

WATER PERMIT NO. 1947-1

Name of Applicant: Keith Lesmeister

Address: PO Box 664, Mobridge SD 57601 Phone: 605 845-7154

Amount of Water Claimed: 5.87 cfs Total Acres: 411 acres

Source of Water Supply: Owl Creek and dry draw storage dam

Water to be used for: irrigation County: Corson

Type of Waste Disposal System:

Location: approximately 25 miles southeast of McLaughlin

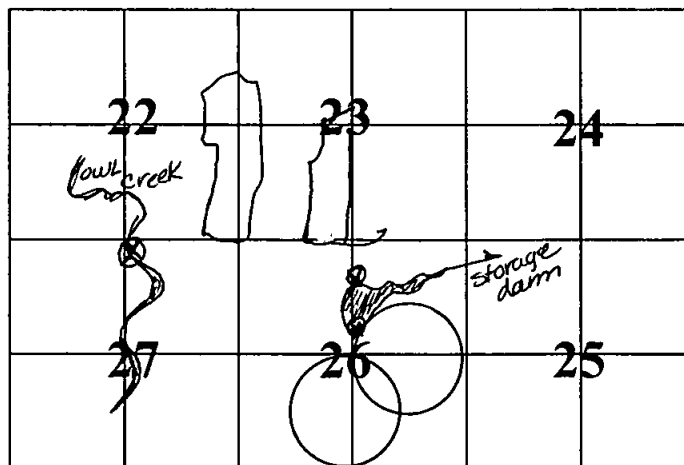
PRIORITY Date Received: 8-19-14 Application/License Fee: \$ 375

Corrected Application Received: Period of Annual Use: April 1 – October 31

Remarks: Changes water source for lands irrigated under No. 1082-1B and adds the use of water from a dry draw dam for irrigation existing under No. 1059-1

Diversion Point: Oak Creek: NW 1/4 NE 1/4 Sec 27; dry draw dam: center of N 1/2 Sec 26; all in T20N-R29E

Land to be Irrigated: S 1/2 NE 1/4, S 1/2 Sec 26; S 1/2 NW 1/4, SW 1/4 Sec 23; SE 1/4 NE 1/4, E 1/2 SE 1/4 Sec 22; all in T20N-R29E



Depth of Well: NA

Well Driller:

Remarks:

Type of Map: aerial

Prepared by: Ron Duvall

Reviewed and the Number Assigned on: 8-19-14

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

AUG 19 2014

WATER RIGHTS
PROGRAM

Mail to:
Water Rights Program
Joe Foss Building
523 E. Capitol
Pierre, SD 57501-3181
(605) 773-3352

(office use only)
No. 1947-1 Hydrologic Unit 10130102
Basin Missouri River 405-823-4490
Newspaper Corson/South Co. News, Box 788, M^cLaughlin 57642
Capital Journal, Box 78, Pierre 57501 605-224-7301

Application For Permit To Appropriate Water For Irrigation

Type of Application: X New Vested Right X Amendment/Correction to Permit No. 1082-1B & 1059-1
(Use predates Mar 2, 1955)

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.) **1) Change water source for No. 1082-1B from Missouri River to Oak Creek and a dry draw dam, 2) specify that existing permitted acreages from Oak Creek can also be irrigated from the dry draw dam**

- Name of Applicant Keith Lesmeister Phone 605-845-7154
Mailing Address PO Box 664 Mobridge State SD 57601
(check one) (Street, RR, or Box and City) (Owner) (Tenant/lessee) (Zip Code)
- Amount of water claimed 5.87 *CFS Total Acreage 227 (Oak Cr & dry draw) 184 (add dry draw)
(*Cubic Feet per Second)
- Source of water supply Oak Creek and dry draw runoff to storage dam
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) Oak Creek: ~ 50 feet south & ~ 50 east from the N1/2 corner sec 27-20N-29E (NW1/4NE1/4); Dry draw dam: approx. center of N1/2 of sec 26-20N-29E County Corson
- County or counties where water will be used Corson
- Annual period during which water is to be used Apr 1 - Oct 31
- List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
See attachment for irrigated acreage			

- Give a description of the project. (Attach sheet if more space is needed)

This application changes the water source for lands irrigated under No. 1082-1B to Oak Creek and the dry draw dam/runoff (located near center of N1/2 sec 26-20N-29E) and allows use of the dry draw dam/runoff along with Oak Creek for irrigation of the existing acreage covered by No. 1059-1.

STATE OF SOUTH DAKOTA) SS
County of Corson

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

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

Applicant's signature

Keith Lesmeister

Attachment**RECEIVED****AUG 19 2014****WATER RIGHTS
PROGRAM**

Following acreages are irrigated from Oak Creek (NW¼NE¼ sec 27-20N-29E) and the dry draw dam located near the center of the N½ section 26-20N-29E

Acreage covered by Water Permit No. 1082-1B (originally permitted for Missouri River – not used):

Land Description (all in sec 26-20N-29E)	Acres	Land Description (all in sec 26-20N-29E)	Acres
SW¼NE¼	25	NE¼SW¼	33
SE¼NE¼	25	NW¼SW¼	3
NE¼SE¼	35	SW¼SW¼	4
NW¼SE¼	40	SE¼SW¼	38
SW¼SE¼	23	Total Acreage 227 acres	
SE¼SE¼	1		

Acreage covered by Water Permit No. 1059-1 (Oak Creek – dry draw dam/runoff to be added as source):

Land Description (all in sec 23-20N-29E)	Acres	Land Description (all in sec 22-20N-29E)	Acres
SW¼NW¼	8	SE¼NE¼	27
SE¼NW¼	4	NE¼SE¼	20
NE¼SW¼	38	SE¼SE¼	22
NW¼SW¼	14		
SW¼SW¼	17	Total Acreage 184 acres	
SE¼SW¼	34		

SOUTH DAKOTA
WATER PERMIT NO. 1947-1

Date of first receipt of application August 19, 2014.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1947-1 to Keith Lesmeister, PO Box 664, Mobridge SD 57601 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 1947-1 amends Water Permit Nos. 1082-1B and 1059-1. Water Permit No. 1082-1B authorizes 6.85 cubic feet of water per second (cfs) from the Missouri River to irrigate 480 acres located in the W 1/2, SE 1/4 Section 26-T20N-R29E. Water Permit No. 1059-1 authorizes 3.14 cfs from Oak Creek to irrigate 220 acres located in the SW 1/4 NW 1/4, S 1/2 NE 1/4, N 1/2 SE 1/4, SW 1/4 Section 23-T20N-R29E.

This permit authorizes the following: 1) changes the water source for No. 1082-1B from the Missouri River to Oak Creek and a dry draw dam, 2) specifies that the existing permitted acreage from Oak Creek can also be irrigated from the dry draw dam.

This permit authorizes a total of 5.87 cfs from Oak Creek located in the NW 1/4 NE 1/4 Section 27 and impoundment of 257 acre-feet of water from runoff and Oak Creek in a dry draw dam located in the approximate center of the N 1/2 Section 26; all in T20N-R29E. The 441 acres irrigated are located in the S 1/2 NE 1/4, S 1/2 Section 26 and S 1/2 NW 1/4, SW 1/4 Section 23 and SE 1/4 NE 1/4, E 1/2 SE 1/4 Section 22; all in T20N-R29E. The other acreage originally covered by the existing water permits is no longer irrigated.

2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31.
3. The dates from which applicant may claim right: August 19, 2014 (storage dam), August 19, 2014 for 2.73 cfs and 221 acres, August 15, 1975 for 3.14 cfs and 220 acres.
4. The date of approval of Permit No. 1947-1 is November 10, 2014.
5. One-fifth of the construction is to be completed on or before May 10, 2017.
6. All construction is to be completed on or before November 10, 2019.
7. Water is to be put to beneficial use on or before November 10, 2024.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. Water Permit No. 1947-1 authorizes an impoundment with a storage capacity of 257 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows on Oak Creek as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. Applicable provisions of Water Permit Nos. 1082-1B and 1059-1 are incorporated into Permit No. 1947-1 and the abandoned portions cancelled.

WATER MANAGEMENT BOARD

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

JAN 22 2015

date



Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable) ☐ Drilling new well(s) ☐ Using existing well(s)

- a) If new wells, how many ____ Have test holes been drilled ☐ Yes ☐ No Drilled by ____
(if yes, please provide copies of logs)
- b) If existing wells, how many ____ Provide copy of log(s), if available. Drilled by ____
- c) Well Depth ____ Depth to Top of Water Bearing Material ____ Depth to Water from Surface ____
- d) Distance to nearest existing domestic well:
On applicant's property ____ On property owned by others ____

2. Wastewater Disposal System Information

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

3. Dugout Information

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

4. Water Storage Dams

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

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

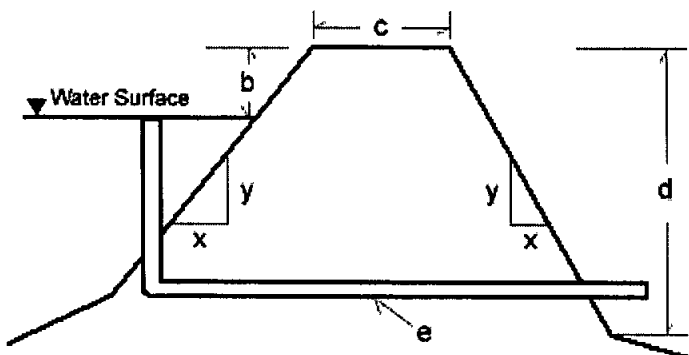
Bridge City Engineers

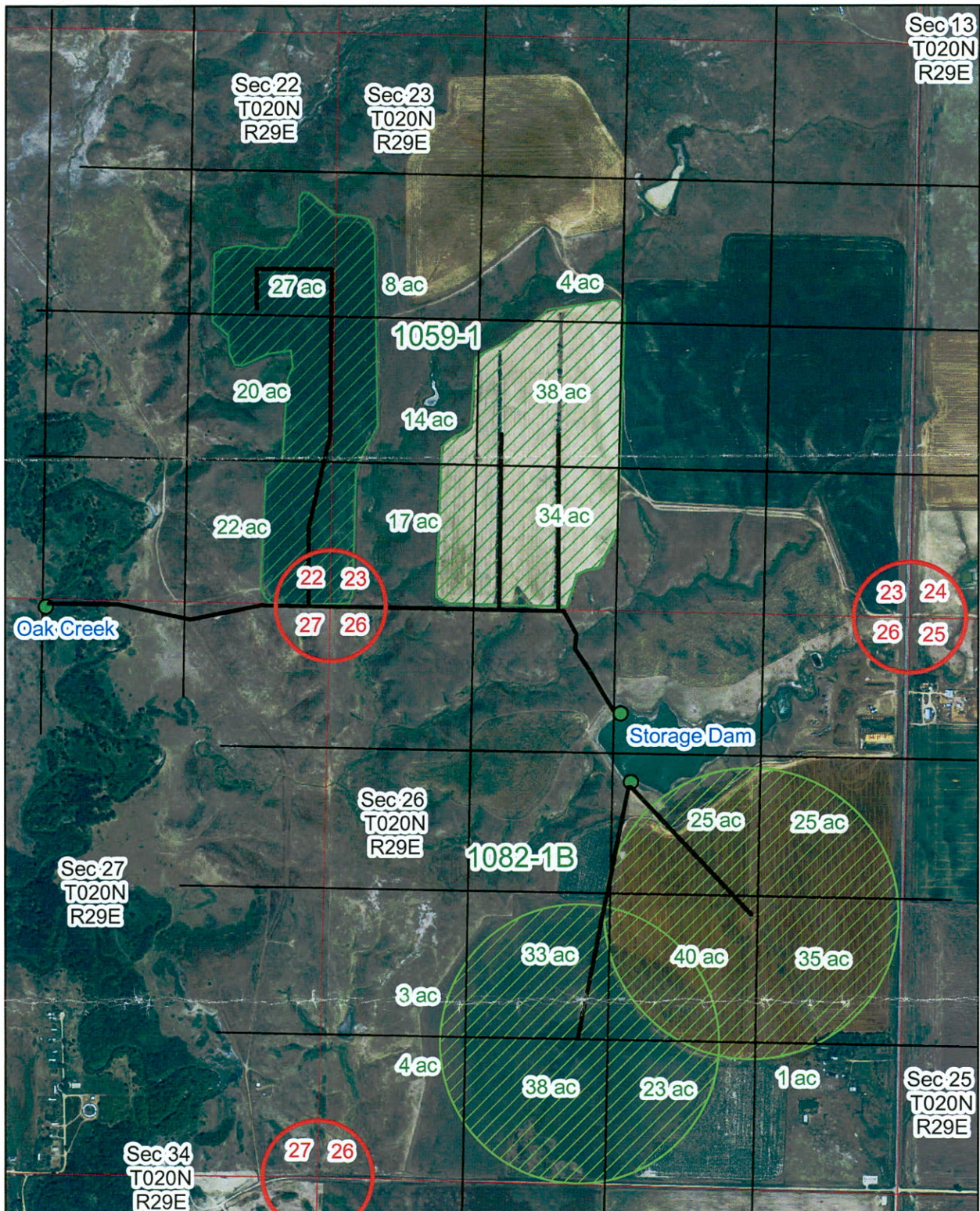
- b) Freeboard 7 feet
- c) Crest Width 15 feet
Crest Length approx 500 feet
- d) Height 40 feet
- e) Primary Outlet Capacity ____

If pipe, diameter none

- f) Secondary Spillway Capacity ____
Spillway Width 38 feet
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream ____
Downstream ____

- h) Surface Area of Impoundment approx 14 ac.
- i) Storage approx 257 Acre Feet
- j) Drainage Area Above Dam 600 Acres





South Dakota
Department of Environment
& Natural Resources
Water Rights

RECEIVED

AUG 19 2014

WATER RIGHTS PROGRAM

Completed by:


Ron Duvall, WR Permitting Administrator
Water Rights Program

Date: August 11, 2014

Appl. No. 1947-1

28

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

No 416616

Pierre, August 29, 2000

RECEIVED OF Marcus Lesmeister, 1710 3rd Ave W, Mobridge SD 57601
the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use _____	325	00
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law) Total	375	00

By Harland Erbele
Chief Engineer

125

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	(office use only) No. _____ Hydrologic Unit _____
	Basin _____
	Newspaper _____



Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☒ Amendment/Correction to Permit No. 1082-1B & 1059-1
(Use predates Mar 2, 1955)

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.) **1) Change water source for No. 1082-1B from Missouri River to Oak Creek and a dry draw dam, 2) specify that existing permitted acreages can be irrigated from both Oak Creek and the dry draw dam, and 3) add acreage**

- ✓ 1. Name of Applicant Marcus Lesmeister Phone 605 845 3035
(check one) ☒ Owner ☐ Tenant/lessee
- ✓ Mailing Address 1710 3rd Ave W Mobridge State SO. Dak. 57601
(Street, RR, or Box and City) (Zip Code)
2. Amount of water claimed 5.10 *CFS Total Acreage 357 See attachment (Area 1 + Area 2 = 357)
(*Cubic Feet per Second)
3. Source of water supply Oak Creek and dry draw runoff
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) Oak Creek: ≈ 50 feet south & ≈ 50 east from the N¼ corner sec 27-20N-29E (NW¼NE¼); Dry draw dam: ≈ 1,000 feet south & ≈ 2,600 feet west from the NE corner sec 26-20N-29E (NW¼NE¼) County Corson
5. County or counties where water will be used Corson
6. Annual period during which water is to be used Apr 1 - Oct 31
7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
See attachment for irrigated acreage			

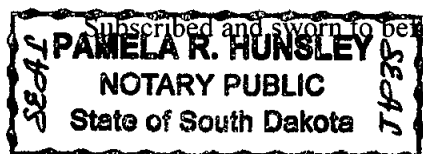
8. Give a description of the project. (Attach sheet if more space is needed)

This application authorizes irrigation of an additional 130 acres (Area 1 on attachment), changes the water source for lands irrigated under No. 1082-1B (Area 2 on attachment) to Oak Creek and the dry draw dam (located near center of N½ sec 26-20N-29E), and allows use of the dry draw dam for irrigation of the existing acreage covered by No. 1059-1 (Area 3 on attachment).

