

11175 - Medora Grazing Association - Water well development program

Application Details

Funding Opportunity:	7583-Outdoor Heritage Fund May 2021 - Round 18	Initial Submit Date:	May 3, 2021 4:18 PM
Funding Opportunity Due Date:	May 3, 2021 11:59 PM	Initially Submitted By:	Shane Goettle
Program Area:	Outdoor Heritage Fund	Last Submit Date:	May 12, 2021 5:18 PM
Status:	Under Review	Last Submitted By:	Shane Goettle
Stage:	Final Application		

Contact Information

Primary Contact Information

Active User*: Yes

Type: External User

Name: Salutation Shane C
First Name Middle Name

Goettle
Last Name

Title: Consultant

Email*: sgoettle@odney.com

Address*: 11PO Box 2035

Bismarck North Dakota
City State/Province

58502
Postal Code/Zip

Phone*: 701-426-0576 Ext.
Phone
###-###-####

Fax: ###-###-####

Organization Information

Status*: Approved

Name*: Medora Grazing Association

Organization Type*: In-State Non-Profit

Tax Id:

Organization Website:

Address*: 355 4th St

Medora North Dakota
City State/Province

58645-0000
Postal Code/Zip

Phone*: (701) 623-4336 Ext.
###-###-####

Fax: ###-###-####

Benefactor:

Comments:

Budget

Objective of Grant

Objective of Grant:

The NDIC's well-plugging program partially plugged 4 oil/gas wells in Billings County. The Medora Grazing Association now desires to develop these 4 wells in water wells to preserve livestock grazing allowed by the USDA Forest Service, enhance wildlife habitat, and to improve water quality.

Summary

Grant Request:	\$245,800.00
Matching Funds:	\$872,000.00
Total Project Costs:	\$1,117,800.00

You must have at least 25% match

Percentage of Match: 78.01%

Project Expenses

Project Expense Description	OHF Request	Match Share (Cash)	Match Share (In-Kind)	Match Share (Indirect)	Other Project Sponsor's Share	Total Each Project Expense
Four Bore Holes	\$0.00	\$0.00	\$504,000.00	\$0.00	\$168,000.00	\$672,000.00
Perforation of Wells	\$72,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$72,000.00
Electricity & Pumps	\$100,000.00	\$0.00	\$200,000.00	\$0.00	\$0.00	\$100,000.00
Develop Pits & Pressure Tanks	\$40,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40,000.00
Piping & Stock Tanks	\$33,800.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	\$245,800.00	\$0.00	\$704,000.00	\$0.00	\$168,000.00	\$884,000.00

Budget Narrative

Budget Narrative:

Four Bore Holes: The Medora Grazing Association (MGA) owns 3 bore holes. NDSU Extension Service (NDSU) owns a fourth bore hole. MGA and NDSU are working on an agreement to share the water resource at this fourth well. Each bore hole is valued at \$168,000 each (\$672,000 total). These constitute the in-kind contribution of the applicant. While the four wells have already been drilled and cased, their in-kind value is reflected in costs associated with drilling and casing a new well, which would cost about \$120.00 per foot. Using estimated depths obtained from State Water Commission (see attached email from Rex Honeyman in the supporting documents) to the Fox Hills formation of at least 1,400 feet, the associated value of each of these wells is: 1,400 foot hole x \$120.00 = \$168,000 per hole (\$672,000 total for 4 wells).

Perforation of Wells: \$72,000 is requested in OHF grant funds. Each of four bore holes need to be perforated at the depth of its underlying aquifer (estimated 30 to 60 foot zones). Estimate - \$18,000 each x 4 = \$72,000 total.

Electricity & Pumps: \$100,000 is requested in OHF grant funds. Rights have already been reserved by the Medora Grazing Association to run power to each well and install pumps. This work is valued at \$200,000 worth of in-kind contribution. If this reservation had not occurred, the cost of repowering would be have been approximately \$50,000 per line to each well. This estimate is based off a prior project in 2020 in northern Billings County where the cost of repowering was \$60,000 for one well. MGA's reservation precluded the U.S. Forest Service and the state from removing the power resource during reclamation. With regard to how OHF funds would be spent, the same northern Billings County project generated a cost estimate of \$25,000 to bring power from the meter to the well head, place a pump and pipe in the well, install a control box, and install a pitless adaptor. Thus, for each well that is part of this project, we are requesting \$25,000 for each well x 4 = \$100,000 total of OHF funds. (See "Ice Cave Well Costs" estimate.)

Develop Pits & Pressure Tanks: \$40,000 is requested in OHF grant funds. Pits and pressure tanks will need to be developed at each well. Estimate - \$10,000 each x4 = \$40,000 total.

