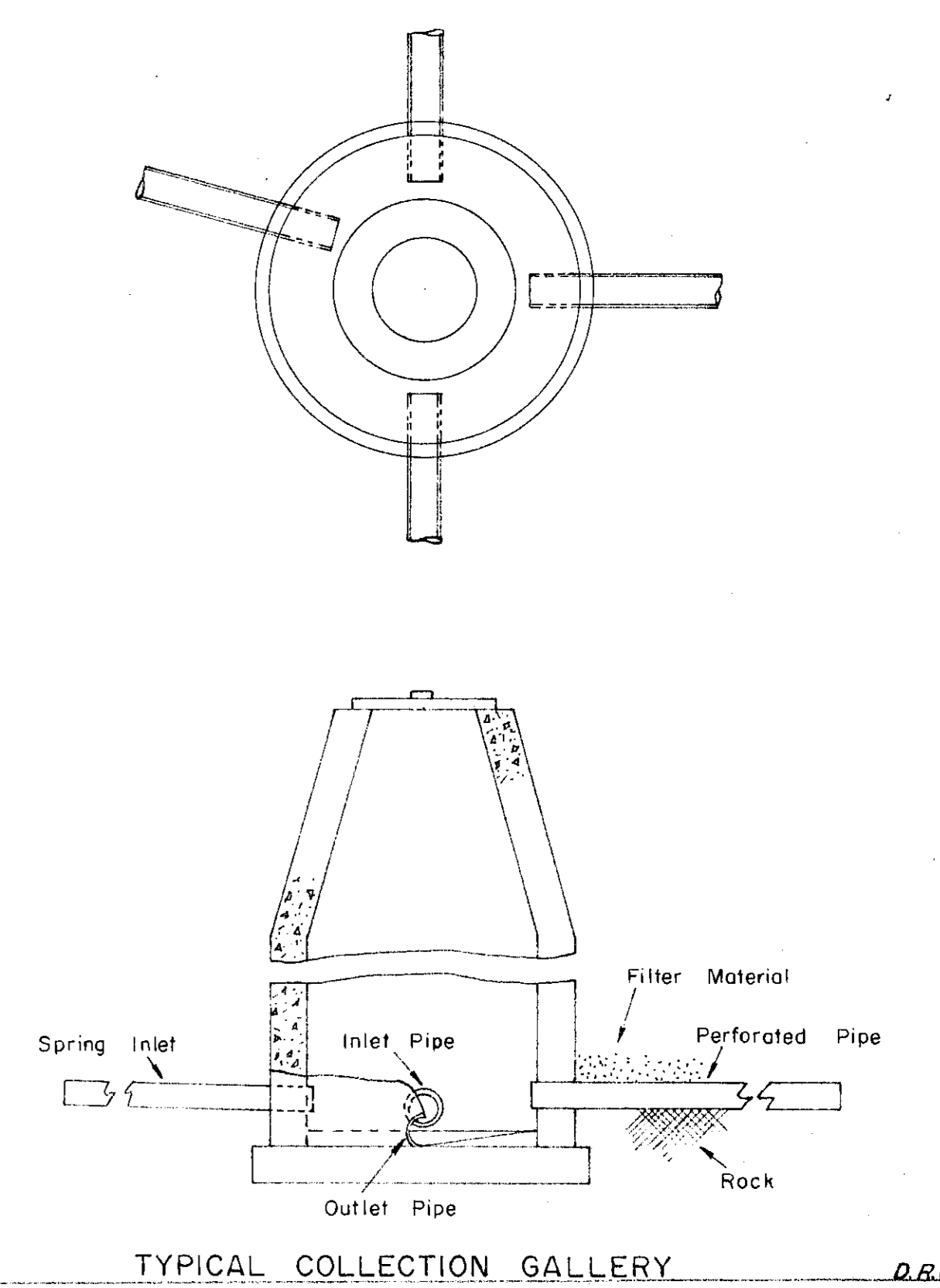
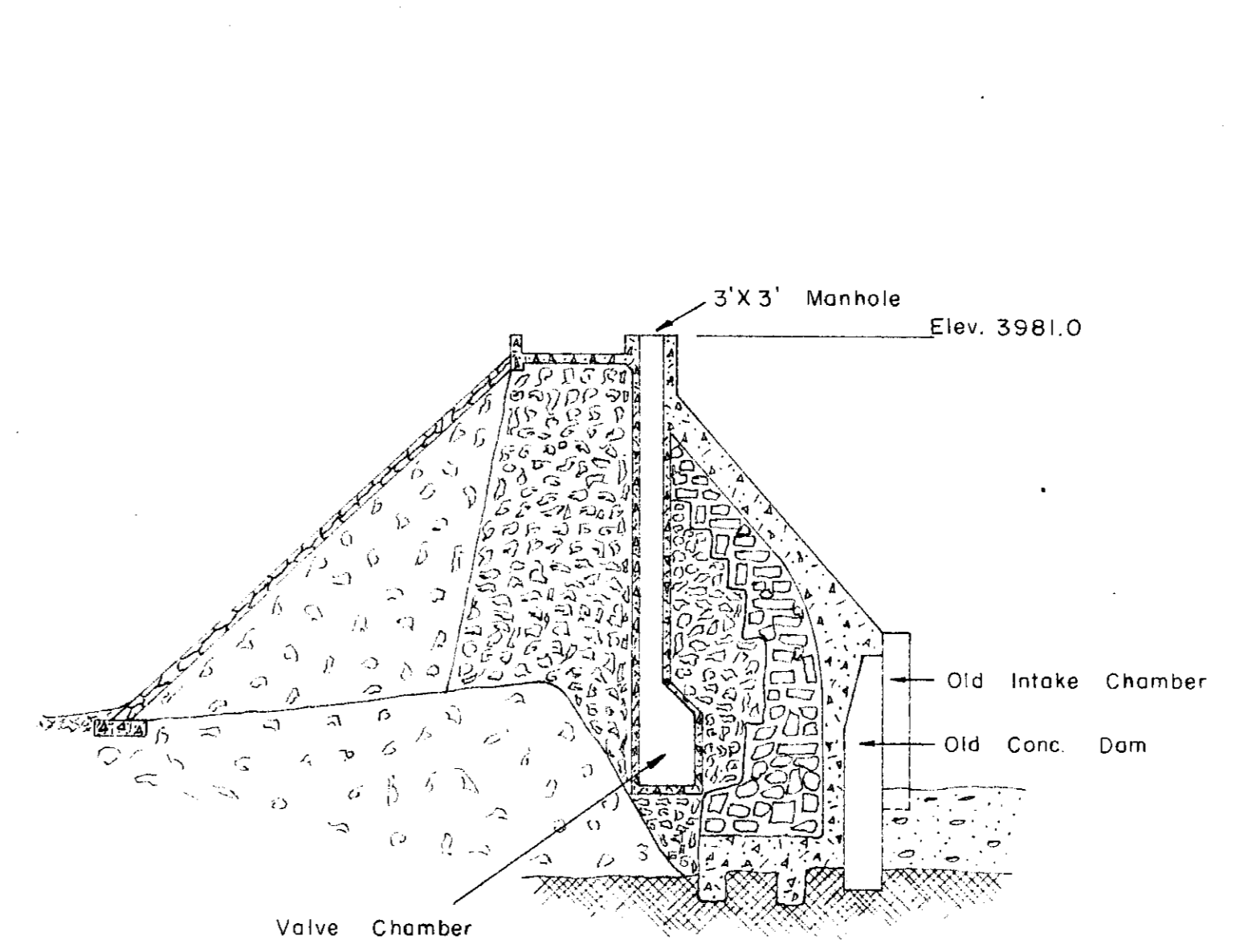
Subscribed and sworn to before me this 27 day of April, 1983

Notary Public (or other qualified officer)



NOTES:

FROM	TO	DISTANCE	ELEVATION
FT. MEADE	GATE	4.8 Mi.	3810.0
GATE	LOWER DAM	500'	3837.5
LOWER DAM	8" GATE VALVE	3840'	3927.5
8" GATE VALVE	UPPER DAM	1070'	3981.0
8" GATE VALVE	SPILLWAY	320'	3977.0
SPILLWAY	GALLERY NO. 1	3350'	4076.0
GALLERY NO. 1	GALLERY NO. 2	744'	4100.0
GALLERY NO. 2	GALLERY NO. 3	190'	4108.1
GALLERY NO. 3	GALLERY NO. 4	18'	4108.5
GALLERY NO. 4	GALLERY NO. 5	317'	4133.5
GALLERY NO. 5	GALLERY NO. 6	37'	4133.5
GALLERY NO. 6	GALLERY NO. 7	271'	4144.0
GALLERY NO. 7	GALLERY NO. 8	2469'	4231.2
GALLERY NO. 8	GALLERY NO. 9	116'	4236.0
GALLERY NO. 9	GALLERY NO. 10	211'	4245.5
GALLERY NO. 10	V. A. FENCE	825'	4284.7
V. A. FENCE	WATER FALL	980'	4316.0



FORT MEADE WATER SYSTEM  
VETERANS ADMINISTRATION  
FT. MEADE, S. DAK.

Drawn: D. R. OULMAN	REVISIONS	NUMBER
Traced:		0.018
Date: 23 FEB 68		Sheet 1 of 1

CHIEF ENGR: K. A. STORY

1281-1

WATER PERMIT

The Water Management Board hereby approves Water Permit Application No. 1281-1

South Dakota Dept. of Game, Fish & Parks Anderson Bldg Pierre  
(Applicant) (Post Office Address)

South Dakota 57501 With the following qualifications.  
(State) (Zip Code)

1. That the diversions of water under Permit No. 1281-1 may be made at any time, provided that water is available first for downstream domestic use, including livestock water and prior water rights.
2. That the Minnelusa Formation well authorized by Water Right No. 266-1 and the Madison Formation well drilled in 1956 be considered abandoned or forfeited and plugged pursuant to SDCL 46-6-18 and that both wells be plugged within eighteen months.

Date of first receipt of application April 27, 1983

Date of return to applicant for correction, amendments or changes required \_\_\_\_\_, 19\_\_\_\_

Date of receipt of corrected application \_\_\_\_\_, 19\_\_\_\_. Approved February 15, 1984

The Water Management Board hereby approves this Water Permit No. 1281-1 authorizing the construction of the water use system and the placing of water to beneficial use as stated in the Application and as qualified in the Water Permit approval, subject, however, to the following limitations and conditions:

1. The date from which applicant may claim right is April 27, 1983
  2. The equivalent of at least one-fifth of the specified work is to be completed on or before August 15, 1986
  3. The whole of said work is to be completed on or before February 15, 1989
  4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is February 15, 1993
  5. The water appropriated shall be used for the purpose of Recreational
- 
6. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be unlawfully impaired by this appropriation.
  7. The amount of the appropriation herein granted shall not exceed 540 acre feet annually ~~cubic feet per second~~; neither shall it exceed the capacity of the above described water supply system nor shall it exceed the amount of water needed for beneficial uses served and to which water is actually and beneficially applied for Recreation on or before February 15, 1989; said water to be used during the following described annual period: January 1st to December 31

WATER MANAGEMENT BOARD

By: John Hatch  
Chief Engineer JOHN HATCH  
Division of Water Rights  
Dept. of Water and Natural Resources

May 21, 1984

Bear Butte  
Lake

- existing  
diversions

Ft. Meade  
Dam

- existing  
diversions

- Natural  
water course

Pipeline

500,000 Gal. Storage Tank

Bear Butte Cr.

1281-3



Attendee who desire a copy of Operating Plan  
for Diversion into Bear Butte Lake,

<u>Name</u>	<u>Address</u>	<u>Monitor @ Your Location</u> (Yes or No)
Jim Sigman	HC 77 Box 146	Sturgis, SD Yes
Oliver Karrels	HC 77 Box 128	STURGIS SD yes
Henry Karrels	Box 187	Sturgis SD No
Carl Bruch	HC 77 Box 30	Sturgis SD NO
David Collins	Box 414	Sturgis SD NO
Richard Meyer	Box 416	Sturgis, S.D. NO
Brooke Hershey	Box 115 66-32	Sturgis, SD yes
HENRY BRUCH	HC 77 Box 30	STURGIS SD YES.

## Conversation or File Documentation

NAME OF PERSON OR FILE: DARREL VIGADDRESS: SCS COUNTY MEADEDATE: 1-12-82 TELEPHONE 347-4451RE: TAKING EXCESS OR OVERFLOW WATER FROM FT MEADE

## COMMENTS:

INDICATED THAT PEOPLE HAD CONTACTED HIM  
ABOUT DWERTING THE OVER FLOW WATER FROM  
FT MEADE - APPARENTLY FOR BEAR BUTTE LAKE -

APPARENTLY FT MEADE TAKES WATER FROM DEADMAN  
GULCH & STORES IT ON THE HILL EAST OF STURGIS.  
OVERFLOW RUNS INTO BEAR BUTTE CREEK DRAINAGE -  
VIG SAYS THEY TOLD HIM THERE WAS 1,000,000  
GALLONS PER DAY OVERFLOW - DON'T KNOW IF THEY  
ARE TALKING ABOUT A PIPELINE TO BEAR BUTTE  
LAKE OR WHAT. JUST IN TALKING STAGE NOW.

WE HAVE WATER RIGHTS ON BEAR BUTTE CREEK  
THAT MAY RELY ON THIS WATER. TOLD HIM  
SOMEONE WOULD VISIT WITH HIM ON NEXT TRIP  
INTO THE AREA.

COMMENT: IF THERE IS <sup>1.55 cfs</sup> 1,000,000 GAL/DAY  
OVERFLOW, IT APPEARS THEY ARE WASTING WATER

Ft. Meade - Check U.S. Withdrawals

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

NAME: 

CAPITAL FOR A DAY

Name: Henry Bruch Phone: 347-3297

Mailing Address: \_\_\_\_\_

City: Sturgis SD Zipcode: \_\_\_\_\_

Problem/Question/Request:

Mr. Bruch is opposed to G.F.E.P well at Bear Butte  
Lake. G.F.E.P has the right to overflow from Fort Meade,  
(Mr. Bruch?) must by-pass G.C.F.S and has been diverting water all  
summer and not below Sturgis lagoon - need water for dilution.

Notetaker's Name: Reese Peck

Solution/Answer/Follow-up:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Problem Solver's Name: \_\_\_\_\_

Citizen contacted with Solution/Answer/Follow-up on what date: \_\_\_\_\_

by telephone                      by mail                      by personal contact

Problem Solver's Suggestions as to changing rules, laws or administrative procedures to prevent re-occurrence of problem (be specific):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

110 18 14 13 14 961 36 28 22 114 ←  
 use breeder (feeding) use  
 Production 595000

use breeder → 912 50 28 39 68 306 22 23 22 170 22 29 24 35

6000 123 30 124 545 112 124 127 129 435 115 89 73 69 265 88 68 67 431 58 80 69

491 495 460 469 47 922 143 555 165 565 164 448 163 165 528 415 237 329 469

Oct 102 246 678 23 211 205 210 959 193 201 232 204 202 203 197 196 659 217 231 2

Sept 240 214 217 243 1240 146 251 319 862 20 192 176 200 608 175 159 184 148 516 22

Aug 971 209 241 192 173 903 208 208 243 234 702 291 198 176 179 649 206 213 205 248

July 1091 425 548 400 486 1433 413 456 315 131 428 315 280 290 311 1007 172 2

June 1017 809 957 343 450 1518 863 398 401 2262 594 731 742 825 200 702 820 664 593

May 1164 1072 1063 1025 751 3284 962 559 960 764 2890 1015 1016 1485 936 4287 2109 100 664

April 745 692 715 2050 1885 1984 1165 1412 3495 1103 1179 1179 1193 31623 4178 1162 1199 1102 2046 1120

March 1226 423 430 443 572 1085 494 474 474 491 2165 554 603 610 688 2449 209 702 683 735

Feb 1650 508 519 484 501 1564 505 492 492 403 2098 359 454 448 1597 424 423 427 416 1597

Jan 1590 1249 715 911 686 683 2146 654 610 629 581 2144 591 564 552 1240 532 505 505 510

Amount In Thousands of Gallons per Day  
 Total Shunt in 1987 - 161,182,000 Gal  
 French Golf 48,324,000 38,985,000 W/Vale closed June 8 thru August  
 16,339,000 W/V 11 open - water in stream of what kind of stream  
 Jan 1 thru June 24 & Sept 1 to Dec 31

918 255 241 252 269 918 158 200 208 131 906 417 399 380 400 1453



# Department of Water & Natural Resources

Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501

Water Rights Division  
605 773-3352

March 1, 1983

Eldon Christians, Chairman  
Water Diversion Committee  
Hills & Plains Sports Club  
632 Weber Dr  
Sturigs SD 57785

Dear Mr. Christians:

For Meade's water right is an old location notice filed with the State Engineers office November 9, 1908. It refers to utilizing the waters of Deadman's Gulch and its tributaries. The overflow from their storage reservoir reverts back to the public.

In order to properly accomplish this Water Diversion Project both Game, Fish & Parks and the Bureau of Land Management must first receive a water right to divert water into their respective lakes. The next Water Management Board Meeting will be held on April 14 & 15, 1983.

If you have any questions on this matter, please contact this office.

Sincerely,

TIMOTHY G SCHAAL  
Water Resources Engineer

TGS:ks

cc: Lowen Schuett  
Game, Fish & Parks

South Dakota  
Department of  
Game, Fish and Parks

April 27, 1983

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

Board of Water Management  
% John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Foss Building  
Pierre, SD 57501

Dear John:

Enclosed find an application for an addition to our Water Right #933-1. This request is for the overflow waters from the Fort Meade Veterans Administration Medical Center's water supply. Records show that flows are available in excess of their present demand, especially during the late fall, winter and spring months. (See enclosed overflow records 1972 - 1982). Currently, this overflow is discharged into Bear Butte Creek.

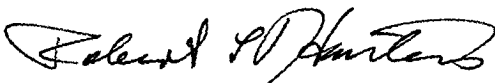
This project was locally conceived and initiated by the Hills & Plains Sportsman Club of Sturgis and is supported by the Department of Game, Fish & Parks. It involves modifying the overflow from the Ft. Meade Water Storage Reservoir and directing the flow through an eight inch pipe into the Bear Butte Lake drainage. The labor will be done by the Club. The Department will purchase the materials and handle the administrative matters. Approximately 500 feet of pipe would be needed to get the water to the north side of the ridge and through the county road grade. Additional pipe may be necessary to go down the steep channel and prevent gully erosion. The pipeline will run northwest from the reservoir to a draw which flows into Fort Meade Dam.

The spillway from Fort Meade Dam over flows in Bear Butte Lake drainage via a man-made diversion built in 1968. A by-pass can be installed to divert around Fort Meade Dam and the flows can be directed into the Bear Butte Lake after Fort Meade Dam is filled to its agreed level.

An Agreement with the Bureau of Land Management will be forwarded to your office as soon as the Agreements are signed.

Enclosed for your review are records for gallons of surplus water for the Fort Meade Veterans Center.

Sincerely,

*Will serve  
points*  


Robert L. Hanten  
Fisheries Staff Specialist

RLH/mt  
Region I

**RECEIVED**

**FEB 17 1983**

**DEPT. OF WATER &  
NATURAL RESOURCES**

February 15, 1983

Mr. Bob Newfield, Secretary  
Dept. of Water & Natural Resources  
State Office Building  
Pierre, South Dakota 57501

Dear Mr. Newfield:

The Hills & Plains Sports Club is sponsoring a Water Diversion Project to increase the water level of Bear Butte Lake. The water for this project would come from the unused portion of Fort Meade water supply which is currently running into Bear Butte Creek. There is a preliminary project report enclosed for a more detailed explanation of this project.

The feasibility of this project hinges upon being able to have the right to change this overflow from Bear Butte Creek into the Fort Meade Reservoir Lake and Bear Butte Lake where it would be more beneficial. At this point, it is not clear just what Fort Meade's water rights are. To help us clarify this issue, we are requesting your department to examine Fort Meade's water rights and give us an interpretation so we know whether we have to file for water rights if necessary so this project can be accomplished.

As you can see by the enclosed report, it is most beneficial to complete this project while the overflow is at its peak, so your earliest possible response will be greatly appreciated.