STATE OF SOUTH DAKOTA) SS
County of WALWORTH

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

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



Applicant's signature Marcus Lesmeister
Subscribed and sworn to before me this 14th day of August 20 00
Pamela R. Hunsley
My Commission Expires August 25, 2005 Notary Public signature

Attachment

Area 1 -- New acreage to be irrigated from Oak Creek and the dry draw dam

Land Description (all in sec 23-20N-29E)	Acres	Land Description (all in sec 23-20N-29E)	Acres
SW $\frac{1}{4}$ NE $\frac{1}{4}$	18	NW $\frac{1}{4}$ SE $\frac{1}{4}$	40
SE $\frac{1}{4}$ NE $\frac{1}{4}$	27	SW $\frac{1}{4}$ SE $\frac{1}{4}$	9
NE $\frac{1}{4}$ SE $\frac{1}{4}$	33	SE $\frac{1}{4}$ SE $\frac{1}{4}$	3
Total Acreage			130 acres

Following acreages are irrigated from Oak Creek (NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec 27-20N-29E) and the dry draw dam located near the center of the N $\frac{1}{2}$ section 26-20N-29E

Area 2 -- Acreage covered by Water Permit No. 1082-1B (Missouri River):

Land Description (all in sec 26-20N-29E)	Acres	Land Description (all in sec 26-20N-29E)	Acres
SW $\frac{1}{4}$ NE $\frac{1}{4}$	25	NE $\frac{1}{4}$ SW $\frac{1}{4}$	33
SE $\frac{1}{4}$ NE $\frac{1}{4}$	25	NW $\frac{1}{4}$ SW $\frac{1}{4}$	3
NE $\frac{1}{4}$ SE $\frac{1}{4}$	35	SW $\frac{1}{4}$ SW $\frac{1}{4}$	4
NW $\frac{1}{4}$ SE $\frac{1}{4}$	40	SE $\frac{1}{4}$ SW $\frac{1}{4}$	38
SW $\frac{1}{4}$ SE $\frac{1}{4}$	23	Total Acreage	
SE $\frac{1}{4}$ SE $\frac{1}{4}$	1		
			227 acres

Area 3 -- Acreage covered by Water Permit No. 1059-1 (Oak Creek):

Land Description (all in sec 23-20N-29E)	Acres	Land Description (all in sec 22-20N-29E)	Acres
SW $\frac{1}{4}$ NW $\frac{1}{4}$	8	SE $\frac{1}{4}$ NE $\frac{1}{4}$	27
SE $\frac{1}{4}$ NW $\frac{1}{4}$	4	NE $\frac{1}{4}$ SE $\frac{1}{4}$	20
NE $\frac{1}{4}$ SW $\frac{1}{4}$	38	SE $\frac{1}{4}$ SE $\frac{1}{4}$	22
NW $\frac{1}{4}$ SW $\frac{1}{4}$	14		
SW $\frac{1}{4}$ SW $\frac{1}{4}$	17	Total Acreage	
SE $\frac{1}{4}$ SW $\frac{1}{4}$	34		
			184 acres

Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

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

2. Wastewater Disposal System Information

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

3. Dugout Information

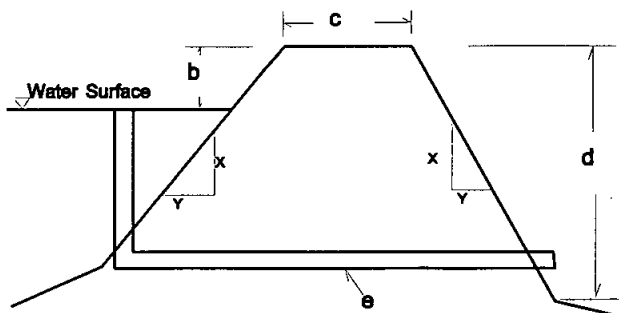
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

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

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

Bridge City Engineers, Inc.



- b) Freeboard 7 feet
- c) Crest Width 15
Crest Length ≈ 500 feet
- d) Height 40 feet
- e) Primary Outlet Capacity _____
If pipe, diameter none
- f) Secondary Spillway Capacity _____
Spillway Width Flows to drainage to north 38 ft
- g) X & Y Slope _____
Upstream _____
Downstream _____
- h) Surface Area of Impoundment ≈ 14 acres
- i) Storage ≈ 185 Acre Feet
- j) Drainage Area Above Dam ≈ 600 Acres



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

August 10, 2000

Marcus Lesmeister
1710 3rd Ave W
Mobridge SD 57601

Dear Mr. Lesmeister:

I am writing in response to my on-site inspection of your water permits on July 11, 2000. Thank you for taking a few minutes to show me your irrigation systems.

As you may recall, the purpose of the inspection was to license your water permits. Licensing of Permit No. 1059-1 and 1082-1B is the last step required to get a water right in South Dakota. One part of the inspection is to determine whether your irrigation project matches what your water permit allow you to do. As we discussed, there are a couple of issues that need to be corrected:

1. The water source for the acreage under the two pivots in the S $\frac{1}{2}$ section 26-20N-29E (see enclosed map) was to be the Missouri River. This water source was never developed and the portion of the pivot located in the S $\frac{1}{2}$ NE $\frac{1}{4}$ was not included on Water Permit No. 1082-1B (a copy of No. 1082-1B is enclosed for your review.)
2. A portion of the acreage in the E $\frac{1}{2}$ section 23 (see blue area on enclosed map) was not developed for irrigation under Water Permit No. 1059-1. You indicated that you may want to irrigate this blue area in the future in addition to the green area which is being irrigated under Permit No. 1059-1.

Enclosed is a partially-completed application to allow irrigation of all the acreage section 26 from Oak Creek and the storage dam and to allow development of an additional 130 acres in the E $\frac{1}{2}$ section 23. This application also makes mention of use of the storage dam for irrigation of the green areas in sections 22 and 23 covered by Permit No. 1059-1. The storage dam was not mentioned on the application for Permit No. 1059-1.

Please complete those portions of the application with red check marks and sign the application form in the presence of a notary public. The application fee based on 357 acres is \$325.00 plus the \$50.00 license fee for a total of \$375.00. Please refer to the instruction sheet attached to your application if you have questions as to how the fee is calculated. After completing your application, please return your application forms, the enclosed maps, and fee to the Water Rights Program. Please call me at (605) 773-3352 if you have any questions.

(continued)

Marcus Lesmeister
August 10, 2000
Page 2 of 2

One other issue I overlooked concerns safety of dams. Your dam is exempt from spillway size requirements provided there is no potential loss of life in the event your dam breaches. To determine whether the potential for loss of life exists, a risk assessment needs to be prepared. The risk assessment takes into consideration what structures, such as homes, are located downstream from your dam. The Natural Resources Conservation Service (NRCS) may be able to do this assessment for you. If you choose not to use the NRCS, then a South Dakota registered professional engineer can complete the assessment for you.

Thank you again for showing me your irrigation system. After completing the above items, we can start processing your application. Please don't hesitate to call if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Duvall", with a stylized, cursive script.

Ron Duvall
Natural Resources Engineer
Water Rights Program

enclosures

FIELD INVESTIGATION REPORT FOR PERMIT NO. 1682-1B

DATE OF INVESTIGATION:	7/11/06
NAME & ADDRESS OF INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE	Marcus L 1710 3rd Ave W Moberg
NAME & ADDRESS OF PERMIT HOLDER	
DIVERSION POINT LEGAL LOCATION	

Other permit(s) associated with the project: _____

WELL INFORMATION:

- 1) Well Drilling Firm: _____
- 2) No. of Wells _____
- 3) Depth(s) _____ feet
- 4) Well log is available Y/N
- 5) Comment: _____

Motor pump @ dam

Pump:

- 1) Make Cornell
- 2) Model 4HF8
- 3) Size _____
- 4) Capacity _____ GPM

Casing:

- 1) Diameter _____ inches
- 2) Length _____ feet
- 3) Type _____

Screen:

- 1) Type _____
- 2) Length _____ feet
- 3) Static water level _____ feet

Motor:

- 1) Make VM 6cy1
- 2) Model No. 1056T
- 3) Horsepower rating 145 hp

DISTRIBUTION LINES OR CANALS:

- 1) Type _____
- 2) Size _____ inches
- 3) Length _____ feet

SYSTEM TYPE:

Center pivot: both

- 1) Make Rainke
- 2) Overall length _____ feet
- 3) Number of towers 8
- 4) Distance between towers _____ feet

- 5) End gun Y/N
- 6) High or low pressure 60
- 7) Capacity 80 GPM each

Gun:

- 1) Make _____
- 2) Nozzle size _____ inches
- 3) Capacity _____ GPM
- 4) Hose size _____ inches

Sideroll:

- 1) Length _____ feet
- 2) Diameter of pipe _____ inches
- 3) Sprinkler spacing _____ feet

DAM INFORMATION:

- 1) Height to crest _____ feet
- 2) Height to primary spillway _____ feet
- 3) Height to secondary spillway _____ ft
- 4) Crest width _____ feet
- 5) Crest length _____ feet

CHEMIGATION EQUIPMENT:

- 1) Does chemigate Y/N
- 2) Main line check valve Y/N
- 3) Inspection port/air relief Y/N
- 4) Low pressure drain Y/N
- 5) Discharge is 20' from source Y/N
- 6) Interlock type electrical or mechanical
- 7) Injection pump type piston or other

PERMIT QUALIFICATIONS:

- 1) Special qualifications to permit being abided by Y/N
- 2) All structures, wells and lands on map Y/N
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y/N

Towline:

- 1) Length _____ feet
- 2) Diameter _____ inches
- 3) Spacing of gates _____ inches

Siphons:

- 1) Size _____ inches
- 2) Number _____

- 6) Spillway length _____ feet
- 7) Spillway width _____ feet
- 8) Approx. storage _____ ac-ft
- 9) Approx. storage to crest _____ ac-ft
- 10) Date constructed: _____

- 8) Injection check valve Y/N
- 9) Injection line check valve or positive displacement pump Y/N
- 10) All chemigation equipment appears to be installed in the proper position and complies with chemigation laws and rules Y/N
- 11) Comments: _____

FIELD INVESTIGATION REPORT FOR PERMIT NO. 1059-1

DATE OF INVESTIGATION:	
NAME & ADDRESS OF INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE	
NAME & ADDRESS OF PERMIT HOLDER	
DIVERSION POINT LEGAL LOCATION	

Other permit(s) associated with the project: _____

*Can run any of systems directly from
creek or from dam on 1059-1 & 1082-113*

WELL INFORMATION:

- 1) Well Drilling Firm: _____
- 2) No. of Wells _____
- 3) Depth(s) _____ feet
- 4) Well log is available Y/N
- 5) Comment: _____

Casing:

- 1) Diameter _____ inches
- 2) Length _____ feet
- 3) Type _____

Screen:

- 1) Type _____
- 2) Length _____ feet
- 3) Static water level _____ feet

Pump:

- 1) Make Cornell
- 2) Model _____
- 3) Size _____
- 4) Capacity _____ GPM

Motor:

- 1) Make Marathon
- 2) Model No. 5/11
- 3) Horsepower rating 100 hp

DISTRIBUTION LINES OR CANALS:

- 1) Type _____
- 2) Size _____ inches
- 3) Length _____ feet

SYSTEM TYPE:

Center pivot:

- 1) Make Field Hopper
- 2) Overall length _____ feet
- 3) Number of towers 1
- 4) Distance between towers _____ feet

- 5) End gun Y/N
- 6) High or low pressure _____
- 7) Capacity 600 GPM

Gun:

- 1) Make Heinzman Traveler
- 2) Nozzle size _____ inches
- 3) Capacity 600 GPM
- 4) Hose size 4 1/2 inches

Sideroll:

- 1) Length _____ feet
- 2) Diameter of pipe _____ inches
- 3) Sprinkler spacing _____ feet

DAM INFORMATION:

- 1) Height to crest _____ feet
- 2) Height to primary spillway _____ feet
- 3) Height to secondary spillway _____ ft
- 4) Crest width _____ feet
- 5) Crest length _____ feet

CHEMIGATION EQUIPMENT:

- 1) Does chemigate Y/N
- 2) Main line check valve Y/N
- 3) Inspection port/air relief Y/N
- 4) Low pressure drain Y/N
- 5) Discharge is 20' from source Y/N
- 6) Interlock type electrical or mechanical
- 7) Injection pump type piston or other

Towline:

- 1) Length _____ feet
- 2) Diameter _____ inches
- 3) Spacing of gates _____ inches

Siphons:

- 1) Size _____ inches
- 2) Number _____

- 6) Spillway length _____ feet
- 7) Spillway width _____ feet
- 8) Approx. storage _____ ac-ft
- 9) Approx. storage to crest _____ ac-ft
- 10) Date constructed: _____

- 8) Injection check valve Y/N
- 9) Injection line check valve or positive displacement pump Y/N
- 10) All chemigation equipment appears to be installed in the proper position and complies with chemigation laws and rules Y/N
- 11) Comments: _____

PERMIT QUALIFICATIONS:

- 1) Special qualifications to permit being abided by Y/N
- 2) All structures, wells and lands on map Y/N
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y/N



T 2271

T 2271

AK-10

20-29

1" = 660'

N

T 2271
○ Acreage developed under No. 1059-1

○ Acreage to be added

Don Durrall
Natural Resources Engineer
8/8/2000

27 ac

8 ac

2 68.2

20 ac

8 in PVC

14 ac

4 ac

38 ac

18 ac

27 ac

40 ac

33 ac

22 ac

17 ac

34 ac

31.3

20-29

19

13 24.0

14 22.9

15 24.7

16 21.6

4 23.0

5 30.1

6

Area 15

22 23
27 26

N 1/4 corner sec 27

≈ 50's

8 in PVC

8 in AL

≈ 1,000'

≈ 2,600'