Piping & Stock Tanks: \$33,800 is requested in OHF grant funds. For each well:

10ft round tank = \$1400.

1000 ft. of 1-1/4" pipe = \$450.

Boring costs are estimated at \$5 per foot = \$5000.

Setting the tank and mobilization = \$800.

The surface around the tank (scoria gravel to meet NRCS approval, along with parts (floats and lumber) = \$800.

TOTAL PER WELL = \$8450

TOTAL FOUR WELLS = \$33,800

Bid Attachments

Description	File Name	Type	Size	Upload Date
The Medora Grazing Association has solicited 1 bid from "Go Wireline, LLC" for a contractor to assess (Job #1) and then perforate (Job #2) a well for conversion from oil/gas bore to water well.	MEDORA GRAZING ASSOCIATION.pdf	pdf	137 KB	05/11/2021 02:25 PM
OHF Funds of \$100,000 will be used to bring electricity, pumps, and mobilize each well. (\$25,000 per well).	IceCavesWell_Costs.pdf	pdf	59 KB	05/12/2021 05:05 PM

Match Funding

Match Amount	Funding Source	Match Type
\$464,000.00	Medora Grazing Association	In-Kind
\$168,000.00	NDSU	In-Kind
\$632,000.00		

Description

Directives

Major Directive*: Directive B
Choose One

Additional Directive: Directive A, Directive C, Directive D
Choose All That Apply

Type of Agency*: In-State Non-Profit
Choose One

Abstract/Executive Summary

Abstract/Executive Summary*:

The NDIC's well-plugging program partially plugged four oil/gas wells in Billings County. This was done with guidance from the the North Dakota Agriculture Department. The Medora Grazing Association, in consultation with the State Water Commission, now desires to convert these four wells in water wells to preserve livestock grazing allowed by the USDA Forest Service, enhance wildlife habitat, and to improve water quality. The result of this project will be four new water wells on lands managed by the Medora Grazing Association. The wells will enhance opportunities for rotational grazing systems, which will improve the grasses and forage for both livestock and wildlife. Also, the water systems developed will also enhance wildlife. The public will benefit from overall improved to ecosystems that improve the enjoyment of the these national grasslands.

Project Duration

Project Duration*:

The projects should take 18 months to complete. Assuming a start date of July 1, 2021, the four separate projects should be complete by December 31, 2022.

Narrative

Narrative

Briefly summarize your organization's history, mission, current programs and activities. Include an overview of your organizational structure, including board, staff and volunteer involvement.

Organization Information*:

The Medora Grazing Association (MGA) is part of the Dakota Prairie National Grasslands. It was formed in 1940 after the North Dakota legislature authorized cooperative grazing associations in 1935. In 1937, the Bankhead-Jones Farm Tenant Act, as part of its actions, purchased land from homesteaders devastated by the Great Depression and the extreme drought in that same time period. The MGA assigned allotments to members and administered these submarginal lands on behalf of the federal government. The MGA also integrated private and other non-federal land into the Association controlled land when necessary, to create natural management units that facilitate sound land management practices. The USDA Forest acquired these federal lands in 1954, and the FS authorized grazing associations (including the MGA) to administer and manage the federal land within the allotments. The MGA collects the federal grazing fee from the members and delivers it to the FS. The MGA manages range improvements and permitted livestock grazing activities. The MGA applies for, and administers the Conservation Practice (CP) for installation across the MGA. Conservation practices funded through the CP program requires that the members pay for 25% of the practice cost. The Secretary calculates the 25% of in-kind needed, and sends forms to participating members to collect the in-kind information. The MGA manages and disperses the CP funds set aside from the annual FS grazing fees. CP monies not used by the MGA have to be returned to the US Treasury, so planners meticulously calculate the cost of all conservation practices.

Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program.

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project.

Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

If your project involves an extenuating circumstance to exempted activities please explain.

Purpose of Grant*:

The NDIC's well-plugging program partially plugged four oil/gas wells in Billings County. This was done with guidance from the the North Dakota Agriculture Department. The Medora Grazing Association, in consultation with the State Water Commission, now desires to convert these four wells in water wells to preserve livestock grazing allowed by the USDA Forest Service, enhance wildlife habitat, and to improve water quality. Assuming a start-date of July 1, 2021, the project will take 18 months to convert all four wells, with an expected completion date of December 31, 2022. The result of this project will be four new water wells on lands managed by the Medora Grazing Association. The wells will enhance opportunities for rotational grazing systems, which will improve the grasses and forage for both livestock and wildlife. Also, the water systems developed will also enhance wildlife. The public will benefit from overall improvement to ecosystems which translates into a higher quality experience.