Sincerely,



Eldon Christians, Chairman  
Water Diversion Committee  
Hills & Plains Sports Club  
632 Weber Drive  
Sturgis, South Dakota 57785

## BEAR BUTTE LAKE

### Proposed Fort Meade Water Diversion Project

The water level in Bear Butte Lake has been a great concern to Park officials and sportsmen alike. It is often so low that a hot summer or severe winter could destroy the lake's fish habitat and population. The purpose of this proposal is to raise the water level and induce flow of fresh water into the lake during winter when oxygen levels are most critical.

Fort Meade V. A. Medical Center receives most of its water supply from springs in Deadman Canyon which is stored in a reservoir on Sly Hill just northeast of Sturgis. During most of the year the supply exceeds demand and a large amount of water overflows into Bear Butte Creek. This overflow amount varies greatly between winter and summer from zero to over 1 million gallons per day. The daily average overflow per year is approximately 150,000 gallons per day. The estimated overflow for March - June should be approximately 1 million gallons per day. With March approaching it is essential we act quickly to divert as much water as possible into Bear Butte Lake.

This diversion would be accomplished by constructing a pipeline from the north end of the concrete reservoir at the overflow level. 8 inch diameter plastic pipe will be used. The pipeline will run northwest from reservoir to a draw which would flow into Fort Meade Reservoir. About 500 feet of pipe is required to get the water to the north side of the ridge and through the county road. However, an additional 1500 feet of pipe may be needed to go down the steeper channel to prevent gully erosion. The spillway from Ft. Meade Reservoir would then flow into Bear Butte Lake drainage via a man-made diversion that was built in 1968. A diversion gate could be installed to by-pass Ft. Meade Dam and allow water to flow directly to Bear Butte Lake. Total length of diversion including pipeline and earthen channel would be about 3.7 miles. See enclosed map showing project plans. The Soil Conservation Service at Sturgis has provided some preliminary surveys and designs of the proposed project.

Reasons which make this project feasible are:

1. The water quality is excellent.
2. The total project cost is very low. Between \$1600 - \$4500 depending whether pipe is necessary to prevent erosion on the back slope of Sly Hill. The excavation depth would be only 2 - 5 feet.
3. The entire project would be completed on Ft. Meade and B.L.M. federal lands. An easement from the Meade County Commission will be needed to cross the county road.

4. There is strong local support.
5. The Sports Club would provide some or all of the funds for materials if grant monies are not available.

This project may not completely solve the low water problem in Bear Butte Lake, but it will improve the water level and quality until a more permanent solution can be developed should it still be necessary.

Hills and Plains Sports Club Committee

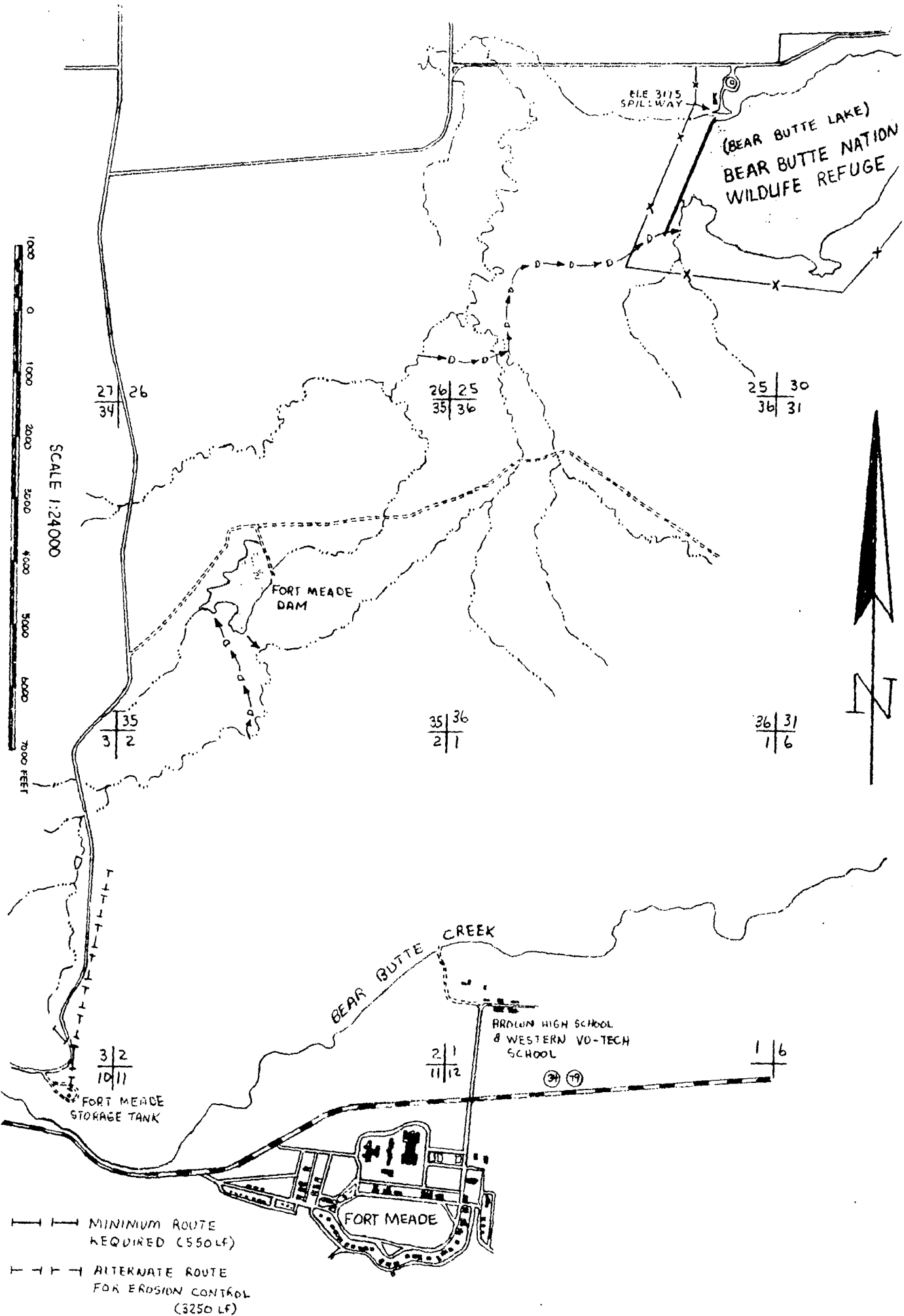
Members

Eldon Christians, Chairman  
Darrell Vig  
Tony Gullet  
Francis Meirose

Employer

Sturgis Water Works  
USDA \_ Soil Conservation Service  
Dept. of Game, Fish and Parks  
Ft. Meade V.A. - Engineering & Water

BEAR BUTTE LAKE - FORT MEADE  
 DIVERSION - PIPELINE PROJECT



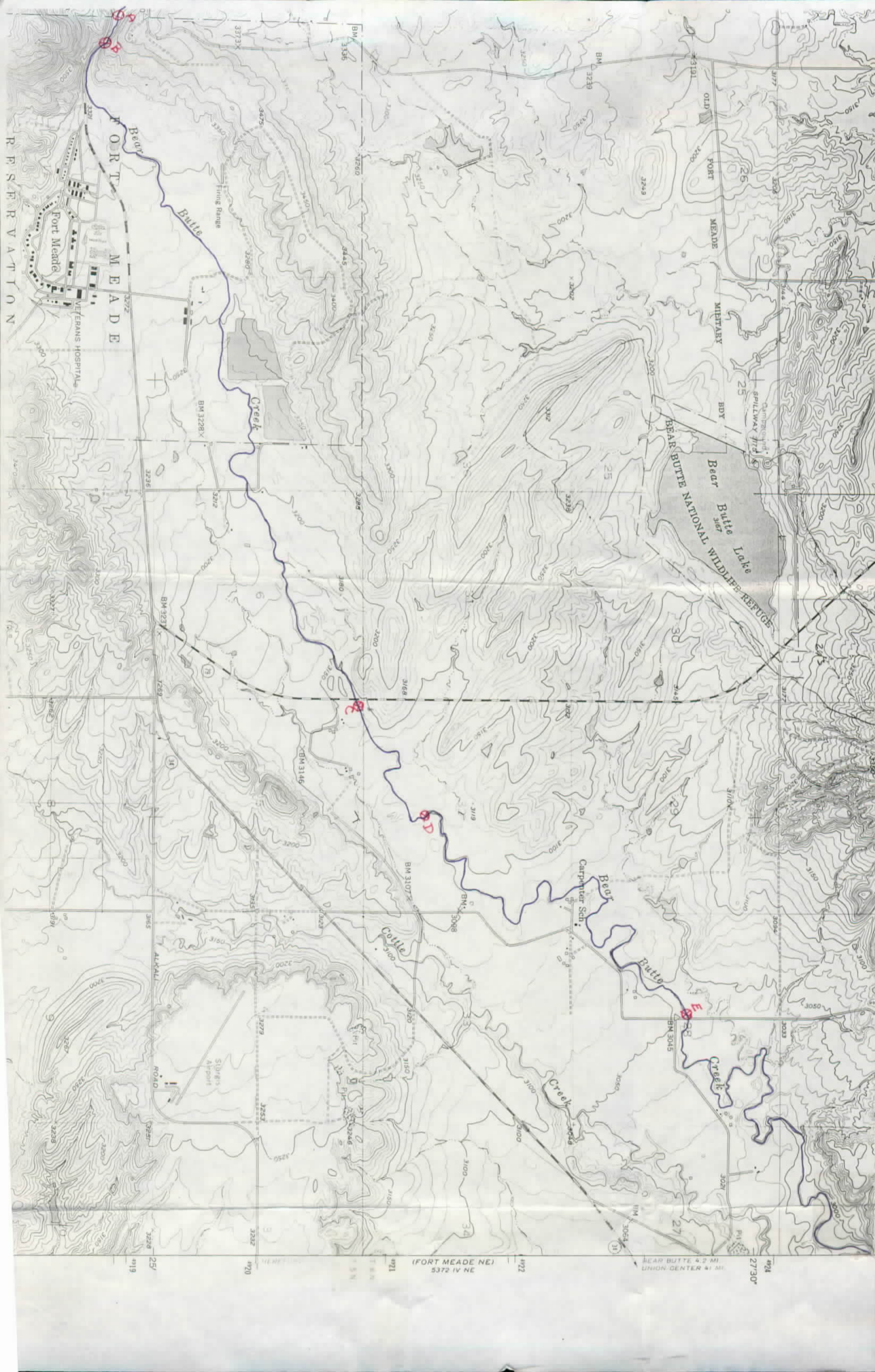
1000  
 0  
 1000  
 2000  
 3000  
 4000  
 5000  
 6000  
 7000 FEET

SCALE 1:24000

—|—|—| MINIMUM ROUTE  
 REQUIRED (550 LF)

- - -| - - -| - - -| ALTERNATE ROUTE  
 FOR EROSION CONTROL  
 (3250 LF)

U.S. DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE



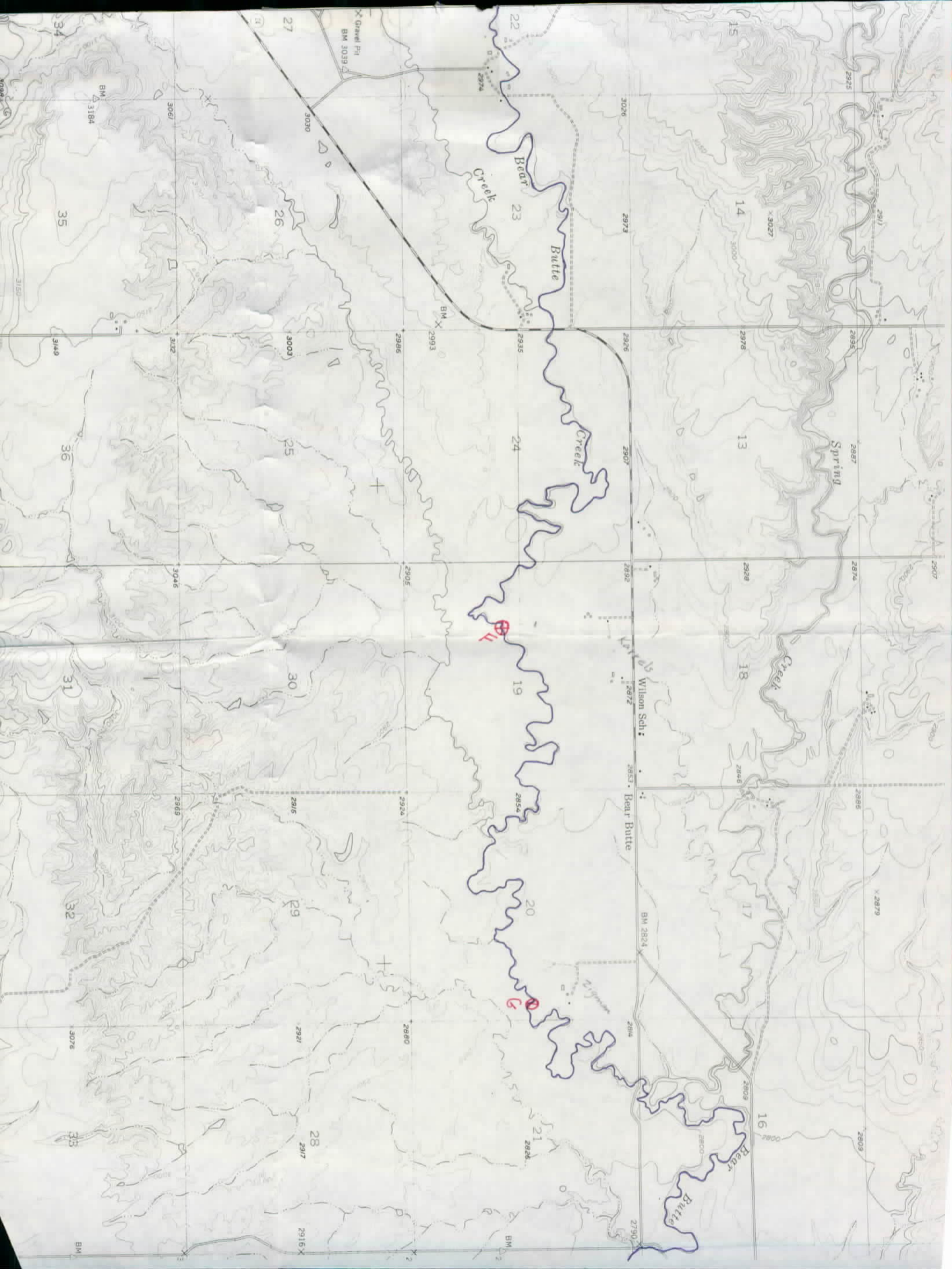
RESERVATION  
FORT MEADE  
VETERANS HOSPITAL

BEAR BUTTE NATIONAL WILDLIFE REFUGE  
Bear Butte Lake  
MILITARY BDY  
SULLYWAY #171 S  
CAMPBELL  
Carpenter Sch.  
SULLY'S Airport  
ALKALI ROAD

(FORT MEADE NE)  
5372 IV NE

BEAR BUTTE 4.2 MI  
UNION CENTER 41 MI

4921 4922 4923 4924 4925 4926 4927 4928 4929 4930 4931 4932 4933 4934 4935 4936 4937 4938 4939 4940 4941 4942 4943 4944 4945 4946 4947 4948 4949 4950 4951 4952 4953 4954 4955 4956 4957 4958 4959 4960 4961 4962 4963 4964 4965 4966 4967 4968 4969 4970 4971 4972 4973 4974 4975 4976 4977 4978 4979 4980 4981 4982 4983 4984 4985 4986 4987 4988 4989 4990 4991 4992 4993 4994 4995 4996 4997 4998 4999 5000



RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT APPLICATION

NO. 1281-1, Dept. of Game, Fish & Parks

Pursuant to Section 4, House Bill 1002, 1983, Legislature, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Water Permit Application No. 1281-1, Dept. of Game, Fish and Parks.

The Chief Engineer is recommending DEFERRAL of Application No. 1281-1 for staff investigation.

A handwritten signature in cursive script, reading "John Hatch", is written above a horizontal line.

JOHN HATCH, Chief Engineer  
June 3, 1983



conclusion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with the Chief Engineer and the Applicant by July 8, 1983. The petition may be informal, but it must include a statement describing the petitioners interest in the application, the reason for the petitioner's opposition to or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or any person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by July 8, 1983.

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, further information on this application or to assure access to the hearing by the handicapped can contact the Water Right Division, DWRN, Joe Foss Bldg., Pierre, SD (605 773-3352) for assistance prior to the hearing date.

Publ June 8 & 15, 1983

Times-Tribune

June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

Re: Addition of Water Rights #933-1


Dear Sir:

The Department of Water & Natural Resources is considering an application from the Department of Game, Fish & Parks for an addition to their water rights to permit the use of unused water from Fort Meade to be piped and channeled into Bear Butte Lake.

As a sportsman, I am very concerned about the erratic levels of water in Bear Butte Lake. The lake is one of few public fisheries in Meade County and its location makes it ideal for many people to enjoy. The proposed diversion project would help assure a more stable water level and provide good quality water.

I urge you to consider this as a request to grant the Department of Game, Fish & Parks the addition to their water rights so we can maintain Bear Butte Lake as a good fishery and recreation area today and for years to come.

Sincerely,



5000 JOHNSTON DR.

Rapid City S.D. 57701



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

Re: Addition of Water Rights #933-1

Dear Sir:

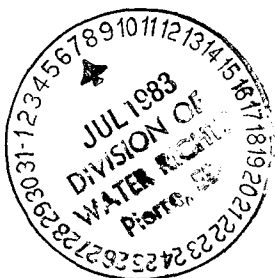
The Department of Water & Natural Resources is considering an application from the Department of Game, Fish & Parks for an addition to their water rights to permit the use of unused water from Fort Meade to be piped and channeled into Bear Butte Lake.

As a sportsman, I am very concerned about the erratic levels of water in Bear Butte Lake. The lake is one of few public fisheries in Meade County and its location makes it ideal for many people to enjoy. The proposed diversion project would help assure a more stable water level and provide good quality water.

I urge you to consider this as a request to grant the Department of Game, Fish & Parks the addition to their water rights so we can maintain Bear Butte Lake as a good fishery and recreation area today and for years to come.

Sincerely,

Dennis L. Hreseth  
1910 Arizona Ave.  
Sturgis S.D. 57785



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

Re: Addition of Water Rights #933-1

Dear Sir:

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I urge you to consider this as a request to grant the Department of Game, Fish & Parks the addition to their water rights so we can maintain Bear Butte Lake as a good fishery and recreation area today and for years to come.

Sincerely,

*Greg Gail*  
\_\_\_\_\_  
*Rt 9 Box 332*  
\_\_\_\_\_  
*Rapid City, S.D. 57701*



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

Re: Addition of Water Rights #933-1

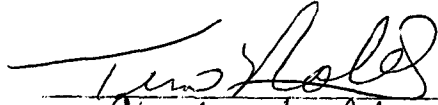
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Sincerely,

  
\_\_\_\_\_  
Riedmont Rt., Box 698  
\_\_\_\_\_  
Riedmont, S.D. - 57767



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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Sincerely,

*Robert C. Heenan*  
1436 11th St  
Sturgis S.D. 57785



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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Sincerely,

*Wadea Sheehy*  
\_\_\_\_\_  
*914 Dudley St.*  
\_\_\_\_\_  
*Sturgis, S. D. 57785*  
\_\_\_\_\_



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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Sincerely,

*Clancy Walsh*

*1340 Javenport*

*Sturgis, S.D.*



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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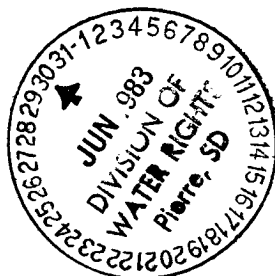
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I urge you to consider this as a request to grant the Department of Game, Fish & Parks the addition to their water rights so we can maintain Bear Butte Lake as a good fishery and recreation area today and for years to come.

Sincerely,

*Jewel E. Daniel*  
2322 S. Fulton  
Sturgis, S.D.