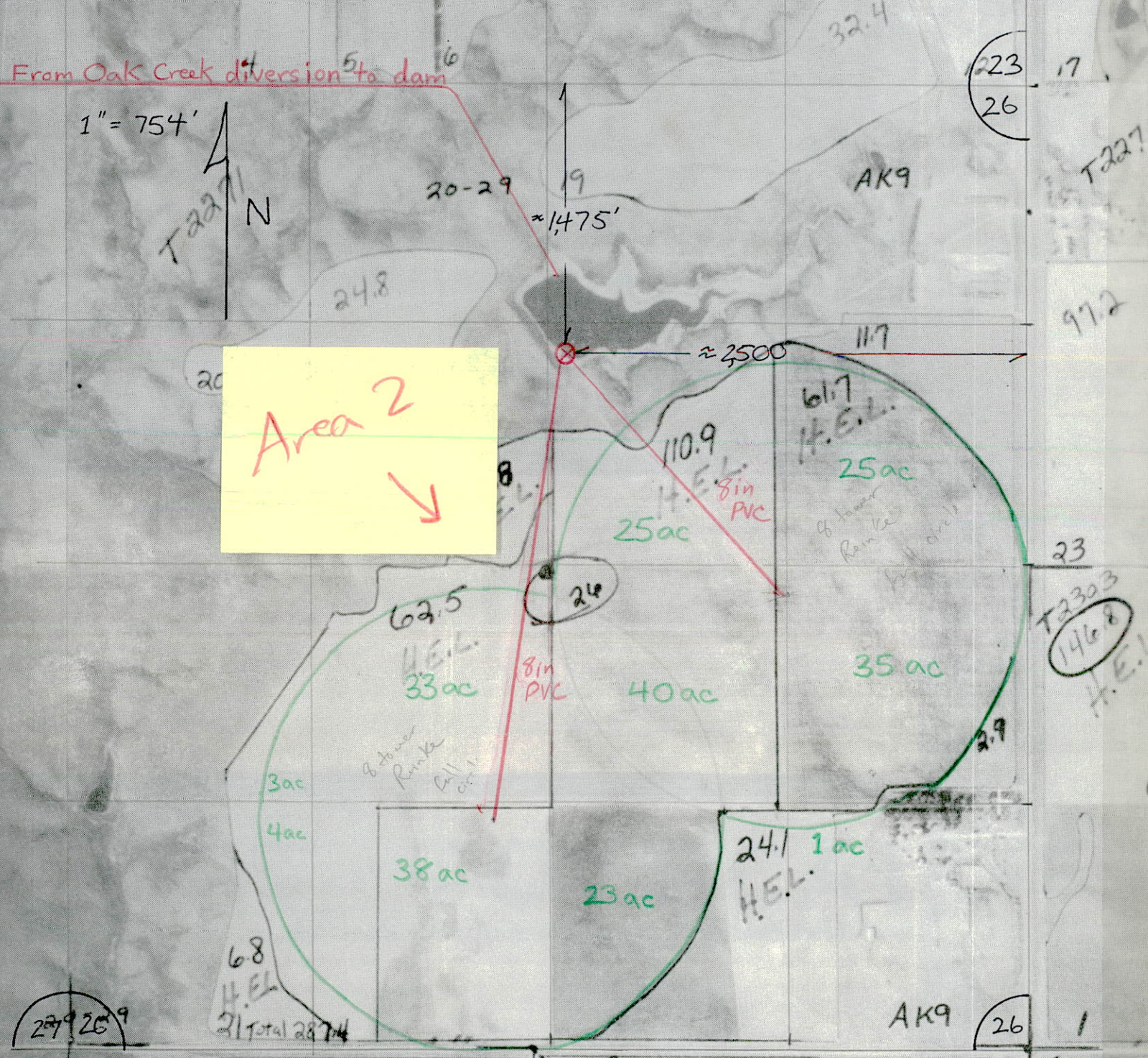
NOT TO SCALE

NOT TO SCALE

From Oak Creek diversion to dam

1" = 754'

Area 2
↓



CRP 88-97

CRP 90-99

CRP

89-98

25-20-29



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

August 24, 2000

Marcus Lesmeister
1710 3rd Ave W
Mobridge SD 57601

Dear Mr. Lesmeister:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation.

As stated in Ron Duvall's letter dated August, 10, 2000, the application filing fee and license fee is \$375.00. Also, Mr. Duvall explained that a risk assessment is required for the dam.

If you have any questions or concerns, please contact Ron Duvall or me.

Sincerely,

Karen Schlaak

Karen Schlaak
Water Rights Program
605 773-3352



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

March 6, 2001

Marcus Lesmeister
1710 3rd Ave W
Mobridge SD 57601

Dear Mr. Lesmeister:

I am writing in response to receipt of your water permit application and application fee of \$375.00 received on August 29, 2000. This application was submitted in response to my inspection of your water permits on July 11, 2000. Please refer to the enclosed copy of my letter dated August 10, 2000 explaining why you needed to submit a new permit application.

Your application is complete except for one item. We have not been able to process your application because we have not received information addressing a safety of dams rule requirement. The second to the last paragraph in my August 10, 2000 letter explains that a risk assessment is needed to determine whether your dam is exempt from spillway requirements. As I noted in the letter, the Natural Resources Conservation Service (NRCS) may be able to do this risk assessment for you. If the NRCS has any questions about what needs to be included in a risk assessment, they can contact Tim Schaal (an engineer in our Water Rights Program) at (605) 773-3352 to get their questions answered.

After we get the risk assessment we can then proceed with processing your application. Please give me a call at (605) 773-3352 if you have any questions.

Sincerely,

Ron Duvall
Natural Resources Engineer
Water Rights Program

enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.denr.sd.gov

October 7, 2011

1059-1
1082-1B

Keith Lesmeister
PO Box 664
Mobridge SD 57601 0664

Dear Mr. Lesmeister:

Thank you for taking the time to visit with me regarding the ownership changes for Nos. 1059-1 and 1082-1B and also the pending application Marcus Lesmeister started in 2000.

The ownership change you submitted for Water Permit No. 1082-1B has been completed. The water right formerly listed in the name of Marcus Lesmeister is now listed in your name. Enclosed for your records is Receipt No. 04680.

Enclosed is a partially completed transfer form for filing an ownership change on Water Permit No. 1059-1. Please review the form and make any necessary corrections. Upon completion, please sign the form and return it to our office with a required filing fee of \$50.00. The check or money order for the fee can be made payable to the Water Rights Program.

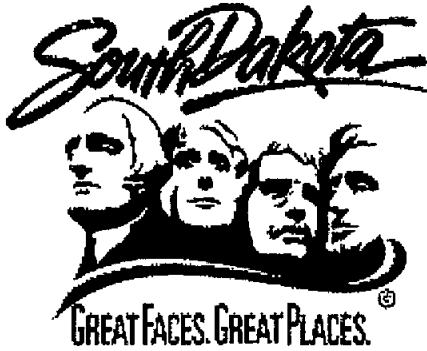
The last item to go over with you is the pending application which was filed to get the irrigation systems under both permits into compliance by increasing acres, changing a water source and permitting of the dry draw storage dam to allow irrigation from it. I have attached a letter dated March 6, 2001 which stated the application was complete except for one item. All that is needed before the application can be processed is a risk assessment for the dam.

I would encourage you to take care of the ownership change for Water Permit No. 1059-1 and the risk assessment needed for the application as soon as possible. If you have any questions, please contact us.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.denr.sd.gov

February 4, 2014

1059-1
1082-1B

Keith Lesmeister
PO Box 664
Mobridge SD 57601 0664

Dear Mr. Lesmeister:

I am writing to acknowledge receipt of your 2013 irrigation questionnaires. Based on our phone conversation, I edited your questionnaires to reflect no irrigation took place in Section 23 as authorized under No. 1059-1.

You may disregard the January 24, 2014, "Notice" concerning reporting requirements for Water Permit Nos. 1059-1 and 1082-1B. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

Another issue that needs to be taken care of is the pending application we have on file in Marcus Lesmeister's name. The application was filed to bring the existing systems into compliance by increasing acres, changing a water source and permitting the dry draw storage dam. The application is complete except for submission of a risk assessment for the dry draw dam. I believe the Corson County NRCS is located McIntosh SD. The phone number for the McIntosh Service Center is 605 273-4506 and is located at 175 Main Street in McIntosh SD.

We would like to work with you to get the permitting in place to bring your irrigation systems into compliance. If you have questions on the risk assessment and what is involved in it, please contact Tim Schaal with our program at 605 773-3352.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us



GOLDSMITH HECK
ENGINEERS, INC.

RECEIVED

FEB 27 2014

WATER RIGHTS
PROGRAM

P.O. Box 70
Mobridge, SD 57601
Tel 605.845.3125
Fax 605.845.3155

February 25, 2014

Mr. Lesmeister
PO Box 664
Mobridge, SD 57601

Re: Dam Analysis

Dear Mr. Lesmeister:

We have completed the Risk Assessment for the existing earth embankment dam located on the Lesmeister property, located in Section 26, R29E, T20N, Corson County, SD. We approached this assessment from three specific standpoints.

First we completed a general inspection of the dam embankment and the spillway. The embankment was in good condition with no evidence of overtopping, erosion or slide activity. We noted no leakage, however our inspection was completed in the winter months, therefore minor leakage may not have been apparent at that time. In general the dam was well designed with the spillway draining into a separate draw that greatly mitigates the danger on erosion caused failure. Based on the design and condition and the history of the dam as related by you, we feel the risk of dam failure is low. Note however that Goldsmith Heck Engineers is not a Geotechnical Engineering firm and you may want to have additional assessment completed regarding the stability of the dam embankment by a qualified Geotechnical firm.

We then surveyed the dam basin in order to calculate the capacity. We did not survey the underwater capacity, but rather projected the slopes of the draw and the dam embankment to create the underwater surface. This would likely overestimate the capacity because it is likely that some of the dam capacity has diminished over time due to siltation fill. We estimate the dam capacity at spillway elevation to be 415,264 CU YD or 11,212,128 Cubic Feet.

We also determined the drainage area to be approximately 511 acres using USGS topographic maps. We then analyzed the drainage under 100 year flood event, 24 hour duration using Hydraflow Hydrographs Extension for AutoCAD to calculate the peak flow and high water elevation in the dam. We assumed the dam was full to spillway elevation at the time of the 100 year event. The SCS method of computing runoff was used assuming CN=85 for Group C soils, rangeland poor condition. Using these assumptions the resulting high water elevation is calculated to be 1744.96, which is 1.0 feet below the top of the dam embankment. Given these assumptions, the risk of overtopping the dam embankment is low. The Hydraflow Reports are enclosed for reference.

Finally we assessed the risk of embankment failure using the Risk Prioritization Tool for Dams prepared for FEMA by URS. This analysis was completed assuming a dam failure during a 100-yr rain event. Using a storage quantity of 321.08 ac-ft and a depth

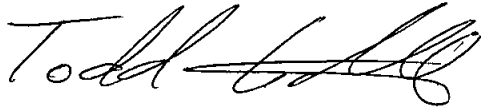
of water behind the embankment of 32.9 feet the peak flow during a failure was calculated at 16,727 cfs. Using an estimated 10-yr discharge on the stream gauge from USGS stream station located on the receiving stream of 4190 cfs, an estimated flood life loss potential was 0.804.

The Failure Mode Evaluation was completed using the general description in making subjective judgments of failure probability provided in the Risk Prioritization Tool for Dams User Manual. The evaluation of probability was determined to be 0.001 for flood and normal stability and 0.0002 for piping failure modes.

The results from the Dam Failure Risk Worksheet shows that the Lesmeister Dam falls in the priority C risk group. The worksheets are enclosed for reference.

Please let me know if this analysis is sufficient for your needs.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd Goldsmith", with a stylized flourish at the end.

Todd Goldsmith, PE

Subject: FW: Lesmiester Dam - Flood Routing Results
From: "Jon Heck" <jheck.goldeng@midconetwork.com>
Date: 5/28/2013 9:03 AM
To: "Todd Goldsmith" <goldeng@westriv.com>

RECEIVED
FEB 27 2014
WATER RIGHTS
PROGRAM

Here you go.

From: Jon Heck [mailto:jheck.goldeng@midconetwork.com]
Sent: Tuesday, April 30, 2013 9:46 AM
To: 'Todd Goldsmith'
Subject: Lesmiester Dam - Flood Routing Results

Todd,

Attached is the output from two modeling runs for the dam. Each run uses the SCS method of computing runoff. One run assuming a CN=85 for Group C soils, rangeland poor condition and the other a CN=79, rangeland fair condition.

For storage I assumed the dam was full up to the spillway elevation of 1742.32 and the storage above this level based on the contour areas from your survey. I used a 100-yr 24-hr duration storm, which produces the greatest volume of runoff.

For the CN=79 run, Qmax= 321 cfs and Elev. Max= 1744.51, which is 1.5' below the top of the dam embankment

For the CN=85 run, Qmax= 422 cfs and Elev. Max= 1744.96, which is 1.0' below the top of the dam embankment.

Jon D. Heck, PE/LS
Vice President

Goldsmith Heck Engineers, Inc.
524 N. Sycamore Avenue, Suite 1
Sioux Falls, SD 57110
p: 605-332-9685 f: 605-332-9687
email: jheck.goldeng@midconetwork.com

— Attachments: —

20130430094510674.pdf

1.5 MB

Hydraflow Table of Contents

Lesmiester Dam 100-yr Storm.gpw

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc. v9.25

Tuesday, Apr 30, 2013

Hydrograph Return Period Recap..... 1

100 - Year

Summary Report..... 2

Hydrograph Reports..... 3

Hydrograph No. 2, Reservoir, 100-yr Overflow Channe..... 3

Pond Report - Dam WS @ 1742.32..... 4

CN = 79 (Group C, Rangeland Fair Condition)

[illegible]

Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc. v9.25

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time Interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	1000.16	2	740	5,166,313	-----	-----	-----	Lesmiester Dam 100-yr 24-hr Stor
2	Reservoir	320.49	2	776	5,165,998	1	1744.51	2,290,123	100-yr Overflow Channe
Lesmiester Dam 100-yr Storm.gpw					Return Period: 100 Year			Tuesday, Apr 30, 2013	

Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc. v9.25

Tuesday, Apr 30, 2013

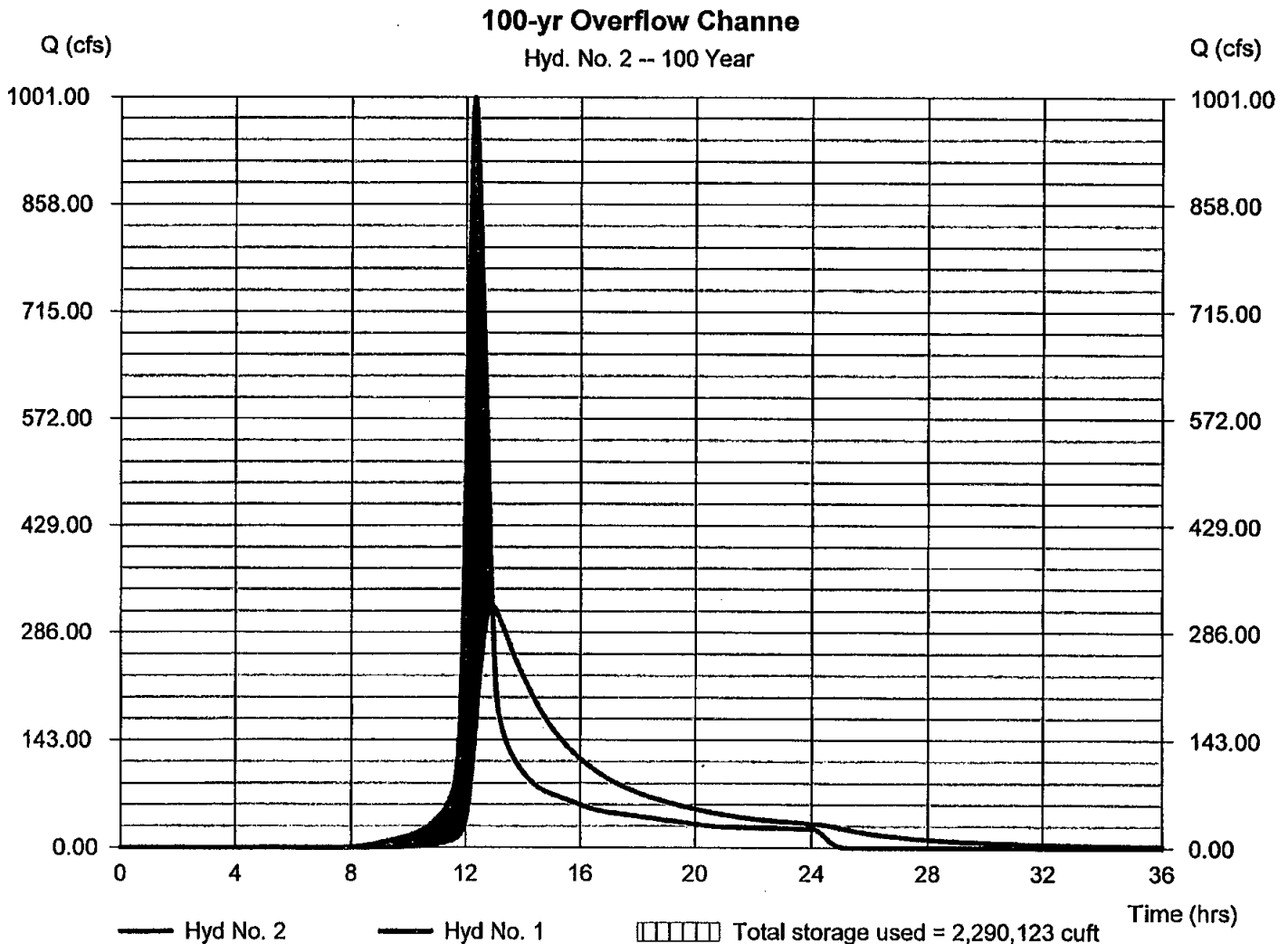
Hyd. No. 2

100-yr Overflow Channel

Hydrograph type	= Reservoir	Peak discharge	= 320.49 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.93 hrs
Time interval	= 2 min	Hyd. volume	= 5,165,998 cuft
Inflow hyd. No.	= 1 - Lesmiester Dam 100-yr 244 Max. Elevation 179	Max. Storage	= 1744.51 ft
Reservoir name	= Dam WS @ 1742.32		= 2,290,123 cuft

Storage Indication method used.

TOP OF DAM
EMBANKMENT = 1746.0'[±]
≈ 1.5' OF FREEBOARD.



Pond Report

4

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc. v9.25

Tuesday, Apr 30, 2013

Pond No. 1 - Dam WS @ 1742.32

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Beginning Elevation = 1742.32 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	1742.32	987,677	0	0
0.68	1743.00	1,022,761	683,549	683,549
1.68	1744.00	1,071,743	1,047,252	1,730,801
2.68	1745.00	1,116,238	1,093,990	2,824,791
3.68	1746.00	1,159,105	1,137,672	3,962,463

← OVERFLOW CREST
1742.32

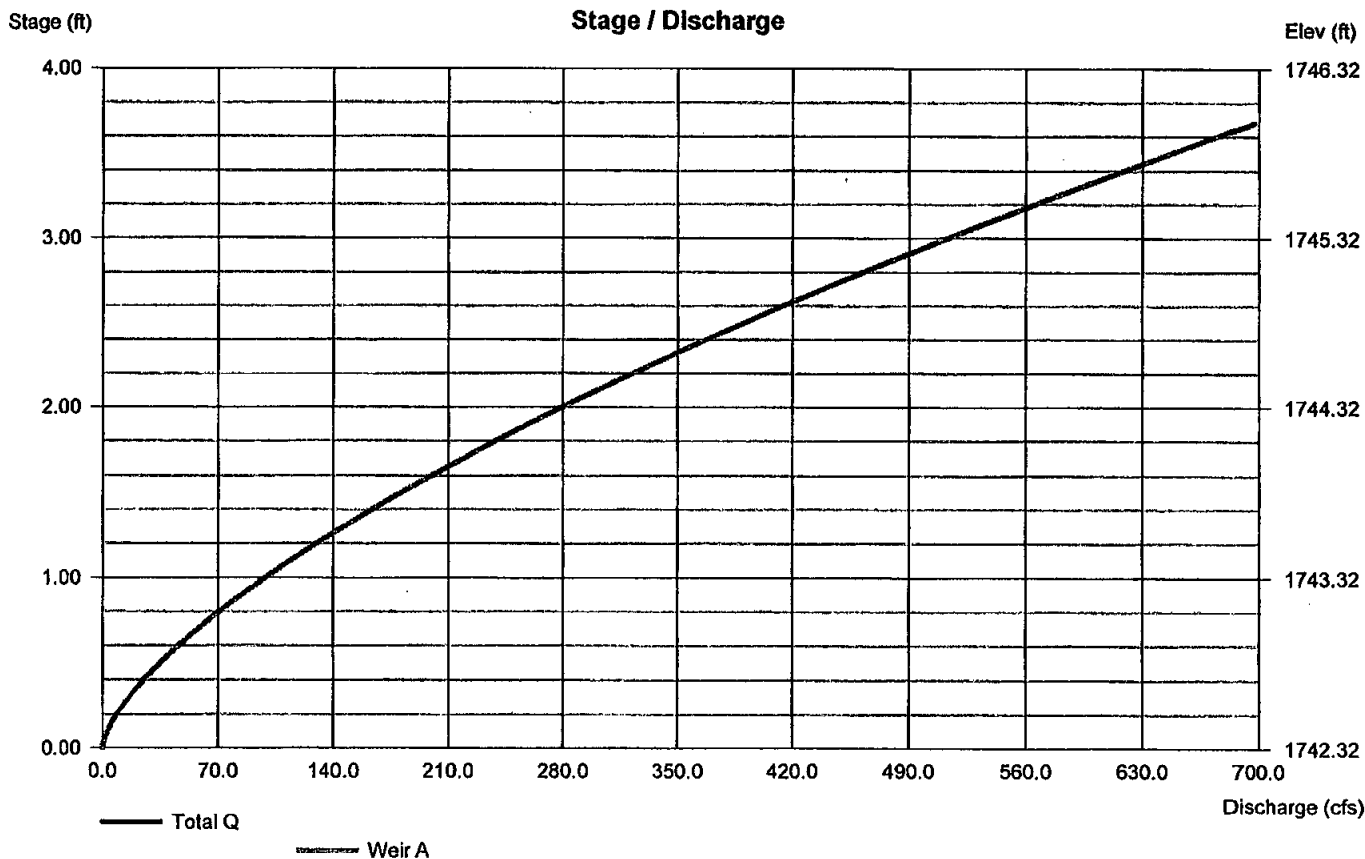
Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (In)	= 0.00	0.00	0.00	0.00
Span (In)	= 0.00	0.00	0.00	0.00
No. Barrels	= 0	0	0	0
Invert El. (ft)	= 0.00	0.00	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 38.00	Inactive	0.00	0.00
Crest El. (ft)	= 1742.32	0.00	0.00	0.00
Weir Coeff.	= 2.60.00	3.33	3.33	3.33
Weir Type	= Broad	Rect	---	---
Multi-Stage	= No	No	No	No
Exfil. (In/hr)	= 0 (by Wet area)			
TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydraflow Table of Contents

Lesmlester Dam 100-yr Storm.gpw

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc. v9.25

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100 - Year

Summary Report..... 2

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Hydrograph No. 2, Reservoir, 100-yr Overflow Channe..... 3

Pond Report - Dam WS @ 1742.32..... 4

CN = 85 (Group C, Rangeland Poor Condition)

CATTLE PASS/CULVERT WAS NOT MODELED,

ASSUME WATERSHED FLOW PASSES UNDER

1806 WITH NO UPSTREAM DETENTION OCCURRING.

(CONSERVATIVE APPROACH BOTH CN'S).

[illegible]

Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc. v9.25

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time Interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	1203.71	2	738	6,221,080	-----	-----	-----	Lesmiester Dam 100-yr 24-hr Stor
2	Reservoir	422.32	2	774	6,220,765	1	1744.96	2,774,097	100-yr Overflow Channe
Lesmiester Dam 100-yr Storm.gpw					Return Period: 100 Year			Tuesday, Apr 30, 2013	

Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc. v9.25

Tuesday, Apr 30, 2013

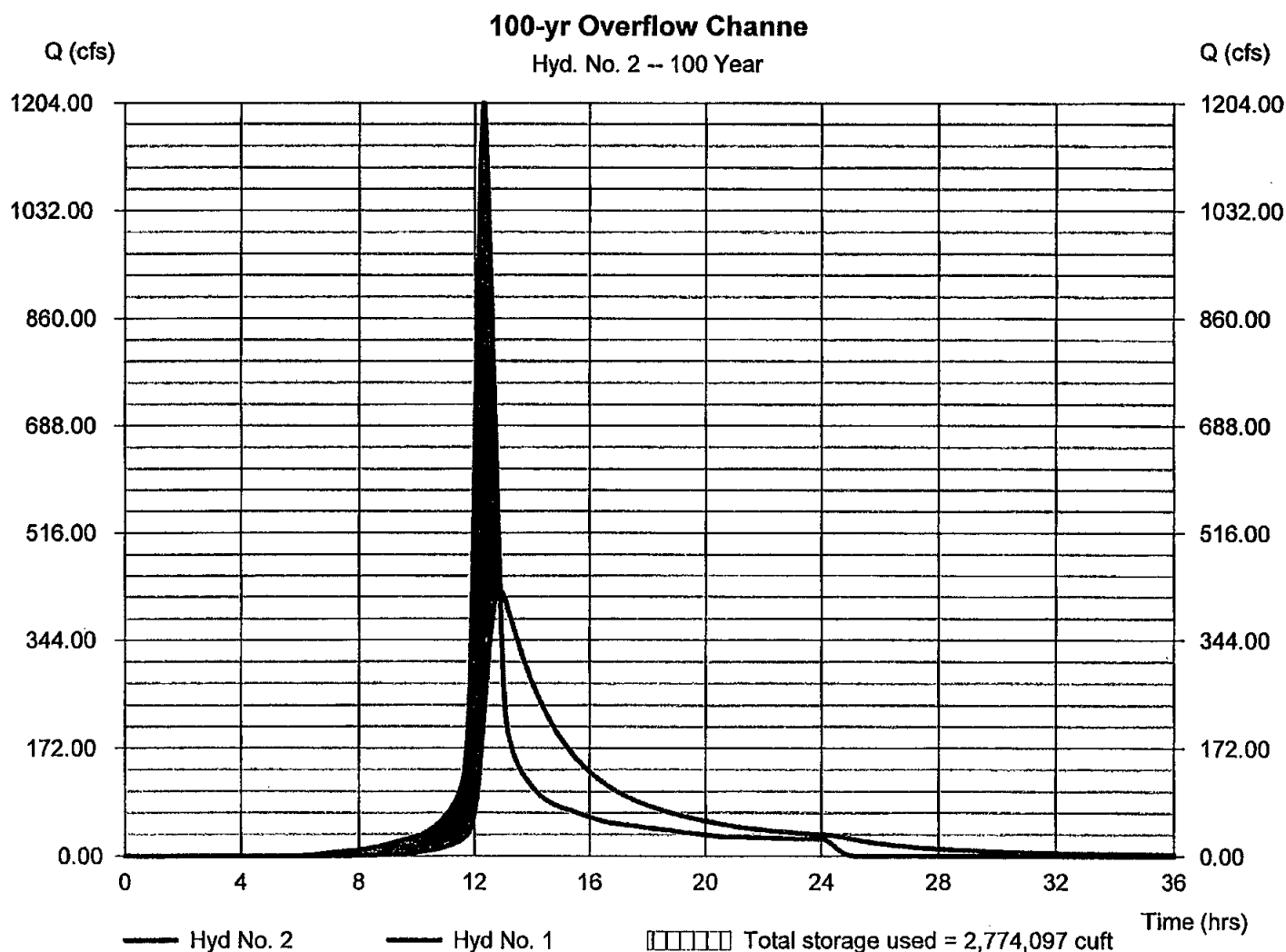
Hyd. No. 2

100-yr Overflow Channe

Hydrograph type	= Reservoir	Peak discharge	= 422.32 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.90 hrs
Time interval	= 2 min	Hyd. volume	= 6,220,765 cuft
Inflow hyd. No.	= 1 - Lesmiester Dam 100-yr 244.85	Max. Elevation	= 1744.96 ft
Reservoir name	= Dam WS @ 1742.32	Max. Storage	= 2,774,097 cuft

Storage Indication method used.

TOP OF DAM
 EMBANKMENT = 1746.0[±]
 ≈ 1.0' OF FREEBOARD.



Pond Report

4

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2010 by Autodesk, Inc. v9.25

Tuesday, Apr 30, 2013

Pond No. 1 - Dam WS @ 1742.32

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 1742.32 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	1742.32	987,677	0	0 ← OVERFLOW CREST
0.68	1743.00	1,022,761	683,549	683,549
1.68	1744.00	1,071,743	1,047,252	1,730,801
2.68	1745.00	1,116,238	1,093,990	2,824,791
3.68	1746.00	1,159,105	1,137,672	3,962,463