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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I urge you to consider this as a request to grant the Department of Game, Fish & Parks the addition to their water rights so we can maintain Bear Butte Lake as a good fishery and recreation area today and for years to come.

Sincerely,

Col L Bratland  
1942 Arizona  
Sturgis SD 57785



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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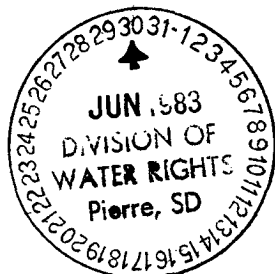
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Sincerely,

*Robert J. Murphy*  
1835 Junction  
Pierre, S.D.



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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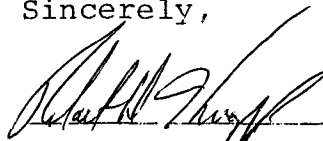
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Sincerely,

  
\_\_\_\_\_  
2121 Baldwin  
\_\_\_\_\_  
Sturgis, SD 57244  
\_\_\_\_\_



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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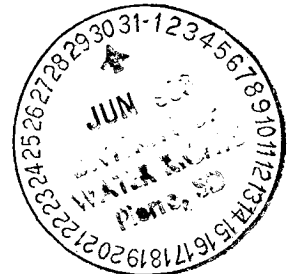
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Sincerely,

*Bob Lockner*  
\_\_\_\_\_  
*Box 172*  
\_\_\_\_\_  
*Siegler, SD 57785*  
\_\_\_\_\_



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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Sincerely,

*Cliff McJinn*  
RT 4, Box 1610  
Rapid City, S. Dak.



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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Sincerely,

*Donald Oliver*  
Boulder Canyon Pt Box 780  
Sturgis, So. Dak. 57785



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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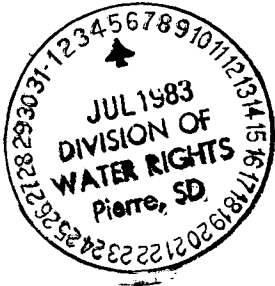
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I urge you to consider this as a request to grant the Department of Game, Fish & Parks the addition to their water rights so we can maintain Bear Butte Lake as a good fishery and recreation area today and for years to come.

Sincerely,

*Hugo A. Auer*  
White wood Road  
Box 216 Sturgis, SD



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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Sincerely,

Allen Christensen  
632 Welter Dr  
Sioux Falls, SD 57785



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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I urge you to consider this as a request to grant the Department of Game, Fish & Parks the addition to their water rights so we can maintain Bear Butte Lake as a good fishery and recreation area today and for years to come.

Sincerely,

Dana Clark  
Box 598  
Sturgis, S.D. 57785



June 29, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

Re: Addition of Water Rights #933-1

Dear Sir:

The Department of Game, Fish & Parks has an application in for additional water rights to permit the use of unused water from Fort Meade to be channeled into Bear Butte Lake by way of the Fort Meade Dam.

Our club is concerned about the erratic levels of water in Bear Butte Lake. The lake being located only a few miles from Sturgis is used heavily by the public as a fishing lake. The proposed diversion project would help to assure a stable water level and provide good quality water to the lake.

We urge you to consider this request of the Department of Game, Fish & Parks for the addition to their water rights.

Sincerely,



Richard Hawley  
President  
Hills & Plains Sports Club  
8340 N. Blucksberg Mtn. Road  
Sturgis, South Dakota 57785



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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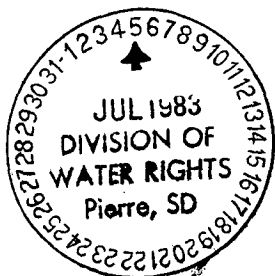
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Sincerely,

*Russell Shou*  
\_\_\_\_\_  
*2608 Elk Rd*  
\_\_\_\_\_  
*Sturgis S. Dak.*  
\_\_\_\_\_



June 28, 1983

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c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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Sincerely,

*Gerald Dougherty*  
Box 157, Precinct Star Route  
Sioux, S. Dakota. 57785



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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Sincerely,

Gary L. Welke  
2004 PRAHASAPA DRIVE  
STURBIS, S.D. 57785



June 28, 1983

Board of Water Management  
c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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Sincerely,

*Mike O'Connor*  
\_\_\_\_\_  
*1600 Cedar St*  
\_\_\_\_\_  
*Sturgis, SD 57785*  
\_\_\_\_\_



June 28, 1983

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c/o John Hatch, Chief Engineer  
Dept. of Water & Natural Resources  
Joe Foss Building  
Pierre, South Dakota 57501

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Sincerely,

*Marie Spur*  
P.O. Box 28011  
Rapid City, S.D. 57701



Box 1 Howes Rt.

Sturgis, S D 57785

July 4, 1983

Water Right Division, DWR

Joe Foss Building

Pierre S.D. 57501

Dear John;

Please consider this letter as our petition in opposition to the application of the Department of Game, Fish and Parks for a permit to take 540 acre feet of water from the overflow of the Ft. Meade Water System. This water is from the Bear Butte Creek drainage and it comes back into Bear Butte Creek.

In some years this is a major source of water for Bear Butte Creek and its removal would reduce an already small flow.

We have existing water rights below the point of diversion that would adversely affected by this removal. Since your office believes that Bear Butte Creek is already over appropriated it would be unwise to take even more water.

Please consider this as a request for an extension of time for this hearing. Please send us a copy of your recommendation and a notice of any other hearings or actions on this application.

Sincerely,  
Henry Bruch

*Henry Bruch*

Box 1 Howes RT

STURGIS, S.D. 57785





# Department of Water & Natural Resources

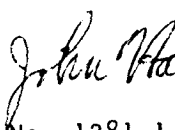
Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501

Division of Water Rights  
605 773-3352

July 11, 1983

## NOTICE

TO: Jack Merwin, Secretary, South Dakota Department of Game, Fish and Parks and Petitioners

FROM: John Hatch, Chief Engineer, Division of Water Rights 

SUBJECT: Automatic Extension of Time of Hearing on Application No. 1281-1 to Appropriate Water

Henry Bruch, a landowner on Bear Butte Creek downstream of the proposed diversion point for Application No. 1281-1 has filed a petition in opposition and a request that the time of hearing on Application No. 1281-1, July 19, 1983 be automatically extended pursuant to SDCL 46-2A-4 and 46-2A-5.

The Water Management Board will now consider Application No. 1281-1 at 1:00 pm, October 5, 1983 at the Civil Defense Meeting Room, State Capitol Building, Pierre, SD.

JH:ks

cc: Water Management Board  
Legislative Oversight Committee  
Bob Hanten, Game, Fish & Parks

1281-1



# Northern Hills Community Development, Inc.

P.O. BOX 677 • 722 MAIN ST. • SPEARFISH, SOUTH DAKOTA 57783-0677 • PHONE 605/642-7106

August 12, 1983

Mr. John Hatch, Chief Engineer  
Division of Water Rights  
Attention: Water Management Board  
Dept. of Water and Natural Resources  
Joe Foss Building  
Pierre, SD 57501



Re: Water Right Permit Application No. 1281-1

Dear Mr. Hatch:

The Board of Directors of Northern Hills Community Development, Inc. unanimously passed a resolution of support for Water Right Permit Application No. 1281-1 at their August 9, 1983 Board meeting.

The proposed permit would allow diversion of excess flows from the Ft. Meade V.A. Hospital water storage reservoir into Bear Butte Lake. The maintenance of a sufficient water level in order to maintain the recreational opportunities at Bear Butte Lake has been a problem in recent years. The diversion of the excess water into Bear Butte Lake would help to maintain the lake as a fine source of outdoor recreation. We do not foresee the diversion of the excess flows as creating a problem since the diverted water is excess flows during high precipitation, high runoff periods.

We hope you will give the Dept. of Game, Fish and Parks water right permit application favorable consideration.

Northern Hills Community Deveopment, Inc. is a nonprofit private development corporation promoting economic development in the Counties of Butte, Lawrence and Meade and the communities of Belle Fourche, Deadwood, Lead, Newell, Spearfish, Sturgis and Whitewood. Our Board of Directors is composed of representatives from each of the seven participating communities and the three counties.

Sincerely,

William D. Cook  
President

WD/jk

*"Promoting Economic Development in the Communities of the Northern Black Hills"*



# Department of Water & Natural Resources

Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501

Water Rights Division  
605 773-3352

1281-1

September 21, 1983

TO: Jack Merwin, Secretary, South Dakota Department of Game, Fish  
and Parks and Petitioners

FROM: John Hatch, Chief Engineer, Water Rights Division *John Hatch*

SUBJECT: Application No. 1281-1 to Appropriate Water

Enclosed for your information is a copy of the Chief Engineer's Revised Recommendation and staff report prepared on Application No. 1281-1 for Game, Fish and Parks which will be considered at the October 5, 1983 Water Management Board meeting.

enclosures

cc: Bob Hanten, Game, Fish & Parks  
Jackie Huber, Attorney

PETITIONERS  
TO NO. 1281-1

*Sent report & recommendations  
9-21-83*

Robert H Thugh  
2121 Baldwin  
Sturgis SD 57785

*notice  
returned*

Mike O'Connor  
1600 Cedar St  
Sturgis SD 57785

Richard Lattison  
5000 Johnston Dr.  
Rapid City SD 57701

Bob Lockner  
Box 172  
Sturgis SD 57785

Marie Pfarr  
PO Box 8011  
Rapid City SD 57701

Dennis L Greseth  
1910 Arizona Ave  
Sturgis SD 57785

Cliff McGirr  
Rt 4, Box 1610  
Rapid City SD 57701

Bob Hanten  
Game, Fish & Parks  
Anderson Bldg.

Greg Peil  
Rt 9, Box 332  
Rapid City SD 57701

Donald Oliver  
Boulder Rt, Box 780  
Sturgis SD 57785

Henry Bruch - opposition  
Box 1, Howes Rt  
Sturgis SD 57783

Tim Nold  
Piedmont Rt, Box 896  
Piedmont SD 57769

Hugo Auen  
Whitewood Blvd, Box 216  
Sturgis SD 57785

Jack Merwin - applicant  
Game, Fish & Parks  
Anderson Bldg.

Robert C Greean  
1135 11st St  
Sturgis SD 57785

Ellen Christians  
632 Weler Dr.  
Sturgis SD 57785

Jackie Huber, Attorney  
1111 5th Ave  
Belle Fourche SD 57717

Wade A Sheeder  
919 Dudley St  
Sturgis SD 57785

Dana Clark  
Box 598  
Sturgis SD 57785

Clancy Walsh  
1340 Davenport  
Sturgis SD 57785

Richard Hawley  
Hills & Plains Sport Club  
8340 N Blucksberg Mtn. Rd  
Sturgis SD 57785

Lowell E Daniel  
2322 S Fulton  
Sturgis SD 57785

Russell Skocum  
2608 Elk Rd  
Sturgis SD 57785

Cal L Bratland  
1942 Arizona  
Sturgis SD 57785

Gerald Dougherty  
Box 151, Pineview Star Rt  
Sturgis SD 57785

Robert I Murphey  
1835 Junction  
Sturgis SD 57785

Gary L Welke  
2004 Pahasapa Dr.  
Sturgis SD 57785

REVISED RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT APPLICATION  
No. 1281-1, Department of Game, Fish & Parks

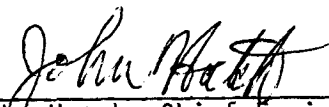
Pursuant to SDCL 46-2A-2 the Chief Engineer recommended Deferral of Application No. 1281-1 June 3, 1983. The following is the Revised recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Water Permit Application No. 1281-1, Department of Game, Fish and Parks, Pierre SD.

The Chief Engineer is recommending APPROVAL of Application No. 1281-1 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) that the proposed diversion can be developed without unlawful impairment of existing rights, 3) that the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. That diversions of water under this permit may only be made from April 1 through June 30 of each calendar year. Diversions may be made at other times when authorized by written orders from the Water Management Board or the Chief Engineer. Diversions at any time are contingent upon water being available first for downstream domestic use including livestock watering and prior water rights.

2. That the well (Minnelusa Formation) authorized by Water Right No. 266-1 and the well (Madison Formation) drilled in 1956 be considered abandoned or forfeited and plugged pursuant to SDCL 46-6-18.

The attached report is a part of this recommendation.



---

John Hatch, Chief Engineer  
September 14, 1983

qualification revised  
October 5, 1983

Hatch

REVISED RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT APPLICATION  
No. 1281-1, Department of Game, Fish & Parks


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1. That diversions of water <sup>made</sup> under this permit ~~may only be made from April 1 through June 30 of each calendar year; Diversions may be made at other times when authorized by written orders from the Water Management Board or the Chief Engineer. Diversions at any time~~ are contingent upon water being available first for downstream domestic use including livestock watering and prior water rights.

2. That the well (Minnelusa Formation) authorized by Water Right No. 266-1 and the well (Madison Formation) drilled in 1956 be considered abandoned or forfeited and plugged pursuant to SDCL 46-6-18.

The attached report is a part of this recommendation.

  
\_\_\_\_\_  
John Hatch, Chief Engineer  
September 14, 1983

REPORT ON APPLICATION NO. 1281-1  
SOUTH DAKOTA DEPT. OF GAME, FISH and PARKS  
September 14, 1983

Water Permit Application No. 1281-1, South Dakota Dept of Game, Fish and Parks is for 540 acre feet of water from the overflow of Ft. Meade Veterans Center storage reservoir to be delivered to Bear Butte Lake via pipelines and natural channels to help maintain the lake level. In reviewing the records, it is obvious that since 1937 when the WPA built Bear Butte Lake Dam there has never been sufficient natural inflow to maintain an adequate lake level. Several attempts at solving this problem have been made.

Water Permit No. 266-1 was approved December 19, 1955 for five cfs from an artesian well (well No. 1, Minnelusa Formation) to stabilize the lake level. Presently, there is zero flow at ground surface from this well. It appears the entire flow from the well exits from a spring into a dry draw which drains into Spring Creek. A brief history of this well is attached. In 1956, a second well was drilled. This well was connected to the pipeline from well No. 1 to Bear Butte Lake. It was never authorized by permit. This well no longer flows at the ground surface.

Using the data in Table 1 approximately 275 acre feet of water is lost each year to evaporation. To replace the water lost through evaporation would require approximately 170 gpm be diverted into the lake on a continuous basis. There are several factors to be considered in the review of this application. The overflow from Ft. Meade has discharged into Bear Butte Creek since 1906. This overflow has become part of the flows of Bear Butte Creek. Delivery of the overflow from the reservoir is to be accomplished primarily overland by way of dry draws. There will be some loss using this method of delivery. The addition of the overflow from the reservoir would improve the lake level, however, the overflow records indicate the quantity of water that will be obtained from this source will fluctuate and will not be sufficient to supply all the water necessary to keep the lake full.

#### Review of Water Rights

Water Right No. 812-2 to divert 3.1 cfs from Bear Butte Creek for irrigation is located about 2½ miles downstream (see map) from the Fort Meade overflow. Four irrigation Water Rights No. 572-1 for 1.27 cfs, No. 919-1 for 2.2 cfs, No. 751-1 for 2.84 cfs and No. 996-1 for 0.25 cfs are located 13-18 miles downstream from the Fort Meade overflow and below where Spring Creek enters Bear Butte Creek. Water Right No. 812-1 would have to be satisfied before any water could be diverted to Bear Butte Lake. During low flow periods, downstream domestic use needs would have to be provided before water could be diverted to Bear Butte Creek.

The following pre-1907 Water Right Filings are located on Bear Butte Creek downstream (see map) of the Fort Meade overflow.

<u>Filing Number</u>	<u>Diversion Rate</u>
0503-1	500 miners inches (10.0 cfs)*
0502-1	400 miners inches (8.0 cfs)
0504-1	500 miners inches (10.0 cfs)
0561-1	Diversion rate not specified
0562-1	Diversion rate not specified, is a deed for right of way
0547-1	Diversion rate not specified

\* 1.0 cfs = 449 gallons per minute

Investigations by the Water Rights Division have found that the filings have been abandoned or forfeited and are subject to cancellation. The owners have objected to cancellation and hearings to consider cancellation will be conducted by the Water Management Board October 6, 1983.

A review of flow records for Bear Butte Creek indicates that during the months of April, May and June the average flows in Bear Butte Creek are such that the overflow from Fort Meade does not make a significant contribution to the flows of the creek. During these three months, creek flows should usually be high enough to allow the Fort Meade overflow to be diverted to Bear Butte Lake without impairment of downstream water rights or domestic water for livestock watering. During periods of low flows in the creek then overflow from Fort Meade would be a significant part of Bear Butte Creek flows then the overflow could not be diverted to Bear Butte Lake.

#### Recommendation

It is recommended that Application No. 1281-1 be approved with the following qualifications:

1. That diversions of water under this Permit may only be made from April through June 30 of each calendar year. Diversions may be made at other times when authorized by written orders from the Water Management Board or the Chief Engineer. Diversion at any time are contingent upon water being available first for downstream domestic use, including livestock watering and prior water rights.
2. That the well (Minnelusa Formation) authorized by Water Right No. 266-1 and the well (Madison Formation) drilled in 1956 be considered abandoned or forfeited and plugged pursuant to SDCL 46-6-18.



KEVIN C LARSON  
Water Resources Engineer

## FIGURE I

### Well No. 1

Was drilled in 1921 as an oil test hole. At this time, the well (Minnelusa Formation) flowed approximately 3000 gallons per minute. An undetermined length of 10 inch casing was set at the time. The original depth was determined to be approximately 710 feet. In 1950, Draine Drilling Service was unable to penetrate below 670 feet, they believed that they had reached the bottom of the original hole. Eight inch casing had been set at some time prior to 1950 from 2 feet above land surface to a depth of 656 feet. A caliper survey completed at this time showed a break and a void surrounding the eight inch casing between 263 and 270 feet. The caliper was unable to contact the sidewalls of the hole. The 1950 flow at the surface was only 200 gpm. Draine set approximately 450 feet of 5½ inch casing. A packer was set above the break and cement slurry was pumped into the annulus between the 5½ inch and 8 inch casing. By 1974, the entire flow from the well was discharging from a break in the casing at about the 270 foot level and exists as a spring which drains into Spring Creek.

### Well No. 2

In 1956, Draine Drilling constructed another well about ¼ mile south of well No. 1. This well was completed into the Madison Limestone to a total depth of 1358 feet. In 1974 only 37 gpm was flowing into Bear Butte Lake. This well does not flow at ground surface at this time.

## FIGURE II

### Permits held by Dept of Game, Fish and Parks for Bear Butte Lake

- 266-1 Was approved December 19, 1955 for 5.0 cfs from a flowing well (Well #1) to stabilize the level of Bear Butte Lake. The well flow now exits from broken casing approximately 270 feet below ground surface and the entire flow drains into Spring Creek via a spring. December 17, 1975 it was observed that about 3/4 of the flow in Spring Creek was from this spring.
- 844-1 Was approved on May 22, 1968 and licensed May 2, 1978 for 520 cfs from dry draws in another drainage with flows transported to Bear Butte Lake via a canal to stabilize the lake level.
- 933-1 Was recognized as a vested right for 540 acre feet on March 25, 1971 for Bear Butte Lake with 1935 priority date.

The well drilled in 1956 was never authorized by permit. Presently, it does not flow into the lake.