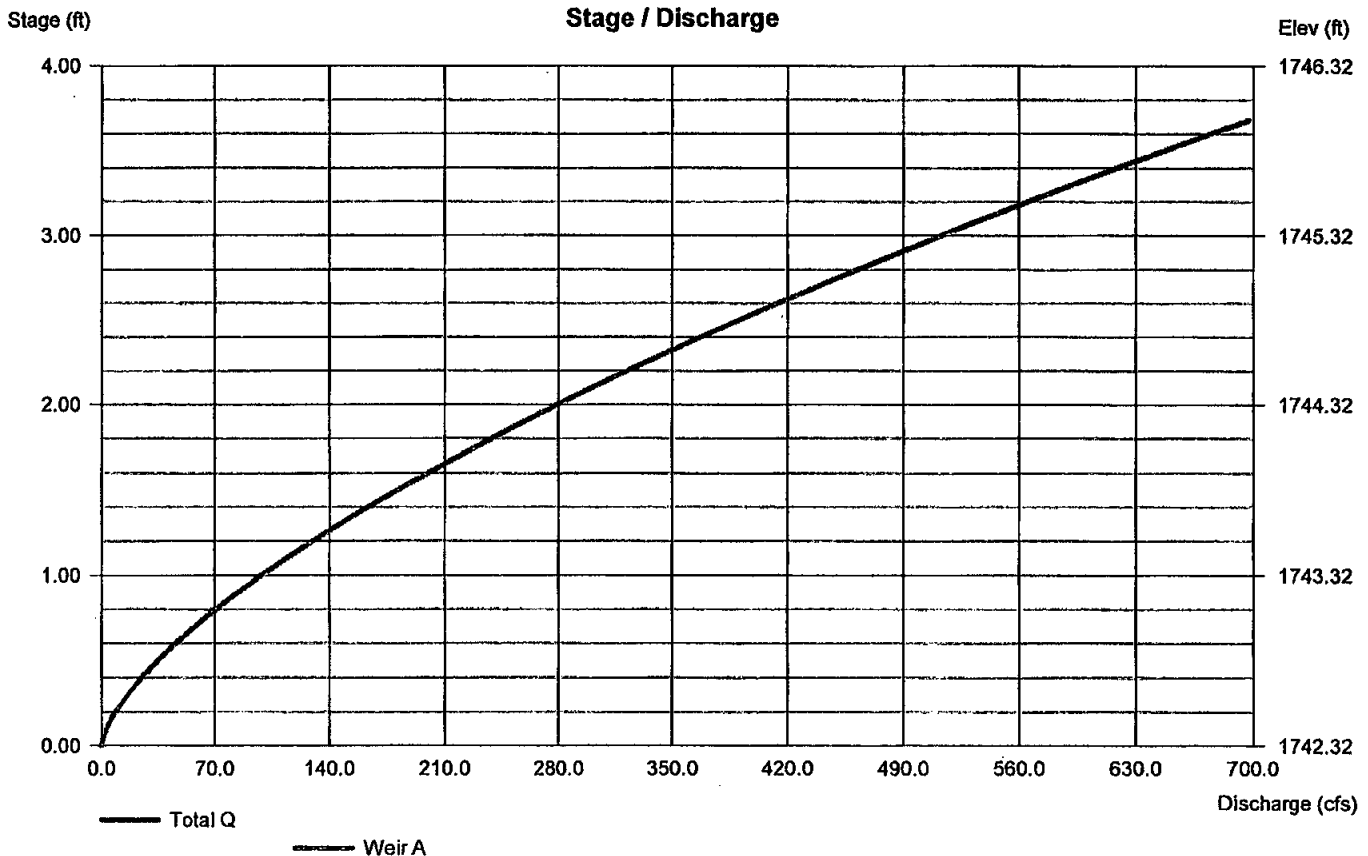
Culvert / Orifice Structures

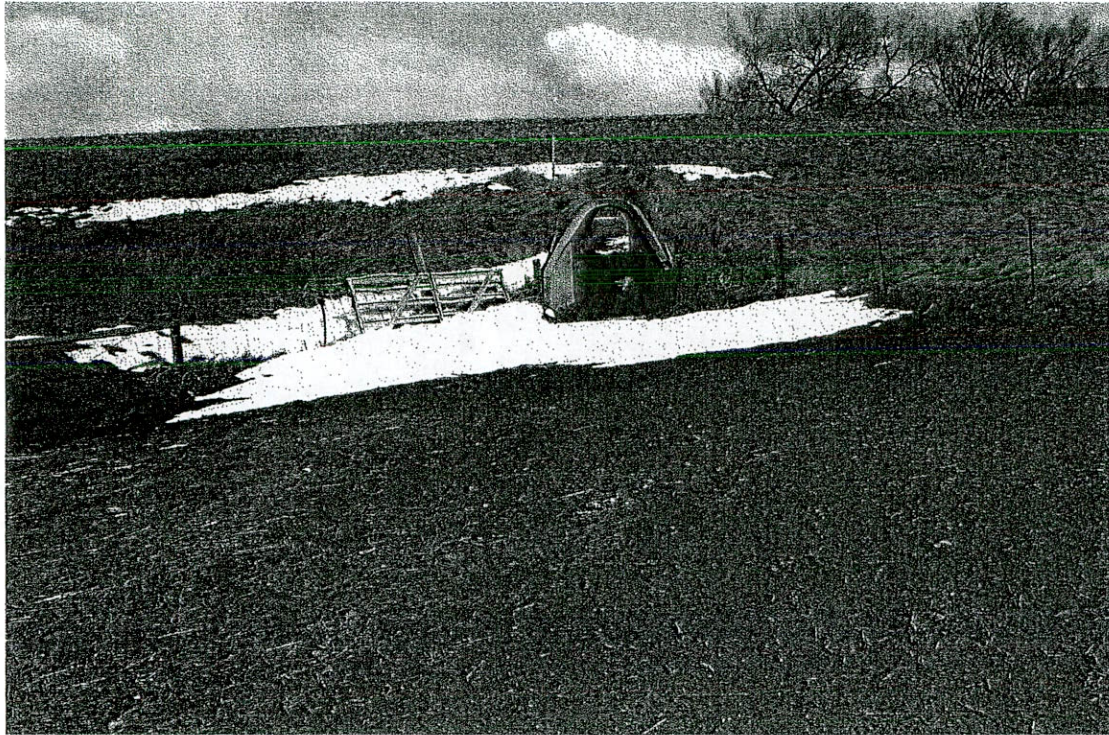
	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 0.00	0.00	0.00	0.00
Span (in)	= 0.00	0.00	0.00	0.00
No. Barrels	= 0	0	0	0
Invert El. (ft)	= 0.00	0.00	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 38.00	Inactive	0.00	0.00
Crest El. (ft)	= 1742.32	0.00	0.00	0.00
Weir Coeff.	= 2.60.00	3.33	3.33	3.33
Weir Type	= Broad	Rect	---	---
Multi-Stage	= No	No	No	No
Exfil.(in/hr)	= 0 (by Wet area)			
TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under Inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).





CATTLE PASS/CULVERT UNDER HWY 1806.

LIKELY PROVIDES SOME UPSTREAM DETENTION
BEHIND HWY 1806 DURING 100-YR. EVENT.
IGNORED FOR OUR MODELING.

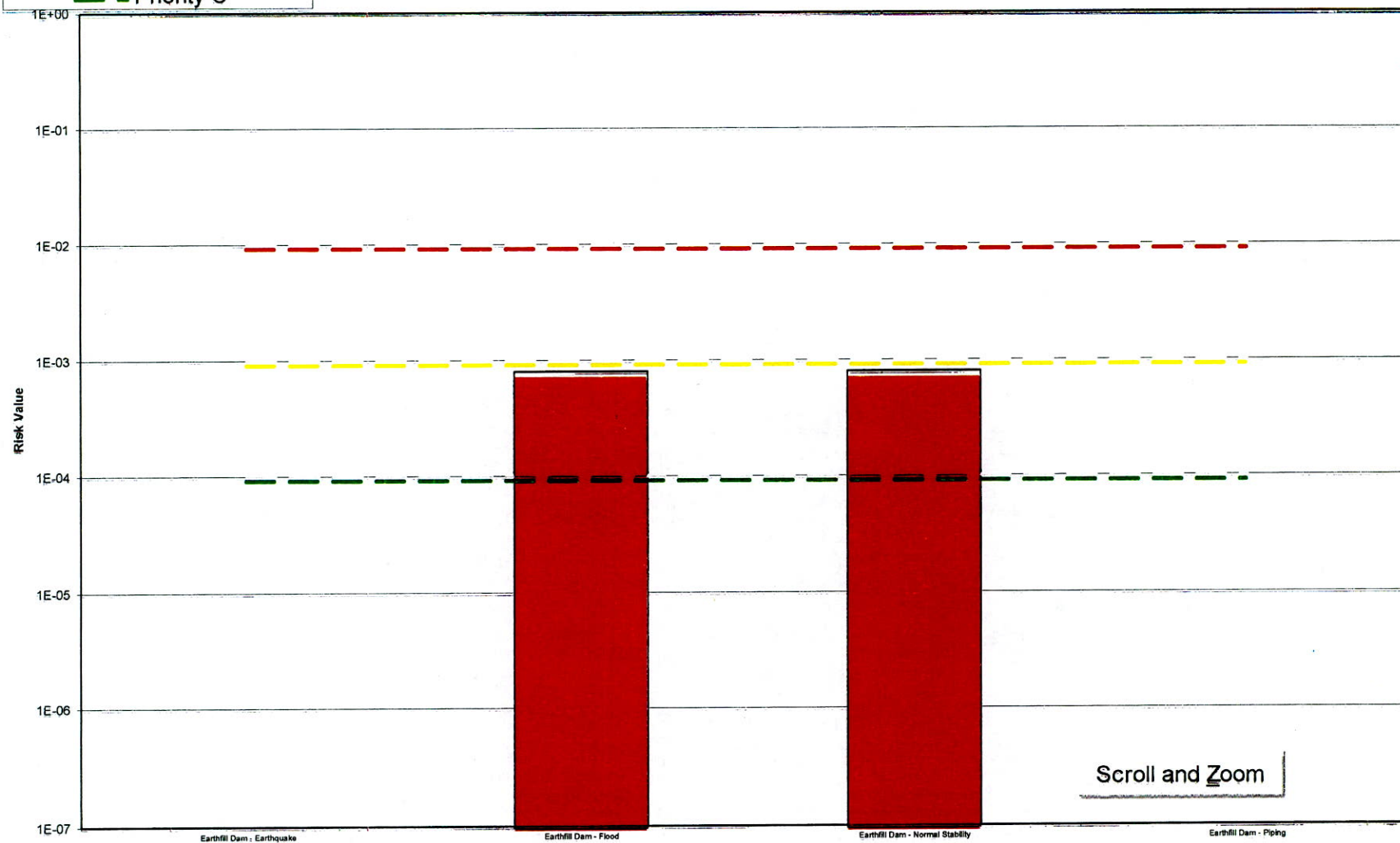
During 100yr Event w/o piping

NID Data	
Dam Name:	Lesmiester Dam
Federal Dam ID:	NA
State:	South Dakota
Region:	Corson County
Hydraulic Height (feet):	32.87
NID Spillway Capacity (cfs):	422.32
Max. Storage Volume (ac-ft):	321.08
Max. Reservoir Area (acres):	26.6
Probability of dam impounding water in any one year:	100.00%
NID Hazard:	Low
EAP Available:	No
Drainage Area (sq.mi.):	0.79
Owner:	Lesmiester
Other Data	
Basin Slope (feet/mile):	4.55
Mean Basin Elevation (feet):	1630
Mean Annual Precipitation (inches):	15
Main Stream Length (miles):	3.44
Evaulator Data	
Evaluator Name:	
Organization:	
Address:	
City:	
State:	
Zip:	Add and Remove Elem
Phone:	
Cell:	
Fax:	
Email:	
Date of Evaluation:	
Last Run Date:	

Funded by FEMA
Developed by URS

Dam Failure Mode Risk Profile

- Risk Value
- Priority A
- Priority B
- Priority C



Scroll and Zoom

DAM: _____

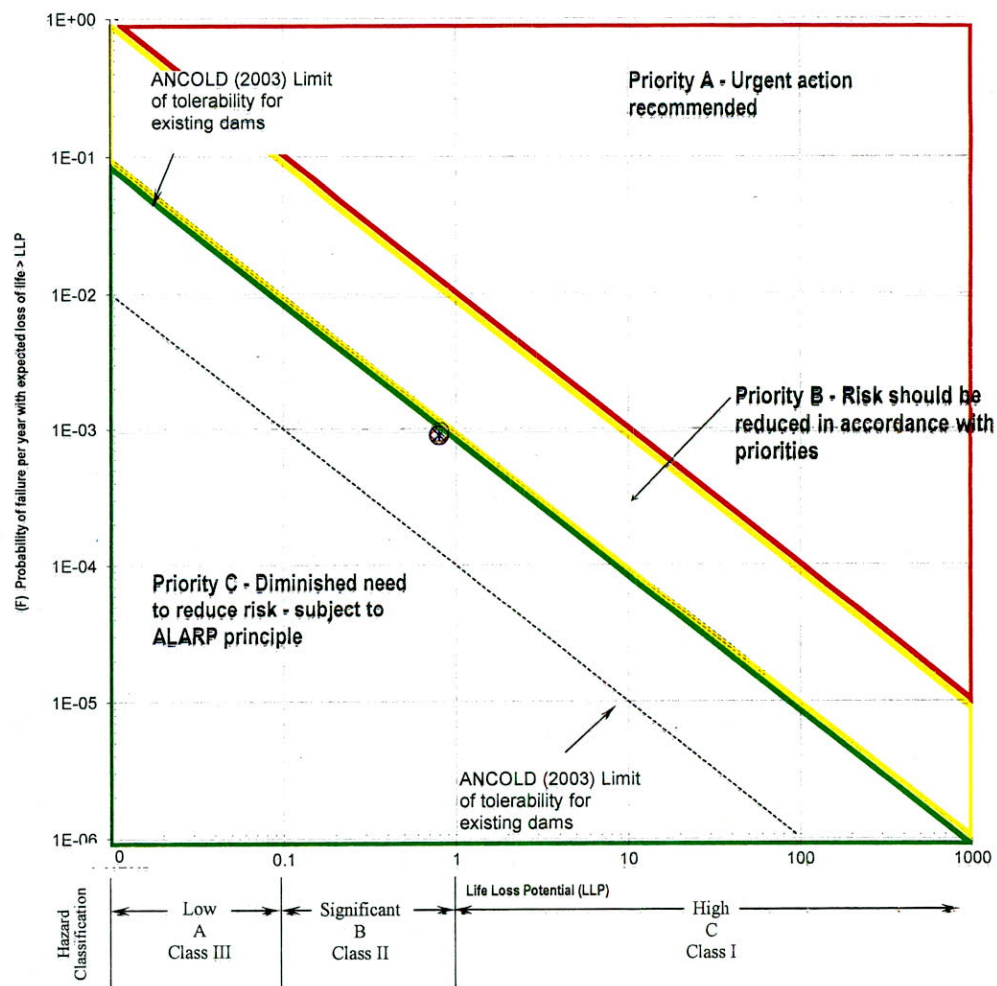
FAILURE MODES EVALUATION AND RISK WORKSHEET EARTHFILL DAM

EVALUATOR: _____

LOCATION: _____

DATE: _____

RISK PLOT



OBSERVATIONS	FAILURE MODES			
	Earthquake ²	Flood ¹	Piping	Normal Stability
Significant deformation and transverse cracking Concentrated seepage with turbidity Large slumps Large Trees	Not designed for EQ loading in high hazard area Soils liquefy FS<1.0* in EQ AEP 10 ⁻¹	TFF < 10 ⁻¹	Observed piping of embankment or foundation Erodable / poorly compacted / dry and brittle soils* and incompatible or internally unstable soils No filter Unprotected seepage exit with high gradient	FS < 1.0* Slopes steeper than 1.5H:1V High Pore Pressures Very weak foundation
Observed deformation and cracking, steep or stepped abutments Significant seepage or wet areas Trees on slope or toe	Loose soils present in fdn or embankment Soils liquefy or FS<1.0* under Operating Basis Earthquake (OBE)	TFF < 10 ⁻²	Compacted clay core No observed piping Uncertain Filter Compatibility Uncertain Foundation Nonerodible soils Toe Drain Partial Fdn. Cutoff (Average 2 E-4)	FS < 1.1* Slopes steeper than 2H:1V High phreatic surface Poor foundation
Infrequent Inspection (none in last 10 years) Limited Cracking Small Trees Minor Animal Burrows Clear, Consistent Seepage	Marginal soils FS>1.0* under OBE FS<1.0* for Maximum Design Earthquake (MDE)	TFF < 10 ⁻³	No known cracks Modern, fully penetrating filter Full Foundation Cutoff Modern Foundation Treatment	FS < 1.2* Slopes steeper than 2H:1V Uncertain foundation
		TFF < 10 ⁻⁴		FS < 1.3 Slopes steeper than 3H:1V
Embankment condition satisfactory confirmed by regular inspection (Note: with embankment concrete corewall or cutoff wall reduce by one order of magnitude)	Dense foundation or compacted embankment soils FS>1.1 under MDE	TFF < 10 ⁻⁴	Wide filter and blanket drain Extensive monitoring	FS > 1.3 Regular monitoring Slopes flatter than 3H:1V Good foundation
	FS>1.3 under MDE	TFF > PMPDF or Probable Maximum Flood		FS > 1.5 Regular monitoring
Failure Mode F		1.00E-03		1.00E-03
Life Loss Potential		1		1
Failure Mode F with Storage	0.00E+00	1.00E-03	0.00E+00	1.00E-03

Notes: (* or unknown)

1. TFF - threshold failure flood flood which overtops sufficient to cause breach

2. Skip earthquake failure mode if in low seismicity area where Maximum Design Earthquake (MDE) pga < 0.1g

Input Required

Ignore if not applicable

at Spillway Elevation

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FEB 27 2014

WATER RIGHTS
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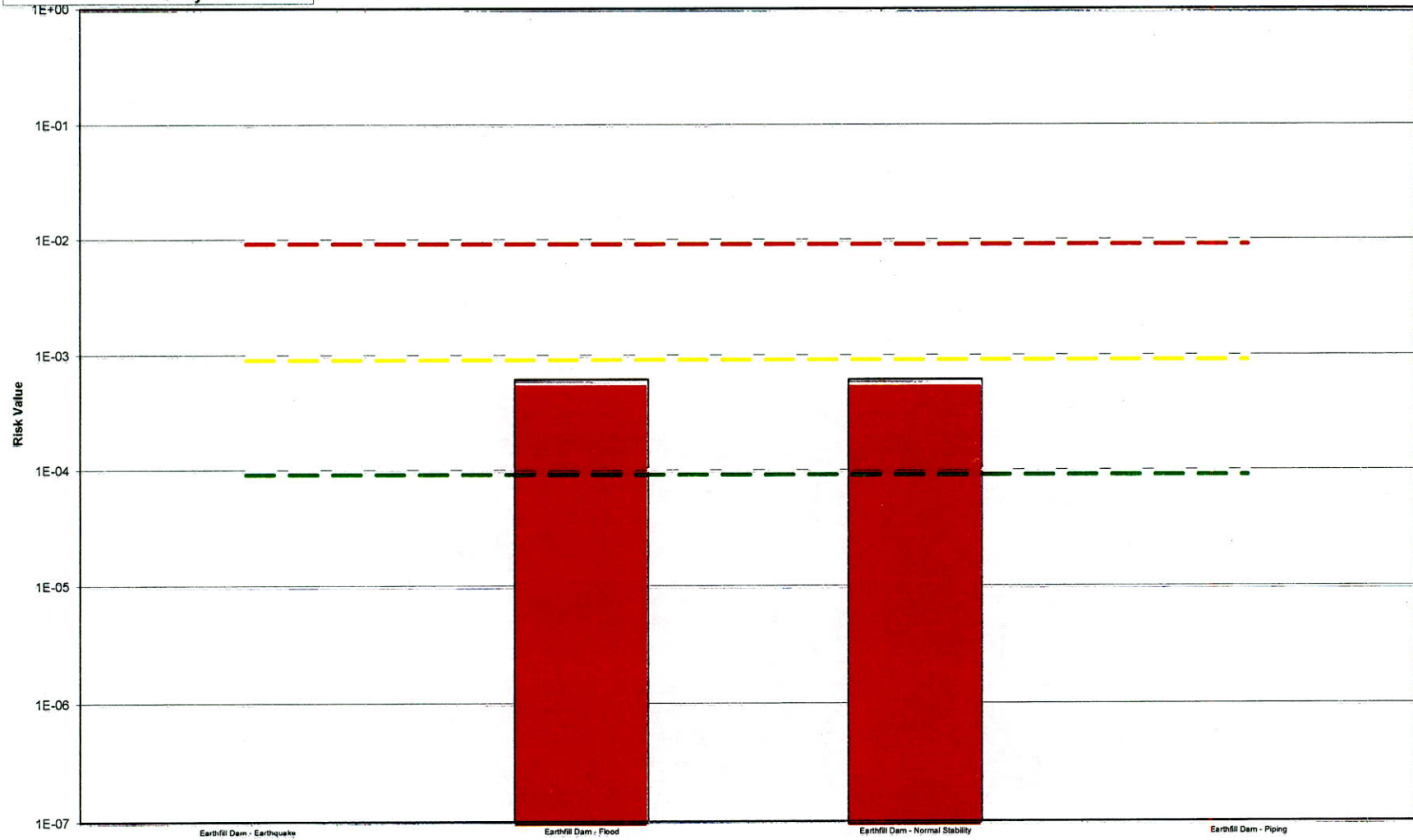
NID Data	
Dam Name:	Lesmiester Dam
Federal Dam ID:	NA
State:	South Dakota
Region:	Corson County
Hydraulic Height (feet):	32.87
NID Spillway Capacity (cfs):	2190.45
Max. Storage Volume (ac-ft):	257.39
Max. Reservoir Area (acres):	22.68
Probability of dam impounding water in any one year:	100.00%
NID Hazard:	Low
EAP Available:	Unknown
Drainage Area (sq.mi.):	0.79
Owner:	Lesmiester
Other Data	
Basin Slope (feet/mile):	4.55
Mean Basin Elevation (feet):	1630
Mean Annual Precipitation (inches):	15
Main Stream Length (miles):	3.44
Evaulator Data	
Evaluator Name:	
Organization:	
Address:	
City:	
State:	
Zip:	
Phone:	
Cell:	
Fax:	
Email:	
Date of Evaluation:	
Last Run Date:	

Funded by FEMA
Developed by URS

Add and Remove Elements

Dam Failure Mode Risk Profile

- Risk Value
- Priority A
- Priority B
- Priority C



[illegible]

[Return to Main](#)

[Return to Main](#)

Approximate Analysis Results		Sunny Day				
Peak Breach Discharge (cfs)		15,671				
10-year Discharge (cfs)		4190				
Reach (Distance from dam) in miles	10-year Discharge (cfs)	Dam Breach Discharge (cfs)	Estimated PAR within the dam sunny day failure inundation limits	Ratio of Peak Discharge from Dam Breach to 10-year Flood Peak Discharge	Calculated Fatality Rate	Estimated Sunny Day Life Loss Potential
0.0 to 3.0	4,190	15,671	60	3.7	0.01	1
3.0 to 7.0	4,190	15,671	2	3.7	0.007	0
7.0 to 15.0	4,190	15,671	0	3.7	0.004	0
Total (mile 0.0 to 15.0)	-	-	62	-	-	1
		From NID database				
		Input from other data sources/calculations				
		Calculated from Froelich Equation				
		Estimated from Table 3 data				

DAM: _____

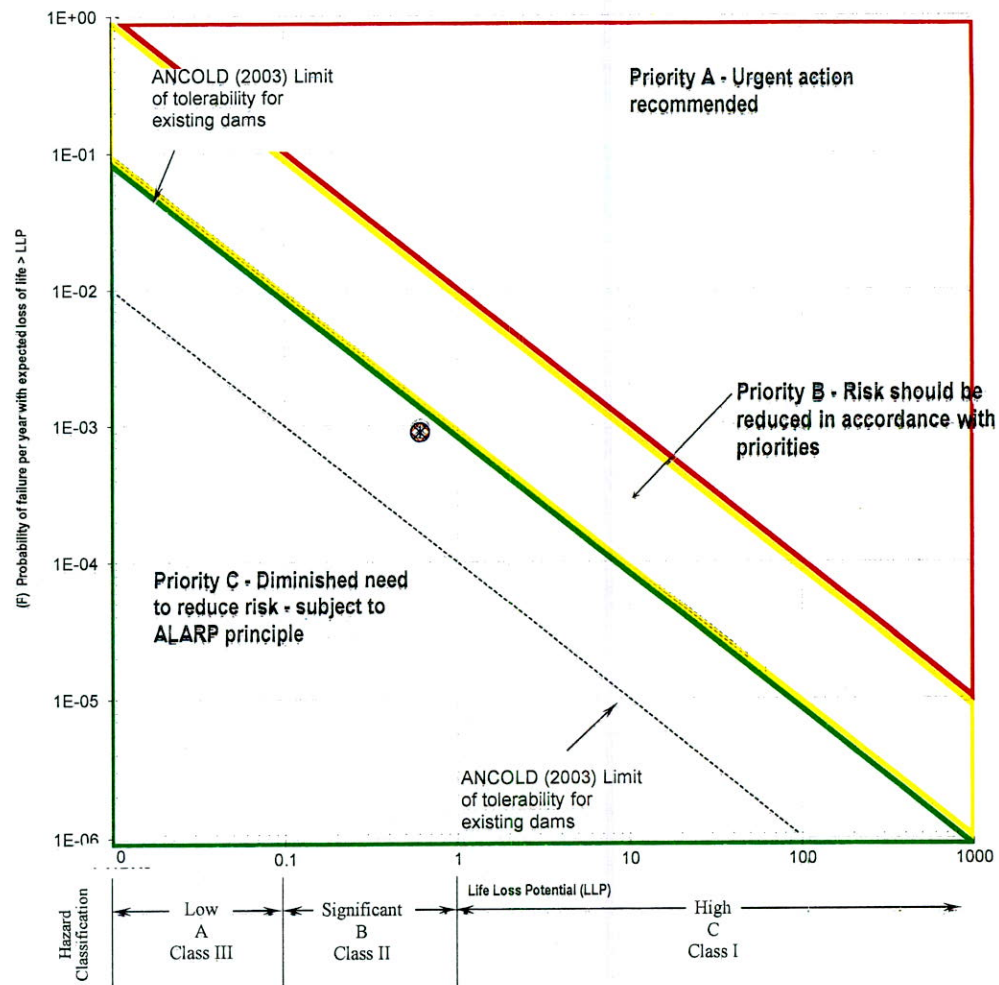
FAILURE MODES EVALUATION AND RISK WORKSHEET EARTHFILL DAM

EVALUATOR: _____

LOCATION: _____

DATE: _____

RISK PLOT



FAILURE MODES

OBSERVATIONS

Earthquake²Flood¹

Piping

Normal Stability

Significant deformation and
transverse cracking
Concentrated seepage with turbidity
Large slumps
Large Trees

Not designed for EQ
loading in high hazard area
Soils liquefy
FS < 1.0* in EQ AEP 10⁻¹

TFF < 10⁻¹

Observed piping of embankment
or foundation
Erodable / poorly compacted / dry
and brittle soils* and
Incompatible or internally unstable
soils
No filter
Unprotected seepage exit with
high gradient

FS < 1.0*
Slopes steeper than 1.5H:1V
High Pore Pressures Very weak
foundation

Observed deformation and cracking,
steep or stepped abutments
Significant seepage or wet areas
Trees on slope or toe

Loose soils present in fdn
or embankment
Soils liquefy or FS < 1.0*
under Operating Basis
Earthquake (OBE)

TFF < 10⁻²

Compacted clay core
No observed piping
Uncertain Filter Compatibility
Uncertain Foundation
Nonerodible soils
Toe Drain
Partial Fdn. Cutoff
(Average 2 E-4)

FS < 1.1*
Slopes steeper than 2H:1V
High phreatic surface
Poor foundation

Infrequent inspection
(none in last 10 years)
Limited Cracking
Small Trees
Minor Animal Burrows
Clear, Consistent Seepage

Marginal soils
FS > 1.0* under OBE
FS < 1.0* for Maximum
Design Earthquake (MDE)

TFF < 10⁻³TFF < 10⁻⁴

FS < 1.2*
Slopes steeper than 2H:1V
Uncertain foundation

FS < 1.3
Slopes steeper than 3H:1V

Embankment condition satisfactory
confirmed by regular inspection
(Note: with embankment concrete
corewall or cutoff wall
reduce by one order of magnitude)

Dense foundation or
compacted embankment
soils
FS > 1.1 under MDE

TFF < 10⁻⁵

No known cracks
Modern, fully penetrating filter
Full Foundation Cutoff
Modern Foundation Treatment

FS > 1.3
Regular monitoring Slopes flatter
than 3H:1V
Good foundation

FS > 1.3 under MDE

TFF > PMPDF or Probable
Maximum Flood

Wide filter and blanket drain
Extensive monitoring

FS > 1.5
Regular monitoring

Failure Mode F

Life Loss Potential

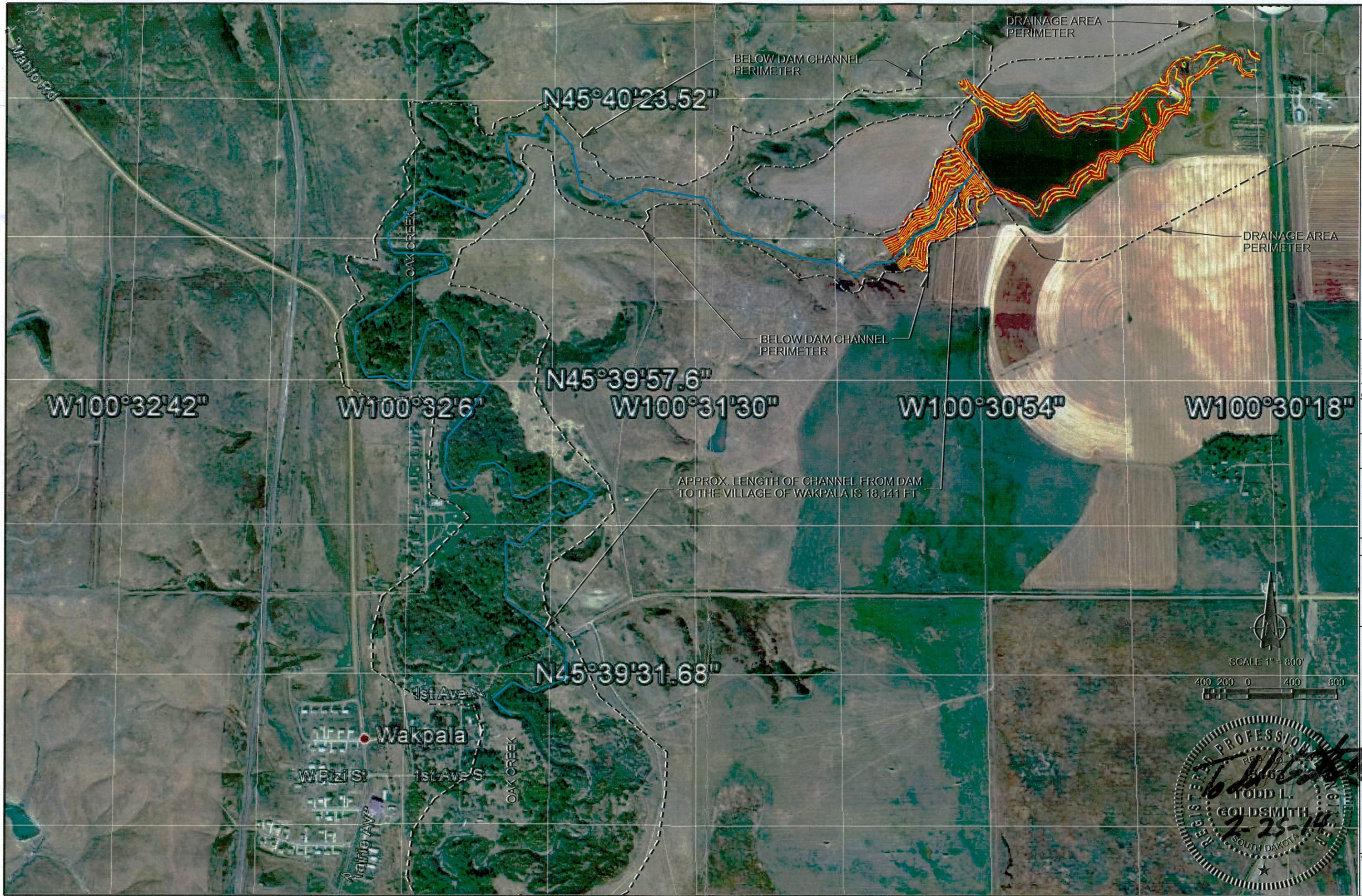
Failure Mode F with Storage

Notes: (* or unknown)