TABLE 1

Surface acres (from vested right No. 933-1)	= 180 acres
Average depth (from vested right No. 933-1)	= 3 feet
Total storage	= 540 acre feet
Contributing drainage area	= 1.3 square miles
Average annual precipitation*	= 16 inches
Average annual lake evaporation*	= 40 inches
Net loss to evaporation	= 24 inches/year
Amount of water contributed annually by the natural drainage are (calculated by SCS method)	= 25 acre feet
Net loss to evaporation x surface area - 25 acre feet (surface area was reduced to 150 acres)	= 275 acre feet

\* Information from "Climate of South Dakota" by Walter Spuhler and W.F. Lytle

TABLE 2

AVERAGE DAILY OVERFLOW IN GALLONS PER MINUTE FROM THE FT. MEADE RESERVOIR

Month	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Jan.	82	--*	93	55	46	49	--	39	--	21	8
Feb.	64	--	90	28	58	67	38	36	--	19	16
Mar.	92	--	93	42	73	77	68	56	--	21	40
Apr.	114	--	162	167	101	--	--	--	--	11	108
May	559	--	220	361	335	--	--	--	--	94	215
June	--	--	77	237	--	--	--	--	--	268	232
July	--	--	28	188	--	--	--	19	--	104	259
Aug.	--	88	5	87	--	--	--	41	--	19	--
Sept.	--	140	33	35	--	--	53	43	11	23	130
Oct.	--	138	43	62	--	--	80	77	29	30	408
Nov.	--	109	46	66	90	82	59	--	24	19	423
Dec.	--	109	41	30	73	--	62	--	30	11	236

\* incomplete data for the month

TABLE 3

BEAR BUTTE CREEK FLOW MEASUREMENTS AT USGS GAGING STATION NEAR STURGIS (below Spring Creek)  
1946 thru September 1972

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Average flow*	2.6	6.8	11.2	16.7	52.7	58.0	7.4	1.9	1.8	2.9	2.8	2.3
Median flow*	1.6	2.6	4.9	10.6	25.4	14.9	2.8	0.71	0.24	0.92	1.45	1.45

\* flows are in cubic feet per second

- At the gage, Spring Creek contributes flows from approximately 40% of total drainage area
- Flow exiting from a spring near Well #1 accounted for approximately 75% of winter flow in Spring Creek. This was measured on December 17, 1975

YEAR	MONTH	PRODUCED	TOTAL GALLONS USED	OVERFLOW	Ave. Daily Overflow (Gal s./Day)
1972	Jan.	9,605,000	5,949,000	3,656,000	117,945
	Feb.	8,075,000	5,422,900	2,652,100	91,451
	Mar.	10,069,000	5,942,300	4,126,700	133,119
	Apr.	10,649,000	5,741,800	4,907,200	163,573
	May	33,395,000	6,665,500	26,729,500	862,243
	June <u>1/2/</u>	10,000,000	2,421,900	7,578,100	757,810 <u>1/</u>
	July <u>2/</u>		8,401,600	<u>3/</u>	
	Aug.		11,781,100		
	Sept.		8,079,800		
	Oct.		3,804,300		
	Nov.		3,714,000		
	Dec.		5,353,400		
	<u>1/</u>	1st 10 days of June only			
	<u>2/</u>	Meter out June 10 thru July 20, 1973			
	<u>3/</u>	Deadman Meter & collection system changed by 1972 flood			
1973	Jan.		4,382,800	<u>3/</u>	
	Feb.		3,700,600		
	Mar.		4,980,300		
	Apr.		3,961,800		
	May		3,476,900		
	June		7,430,900		
	July <u>1/</u>	5,772,000	2,943,600	2,828,400	257,127
	Aug.	15,193,000	11,252,300	3,940,700	127,119
	Sept.	11,459,000	5,418,200	6,040,800	201,360
	Oct.	9,886,000	3,747,500	6,138,500	198,016
	Nov.	8,404,000	3,683,000	4,721,000	157,366
	Dec.	7,741,000	3,349,500	4,391,500	156,839
	<u>1/</u>	20th thru 31st			
1974	Jan.	8,196,000	4,062,600	4,133,400	133,335
	Feb.	7,205,000	3,590,500	3,614,500	129,089
	Mar.	7,909,000	4,037,766	3,871,234	133,490
	Apr.	10,875,000	3,868,700	7,006,300	233,543
	May	14,548,000	4,732,400	9,815,600	316,632
	June	10,713,000	7,589,300	3,123,700	111,560
	July	9,298,000	8,032,700	1,265,300	40,816
	Aug.	7,281,000	7,445,500	235,500	7,850
	Sept.	6,637,000	5,222,500	1,414,500	47,150
	Oct.	5,831,000	3,909,900	1,921,100	61,970
	Nov.	5,319,000	3,391,700	1,927,300	66,458
	Dec.	5,697,000	3,864,200	1,832,800	59,122

YEAR	MONTH	PRODUCED	TOTAL GALLONS USED	OVERFLOW	Ave. Daily Overflow (Gal s./Day)
1975					
	Jan.	5,987,000	3,519,400	2,467,600	79,600
	Feb.	4,250,000	3,121,200	1,128,800	40,314
	Mar.	5,367,000	3,489,200	1,877,800	60,574
	Apr.	11,783,000	4,560,800	7,222,000	240,733
	May	19,223,000	4,135,500	15,087,500	520,258
	June	19,903,000	4,663,300	10,239,700	341,323
	July	15,845,000	7,451,100	8,393,900	270,770
	Aug.	10,748,000	7,097,900	3,650,100	125,865
	Sept.	8,154,000	6,650,800	1,503,200	50,106
	Oct.	6,816,000	4,030,800	2,785,200	89,845
	Nov.	5,578,000	2,902,700	2,675,300	95,546
	Dec.	5,682,000	4,332,400	1,344,600	43,535
1976					
	Jan.	5,099,000	3,102,900	1,996,100	66,536
	Feb.	4,725,000	2,470,100	2,254,900	83,514
	Mar.	6,848,000	3,565,400	3,282,600	105,190
	Apr.	7,693,000	3,347,500	4,345,500	144,850
	May	16,340,000	2,821,200	13,518,800	482,814
	June <u>1/</u>	9,759,000	2,589,100	7,169,900	512,135 <u>2/</u>
	July	No Record - Flood Damaged			
	Aug.	7,189,000	7,051,000 <u>3/</u>	138,000	5,750
	Sept.	1,742,000	5,384,800 <u>3/</u>	None	
	Oct.	2,488,000	3,375,600 <u>3/</u>	None	
	Nov.	7,090,000	3,215,000	3,875,000	129,166
	Dec.	6,478,000	3,331,200	3,146,800	104,893
<u>1/</u> 1st 15 days of month <u>2/</u> 14 Days only <u>3/</u> Incomplete records					
1977					
	Jan.	5,742,000	3,563,400	2,178,000	70,277
	Feb.	5,486,000	2,791,400	2,694,600	96,235
	Mar.	6,264,000	3,153,000	3,111,000	111,107
	Apr.	Meter out			
	May	Meter out			
	June	Meter out			
	July	Meter out			
	Aug.	Meter out			
	Sept.	Meter out			
	Oct.	Meter out			
	Nov.	6,574,000	3,049,000	3,524,100	117,470
	Dec. <u>1/</u>	2,160,400	1,128,000	1,032,400	54,336 <u>2/</u>
<u>1/</u> 1st 19 days <u>2/</u> 19 Days only					

YEAR	MONTH	PRODUCED	TOTAL GALLONS USED	OVERFLOW	Ave. Daily Overflow (Gal s./Day)
1978	Jan. <u>1/</u>	2,178,000	732,000 <u>2/</u>	1,446,000	120,500
	Feb.	4,785,000	3,315,600 <u>2/</u>	1,469,400	54,422
	Mar.	6,715,000	3,663,900 <u>2/</u>	3,051,100	98,423
	Apr.	No Record - Meter Stopped			
	May	No Record			
	June	No Record			
	July	No Record			
	Aug. <u>3/</u>	8,599,000	5,333,900	3,265,100	155,480
	Sept.	8,620,000	6,412,300	2,207,700	76,127
	Oct.	6,884,000	3,333,000	3,551,000	114,548
	Nov.	6,072,000	3,501,800	2,570,200	85,673
	Dec.	6,017,000	3,418,700	2,598,300	89,596

1/ 6th thru 17th

2/ No record from usual meter

3/ 10th thru 31st

1979	Jan.	5,941,000	4,179,300	1,761,700	56,829
	Feb.	5,128,000	3,690,100	1,437,900	51,353
	Mar.	6,118,000	3,702,200	2,415,800	80,526
	Apr.	Meter stopped			
	May	Meter out			
	June	Meter out			
	July	6,453,000	5,635,000	818,000	27,266
	Aug.	8,000,000	6,171,000	1,829,000	59,000
	Sept.	5,410,000	3,683,000	1,727,000	61,678
	Oct.	5,673,000	2,231,900	3,441,100	111,003
	Nov.	3,373,000 <u>1/</u>	2,462,600	910,400+	30,346
	Dec. <u>2/</u>	1,999,000 <u>3/</u>	2,073,300	None?	

1/ Meter stopped 3 times

2/ 1st thru 27th

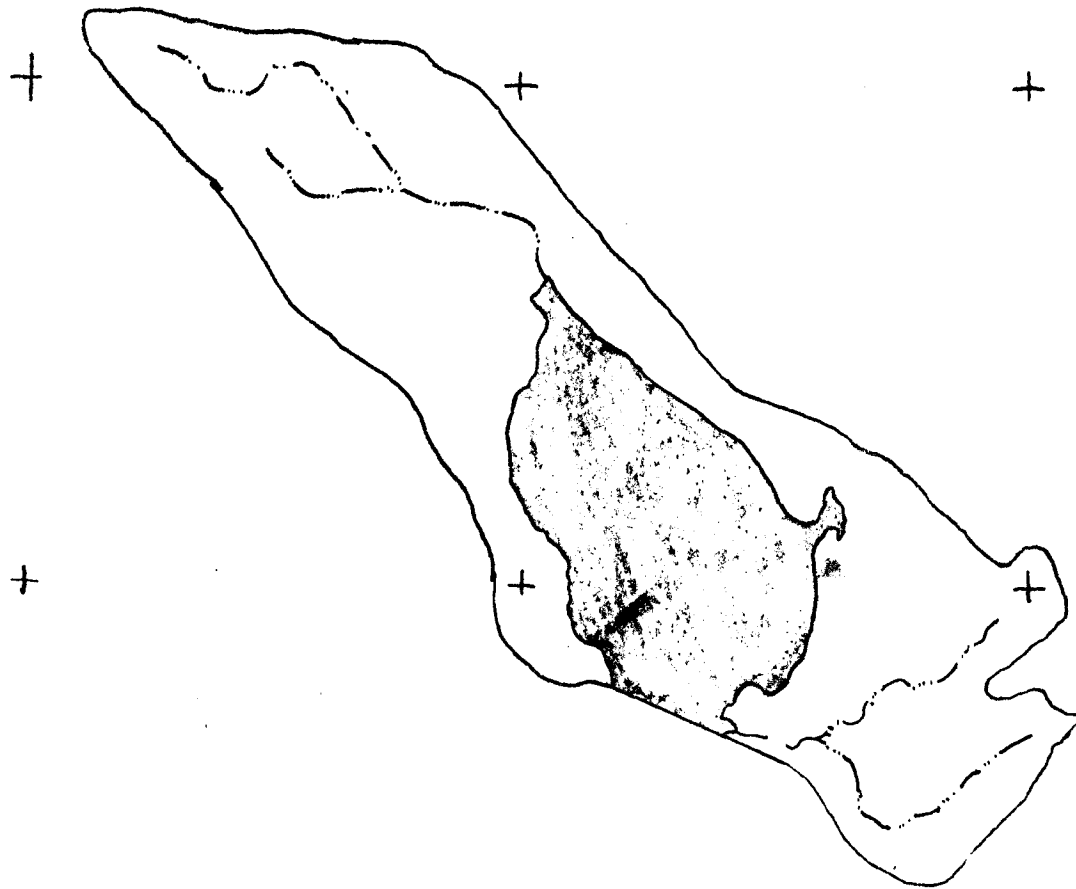
3/ Meter stopped 4 times

YEAR	MONTH	PRODUCED	TOTAL GALLONS USED	OVERFLOW	Ave. Daily Overflow (Gal s./Day)
1980					
	Jan.	Meter stopped			
	Feb.	Meter stopped			
	Mar. <u>1/</u>	1,609,000	745,200	863,800	86,380
	Apr. <u>2/</u>	1,570,000	687,700	882,300	110,287
	May	Meter stopped			
	June <u>3/</u>	3,490,000	2,391,300	1,098,700	78,478
	July	5,313,000	6,503,200	None	
	Aug.	4,366,000	4,879,500	None	
	Sept.	4,100,000	3,613,000	487,000	16,233
	Oct.	4,047,000	2,774,200	1,272,800	41,058
	Nov.	3,005,000	2,152,900	852,100	34,084
	Dec.	3,791,000	2,434,000	1,357,000	43,774
<u>1/</u>	21st thru 31st				
<u>2/</u>	1st thru 9th				
<u>3/</u>	17th thru 20th				
1981					
	Jan.	3,230,000	2,341,300	888,700	30,644
	Feb.	2,914,000	2,215,100	698,900	26,880
	Mar.	3,300,000	2,383,000	917,000	30,566
	Apr.	3,595,000	3,135,800	459,200	15,306
	May	7,735,000	3,802,200	3,932,800	135,613
	June	15,968,000	4,388,300	11,579,000	385,990
	July	9,939,000	5,311,600	4,627,400	149,270
	Aug.	6,368,000	5,572,700	795,300	27,424
	Sept.	5,106,000	4,123,600	982,400	32,746
	Oct.	3,992,000	2,712,300	1,279,700	42,656
	Nov.	3,224,000	2,404,700	819,300	27,310
	Dec.	3,094,000	2,608,300	485,700	15,667
1982					
	Jan.	2,699,000	2,428,800	270,200	11,258
	Feb.	3,005,000	2,414,000	591,000	22,730
	Mar.	4,129,000	2,356,500	1,772,500	57,177
	Apr.	5,234,000	583,900?	4,650,100	155,003
	May	10,353,000	2,005,300	8,347,700	309,174
	June	14,513,000	4,476,400	10,036,600	334,563
	July	18,707,000	7,531,200	11,175,800	372,526
	Aug.	8,933,000 <u>1/</u>	6,608,100	2,324,900	77,496
	Sept.	9,435,000	3,807,600	5,627,400	187,580
	Oct.	19,113,000	2,073,600	17,039,400	587,565
	Nov.	21,093,000	2,806,400	18,286,600	609,553
	Dec.	13,165,000	2,990,700	10,174,300	339,143

1/ Meter off 4 days

FIGURE 3

Natural Contributing Watershed for Bear Butte Lake



Scale: 1" = 2000 feet

—Climate

# 12 —

Bulletin 582  
November 1971

CA-4(71)

1281-1

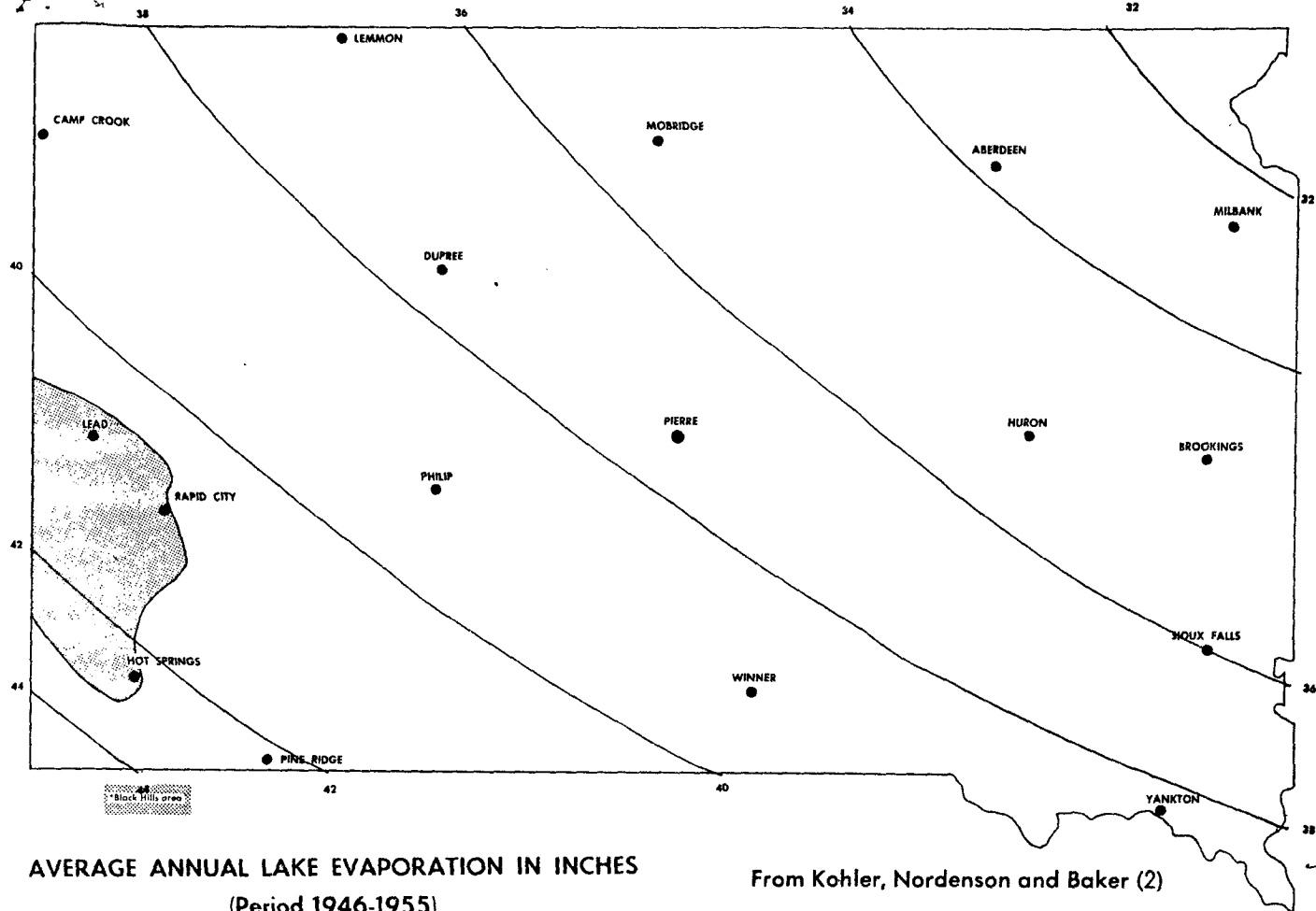
# Climate of South Dakota

By  
WALTER SPUHLER  
NOAA Climatologist for South Dakota  
and  
W. F. LYTLE  
Associate Professor, Agricultural Engineering Department,  
South Dakota State University, Brookings