1. TFF - threshold failure flood flood which overtops sufficient to cause breach

2. Skip earthquake failure mode if in low seismicity area where Maximum Design Earthquake (MDE) pga < 0.1g

Input Required
Ignore if not applicable



**LESMIESTER DAM
SURVEY**
MOBRIDGE, SOUTH DAKOTA

Project No.:	Date	By	Revision	No.	Date
112526					
File Name:					
plan.dgn					

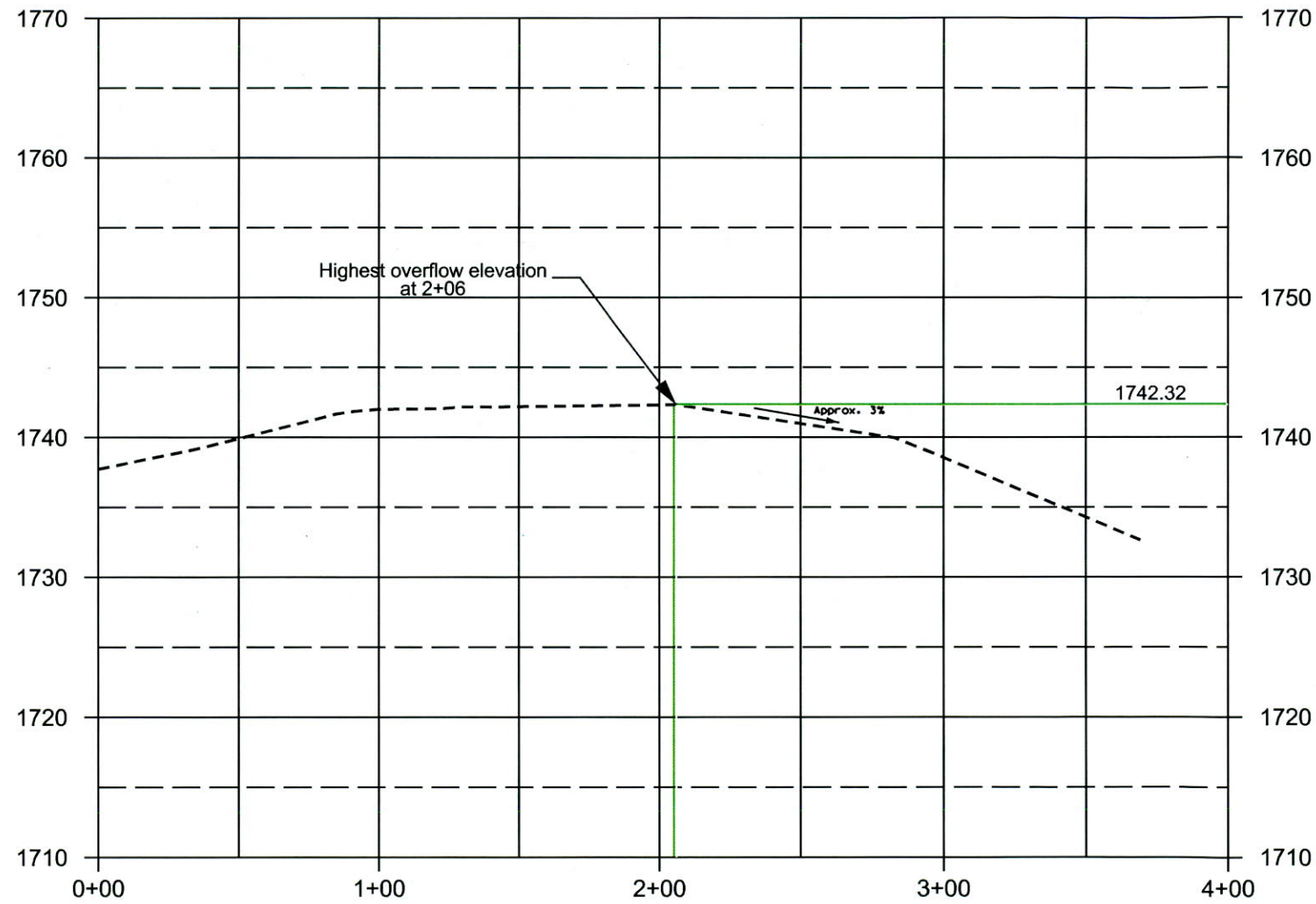
GOLDSMITH HECK
ENGINEERS, INC.
Sioux Falls, SD
(605)332-9685

REGISTERED PROFESSIONAL ENGINEER
No. 5162
TODD L.
GOLDSMITH
7-25-14
SOUTH DAKOTA

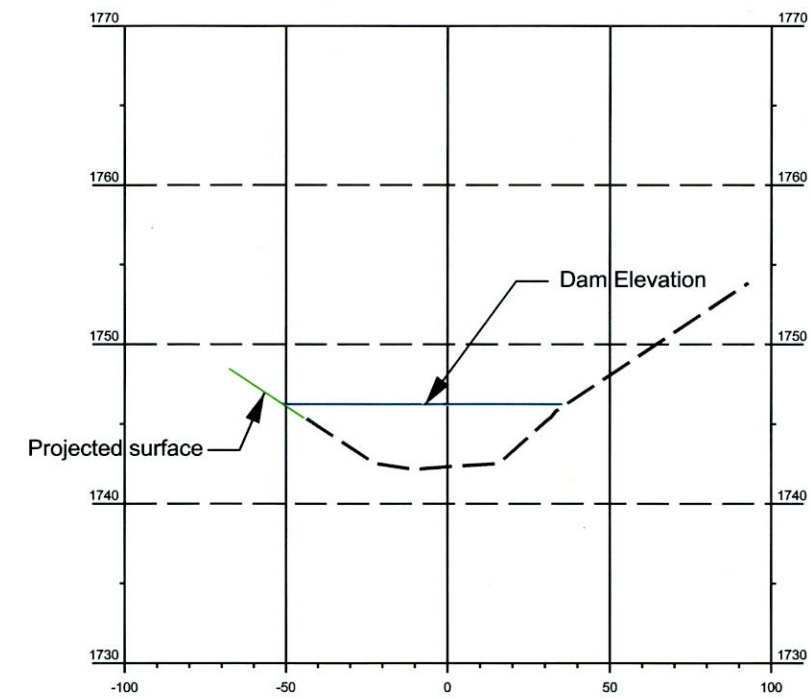
SHEET NO.
2 of 2

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PROGRAM

OverFlow Profile



OverFlow
Cross Section



2+06



**LESMIESTER DAM
SURVEY**
MOBRIDGE, SOUTH DAKOTA

Project No.:	112526
File Name:	plan.dgn
Date	
By	
Revision	
No.	
Date	
Dr:	JML 12/12
Dsgn:	TLG 12/12
Appr:	TLG 12/12

GOLDSMITH HECK
ENGINEERS, INC.
Sioux Falls, SD
(605)332-9685
Mobridge, SD
(605)845-3125

Water Rights Division -DENR
Conversation or File Documentation

NAME OF PERSON OR FILE: Keith Lesmeister

ADDRESS: PO Box 664, Mobridge, SD 57609

COUNTY: Corson

DATE: August 7, 2014

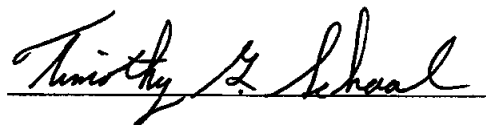
TELEPHONE: 848-1596 (cell)

RE: Risk Assessment for irrigation dam

After inspections of Water Permits No. 1059-1 & 1082-1B were completed several years ago, it was determined that an additional Water Permit Application would be necessary to include the irrigation dam and change and/or add irrigated acres (see Water Permit files). Part of the new application process was the requirement for the applicant to include a Risk Assessment for the existing irrigation dam. After several attempts to get the Risk Assessment, one was submitted in February of this year.

Goldsmith Heck Engineers, Inc. completed the Risk Assessment for the existing irrigation dam located in the NE ¼ of Sec. 26-T20N-R29E. They inspected the dam and found it to be in good condition and determined that it had the spillway capacity to pass a 100-year event with 1 ft. to 1.5 ft. of freeboard available. They completed the Risk Assessment using the Risk Prioritization Tool for Dams prepared for FEMA by URS. The results from their analysis indicated the Lesmeister Dam falls in the priority C (low hazard) risk group.

Since the Risk Prioritization Tool for Dams is a fairly new method of analysis to me, I conducted a site visit and investigation on July 16, 2014. I would have to concur with the Goldsmith Heck report. The Lesmeister Dam is in good condition, hydrologically adequate and has a low downstream hazard potential in the event of a dam failure. The Lesmeister Dam will be added to our National Inventory of Dams (NID) as a Low Hazard dam with ID No. SD02597.



Timothy G. Schaal, P.E.
Engineer IV
SD DENR, Water Rights Program



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

August 12, 2014

Keith Lesmeister
PO Box 664
Mobridge SD 57601 0664

Dear Mr. Lesmeister:

I am writing concerning receipt of the risk assessment for your storage dam located in the N1/2 section 26-T20N-R29E. This risk assessment has been reviewed by Tim Schaal who also completed a site visit on July 16, 2014. Based on Tim's review and site visit, the Water Rights Program agrees with the risk assessment that the storage dam qualifies as a low hazard dam.

Since the risk assessment matter has been addressed, we can now proceed with the irrigation application to add the storage dam as a water source for the existing irrigated acreage. In addition, the two pivots in section 26 were to be irrigated from the Missouri River, so the application will change the water source to Oak Creek as well as the storage dam. Tim also informed me that you currently do not intend to add the acreage located in the E1/2 section 23. To accommodate these changes, plus to allow the application to be processed in your name, I have reworked the application and a copy is enclosed for your review. After reviewing the application, the only thing you need to do is complete No. 1, place your name on the application, and return it to us. A postage paid return envelope is included for your convenience.

After we get your application back, a report and recommendation will be prepared along with a public notice that will need to get published. All that information will be provided to you once it is complete.

If you have any questions, please let me know. I can be reached at (605) 773-3352. Thank you for your efforts in getting this application completed.

Sincerely,

Ron Duvall
Water Rights Permitting Administrator
SD DENR, Water Rights Program

enclosure

10-6-14

RUNOFF AUG 450 1947-1

NRCS ANNUAL SURFACE YIELD (METHOD A)

$$\text{WATERSHED AREA} = 0.81 \text{ mi}^2$$

$$PN = 85$$

HYDROLOGIC SOIL GROUP D

$$\text{ISO-NUMBER} = 1.75$$

$$80\% \Rightarrow 0.56 \text{ in/hr}$$

$$50\% \Rightarrow 1.25 \text{ in/hr}$$

$$20\% = 2.45 \text{ in/hr}$$

@ 80% yield

$$\text{ANNUAL YIELD} = 0.56 \text{ in/hr} \times 0.81 \text{ mi}^2 \times 640 \frac{\text{ac}}{\text{mi}^2} \times \frac{1 \text{ ft}}{12 \text{ in}} = 24.2 \frac{\text{Ac-ft}}{\text{yr}}$$

@ 50% yield

$$\text{ANNUAL YIELD} = 1.25 \text{ in/hr} \times 0.81 \text{ mi}^2 \times 640 \frac{\text{ac}}{\text{mi}^2} \times \frac{1 \text{ ft}}{12 \text{ in}} = 54 \frac{\text{Ac-ft}}{\text{yr}}$$

@ 20% yield

$$\text{ANNUAL YIELD} = 2.45 \text{ in/hr} \times 0.81 \text{ mi}^2 \times 640 \frac{\text{ac}}{\text{mi}^2} \times \frac{1 \text{ ft}}{12 \text{ in}} = 105.8 \frac{\text{Ac-ft}}{\text{yr}}$$



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1947-1, Keith Lesmeister**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 1947-1, Keith Lesmeister, PO Box 664, Mobridge SD 57601.

The Chief Engineer is recommending APPROVAL of Application No. 1947-1 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. Water Permit No. 1947-1 authorizes an impoundment with a storage capacity of 257 acre feet of water and sufficient water annually to maintain the water level to the outlet elevation.
2. Low flows on Oak Creek as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.
4. Applicable provisions of Water Permit Nos. 1082-1B and 1059-1 are incorporated into Permit No. 1947-1 and the abandoned portions cancelled.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
October 16, 2014

REPORT ON WATER PERMIT APPLICATION NO. 1947-1

Keith Lesmeister

October 6, 2014

Application No. 1947-1, Keith Lesmeister, has filed an application for a water permit to amend Water Permit Nos. 1082-1B and 1059-1. Water Permit No. 1082-1B authorizes 6.85 cubic feet of water per second (cfs) from the Missouri River to irrigate 480 acres located in the W 1/2, SE 1/4 Section 26-T20N-R29E. Water Permit No. 1059-1 authorizes 3.14 cfs from Oak Creek to irrigate 220 acres located in the SW 1/4 NW 1/4, S 1/2 NE 1/4, N 1/2 SE 1/4, SW 1/4 Section 23-T20N-R29E. This application proposes to: 1) change the water source for No. 1082-1B from the Missouri River to Oak Creek and a dry draw dam, 2) specify that the existing permitted acreage from Oak Creek can also be irrigated from the dry draw dam.

This application proposes to appropriate a total of 5.87 cfs from Oak Creek located in the NW 1/4 NE 1/4 Section 27 and impoundment of 257 acre-feet of water from runoff and Owl Creek in a dry draw dam located in the approximate center of the N 1/2 Section 26; all in T20N-R29E. The 441 acres irrigated are located in the S 1/2 NE 1/4, S 1/2 Section 26 and S 1/2 NW 1/4, SW 1/4 Section 23 and SE 1/4 NE 1/4, E 1/2 SE 1/4 Section 22; all in T20N-R29E. The other acreage originally covered by the existing water permits will no longer be irrigated. The proposed project is located approximately 25 miles southeast of the town of McLaughlin in Corson County.

Review of Existing Water Rights

There are no existing water rights/permits located on the reach Oak Creek from the USGS gaging station to the proposed diversion point or from the diversion point in the 3.5 mile reach down to the upper reaches of Oahe Reservoir.

Review of the Proposed Project and Source of Water

The sources of water for this application are from Oak Creek and direct runoff into a dry draw storage dam. The applicant proposes to be able to pump from Oak Creek to either the irrigated acres or the storage dam and from the storage dam to the irrigated acres.

The USGS operates a streamflow gaging station on Oak Creek near Wakpala located upstream approximately 4 miles from the proposed creek diversion point. The historical data from 1984 to 2013 for the stream flow gage indicate there is a 50-percent probability monthly median flows could range from 9.1 to 13.9 cfs for any given March and April. Oak Creek cannot be considered a reliable source of water.

Probability	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
90%	0.0	0.0	0.9	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75%	0.1	0.0	2.4	2.2	1.2	0.5	0.1	0.0	0.0	0.0	0.0	0.2
50%	0.9	1.1	13.9	9.1	5.0	4.4	1.2	0.0	0.0	0.1	0.9	1.1
25%	2.0	5.7	68.0	40.8	22.8	17.4	5.3	1.5	0.7	1.6	3.3	2.3
10%	3.2	33.3	559.9	270.4	115.3	57.4	16.8	8.9	3.3	5.3	6.5	3.5

Table 1. USGS Stream Gaging Station No 06444500 Oak Creek near Wakpala SD monthly flow probabilities based upon 28 years of record, 1984 to 2013.

In order to address the unreliability of flow from Oak Creek, the applicant is also proposing the use of an existing 257 acre-foot storage dam located on an unnamed tributary to Oak Creek.

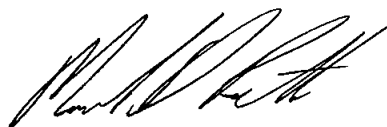
The waterway the dam is constructed on is considered an intermittent small prairie stream. The watershed above the dam encompasses approximately 0.81 sqmi. Utilizing the USDA-NRCS method for estimating annual surface water yield for streams, the creek at this site has an 80% probability of yielding 24 ac-ft of water annually, a 50% probability of yielding 54 ac-ft annually and a 20% probability of yielding 106 ac-ft annually.

In addition to the local runoff, the applicant proposes to be able to directly divert from Oak Creek into the storage dam. This would allow the capturing of stream flow when flow is available and utilizing it for irrigation at a later date.

Water availability for this project is a concern. Diverting water from the creek into the dam when flow is available will improve this somewhat but the applicant should not expect either water source to be dependable.

Conclusions

1. This application proposes to amend existing Water Permit Nos. 1082-1B and 1059-1 to change the water source from the Missouri River to Oak Creek and a dry draw dam, and specify that the sources of water for the permitted acres.
2. There are no existing water rights/permits on Oak Creek in the vicinity of the application.
3. A reliable water source for this project is a concern.
4. Utilizing a dam to store water when it is available improves that situation.