**AGRICULTURAL EXPERIMENT STATION  
SOUTH DAKOTA STATE UNIVERSITY, BROOKINGS**

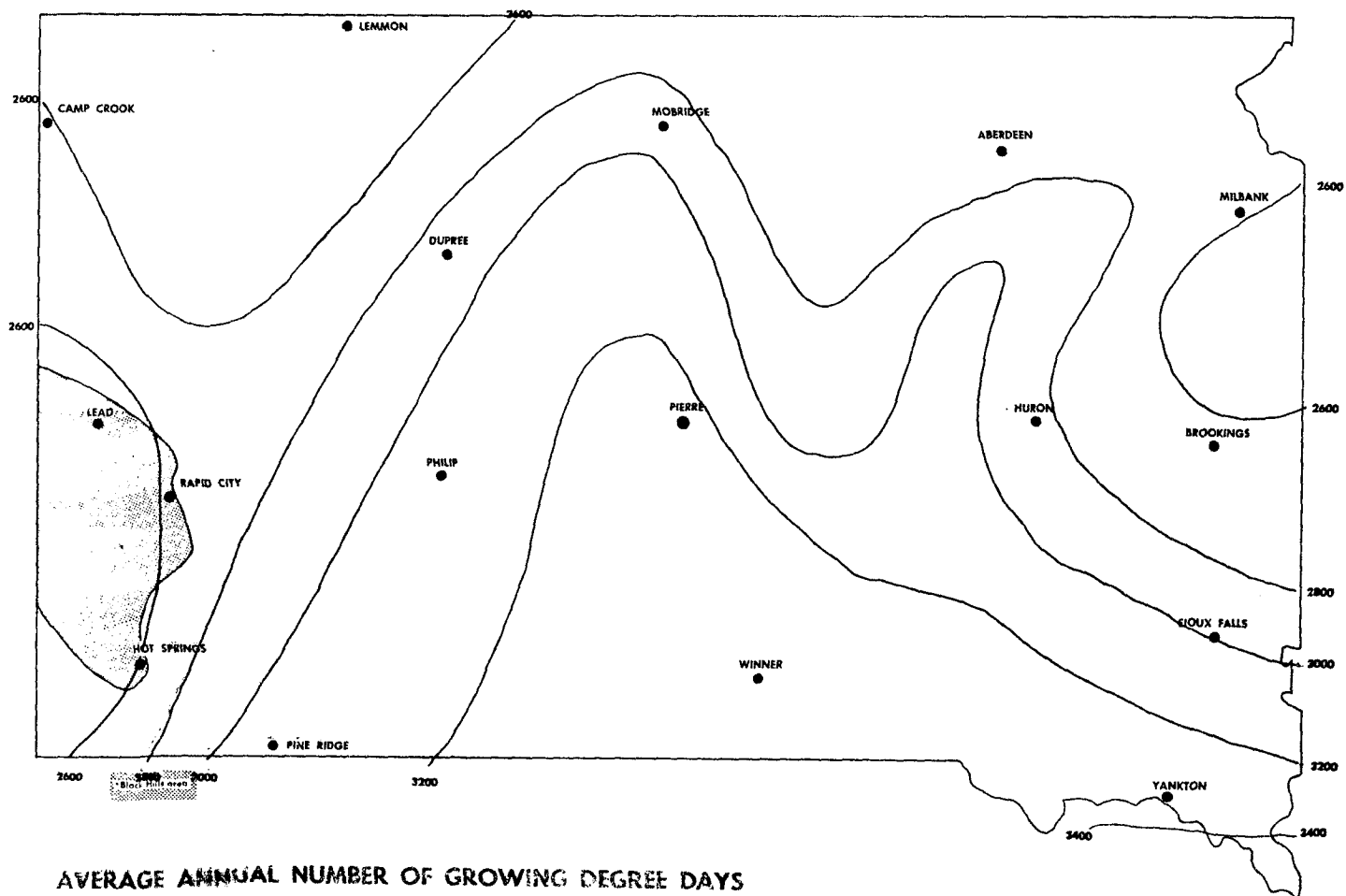
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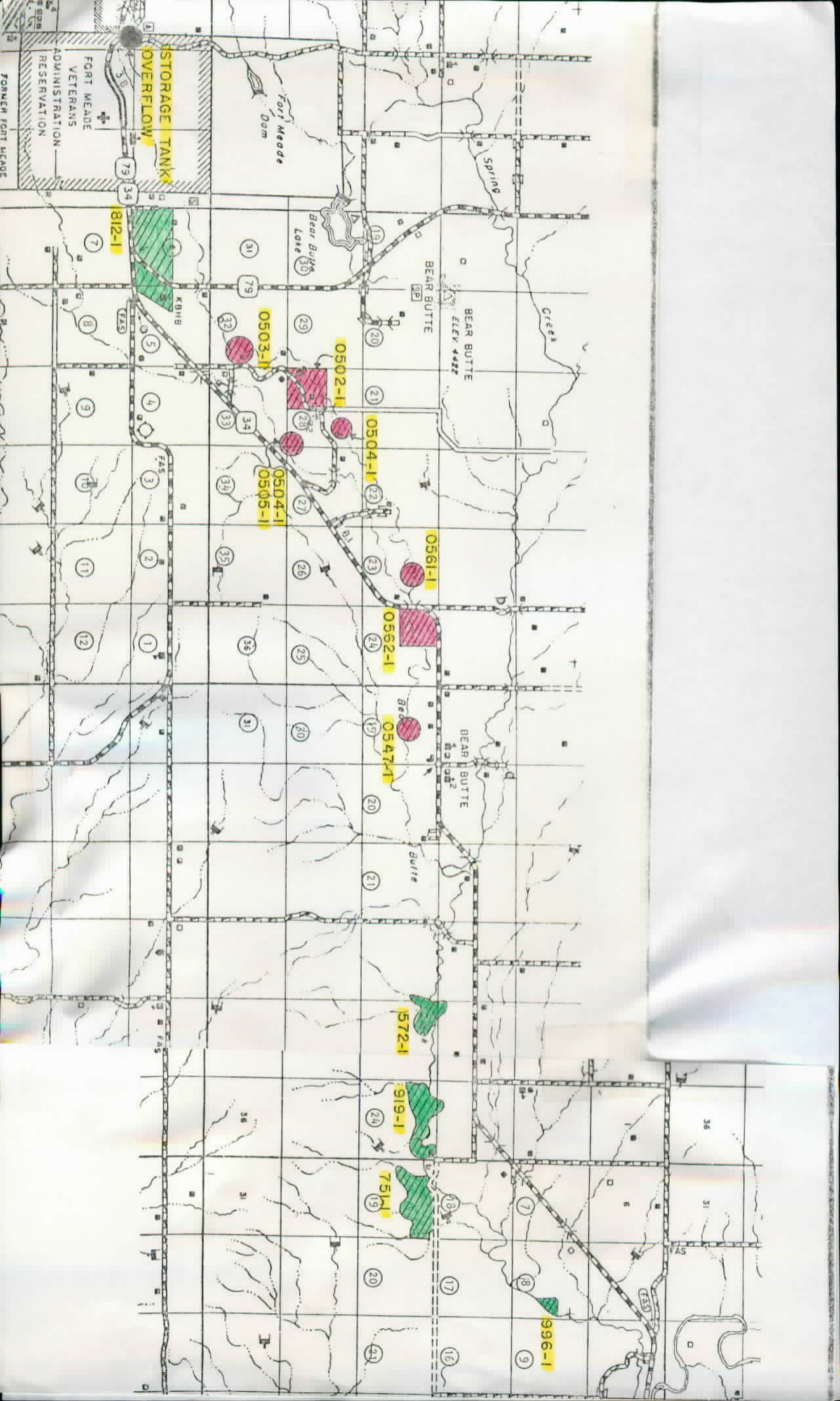


AVERAGE ANNUAL LAKE EVAPORATION IN INCHES  
(Period 1946-1955)

From Kohler, Nordenson and Baker (2)



AVERAGE ANNUAL NUMBER OF GROWING DEGREE DAYS



1281-1, Dept. of Game, Fish and Parks, Pierre SD

Application is to divert 540 acre feet of water annually from the Fort Meade Water Supply Reservoir overflow for public recreation purposes in Bear Butte Lake.

Kevin Larson presented the report on the application (copy on file). Mr. Larson further stated the storage reservoir is an elevated tank. It receives water from a collection gallery, southwest of Sturgis. The overflow occurs when the tank is full, then it runs down a hill into Bear Butte Creek right below it. The elevated tank is used as the delivery system for the water. During the recommended April 1 thru June 30 period, the overflow water from the tank could be diverted away from Bear Butte Creek over into Bear Butte Lake. At other times of the year, when flows in Bear Butte Creek are low the water will have to be allowed to run down the hill into the creek.

Mr. Hatch stated the qualification is such that the only time diversions from the overflow could be made would be during times when the water in Bear Butte Creek is sufficient to supply domestic needs as well as prior water rights. During drier times when water needs are more critical, the overflow would have to continue into Bear Butte Creek. Mr. Hatch stated there are 23 petitioners in favor of the application and one petitioner in opposition (copy on file). Mr. Hatch stated the recommendation is relative to the public interest that is involved. If we were not dealing with another State Agency, the staff would be hesitant to make this type of recommendation. The staff believes that Game, Fish and Parks will cooperate to meet the requirements of the qualification.

Chairman Gunderson administered the oath to Art Talsma.

Mr. Talsma presented a map of the area referred to as Exhibit A. Mr. Talsma stated it was not originally Game, Fish and Parks' idea to do this, but rather an idea brought forth from the recreational users in the Hills area. The Hills, Plains, and Sportsman's group came to the Game, Fish and Parks Commission in March of this year and discussed the idea. The purpose has been around for a long time. Bear Butte Lake is set in an arid part of the country. They have a tough time maintaining the water level in the lake. That is why the wells were drilled in the past to benefit the lake. At the lake, the water level can get low both in the summer and winter causing fish kills. They lose the fishery and have to start all over again. The idea was brought before them in March. The plan has now been reviewed by BLM, the sportsman groups themselves, Game, Fish and Parks staff and the Veterans Hospital staff as well. They agree with the recommendation of the Department of Water and Natural Resources staff. Mr. Talsma stated they would like the Board to consider allowing them to make the diversion six months a year. The months of March, April, May, June, October and November. Most years April, May and June would be adequate to supply the 540 acre feet of water. Some years the month of March seems to have a lot of water in stream to supply both their use and the use of downstream water rights. The months of October and November are really critical to their use and those of downstream water rights. They are also critical prior to winter freeze up. Those two months are the most critical to get water to the lake. If the lake is extremely low in October and November, it ices over and winter kill is severe. They would expect the limitation of 540 acre feet total and the limitation that they could not draw water unless all of the downstream water rights were met.

Also, the pipe that they intend to cost share with the Sportsmans Group is an eight inch pipe which would barely supply 540 acre feet in the three month period. They would have to either use a larger pipe or come to the Board on a monthly basis for more water. The 540 acre feet requested is the very minimum amount necessary to supply the lake. It is a 175 acre lake. It would raise the lake level about 2 feet which is about the same amount it losses to evaporation each year. They have no problem with the recommendation to abandon and close the other two wells, however there is some beneficial use from them now. The landowner with whom they have the easement, uses them for the watering of his livestock. They do not see the reasoning for the abandonment of them as far as effect on the watershed.

Chairman Gunderson accepted Exhibit A into the record.

Chairman Gunderson administered the oath to Doug Hofer.

Mr. Hofer stated he was also representing the Department of Game, Fish and Parks. Bear Butte Lake is the future of Bear Butte Park. It is one of the more significant state parks in South Dakota. It is a natural geological feature that attracts a lot of people each year. Bear Butte Lake is located within one mile of the Butte itself and within the borders of the state park. Mr. Hofer stated that Bear Butte Lake is impounded by a WPA dam that was simply built to raise the level of the lake. Bear Butte Lake is the only natural lake in western South Dakota. They have looked at other solutions which might exist in bringing water to the park. The other solutions are simply too expensive to implement. The well that was dug earlier has a casing that is completely deteriorated. Recasing is totally cost prohibitive from the advice given to them by well experts. The proposed solution is the only economical solution to the problem and would enhance the park. The lake, when it is full is very esthetic. When the lake is low there gets to be a lot mud flats and it has the opposite effect.

Chairman Gunderson administered the oath to Henry Bruch.

Mr. Bruch stated he was a downstream resident from Ft. Meade at the point of diversion. Mr. Bruch stated he had a petition for denial signed by thirteen residents of the area and two letters (copy on file) referred to as Exhibits B, C, and D. One letter is from the gentleman who is the owner of the first water right downstream. Mr. Bruch stated he did not feel that anyone could deny the use of surplus water into the diversion. The best way to determine surplus water is to maintain a certain flow in the creek rather than a time limitation. Mr. Bruch stated he would suggest a 6.0 cfs flow at the 79 Bridge which is about 2 miles below Ft. Meade. Then there would be no argument either way. There should be an actual surplus rather than a date limitation. There should be personal notice to downstream residents when they do take it. Any permit granted should be on condition that the Game, Fish and Parks first plug the existing wells, so there is not a double jeopardy to the underground water and the surface water. This water originates in Bear Butte Watershed. The attempt to pipe would be into a different watershed. The names on the petition represent most of the land between Ft. Meade and the confluence with Spring Creek. Bear Butte Lake sits on a high ridge. There is very little natural drainage into the lake. Attempts have been made to maintain the water level, but it is basically a lost cause. Any rise in the lake level spreads over a vast area and still only maintains a few feet. Most of the water is lost to

evaporation during the course of the year. The water is much better used to maintain the underground water table in the valley. Mr. Bruch stated he arrived at 6 cfs because this would cover the needs downstream. Most years during the summer, the creek gets down to a mere trickle. Many spots dry up completely. There are spots where it runs underground and comes up as a spring.

Jackie Huber stated she was representing Mr. Bruch. Ms. Huber questioned if there was water available. Mr. Hatch indicated the only information the Board has on the flow in the creek, is from a point that is below where Spring Creek enters Bear Butte Creek. There are no stream gauges above that point. One of the concerns of Mr. Bruch and the landowners is that those figures are going to be higher at that point in the stream than they would be where Bear Butte Creek crosses a lot of the property owners. The Board should be concerned with the lack of real concrete information on the flow of the Creek above Spring Creek. The Board must decide if this permit is in the public interest and a beneficial use of the water. The staff recommendation indicates some question about the large amount of evaporation that is going to be possible with this type of drainage into the lake. Mr. Hatch indicated that normally the staff would be critical of this type of application if it were made by a private party. But they are giving it favorable consideration because it is an application made by a state agency. Should that type of a preference be made? The Board should make a long term consideration if they want to grant permits to this type of project. It is a creek that is pretty well allocated at this point. There may be future applications for projects that are a lot more feasible and a better use of the water than what is planned in this application.

Mr. Harms stated he felt this application had some validity because it came from a state agency that does not benefit itself.

Ms. Huber stated she did not know how they arrived at the list of petitioners in favor of the application.

Mr. Hatch indicated the petitioners on the list were those who submitted written petitions. Each one individually.

After referring to the list of petitioners, Mr. Bruch indicated that none of the names were of those people who were residents along the creek. Mr. Bruch stated he hoped that the Board did not give this list the same consideration they gave the list of petitioners which he submitted.

Mr. Larson stated the reason the qualification was written using dates instead of amounts was because there were no gauges upstream.

Mr. Talsma stated in their considerations of the qualifications and time limitations of three months, Game, Fish and Parks interest was not only for Bear Butte Lake but also in stream flows in Bear Butte Creek. That is to benefit downstream users and to benefit recreation in Bear Butte Creek too. It happens to be approximately the same 6 cfs as he was looking at in the six months request for flows. In general, Game, Fish and Parks would have no objection to stipulation contingent upon the cfs level vs. the monthly level in the stream.

Mr. Harms questioned how this would be administered.

Mr. Bruch stated he drives by the area at least once every other day. You can see the water coming off the cliff. It forms a waterfall which is very noticeable. In the last twenty years, that only ran a few weeks in the spring under normal situations. Last fall it ran good for about three weeks because of the snow. This is the reason for the recommendation of a flow limitation rather than the time limitation. It does not flow enough water to do any good in Bear Butte Lake whereas the supplemental water that it does put into the creek does a lot of good. It also maintains fish in the creek. Mr. Bruch stated at the point he is suggesting to monitor the creek, either it is running excessively strong or just a trickle. It does not take much determination. It is only a very short period of time that it would be running 6 cfs.

Mr. Hatch stated he did not want to measure 6 cfs at a particular bridge. The real question is if there is enough water in the stream for livestock use and the downstream rights. Those months when there are enough flows for downstream rights you are not going to need to measure. You can not divert the water if the flows are low. Mr. Hatch stated the April 1 thru June 30 was included in the qualification because that appeared to be the main time water was available for diversion. Game, Fish and Parks is asking for the longer time for diversion so they would not have to be asking permission every month to pump water. The time frame is for a better indication of when the diversions will usually take place. Diversions could take place at other times, but they would have to have permission to do that. The staff would like to see a time left in.

Mr. Bruch stated he felt if the water was going into the lake instead of down the stream, the residents will complain. A lot of upstream landowners would be out of water before Mr. Bruch. Between Ft. Meade and Mr. Bruch's fence line, the creek was channeled after the 1972 flood. Upstream owners are out of water almost immediately when the flow stops. They do not have the surplus in the holes as Mr. Bruch does.

Mr. Arend MOVED, SECONDED by Mr. Decker that Application No. 1281-1 be APPROVED with the qualification that diversions of water under Permit No. 1281-1 may be made at any time, provided that water is available first for downstream domestic use, including livestock watering and prior water rights. That the Minnelusa Formation well authorized by Water Right No. 266-1 and the Madison Formation well drilled in 1956 be considered abandoned or forfeited and plugged pursuant to SDCL 46-6-18. MOTION CARRIED.

Mr. Selken questioned if there was a time limit for the plugging of the wells.

Mr. Hatch stated by the motion the wells are considered abandoned and then subsequently plugged with staff supervision. There is no time limit. It would depend on their budget.

Mr. Selken stated he has been working with Game, Fish and Parks trying to get the wells plugged.

Mr. Hofer stated they were aware that the well that is abandoned must be plugged. They are unclear as to whose responsibility in State Government it is to plug the wells. They have no quarrel with the fact that the State law needs to be addressed. This particular lake and well is involved with the State Park which is part of the Division of Parks and Recreation which is funded by the

Legislature. Who makes the request to the Legislature and in whose budget does it belong?

Mr. Guhin stated the owner of the property is responsible for the well.

Mr. Hatch stated setting a deadline will cause the Department of Game, Fish and Parks to establish a priority for the money.

Mr. Waldner MOVED, SECONDED by Mr. Arend that the well abandoned under Water Right No. 266-1 and the Madison well be plugged within 12 months.

Mr. Talsma stated that the 12 months is impractical because the budgets are already set for FY85. There are no funds to take care of this type of contingency.

Mr. Waldner stated he would WITHDRAW his motion. Mr. Arend would not withdraw his second.

Chairman Gunderson called for a vote on the motion. MOTION LOST.

Mr. Decker MOVED, SECONDED by Mr. Waldner that the Minnelusa well abandoned under Water Right No. 266-1 and the Madison well be plugged within 18 months. MOTION CARRIED.

Meeting recessed at 3:25 p.m.

Meeting reconvened at 3:35 p.m.

CONSIDERATION OF FINDINGS OF FACT, CONCLUSIONS OF LAW AND FINAL DECISION

WAUBAY LAKES ORDINARY HIGH WATER MARK

Mr. Decker MOVED, SECONDED by Mr. Waldner to ADOPT the Findings of Fact, Conclusions of Law and Final Decision as prepared by the Attorney General's Office. MOTION CARRIED.

Mr. Decker MOVED, SECONDED by Mr. Waldner to REJECT the Findings of Fact, Conclusions of Law and Final Decision as prepared by the South Dakota Wildlife Federation and the Waubay Lake Owners Association. MOTION CARRIED.

CANCELLATION CONSIDERATIONS OF PLACER MINING CLAIMS IN HARDING COUNTY

Mr. Hatch stated in Harding County there are several old filings that are actually placer mining claims. The Board was presented with the notice which was published in the newspaper in the Harding County area (copy on file). This action proposes to cancel the old water rights filings. With one exception, there are no land locations. All we have is a name. It was advertised and we did not receive any objections to the cancellation considerations.

Mr. Decker MOVED, SECONDED by Mr. Waldner that Water Right Filings No. 065-1, 083-1, 092-1, 0118-1, 0162-1, 0168-1, 0175-1, 0184-1, 0225-1, 0234-1, 0310-1, 0339-1, 0359-1, 0122-1, 0123-1, 0124-1, 0126-1, 0246-1, 0288-1, 0289-1, 0290-1, 0378-1, 0389-1, 0390-1, 0391-1, 0167-1 and 0187-1 be CANCELLED because the filings are actually location notices for placer mining claims and no water rights can be claimed based upon those filings. MOTION CARRIED.



# Department of Water & Natural Resources

Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501

Water Rights Division  
605 773-3352

November 2, 1983

## NOTICE

TO: Persons Interested in Dept. of Game, Fish & Parks  
Application No. 1281-1

FROM: John Hatch, Chief Engineer, Water Rights Division

SUBJECT: Approval of Application No. 1281-1

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

Following a public hearing October 5, 1983, the Water Management Board APPROVED the Dept. of Game, Fish and Parks Application No. 1281-1 from the Fort Meade Water Supply Reservoir Overflow for public recreation purposes in Bear Butte Lake with the following qualifications:

1. That diversions of water under Permit No. 1281-1 may be made at any time, provided that water is available first for downstream domestic use, including livestock water and prior water rights.
2. That the Minnelusa Formation Well authorized by Water Right No. 266-1 and the Madison Formation Well drilled in 1956 be considered abandoned or forfeited and plugged pursuant to SDCL 46-6-18 and that both wells be plugged within 18 months.

South Dakota Statutes provide that the decision of the Board may be appealed to the courts.

JH:ks





# Department of Water & Natural Resources

Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501

Water Rights Division  
605 773-3352

November 15, 1983

## NOTICE

TO: Persons Interested in Dept. of Game, Fish & Parks  
Application No. 1281-1

FROM: John Hatch, Chief Engineer, Water Rights Division *John Hatch*

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

Enclosed please find a copy of the Findings of Fact, Conclusions of Law and Final Decision regarding approval of Application No. 1281-1, Dept. of Game, Fish and Parks. The Findings of Fact, Conclusions of Law and Final Decision have been prepared by the Attorney Generals Office.

The Water Management Board will consider proposed Findings, Conclusions and Decisions for Application No. 1281-1 at 1:00 pm, November 30, 1983 in Room 216, Joe Foss Building, Pierre, South Dakota.

ks

enclosure

*cc: to [unclear]  
[unclear]*



1281-1

# Department of Water & Natural Resources

Joe Foss Building  
523 East Capitol

Pierre, South Dakota 57501-3181

WATER RIGHTS DIVISION  
(605) 773-3352

January 25, 1984

## NOTICE

Jackie Huber, Attorney  
Box 509  
Aspen, Colorado 81612

RE: 1281-1, 0502-1 and 0503-1

Dear Ms. Huber:

November 30, 1983, the Water Management Board delayed consideration of Findings of Fact, Conclusions of Law and Final Decisions on Water Permit Application No. 1281-1, Department of Game, Fish and Parks and cancellation of Water Right Filings No. 0502-1 and 0503-1. These considerations were delayed to allow you to be present.

Consideration of proposed Findings, Conclusions and Final Decisions on No. 1281-1, 0502-1 and 0503-1 is now scheduled at 1:15 pm, February 15, 1984 in the Civil Defense Room, basement State Capitol Building, Pierre, South Dakota.

December 2, 1983, I advised that the Board had directed that any proposed Findings of Fact, Conclusions of Law and Final Decisions are to be submitted and received by individual Board Members prior to February 1, 1984.

Please advise if you have any questions.

Very truly yours,

John Hatch, Chief Engineer  
Water Rights Division

JH:ms

cc: Henry Bruch  
Jack Merwyn

STATE OF SOUTH DAKOTA  
WATER MANAGEMENT BOARD

IN THE MATTER OF WATER PERMIT )  
APPLICATION NO. 1281-1 BY THE )  
SOUTH DAKOTA DEPARTMENT OF )  
GAME, FISH AND PARKS )

FINDINGS OF FACT,  
CONCLUSIONS OF LAW,  
FINAL DECISION

Having heard and considered all the evidence in the above-entitled matter at its regularly scheduled hearing on October 5, 1983 at the Civil Defense Meeting Room, State Capitol, Pierre, South Dakota, the South Dakota Water Management Board hereby makes the following:

FINDINGS OF FACT

1. On April 27, 1983 an application for a permit to appropriate water was received by the Division of Water Rights, Department of Water and Natural Resources from the South Dakota Department of Game, Fish and Parks.

2. The application requested five hundred and forty acre feet of water per year or whatever quantity was necessary to fill Bear Butte Lake.

3. The source of the water would be the overflow from the Fort Meade water supply reservoir which is supplied by water from a collection gallery.

4. The overflow from the water supply reservoir normally flows into Bear Butte Creek downhill from the reservoir.

5. The proposed diversion point is in the NE 1/4 of the NE 1/4, Section 10, Range 5 East, Township 5 North, Black Hills Meridian in Meade County, South Dakota east of Sturgis.

domestic users or those who have prior water rights could be provided if minimum flows were maintained. The Chief Engineer also recommended that diversions could be allowed at other times of the year when flows in Bear Butte Creek were sufficient.

14. Petitioner Henry Bruch appeared in person and through counsel at the hearing on October 5, 1983. Mr. Bruch testified that the use of surplus water from Bear Butte Creek for Bear Butte Lake was not a problem but that he was concerned about how the determination of surplus would be made and who would be making that determination. Mr. Bruch, a landowner downstream from Fort Meade presented a petition for denial of the permit signed by thirteen area residents. Mr. Bruch also presented two letters requesting the Board to deny the permit.

15. Mr. Bruch recommended that the permit be limited to diversions only when there is a flow in excess of six cubic feet per second at the Highway 79 bridge, approximately two miles below Fort Meade.

16. Officials from the South Dakota Department of Game, Fish and Parks agreed that, in order to maintain minimum flows for their own purposes in Bear Butte Creek, diversions would not be made when flows in the creek are less than six cubic feet per second.

17. There is no dispute that at certain times of the year excess water is available in Bear Butte Creek to satisfy the proposed application as well as the needs for downstream domestic uses and those holding prior water rights.

18. The use of water for recreation provides a benefit and is in the public interest.

19. Approving Water Permit No. 1281-1 with the condition that sufficient water be by-passed for domestic users and those with prior water rights is appropriate.

20. Development of this permit will not impair existing rights.

21. Two wells have been drilled in the past to help stabilize the lake level. A water permit was issued for one of these wells and the other well was drilled without a permit. Neither well flows at the ground surface and neither one is being used. Both of these wells are subject to cancellation for abandonment and forfeiture.

22. All persons who wished to speak to Water Permit No. 1281-1 were given full opportunity to do so.

#### CONCLUSIONS OF LAW

1. The Board has jurisdiction to consider the approval or denial of Water Permit Application No. 1281-1.

2. The application complied in all respects with law.

3. Notice and publication of the hearing complied in all respects with law.

4. All persons who are interested in this application were given full rights to appear and present evidence and testimony. All due process rights of interested persons were provided by the Board.

5. The Board is required to approve a permit for the appropriation of water when unappropriated water is

available, the use of the water will be a beneficial use, the development of the permit will not impair existing water rights and the application is in the public interest.

6. The Board has the authority to place whatever conditions are necessary on a permit in order to protect the public interest and the natural resources of this state.

FINAL DECISION

Water Permit Application No. 1281-1 is hereby approved subject to the following qualifications:

1. That the diversions of water under Permit No. 1281-1 may be made at any time, provided that water is available first for downstream domestic use, including livestock water and prior water rights.

2. That the Minnelusa Formation well authorized by Water Right No. 266-1 and the Madison Formation well drilled in 1956 be considered abandoned or forfeited and plugged pursuant to SDCL 46-6-18 and that both wells be plugged within eighteen months.

Dated and signed this 15th day of <sup>February</sup> ~~November~~ 7-

4  
1983-

Marian B. Sunderson  
CHAIRMAN

Margaret H. Walter  
SECRETARY



# Department of Water & Natural Resources


Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501

Water Rights Division  
605 773-3352

March 2, 1984

## NOTICE

TO: Persons Interested in Dept. of Game, Fish & Parks  
Permit No. 1281-1

FROM: John Hatch, Chief Engineer, Water Rights Division 

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

This is to notify you that a final Decision including Findings of Fact and Conclusions of Law were adopted by the Water Management Board for approval of Permit No. 1281-1, Dept. of Game, Fish and Parks which was considered at the February 15, 1984 meeting.

The final Decision, Findings and Conclusions are on file in this office and signed copies will be furnished upon request. South Dakota Statutes provide that the decisions of the Board may be appealed to the Courts.

ks





# Department of Water & Natural Resources

Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501

June 8, 1984

Jack Merwin, Secretary  
Dept. of Game, Fish and Parks  
Anderson Bldg.  
Pierre SD 57501

Dear Mr. Merwin:

Enclosed herewith is your Water Permit No. 1281-1 as approved by the Water Management Board authorizing you to construct your water diversion system and the water to beneficial use, not exceeding the limits as specified in said Water Permit No. 1281-1.

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 your Water License may be issued to you, thus completing your acquisition of a Water Right.

Very truly yours,

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

JOHN HATCH, Chief Engineer  
Water Rights Division

JH:ks

enclosure

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period-i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.

WNR-809-5/83

South Dakota  
Department of  
Game, Fish and Parks

Division of Parks & Recreation  
Sigurd Anderson Building  
445 East Capitol Avenue  
Pierre, South Dakota 57501-3185  
(605) 773-3391

January 31, 1985

John Hatch, Director  
Water Rights Division  
Foss Building  
Pierre, SD 57501

Dear John:

Enclosed you will find the signed "Notice of Completion of Water to Beneficial Use" form on Water Rights Permit Number 1281-1. The water diversion was constructed during 1984 as a result of alot of cooperative effort by the local sportsman club, the National Guard unit, several federal agencies and the Game, Fish and Parks Department. We feel the project was a real successful venture.

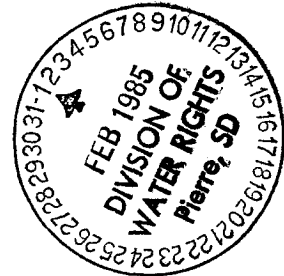
Sincerely,



Lowen Schuett  
DIRECTOR

LS/tk

Enclosure



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

Post Office \_\_\_\_\_

Date December 19, 1985

TO: Water Rights  
Joe Foss Building  
Pierre, South Dakota 57501

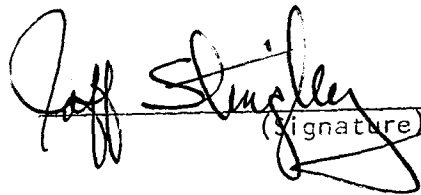
Dear Sirs:

This is to inform you that I have completed the construction of the water diversion system and/or that I have put the water to beneficial use to maximum extent it is going to be used, not exceeding the amounts as specified in Water Right No. 1281-1.

Water Right Permit No. 1281-1 states that the diversion system is to be constructed by February 15, 1989, and that the water is put to beneficial use by February 15, 1993.

The diversion system was completed on September 14, 1984. Applying the water to beneficial use was completed on September 14, 1984.

You may schedule an inspection so that ~~the Certificate of Construction and/or~~ the Water License may be issued, thus completing my acquisition of a water right.

  
\_\_\_\_\_  
(Signature)



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DEPARTMENT OF WATER AND NATURAL RESOURCES  
SOUTH DAKOTA GEOLOGICAL SURVEY  
Science Center, USD  
Vermillion, SD 57069  
(605) 677-5227

September 27, 1985

Mr. Jeff Stingley, Secretary  
Department of Game, Fish,  
and Parks  
445 East Capitol  
Pierre, SD 57501

**RECEIVED**

OCT 1 1985

**DEPT. OF WATER &  
NATURAL RESOURCES**

Dear Mr. Stingley:

This letter is in response to your letter of August 6, 1985, to Bob Neufeld, concerning ground-water information around Bear Butte Lake.

Geologically, the area around Bear Butte Lake is fairly complex and there is very little data available. In general, the geologic formations are dipping downwards south and west of Bear Butte. As examples, the Milin No. 1 (Bear Butte well) located 1 mile north of Bear Butte Lake penetrated the Minnelusa Formation at a depth of 370 feet (see enclosed logs). A nearby well (Hugh Milin - landowner) found the Minnelusa top at 445 feet (see enclosed log). One mile to the south, which is just a few hundred feet from the north shore of Bear Butte Lake, a well drilled to 940 feet (Hoel - landowner) had not yet penetrated the Minnelusa. As you can see from the examples cited above, the top of the Minnelusa could vary considerably depending on the location around the lake and it is estimated to be between 1,000 and 1,500 feet deep. Chances are that the Minnelusa would be shallowest at the northeast end of the lake.

A well drilled near Bear Butte Lake would probably flow, but no realistic estimate of the flow rate can be made with present data. The Milin No. 1 well originally flowed about 3,000 gpm when drilled in the 1920's. However, flow in 1956 was reported to be 100 gpm. This single well has probably caused considerable head decline in the area since it was drilled. Another Minnelusa well at Bear Butte Lake would increase the rate of head decline.

The general water quality that might be expected from the Minnelusa is indicated on the two enclosed water quality reports (Milin No. 1 well and Veterans Administration well). You will note there are no pH measurements available.

The water temperature at the Veterans Administration well is reported 50 degrees Fahrenheit and the Milin No. 1 well water temperature is reported 58 degrees Fahrenheit. The Minnelusa water at Bear Butte Lake would probably fall within this range.

Mr. Jeff Stingley  
September 27, 1985  
Page 2

It might be possible to field check the two private wells mentioned (Milin and Hoel) and obtain pH and water temperature values as well as collect a sample for laboratory analysis.

It is not uncommon around the Black Hills for water in the Madison Formation to be of better quality and under higher pressure than in the Minnelusa. Unfortunately, data on the Madison do not exist in this vicinity. There is also a slight chance that the Madison water could be warmer than the Minnelusa water; however, there is no data to indicate whether this is the case at this location.

If you were to propose a test hole-well, I would suggest drilling to the Minnelusa and testing it for flow, pH, temperature, and general water quality. If the results were unfavorable, you could deepen the hole and test the Madison Formation which would be about 400 to 500 feet below the top of the Minnelusa. I should warn you, however, about the possibility of granitic rocks underlying the Minnelusa, in which case all the above estimations could be invalid. However, you should be aware of this possibility and provide contingency plans if you propose a test hole-well.

I hope this information will be of use to you. If we can help in any way, please contact our office.

Sincerely,



Lynn S. Hedges  
Geologist

For the State Geologist

LSH:co  
Enclosures

MEADE COUNTY

Milin No. 1 (Bear Butte) Well

LOCATION: SW.  $\frac{1}{4}$ , SW.  $\frac{1}{4}$ , Sec. 18, T. 6 N., R. 56 E., Meade County

OWNER: Bear Butte Oil Company

DRILLER: John P. Everett

DATE OF DRILLING:

CORB ELEVATION:

SOURCE OF INFORMATION: From a letter by John P. Everett, March 31, 1923

Feet

0 - 180	"Red beds"
180 - 220	"Minnekahta"
220 - 370	"Opeche"
370 - 820	"Minnelusa"
820 - 830	"Granite"

Map Location #11

BEAR BUTTE WELL

Location . . . . . Sec. 18, T 6 N., R 6 E., SW 1/4  
 When drilled (year) . . . . . 1921  
 Drilling method . . . . . Cable tool  
 Depth . . . . . 820 feet  
 Producing formation . . . . . Minnelusa  
 Yield of water . . . . . Originally 3,000 gallons per minute  
 Temperature . . . . . 58 degrees Fahrenheit (Cold water)

Quality of water:

	Parts per million	Grains per gallon
Calcium . . . . .	288.0 . . . . .	16.79
Chloride . . . . .	5.3 . . . . .	0.31
Fluoride . . . . .	0.6 . . . . .	0.03
Magnesium . . . . .	61.0 . . . . .	3.56
Nitrate . . . . .	0.62 . . . . .	0.04
Sodium plus potassium . . . . .	2.3 . . . . .	0.13
Sulfate . . . . .	752.0 . . . . .	43.84
Hardness (CaCO <sub>3</sub> ) . . . . .	970.0 . . . . .	56.55
Total Solids . . . . .	1213.0 . . . . .	70.72





Map Location #12

VETERAN'S ADMINISTRATION WELL

Location . . . . . Sec. 11, T 5 N., R 5 E., NW 1/4  
 When drilled (year) . . . . . 1940  
 Drilling method. . . . . Cable tool  
 Depth . . . . . 1800 feet  
 Producing formation . . . . . Minnelusa  
 Yield of water . . . . . 540 gallons per minute  
 Temperature . . . . . 50 degrees Fahrenheit (Cold water)

Quality of water:

	Parts per million	Grains per gallon
Calcium . . . . .	210.0 . . . . .	12.24
Fluoride . . . . .	0.7 . . . . .	0.41
Iron . . . . .	1.7 . . . . .	0.10
Magnesium . . . . .	56.0 . . . . .	3.26
Nitrate . . . . .	3.3 . . . . .	0.19
Silica . . . . .	11.0 . . . . .	0.64
Sodium plus potassium — .	45.0 . . . . .	2.62
Sulfate . . . . .	605.0 . . . . .	35.27
Bicarbonate . . . . .	258.0 . . . . .	15.04
Hardness (CaCO <sub>3</sub> ) . . . . .	753.0 . . . . .	4.26
Total solids . . . . .	1060.0 . . . . .	61.80

Conversation or File Documentation

NAME OF PERSON OR FILE: GF&P wells near Bear Butte

ADDRESS: \_\_\_\_\_ COUNTY Meade

DATE: 10/18/85 TELEPHONE \_\_\_\_\_

RE: \_\_\_\_\_

COMMENTS:

I looked at the GF&P wells near Bear Butte on October 17, 1985 and saw no change in their condition. It was obvious that no attempt has been made to plug these wells.

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

NAME: Tim Schaal

DATE: 11-25-85

NAME OF PERSON Mike Jackley, states Attorney TELEPHONE \_\_\_\_\_

ADDRESS \_\_\_\_\_ COUNTY Meade

Location or Land Description: \_\_\_\_\_

Comment or Complaint: <sup>Jackley called because he</sup> Has received a complaint from Henry Bruch concerning diversions of water by G F & P under No. 1281-3 into Bear Butte Lake. Bruch believes diversion deprives him of water that recharges the gravel along Bear Butte Creek. Bob Hanta <sup>G & P</sup> called and advised that we ~~would~~ receive a complaint. G F & P is only diverting a few gallons to keep pipe from freezing up.  
(When applicable, complete following)

Well location if different from above: \_\_\_\_\_

Date well drilled: \_\_\_\_\_ Well Driller \_\_\_\_\_

Purpose of well: \_\_\_\_\_  
(domestic, irrigation, municipal, other)

Water Level: \_\_\_\_\_ Flow, if flowing \_\_\_\_\_

Depth of well: \_\_\_\_\_ Can well be controlled? \_\_\_\_\_

Pump setting: \_\_\_\_\_ Casing size: \_\_\_\_\_

Type of pump: \_\_\_\_\_ Screen type: \_\_\_\_\_

Can pump be lowered: \_\_\_\_\_ Casing material \_\_\_\_\_

When pump last pulled, pump replaced or anything done to well \_\_\_\_\_

Pump Capacity \_\_\_\_\_

Pumping dirty or riley water now and has well ever pumped sand or dirty or riley water in the past? \_\_\_\_\_

Other: I told Jackley we would investigate, although I did not believe the amount of water diverted was harming Bruch. Contact local Conservation Officer.

NAME: John Hanta

NAME OF PERSON OR FILE: Henry Bruch & Dept. of G.F.P.  
 ADDRESS: Sturgis, SD COUNTY Meade  
 DATE: 3/24/86 TELEPHONE \_\_\_\_\_  
 RE: Diverted flows into Bear Butte Lake.

## COMMENTS:

On March 20, 1986, Tim Schaal and I investigated Henry Bruch's complaint concerning flows of Bear Butte Creek. He feels ~~that~~ water being diverted to Bear Butte Lake is effecting the water levels in the gravels along the creek. Mr. Bruch wants the water to be diverted into Bear Butte Creek and not Bear Butte Lake which he feels would increase the flows in the creek and water levels in the gravels.

On March 20, there was 50 gpm being diverted from <sup>the overflow</sup> of the Fort Meade water supply storage tanks into Bear Butte Lake. We also measured the flows on Bear Butte Creek in the following points:

1. NE<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> Sec 10-TSN-RSE - 0.29 cfs.
2. NW corner Sec 5-TSN-R6E - 1.04 cfs.  
downstream side of Hwy 79 Bridge.
3. 3040' N52°W from SE cor Sec 32-TSN-R6E - 0.47 cfs.
4. Center Sec. 28-TSN-R6E - 1.08 cfs.  
upstream side of Bridge crossing stream.

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

NAME: \_\_\_\_\_

NAME OF PERSON OR FILE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ COUNTY \_\_\_\_\_

DATE: \_\_\_\_\_ TELEPHONE \_\_\_\_\_

RE: \_\_\_\_\_

COMMENTS:

Bear Butte Creek flows originate from  
springs in the flood plain gravels.  
Where the water level in the gravels  
intersects the ~~ground~~ ground  
surface there is water flowing.  
After the 1972 flood the creek  
was rechanneled. As a result much  
of the creek bed is ~~higher~~ higher than  
the original creek bed. In these areas  
there is no flow in the creek. From  
inspections of the creek we found  
the creek would flow then disappear  
into the gravels only to begin  
flowing again further downstream.  
Mr. Bruch was concerned about  
the dry portions of the creek  
through his property. It appeared his  
main concern was a dry portion at  
the beginning of his property where  
the creek had been rechanneled. It was  
evident there had been no flow over that  
portion for quite some time.