Mark D. Rath
Natural Resources Engineer III

AFFIDAVIT OF PUBLICATION

Corson-Sioux County News-Messenger

STATE OF SOUTH DAKOTA)

COUNTY OF CORSON

RECEIVED

NOV 05 2014

WATER RIGHTS PROGRAM

Zach M Buechler of said county and state, being first duly sworn, on his oath says that the Corson - Sioux County News-Messenger is a weekly newspaper of general circulation, printed and published for more than fifty-two successive weeks prior after mentioned and that I, Zach M Buechler, the undersigned, am Editor of said newspaper, in charge of advertising department thereof, and have personal knowledge of the facts stated in the affidavit and that the advertisement headed

Notice of Application No. 1947-1.
Notice is hereby given that
Keith Lesmeister PO Box 664

a printed copy of which is hereunto attached, was printed and published in the regular and entire issue of said newspaper, an not in supplement, once each week for 1 weeks, the first publication being made on the 30 day of October, 2014 and the last publication being made on the 30 day of October, 2014.

The 1st publication being on 30 day of October, 2014
The 2nd publication being on _____ day of _____, 20____
The 3rd publication being on _____ day of _____, 20____
The 4th publication being on _____ day of _____, 20____
The 5th publication being on _____ day of _____, 20____
The 6th publication being on _____ day of _____, 20____
The 7th publication being on _____ day of _____, 20____
The 8th publication being on _____ day of _____, 20____
The 9th publication being on _____ day of _____, 20____

That said newspaper is a legal newspaper and has a bona fide circulation of more than two hundred copies weekly, and has been published within the County of Corson for more than fifty-two successive weeks prior to the first publication of said notice and is printed in English in an office maintained at McLaughlin, SD, the place of publication of said newspaper. That the full amount of the fee for the publication of annexed notice is \$ 33.10 and incurs solely to the benefit of said publisher, that no agreement or understanding of a division there of has been made with any other person whomsoever.

Zach Buechler

Subscribed and sworn to before me this 3rd day of

Nov, 2014
Shawn Havel
3-30-2015

NOTICE OF APPLICATION NO. 1947-1

Notice is given that Keith Lesmeister, PO Box 664, Mobridge SD 57601 has filed an application for a water permit to amend Water Permit Nos. 1082-1B and 1059-1. Water Permit No. 1082-1B authorizes 6.85 cubic feet of water per second (cfs) from the Missouri River to irrigate 480 acres located in the W 1/2, SE 1/4 Section 26-T20N-R29E. Water Permit No. 1059-1 authorizes 3.14 cfs from Oak Creek to irrigate 220 acres located in the SW 1/4 NW 1/4, S 1/2 NE 1/4, N 1/2 SE 1/4, SW 1/4 Section 23-T20N-R29E.

This application proposes to: 1) change the water source for No. 1082-1B from the Missouri River to Oak Creek and a dry draw dam, 2) specify that the existing permitted acreage from Oak Creek can also be irrigated from the dry draw dam.

This application proposes to authorize a total of 5.87 cfs from Oak Creek located in the NW 1/4 NE 1/4 Section 27 and impoundment of 257 acre-feet of water from runoff and Oak Creek in a dry draw dam located in the approximate center of the N 1/2 Section 26; all in T20N-R29E. The 441 acres irrigated are located in the S 1/2 NE 1/4, S 1/2 Section 26 and S 1/2 NW 1/4, SW 1/4 Section 23 and SE 1/4 NE 1/4, E 1/2 SE 1/4 Section 22; all in T20N-R29E. The other acreage originally covered by the existing water permits is no longer irrigated.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1947-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by November 10, 2014.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Information concerning this application is available at <http://denr.sd.gov/public>. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of 33.10

RECEIVED

OCT 29 2014

WATER RIGHTS
PROGRAM

Form 8

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of Hughes) SS

I, Marilyn Baker

certify that the attached printed Notice was taken

from the Capital Journal

printed and published in Pierre

County of Hughes and

state of South Dakota. The notice was published

in the newspaper on the following date:

10-23-14

Cost of Printing \$40.59

Marilyn Baker
(Signature)

Bookkeeper
(Title)

10-28-14
(Date Signed)

July, October 23, 2014

Public Notice

and S 1/2 NW 1/4, SW 1/4 Section 23 and SE 1/4 NE 1/4, E 1/2 SE 1/4 Section 22, all in T20N-R29E. The other acreage originally covered by the existing water permits is no longer irrigated.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1947-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with the applicant and Chief Engineer. The applicant must file a water permit to petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is Water Rights Program, Foss Building, 523 second (d/s) from E Capitol, Pierre SD 57501 (505) 773-3332 and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by November 3, 2014. The petition may be informal, but N 1/2 SE 1/4, SW must include a 1/4 Section statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the Oak Creek and a signature and dry draw dam, 2) mailing address of the petitioner or existing permitted the petitioner's lease from Oak gail counsel, if le-Creek can also be gail counsel is ob-ligated from the listed information concerning this This application application is proposes to available at authorize a total of <http://dws.sd.gov/> 5.87 cfs from Oak public. Contact Creek located in Eric Gronlund at the NW 1/4 NE the above Water 1/4 Section 27 Rights Program and impoundment address to request of 257 acre-foot of copies of Informa-water from runoff from pertaining to and Oak Creek in this application. a dry draw dam lo- Steven M. Pines, cated in the ap- Secretary, Depart- proximate center ment of Environ- of the N 1/2 Sec- ment and Natural tion 28; all in Resources. T20N-R29E. The 441 acres irrigated Published once al are located in the the total approx- B 1/2 NE 1/4, S mate cost of 1/2 Section 26 \$40.59.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



October 16, 2014

Corson/Sioux County News Messenger
PO Box 788
McLaughlin SD 57642

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 1947-1 to Appropriate Water. Please publish the notice once on October 23, 2014. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Keith Lesmeister, PO Box 664, Mobridge SD 57601 (Ph # 605-845-7154).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



October 16, 2014

Capital Journal
PO Box 878
Pierre SD 57501

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 1947-1 to Appropriate Water. Please publish the notice once on October 23, 2014. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Keith Lesmeister, PO Box 664, Mobridge SD 57601 (Ph # 605-845-7154).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



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

October 16, 2014

Keith Lesmeister
PO Box 664
Mobridge SD 57601

Dear Mr. Lesmeister:

Water Permit Application No. 1947-1 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Corson/Sioux County News Messenger printed at McLaughlin SD (Ph # 605-823-4490) and the Capital Journal printed at Pierre SD (Ph # 605-224-7301). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352
enclosures

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

Instruction to Newspaper - Publish the Notice on October 23, 2014. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 1947-1

Notice is given that Keith Lesmeister, PO Box 664, Mobridge SD 57601 has filed an application for a water permit to amend Water Permit Nos. 1082-1B and 1059-1. Water Permit No. 1082-1B authorizes 6.85 cubic feet of water per second (cfs) from the Missouri River to irrigate 480 acres located in the W 1/2, SE 1/4 Section 26-T20N-R29E. Water Permit No. 1059-1 authorizes 3.14 cfs from Oak Creek to irrigate 220 acres located in the SW 1/4 NW 1/4, S 1/2 NE 1/4, N 1/2 SE 1/4, SW 1/4 Section 23-T20N-R29E.

This application proposes to: 1) change the water source for No. 1082-1B from the Missouri River to Oak Creek and a dry draw dam, 2) specify that the existing permitted acreage from Oak Creek can also be irrigated from the dry draw dam.

This application proposes to authorize a total of 5.87 cfs from Oak Creek located in the NW 1/4 NE 1/4 Section 27 and impoundment of 257 acre-feet of water from runoff and Oak Creek in a dry draw dam located in the approximate center of the N 1/2 Section 26; all in T20N-R29E. The 441 acres irrigated are located in the S 1/2 NE 1/4, S 1/2 Section 26 and S 1/2 NW 1/4, SW 1/4 Section 23 and SE 1/4 NE 1/4, E 1/2 SE 1/4 Section 22; all in T20N-R29E. The other acreage originally covered by the existing water permits is no longer irrigated.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1947-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by November 3, 2014.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Information concerning this application is available at <http://denr.sd.gov/public>. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

JAN 22 2015

Keith Lesmeister
PO Box 644
Mobridge SD 57601

Dear Mr. Lesmeister:

Enclosed is Water Permit No. 1947-1 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

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

enclosures

1947-1
RECEIVED

FEB 17 2015

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 2-11-2015TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181FROM: Keith Lesmeister

(name)

P.O. Box 664

(address)

Mobridge SD 57601

(city, state, zip)

605-845-7154

(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

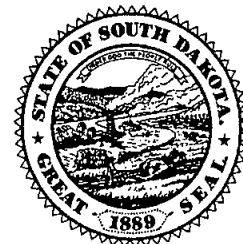
Water Permit No. 1947-1 states that the water use system is to be constructed by
1981 (date), and water is to be put to beneficial use by 2014 thru 1881 (date)

The water use system was completed on ~~1981~~ 1981 (date)

Applying the water to beneficial use was completed on 1981 (date)

You may schedule an investigation so that the water license may be issued.

Keith Lesmeister
(signature)

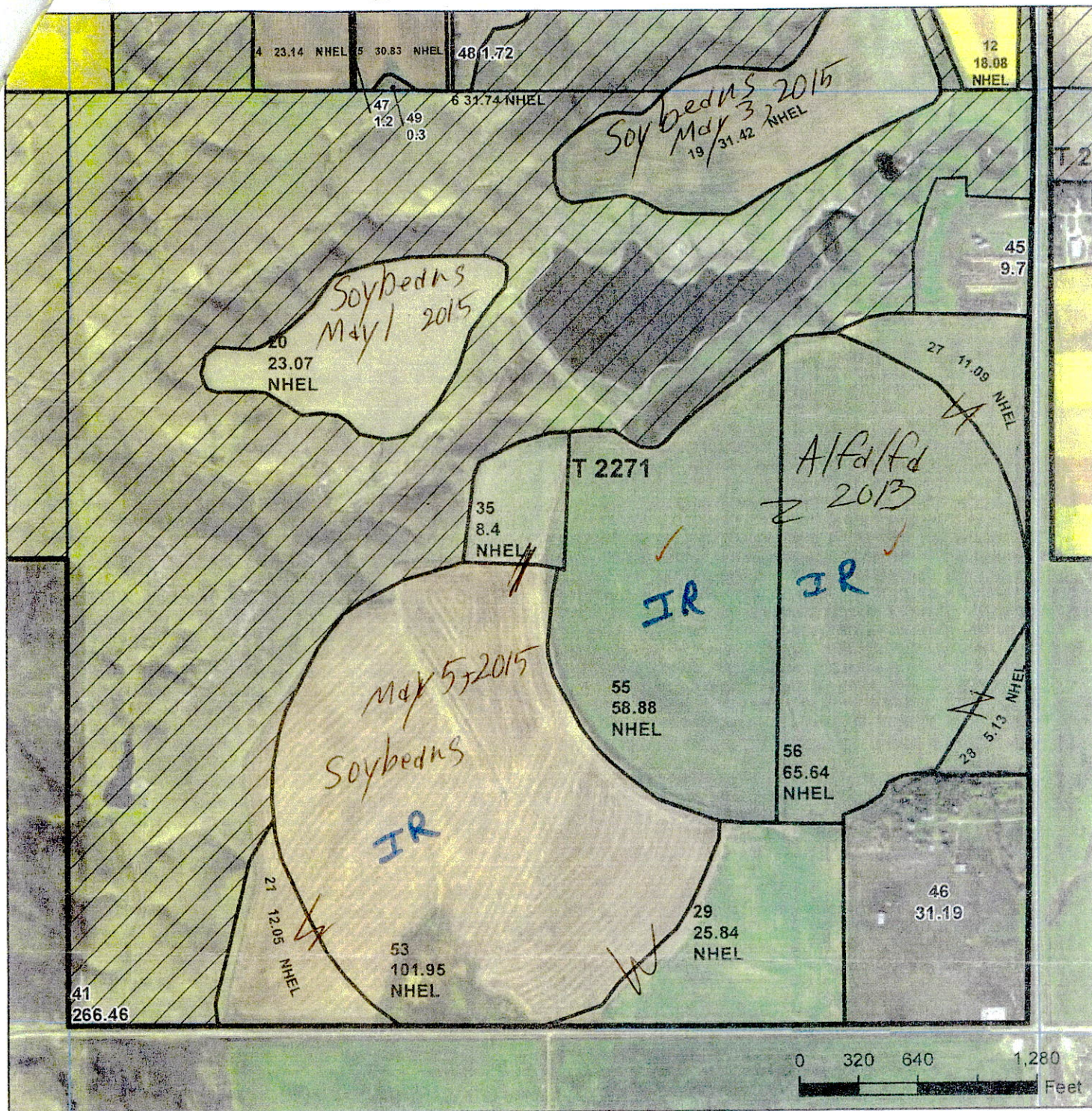


Keith Lesmeister

1947-1

United States
Department of
Agriculture

Corson County, South Dakota



Common Land Unit
☐ Other Ag
☐ Cropland
☐ Rangeland
☐ Tract Boundary

Wetland Determination Identifiers
☐ Restricted Use
☐ Limited Restrictions
☐ Exempt from Conservation
☐ Compliance Provisions



RECEIVED
NOV 19 2015

WATER RIGHTS
PROGRAM

2015 Program Year
Map Created April 06, 2015

Farm 798

26 -20N -29E

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

1947-1

NOTICE OF TRANSFER OF OWNERSHIP

PAID

To: Chief Engineer
Water Rights Program, DANR
523 E. Capitol
Pierre, SD 57501-3181

NOV 06 2023
CK# 12444
Rec'd 11/6/23

No. 1947-1

Date: 10-31-2023

I/We request that Water Permit No. 1947-1

formerly owned by: Keith Lesmeister; PO BOX 664, Mobridge SD 57601

be transferred to: (name & address) Kody Lesmeister; P.O. Box 664 Mobridge SD 57601

Telephone No. 605-850-4183

Title to the following described land(s)/property has been transferred as described above:

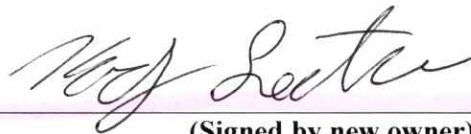
W $\frac{1}{2}$, SE $\frac{1}{4}$ Sec 26 $\frac{3}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ Sec 23
all in T20N-R29E

I/We understand that the validity of Water Permit No. 1947-1 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Fifty Dollars (\$50.00) is required to cover the filing fees as required under SDCL 46-2-13. This form must be signed by the new owner.

I/We Kody Lesmeister, the new owner, certify that the above information is true and correct.



(Signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five year construction period has expired. Once a water permit is developed and the water used, the permit becomes a right. A water right may be lost for three reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

RECEIVED

NOV 07 2023

OFFICE OF
WATER

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

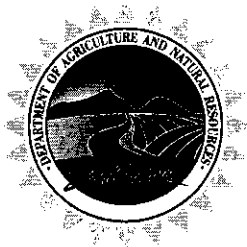
Date November 6, 2023

RECEIVED OF Kody Lesmeister PO Box 664 Mobridge SD 57601

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	\$ _____
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	\$ _____
Fee for Filing Transfer Form <u>1947-1</u>	<u>\$50.00</u>
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law)	
TOTAL	<u>\$50.00</u>

By Eric Gronlund
Chief Engineer
ERG



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

November 7, 2023

1947-1

Kody Lesmeister
PO BOX 664
Mobridge SD 57601

Dear Mr. Lesmeister:

I have received your "Notice of Transfer of Ownership" form and the required fees. Enclosed is a receipt of payment for your records.

Water Permit No. 1947-1 previously owned by Keith Lesmeister is now listed under Kody Lesmeister. I have also updated your contact information in our system.

As a reminder, so long as you use the water beneficially, as stated in the Water Permit, State Water Laws provide that you have a continuing right to use the water. Should the water not be put to beneficial use for a period longer than 3 consecutive years, without legal excuse, the Permit will be subject to cancellation.

If you have any questions, please contact me.

Sincerely,

Amanda Dewell
Water Rights Program
605 773-3352
Amanda.Dewell@state.sd.us

enclosure