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

NAME: \_\_\_\_\_

NAME OF PERSON OR FILE: Henry Bruch

ADDRESS: \_\_\_\_\_ COUNTY \_\_\_\_\_

DATE: \_\_\_\_\_ TELEPHONE \_\_\_\_\_

RE: \_\_\_\_\_

COMMENTS:

On March 21, we talked to Dale Morrison and Lee Benbo, Engineering Department, Fort Meade. We asked them to start diverting the <sup>over</sup>flows into Bear Butte Creek instead of the Lake. We informed them that we would be back on March 26, 1986 and tell them whether to divert their overflows into the Lake or into the creek.

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

NAME: Jim Saltsud

NAME OF PERSON OR FILE: Dept. of GFIPADDRESS: \_\_\_\_\_ COUNTY MeadeDATE: March 28, 1986 TELEPHONE \_\_\_\_\_RE: Henry Bruch complaint

COMMENTS:

On March 26, 1986 Tim Tollefsrud and I made another investigation of Bear Butte Creek. The Ft. Meade overflow was running into Bear Butte Creek at approximately the same rate as before (50gpm). We measured the flow of Bear Butte Creek in the same location as our first measurement from last week. We recorded a flow rate of 0.38 cfs. We measured the flow in the creek at a point just below the Ft. Meade overflow. We recorded a flow rate of 0.97 cfs. There are several springs in the area between these two points and the flow readings we took indicate there was an increase in flow from these springs since last week. We measured the flow in the creek just below the Hwy 79 bridge. We recorded a flow rate of 1.04 cfs the same reading as last week. We then talked to Henry Bruch and asked if we could get on his land to measure flows. He said he was going to Newell but thought we could get out there without any trouble. I then told him about

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

NAME: \_\_\_\_\_

NAME OF PERSON OR FILE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ COUNTY \_\_\_\_\_

DATE: \_\_\_\_\_ TELEPHONE \_\_\_\_\_

RE: \_\_\_\_\_

COMMENTS:

Water Right Filing No. 0501-1 and why it should be cancelled and it probably should have been included in the other Water Right Filings we cancelled. Mr. Bruch got upset about this and told us to stay off his land. He said everytime he deals with us he loses and we take something away from him. I tried to explain to him there was nothing there for him to lose and we need to cancel it for bookkeeping purposes. He said why cancel it if nothing is there? I then asked him if we went out to the location described in Water Right Filing No. 0501-1 if he could show us any irrigation. He said we had to stay off his land unless we had a search warrant. We then got into a discussion about ET&I and the same story we heard before when we cancelled his Water Right Filings. He said if we make him live up to all the qualifications we should also make G.F.P do so. I told him we felt he had enough water for domestic use. He then said he did not have enough water to irrigate with and thought G.F.P should not be allowed to divert the Ft. Meade overflows.

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

NAME: \_\_\_\_\_

NAME OF PERSON OR FILE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ COUNTY \_\_\_\_\_

DATE: \_\_\_\_\_ TELEPHONE \_\_\_\_\_

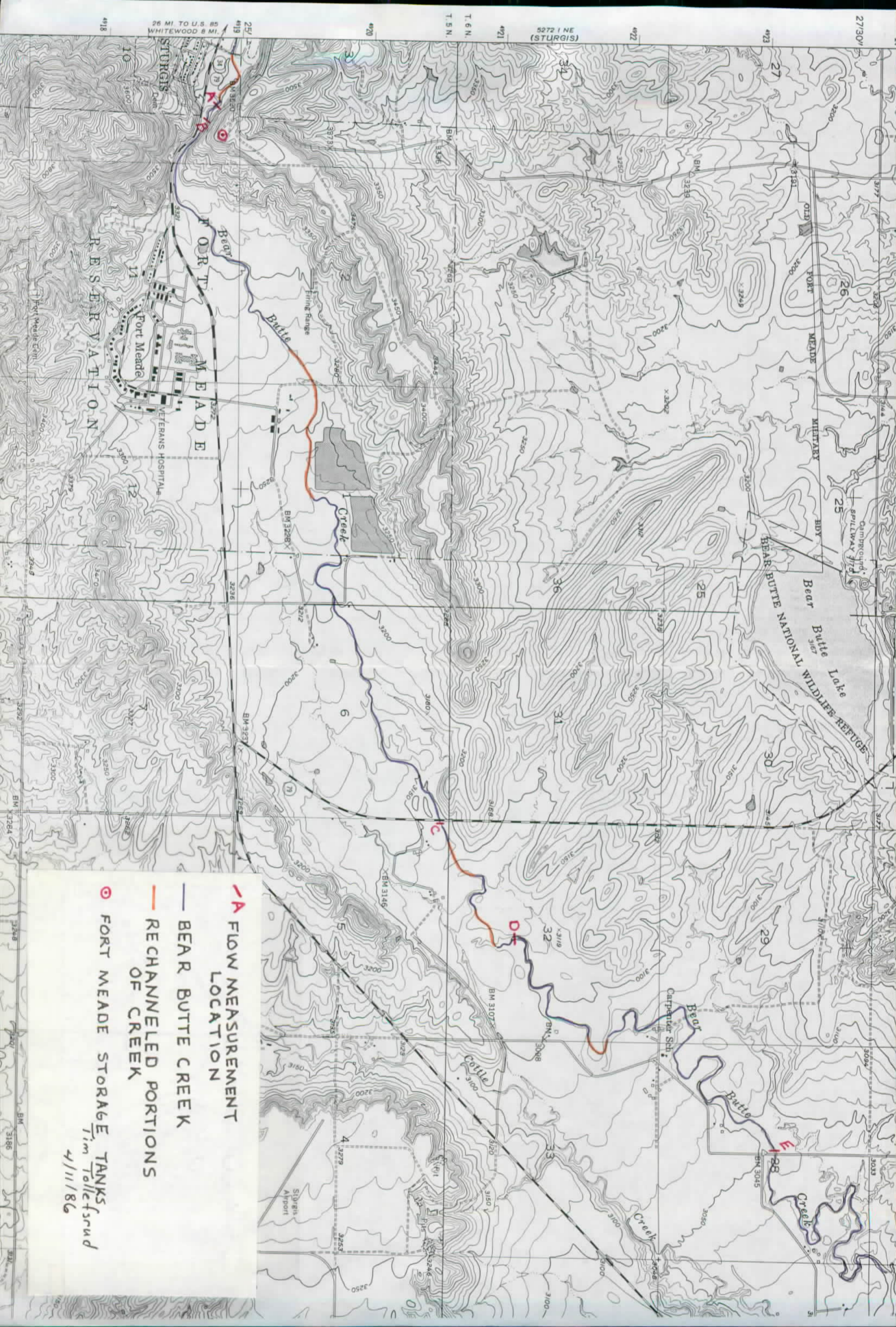
RE: \_\_\_\_\_

COMMENTS:

Mr. Bruch has also mentioned several times that one of the qualifications on the G.F.P permit was to plug the 2 wells. G.F.P has not done anything to these wells yet. He said we would have to deal with his attorney concerning the cancellation of Water Right Filing No 0501-1.

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

NAME: Trin Schaul



**▲** FLOW MEASUREMENT  
LOCATION

**—** BEAR BUTTE CREEK  
**—** RECHANNELED PORTIONS  
OF CREEK

**○** FORT MEADE STORAGE TANKS

Tim Tollefsrud  
4/11/86

TO: Jim Winterton  
FROM: Gary Stephenson

Please be advised that 450 THOUSAND gallons of sewage leaks from ponds daily. A good portion of this flows into Bear Butte Creek..

Call 394-2384 if you need additional information.



# Department of Water & Natural Resources

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

April 29, 1988

Tony Gullett  
Park Manager  
Bear Butte State Park  
Sturgis, SD 57785

Dear Mr. Gullett:

I am writing in response to our discussion on water availability in Bear Butte Creek. When water from the Fort Meade overflow may be diverted to Bear Butte Lake needs to be clarified. Based upon our investigations of Bear Butte Creek flows, we believe that there is some correlation between flows in Bear Butte Creek and the quantity of water which overflows the Fort Meade Reservoir. Lower overflow usually means the Creek (even above the confluence of the Fort Meade overflow and the Creek) will have less flow. Conversely the higher the overflow, the more flow in the creek. We have found when the overflow is less than 100 gallons per minute, Bear Butte Creek is providing some water from its adjacent alluvial deposits, but only to a limited extent.

In order answer the complaints and to provide an operating plan for diversion of the overflow water, I want to try the following temporary operational plan for diverting flows from the Fort Meade overflow:

- 1) From April 1 through May 31, all overflow from the Fort Meade Reservoir can be diverted when the overflow exceeds 100 gallons per minute or 144,000 gallons per day. When the overflow is equal to or less than 100 gallons per minute, all overflow water must be bypassed to Bear Butte Creek.
- 2) From June 1 through August 31, all overflow waters must be bypassed to Bear Butte Creek. The exception to this is when in excess of 10 cfs is available in Bear Butte Creek at the Highway 79 bridge.
- 3) From September 1 through September 30 follow the same restriction as in Item No. 1.
- 4) From October 1 through March 31, all overflow water from the Fort Meade reservoir may be diverted to Bear Butte Lake regardless of the quantity.

April 29, 1988  
Tony Gullett  
Page 2

During the temporary operating plan, the Division of Water Rights will periodically measure the flow at a point immediately above and below the overflow area and at the Hwy 79 Bridge. These measurements are needed to determine if there is correlation between the overflow flows and the flows in Bear Butte Creek.

I would like for you to keep a weekly record of the overflow from Fort Meade Reservoir whether used or not for Water Permit No. 1281-1.

If you have any questions, please let us know.

Very truly yours,



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

cc: Representative Kenneth McNenny  
Henry Bruch  
Brook Hershey  
Ron Koth, Department of Game, Fish and Parks



# Department of Water & Natural Resources

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

May 4, 1988

Henry Bruch  
Box 1, Howes Rt.  
Sturgis, SD 57783

Dear Mr. Bruch:

I have enclosed a copy of the minutes of the October 5, 1983 regarding the Game, Fish, and Parks water permit no. 1281-1 for use of the Ft. Meade overflow water. Kent Buhler advised me that you were still waiting to receive a copy of the minutes. I was under the impression that the minutes had been sent. I apologize for any inconvenience that this may have caused you.

If you need any further assistance, please do not hesitate to contact us.

Very truly yours,

James Winterton  
Natural Resources Engineer  
605 773-3352

enclosure





# Department of Water & Natural Resources

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

## NOTICE

DATE: November 7, 1988 1281-1

TO: Tony Gullett, Park Manager  
Bear Butte State Park  
Sturgis, SD 57785

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

SUBJECT: Diversions by Game, Fish, and Parks from the Ft. Meade  
Overflow

The Game, Fish, and Parks diversion from the Ft. Meade overflow is authorized under Water Permit No. 1281-1. It is being operated under the restrictions set forth in an operating plan developed by the Division of Water Rights and submitted to you by letter dated April 29, 1988. However, because of the dry conditions prevailing in western SD, the no flow conditions in Bear Butte Creek at Hwy 79 bridge and the domestic needs (livestock water) along Bear Butte Creek, we must suspend the operating plan. Therefore, effective immediately, no diversions are to be made from the Ft. Meade Overflow Waters, unless flow conditions change.

We will continue to monitor flows in Bear Butte Creek. If you notice any major change in the flows, please let us know.

We tried to call you several times November 7, 1988; however, we were unable to reach you. Let us know, if you have any questions.

cc: Representative Kenneth McNenny  
Henry Bruch  
Brook Hershey  
Ron Koth, GF&P Department








# Department of Water & Natural Resources

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

March 10, 1989

## NOTICE

TO: Tony Gullett, Park Manager  
Bear Butte State Park  
Sturgis, SD 57785

FROM: Jim Winterton   
Natural Resources Engineer  
For John Hatch, Chief Engineer  
Water Rights Division  
(605) 773-3352

SUBJECT: Rescission of November 7, 1988 Suspension of the  
Operating Plan and Order to Cease Withdrawals by  
Department of Game, Fish, and Parks from the Ft. Meade  
Overflow.

Following up on our telephone conversation March 10, 1989, your request to divert the overflow waters of the Ft. Meade Reservoir is approved subject to the operating plan established by our letter dated April 29, 1988. We believe that diversions can be allowed at this time because of runoff to Bear Butte Creek and, as reported by you, the flows at the Hwy 79 bridge have improved.

As stated in the operating plan, during March you will be allowed to divert the overflow water. However, beginning April 1, 1989, 100 gallons per minute of overflow water must be available in order to continue diversion of the overflow. From June 1, 1989 to August 31, 1989 all overflow must be bypassed to Bear Butte Creek unless in excess of 10 cfs is available in Bear Butte Creek at the Hwy 79 Bridge.

If you have any questions regarding the operating plan, please contact me.

cc: Representative Kenneth McNenny  
Henry Bruch  
Brook Hershey  
Ron Koth, Department of Game, Fish and Parks



6. The water would be diverted via a pipeline from the reservoir, then through a natural draw and into a diversion channel which would direct the flows into Bear Butte Lake.

7. The water would be used for recreation purposes. The lake is currently used for fishing, swimming, boating, and as a wildlife refuge.

8. The notice of the hearing was published in the Meade County Times Tribune of Sturgis, South Dakota on June 8, 1983 and June 15, 1983.

9. The Chief Engineer had recommended deferral of Permit Application No. 1281-1 in order to allow the staff to make further investigation of this matter.

10. A petition was received by the Board on July 6, 1983 from Henry Bruch who expressed concern about the lack of flow in Bear Butte Creek at certain times of the year or during certain years and about the possibility that he would be adversely affected by diversions from Bear Butte Creek. Mr. Bruch requested an extension of time for consideration of the permit.

11. The hearing scheduled for July 19, 1983 was rescheduled for October 5, 1983.

12. Twenty-four letters from South Dakota citizens were received by the Board in support of the permit application.

13. A revised recommendation for approval was issued by the Chief Engineer. The recommendation was based on water being available during the months of April 1st through June 30th and upon the fact that protection for



# Department of Water & Natural Resources


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

March 13, 1989

1281-1

## NOTICE

TO: Tony Gullett, Park Manager  
Bear Butte State Park  
Sturgis, SD 57785

From: Jim Winterton   
Natural Resources Engineer  
For John Hatch, Chief Engineer  
Water Rights Division  
(605) 773-3352

SUBJECT: Order to Cease Diversions under Water Permit No. 1281-1  
from the Ft. Meade Overflow by the Department of Game,  
Fish, and Parks.

Following up our telephone conversation on March 13, 1989, we must require the Dept. of Game, Fish, and Parks to cease diversions from the Ft. Meade overflow waters. We have received complaints from the domestic users downstream on Bear Butte Creek. They contend that the creek has insufficient flows to satisfy their livestock watering needs. You verified to me that there is now no flow going beyond the Hwy 79 Bridge.

The basis that you were allowed to begin diversions was because you had stated last week that flows were improving at the Hwy 79 Bridge. We have been using the Hwy 79 bridge as a primary check point for allowing or disallowing diversions. With no flow beyond the bridge, diversions must cease. We are continuing to investigate the available water supplies in Bear Butte Creek and the effects that the Ft. Meade overflow waters may have on available water supplies. I have discussed this matter with Doug Hofer, Department of Game, Fish, and Parks. We are proposing to meet and discuss this matter in the near future.

Please notify me if you have any questions.

cc: Representative Kenneth McNenny  
Henry Bruch  
Brook Hershey  
Ron Koth, Dept. of G,F,&P  
Doug Hofer, Dept. of G,F,&P  
Tim Edman, Governors Office



**SOUTH DAKOTA**  
**Department of**  
**Water & Natural Resources**

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

MEMO TO: James Winterton  
FROM: M. Rassool Ahadi *M. Rassool Ahadi*  
RE: Bear Butte Creek Water Shortage  
DATE: March 16, 1989

On March 13, 1989, at 2:35 pm CST, I arrived at the Hwy 79 bridge. The creek was not flowing. Some ice and water could be seen on the bottom of the creek bed.

To see Tony Gullett, I drove up to the Bear Butte State Park. At about 2:50 pm CST, I finally found Tony. He said that Brooke Hershey had called him last night and told him about the water shortage. He also said that on Friday, after making sure there was water in the creek, he had called Jim Winterton. He stated that he had been diverting water since Friday and that he stopped diverting today at noon. He explained that the flow of water underneath the bridge sometimes seizes rather rapidly. He gave me a list of the amount of water being "dumped" into the Bear Butte Creek in March:

March 1	21,000 gallons
2	40,000
3	19,000
4,5,6	169,000
7	36,000
8	40,000
9	97,000
10	98,000
11,12,13	440,000

At 3:30 pm CST, I arrived at point A to measure the flow in Bear Butte Creek. No overflow was entering the creek. I could, however, hear the water flowing down the side of the hill. After a while, I could see water entering the creek. The flow at Point A was measured to be 0.65 cubic feet per second and at point B was measured to be 0.83 cubic feet per second. I do not believe, however, that the difference in flow between points A and B is the amount of overflow. The overflow was estimated to be approximately 40 gallons per minute. The distance between points A and B was measured to be 65 feet. At about 4:30 pm CST, I was getting ready to leave the area, the overflow seized.



At about 4:45 pm CST, I arrived at Mr. Brooke Hershey's place. Mr. Hershey was not home at that time. His daughter(?) opened the door. I asked for her permission to measure the water level in the well. She said that was OK. I also asked her to tell Mr. Hershey that I stopped by to see him. The water level in the well was measured to be 28.4 feet below the stickup.

At about 5:15 pm CST, I met Mr. Bruch's son at his place. We drove out where Mr. Henry Bruch was working. Mr. Richard Meyer from Sturgis was also present. Mr. Bruch and I drove to point E where I measured the flow in Bear Butte Creek. The creek was flowing at a rate of 0.35 cfs. Mr. Bruch believed that the flow at this point was coming from springs in the area and also from ice and snow on the creek bottom. After that we drove around and he showed me the creek at different points emphasizing that creek was totally dry. Mr. Bruch brought up the letter from Jim Winterton. I told him the reason that Jim wrote that letter was the report from Tony. Mr. Bruch stated that it was 77 degrees on Friday and that the flow might have been the result of snow melt. Mr. Bruch referred to when the Game, Fish, and Parks water application was before the Water Management Board; he suggested that a flow of 6 cubic feet per second should be maintained in the creek. He also said this amount of water is needed during the irrigation season. He is, however, more worried about his cattle than his irrigation. Mr. Bruch and I then drove to Mr. Hershey's place but he had not come back yet. At about 6:30 pm CST, I left Mr. Bruch's place.

Tuesday, March 14, 1989

At 9:25 am CST, I was able to talk to Mr. Hershey via telephone. He said that Tony was too zealous to do his job. He also stated that the water right should be reversed and the irrigators should be able to get all the water in the creek and no water should go to the Bear Butte Dam. He said that last week whatever Tony diverted never got to the dam and he actually wasted the water. He was wondering if there was a connection between his well and the creek. He said he measured the well yesterday morning and the water was 25 feet deep. He said that the lowest that the well has ever been was 30 feet and that was last year. He brought up the letter from Jim Winterton, I told him the reason for that letter was Tony's report. He said that might be, and that was the reason he wanted him to be removed.

Same afternoon, after talking to Jim Winterton, I called Mr. Hershey and informed him of the letter of Monday, March 13, 1989. He said the water situation in the area will be published in the Meade County Tribune. He was not sure exactly when.

At 9:44 pm CST, Mr. Voorhees, the mayor of Sturgis called me up to express his concern about the water in Bear Butte Creek and its shortage. He also said that they needed the water in the creek to dilute the sludge. Apparently the lagoon in Ft. Meade is leaking into Bear Butte Creek. On Wednesday March 15, 1989, I reported the leak to Joan Bortnam with the Land and Water Quality. She said that they knew about it and they had a big file on them!

Wednesday March 15, 1989

I stopped at the Meade County Tribune office and asked them to send me the copies of the paper, whenever the Bear Butte Creek water problem is published.

#### Conclusions and Recommendations

1. It seemed to me that there is a tension between the irrigators in the area and Tony Gullett from the Game, Fish, and Parks.
2. The problem in the area happens every year. Unless there is a permanent solution, the problem will exist. Short term solutions cause more tension between the parties involved.
3. Any proposed plan must be agreed upon by all the parties involved. The plan should be based on the needs of the irrigators, their irrigation and domestic needs and also the amount of water that the Game, Fish, and Parks is entitled to divert.
4. Using the Hwy 79 bridge as a check point is a step in the right direction. Installing some kind of measuring device at point C (Hwy 79 bridge) would be helpful to regulate the timing and the amount of water that could be diverted by the Game, Fish, and Parks.
5. The valves on the Ft. Meade water tank might be modified so that, whenever water is available, a certain amount of water would flow into the Bear Butte Creek. Whatever water is left could be diverted into the Bear Butte Dam. A certain amount of water should continually be available in the creek for domestic use and if possible for irrigation. The amount of water available must be measured at point C.

cc: Brooke Hershey, Rancher  
Henry Bruch, Rancher, Farmer  
Richard Meyer, Rancher  
Doug Hofer, Dept of Game, Fish and Parks  
Larry Donovan, Assistant Attorney General



**FT. MEADE STORAGE TANKS**

**BROOKE HERSHEY'S WELL**

**HENRY BRUCH'S PLACE**

- ▲ FLOW MEASUREMENT LOCATION
- BEAR BUTTE CREEK
- RECHANNELED PORTIONS OF CREEK
- ⊙ FORT MEADE STORAGE TANKS

Additional information  
 3/20/89  
 4/11/86  
 Jim Tollefsrud  
 WABad

26 MI TO U.S. 85  
 WHITEWOOD 8 MI.

5272 1 NE  
 (STURGIS)

T. 6 N.  
 T. 5 N.

27 30'

4923

4922

4921

4920

4918

10

RESERVATION

MEADE

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File No.

Water Rights Division -DENR  
Conversation or File Documentation

NAME OF PERSON OR FILE:

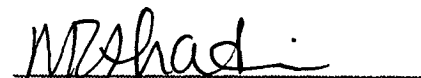
ADDRESS: COUNTY: Meade

DATE: 5-30-91 TELEPHONE: see below

RE: Diversion of the Ft. Meade overflow into Bear Butte Lake.

COMMENTS: Tony Gullet (347-5240), with the Department of Game, Fish, and Parks called today requesting diversion of the overflow into Bear Butte Lake. I told him I will check with Jim Sigman to see if he has got any water. Called Mr. Sigman up (347-3179) to see if he had any water? He said he had enough water and he did not have any problem letting the overflow into the lake. Mr. Sigman's place is located approximately 8 miles downstream from the HWY 79 Bridge. I also called Henry Bruch (347-3297) to see how the creek flowing at his place? He said he had enough water and had no problem with diverting the overflow into the lake. I then, contacted Ken Simenson, Chief Engineer, with the Ft. Meade VA Hospital. I told him he may divert the overflow into the lake for 48 hours. He said he had a problem with turning the valve off on Saturday because he will be out of town and nobody else will be here to take care of it. Ken and I agreed that the overflow be diverted into the lake until Monday morning (6-3-91) contingent upon creek having enough flow. I agreed with this since the forecast is calling for more rain for the area.

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



M. RASSOOL AHADI  
Natural Resources Engineer III  
DENR, Water Rights Division



**DATE:** May 7, 1993

**MEMO TO:** Del Brosz

**FROM:** M. Rassool Ahadi *MDA*

**Subject:** Ft. Meade Overflow

**Tony Gullet (347-5240)**, with the Dept. of Game, Fish, and Parks contacted me today requesting that the overflow from the Ft. Meade storage tank be diverted into the Bear Butte Lake. He said Henry Bruch had called him up and had told him that there was enough water in Bear Butte Creek. I contacted **Henry Bruch (347-3297)**. He stated that they had enough water. I said we let the GFP divert the overflow into the lake until Monday. I told him if after Monday there is no water in the creek, he should call you. Mr. Bruch was very happy with our decision.

I contacted **Mrs. Sigman (347-3179)** to find out if there is any water in the creek at their place. She said that as of last night there was none. She also stated that they had about an inch of rain yesterday. Mrs. Sigman stated that her husband was not home and may not come back soon. I asked if it was OK with her to let the overflow be diverted into the lake until Monday? If they still did not have any water they can call you and request that the overflow be diverted back into the creek. She said that was fine.

I contacted Tony Gullet and told him that he could go ahead and divert the overflow into the lake until Monday or until we get a phone call from either Mr. Bruch or Mr. Sigman.

I contacted **Ken Simenson (347-2511 EX 238)**, Chief Engineer, with the Ft. Meade VA Hospital and informed him of our decision.

Mr. Simenson must be notified whenever we make a decision regarding the overflow.

If either Mr. Bruch or Mrs. or Mr. Sigman called, we should contact Ken Simenson and ask that the overflow be diverted back into the creek.

## Gronlund, Eric

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**From:** Gronlund, Eric  
**Sent:** Monday, July 30, 2001 11:55 AM  
**To:** Erbele, Garland; Rath, Mark  
**Cc:** Goodman, Jim  
**Subject:** Bear Butte Creek

Hank Bruch called saying that the overflow water from the Ft. Meade Veteran Home water tank was redirected toward Bear Butte Lake again last Friday instead of into Bear Butte Creek. Bear Butte Creek is drying up and many landowners are concerned about getting water for their livestock. Jim Goodman handled this issue last week and the Ft. Meade was going to direct the overflow into the creek.

I contacted John Holmgren, Engineer for the Veteran Home. He explained that they were having trouble with their remote control system for making this switch. He was going to take the system off line and have an employee go up there and manually make it so any overflow goes into the creek. Mr. Holmgren cautioned that at times the Veteran Home may need all the water and there wouldn't be any overflow at all.

I contacted Mr. Bruch back and he appeared pleased that this was handled. He understood that there may be times when there is no overflow but wanted assurance that any overflow would go to the creek.

This same situation occurred previously, most recently in 1993, and appears to have been handled informally. The file documents are in Water Right No. 1281-1, Game, Fish and Parks

Jim FANDREAU G.F.P. - Bear Butte Sr Park - 347-5240  
John HOLMGREN Ft Meade VA 347-7050  
Henry BRUCH 347-3297

## Rath, Mark

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**From:** Rath, Mark  
**Sent:** Thursday, October 18, 2001 10:18 AM  
**To:** Rath, Mark  
**Subject:** Bear Butte Creek diversion

10/16/01- Henry Bruch called said GF&P was diverting flow from the overflow at the Ft Meade VA hospital to Bear Butte Lake. I called John Holmgren, facilities manager at Ft Meade. He said they were working on the valve and it had been switched over to the pipeline for about 4 days. He said they had gotten it fixed and would switch it back so that it would flow to Bear Butte Creek. I returned call to Mrs. Henry Bruch and told her what had happened.



2. The works are capable of diverting and conveying to the place of use 1.3 cu. ft. per second of water (559 gpm) which is to be used for **recreation use** and the license should be issued for **540 acre feet**.

All structures, wells and lands on map: Yes

**G. Comments or other permits associated with the project:**

Diversion of flows from Fort Meade reservoir are controlled by the Engineering Department at Fort Meade. As of the report date water is not being diverted into Bear Butte Lake due to a leak in the 8" pvc going under the county road below Sly hill. Normal operation is for the overflow to be continuously diverted into Bear Butte Lake unless Fort Meade is contacted by one of the land owners below highway 79 on Bear Butte Creek concerning low creek flows. The engineering department at Fort Meade has not been contacted in the last three years. The permit states that diversions may be made at any time, provided that water is available first for downstream domestic use, including livestock water and prior irrigation rights. Records are not kept of overflow rates/volumes however at the time of the permit application overflow volumes ranged from 0-559 gpm with an estimated average daily flow of 150,000 gallons per day (168 ac-ft/year). A Madison formation well drilled in 1956 which was located just north of the north shore of Bear Butte creek was to be plugged. A well plugging report was filed for this well by Sharp drilling 12/4/1991. There is no surface evidence of the well authorized by Water Right 266-1, which was also to be plugged. The water level in Bear Butte Lake at the time of inspection was within inches of the spillway elevation. The diversion flows from Fort Meade are beneficial to Bear Butte Lake levels, but during dry years the lake levels can still drop drastically and the lake was last dry in 2008.



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Steven Quissell  
Water Rights Inspector  
DENR, Water Rights Program

Date report completed: 7/15/2016



Fort Meade raw water storage



8" pipe outlet into dry draw at center of photo

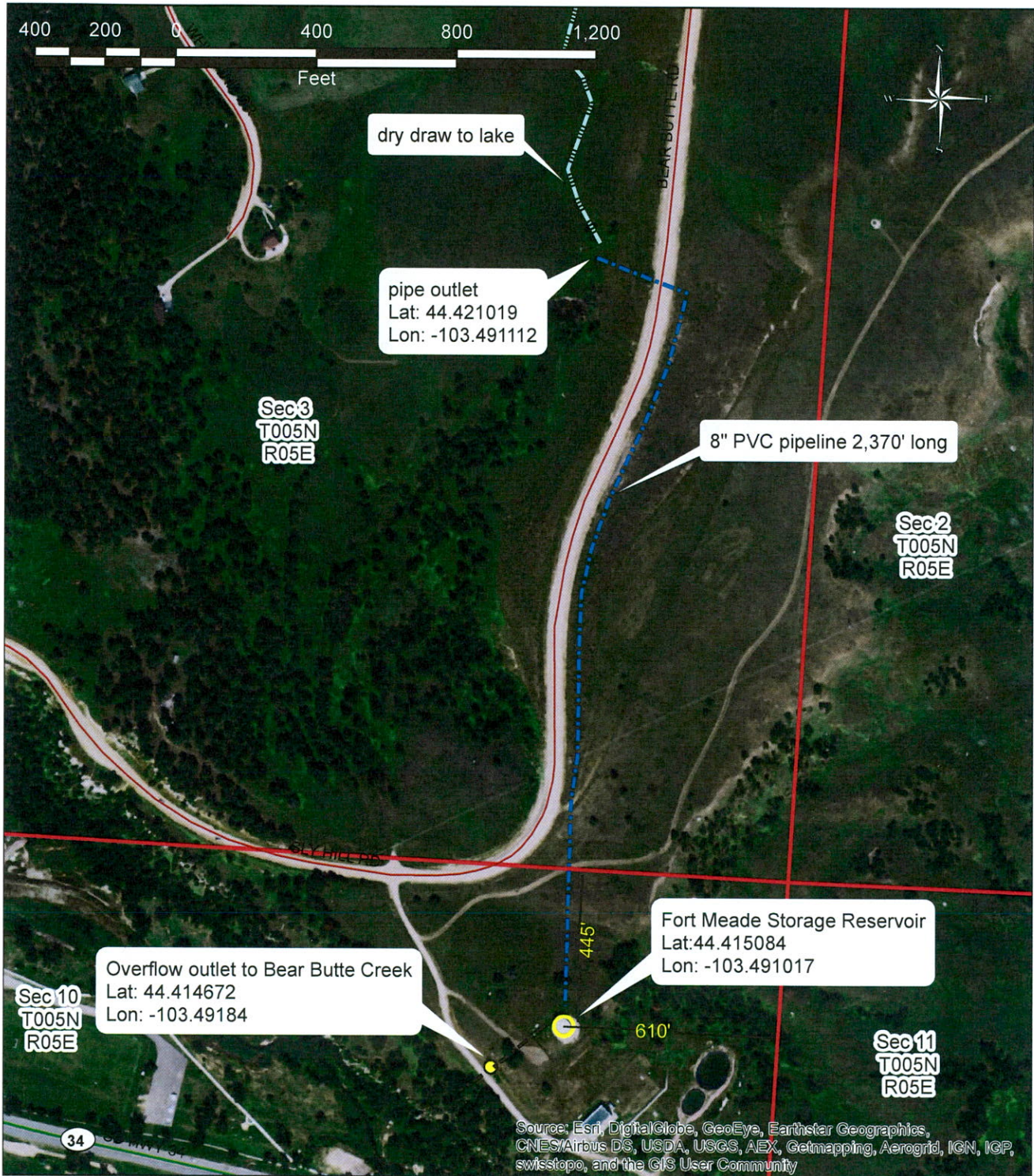


overflow outleting above service road  
and then into Bear Butte Creek

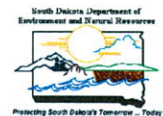


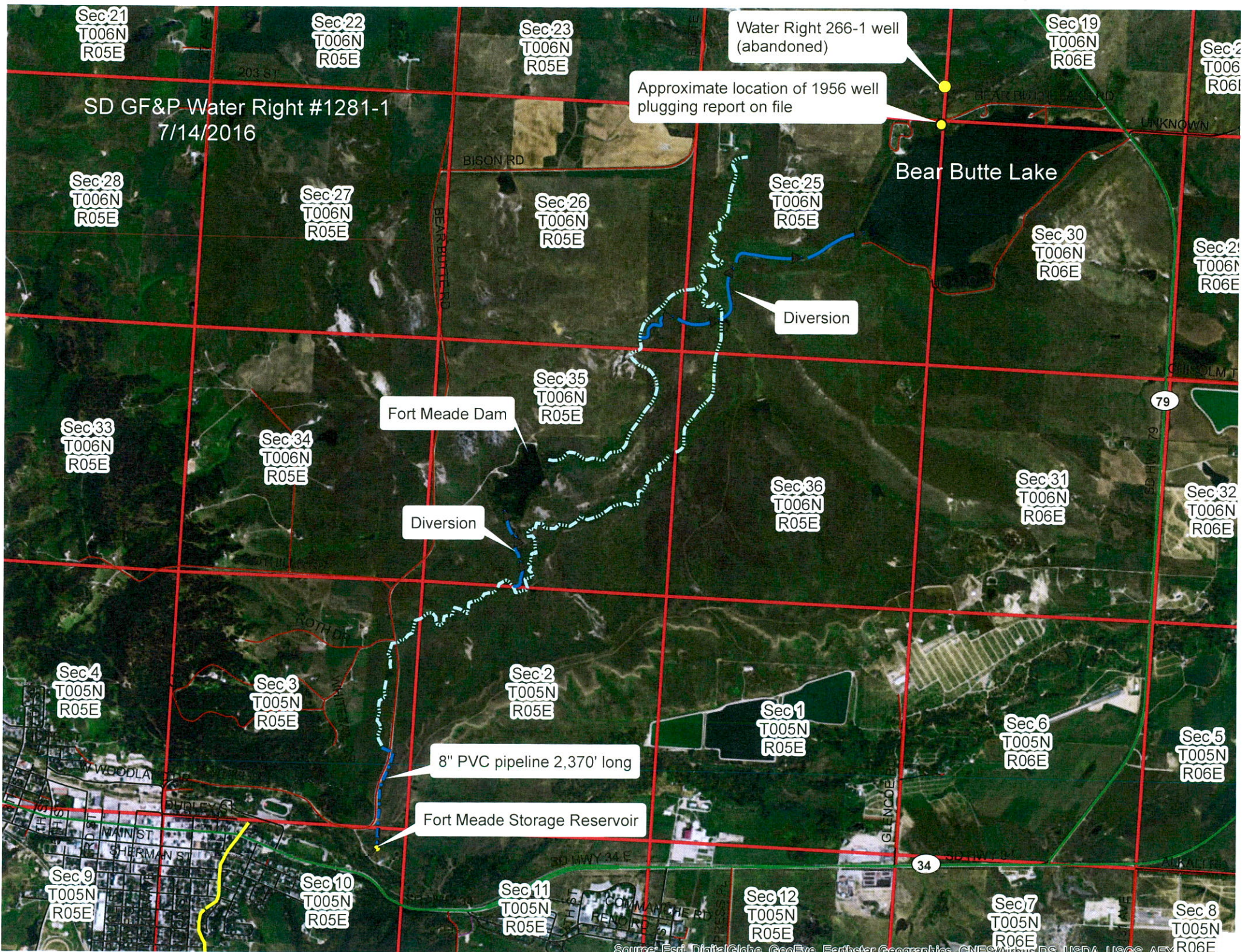
flow over rock formation above Bear Butte Creek at  
center of photo

**Water Right #1281-1  
SD Game Fish and Parks  
7/15/2016**



*Steven Quissell*  
 Steven Quissell  
 Water Rights Inspector  
 DENR Water Rights Program





SD GF&P Water Right #1281-1  
7/14/2016

Water Right 266-1 well  
(abandoned)

Approximate location of 1956 well  
plugging report on file

Bear Butte Lake

Diversion

Fort Meade Dam

Diversion

8" PVC pipeline 2,370' long

Fort Meade Storage Reservoir

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 1281-1

(1) South Dakota Department of Game, Fish and Parks, 523 E Capitol, Pierre SD 57501 made Application No. 1281-1, April 27, 1983 for a water permit to divert 540 acre-feet of water annually from the Ft. Meade water supply reservoir, Meade County, South Dakota for recreational use purposes at Bear Butte Lake. Permit No. 1281-1, with a priority date of April 27, 1983 was approved February 15, 1984 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before February 15, 1989 and for the application to beneficial use of water on or before February 15, 1993.

Diversion of flows from the Ft. Meade water supply reservoir to Bear Butte Lake is controlled by the Engineering Department at Ft. Meade.

(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. 1281-1 is issued a license, bearing a priority date of April 27, 1983 to divert 540 acre-feet of water annually from the Ft. Meade water supply reservoir for recreational use purposes at Bear Butte Lake.

The Ft. Meade water supply reservoir is located: 445 feet south and 610 feet west of the NE corner of Section 10-T5N-R5E (NE 1/4 NE 1/4).

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Permit No. 1281-1 including the following qualifications:

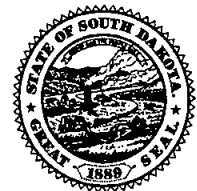
- That the diversions of water under Permit No. 1281-1 may be made at any time, provided that water is available first for downstream domestic use, including livestock water and prior water rights.
- That the Minnelusa Formation well authorized by Water Right No. 266-1 and the Madison Formation well drilled in 1956 be considered abandoned or forfeited and plugged pursuant to SDCL 46-6-18 and that both wells be plugged within eighteen months. *There is no surface evidence of the well authorized by No. 266-1. A copy of the well plugging report for the Madison well is on file with the Water Rights Program.*



Jeanne Goodman, Chief Engineer  
Water Rights Program  
Department of Environment and Natural Resources

AUG 16 2016

date





DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

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

denr.sd.gov

1281-1

AUG 16 2016

South Dakota Dept of Game, Fish & Parks  
Leslie Murphy  
523 E Capitol Ave  
Pierre SD 57501

Dear Ms. Murphy:

Enclosed is Water License No. 1281-1. 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,

Jeanne Goodman, Chief Engineer  
Water Rights Program  
(605) 773-3352

enclosures

**SOUTH DAKOTA**  
**Department of**  
**Water & Natural Resources**

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

*John Hatch  
for your files*

File 1281-1

November 18, 1986



Jeff Stingley, Secretary  
Department of Game, Fish and Parks  
Anderson Building  
Pierre SD 57501

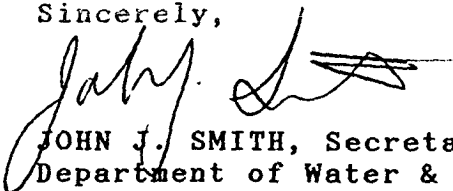
Dear Jeff:

I am writing in regard to the Bear Butte Flowing Wells, one of the agenda items on our interdepartmental meeting November 7, 1986. We ran out of time and this item did not get discussed.

As a condition to approval of Water Permit No. 1281-1 February 15, 1984, the Water Management Board ordered two wells in the Bear Butte area plugged within 18 months (August 15, 1985). The two wells are an abandoned Minnelusa Formation well authorized by Water Permit No. 266-1 and an abandoned Madison Formation well drilled in 1956. Permit No. 1281-1 is not valid unless the wells are plugged.

The Division of Water Rights has money in its budget to plug wild or uncontrolled State owned wells. The Division is proposing to plug both wells at Bear Butte. This work will be accomplished by use of contractors, coordinated with your engineering staff, and completed by June 30, 1986.

Sincerely,

  
JOHN J. SMITH, Secretary  
Department of Water & Natural Resources  
605 773-3352