Please list the counties that would be impacted by this project:

Counties*: Billings

Is This Project Part of a Comprehensive Conservation Plan?* No

If Yes, Please Provide Copy of Plan:

Does Your Project Involve an Extenuating Circumstance?* No

Please Explain:

Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met. Include a brief background and work experience for those managing the project.

Management of Project*:

The projects start at the Board level of the Medora Grazing Association. After a vote to proceed with the projects, the USDA Forest Service will also need to approve all four well projects, including implementation and technical standards.

Wes Obrigewitch, President, MGA, will be the project lead, overseeing management of the this grant. He has served as President since 2017. As President, he will be responsible for reporting requirements, developing partnerships, coordinating with staff and board directors, and overseeing contracts and contractors necessary to further the project. Members of the affected grazing allotments will also be very involved.

The USDA Forest Service will have its grassland supervisor, staff, and technicians assigned to the project to provide advice and counsel, as well ensure technical requirements are met.

Indicate how the project will be funded or sustained in future years. Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

Sustainability*:

This is one-time funding. Once the wells are in place, they will provide several life times of benefits for the Medora Grazing Association's members, wildlife, and the public. Provided the aquifers remain healthy, the additional watering systems should be relatively easy to maintain and continue in operation. The Medora Grazing Association members will take full responsibility maintenance and repairs on a long-term basis. The corresponding development and enhancement to grazing systems will not only improve the health of the land, but increase sustainability of family ranching, and pass healthy grazing lands to subsequent generations.

Indicate how the project will be affected if less funding is available than that requested.

Partial Funding*:

The members of the Medora Grazing Association would need to come up with the funds. This will be particularly difficult with current drought conditions expected in Billings County.

If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * There must be signage at the location of the project acknowledging OHF funding when appropriate. If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be.

Partnership Recognition*:

Signage could be posted at each well. In addition, the Medora Grazing Association will highlight the grant among its members and to the broader public in any of its formal communications.

Do you have any supporting documents, such as maps or letters of support that you would like to provide? If so, please provide them in a single file.

Supporting Documents*: Yes

If Yes, Please Provide Copies in a Single File: Supporting Documents Submission 2nd AMENDED.pdf

Awarding of Grants - Review the appropriate sample contract for your organization. Sample Contract

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

Tasks

Task	Start Date	Completion Date
Develop 4 water wells	07/01/2021	06/30/2022

First, each of the four wells will be perforated at the depth of the existing aquifers. After perforation, the wells will be test pumped to determine the size pump that will be needed for the well. Electricity and pumps will then be installed. Pits and pressure tanks will be installed near the well. A licensed well driller will be on hand, and will have arranged the necessary permits in advance. 1000 feet of horizontal boring will be conducted for installation of pipe and stock tanks.

Deliverables

Deliverable	Unit of Measurement, if applicable
Water wells on lands controlled by the Medora Grazing Association	4.000

Certification

Name:	Wes	Obrigewitch
	First Name	Last Name
Title:	President	
	Title	
Date:	05/03/2021	

Internal Application Number

YOU CALL. WE GO.



PO BOX 1343 | WILLISTON, ND 58801 | (701) 572-0886
PO BOX 327 | DICKINSON, ND 58602 | (701) 483-9787

COMPANY NAME:	MEDORA GRAZING ASSOCIATION	CONTACT NAME:	WES OBRIGEWITCH
WELL NAME:	SQUARE BUTTE	PHONE NUMBER:	307-250-0887
		EMAIL ADDRESS:	-
COUNTY	GOLDEN VALLEY	BILLING ADDRESS:	
STATE:	NOTH DAKOTA	CITY / STATE / ZIP:	

SCOPE OF WORK

JOB #1

RUN IN WITH JUNK BASKET GAGE RING TO DETERMINE DEPTH

RUN GAMMA RAY CORRELATION LOG FROM PBTD TO SURFACE

PRICING INCLUDES CRANE

TOTAL COST = \$4,980.00

JOB #2

PERFORATE FOX HILLS FORMATION +/- 20' W/4" TAG AT 4 JSPF W/PREMIUM CHARGES

PRICING INCLUDESS PRESSURE CONTROL EQUIPTMENT

CRANE IS NOT INCLUDED FOR JOB #2

TOTAL COST \$12,208.00

These prices are for a non H2S wellbore

Note: These prices are subject to change with 30 days notice to increase prices, no notice to further decrease prices. Pricing is for Non Reservation Wells. Tier 1 Pricing would be applied for reservation wells.

BRANT BOECKEL	Williston Operations	701-572-0886	Friday, April 30, 2021
bboeckel@gowireline.com			

129/302 Ice Caves Well & Power line - 2019 - 2021

Project Expenses:	Amount
<i>1. Water well</i>	
Gregory Water & Energy	\$233,700.00
Less NRCS reimbursement (total)	(\$71,907.76)

<i>Project amount eligible for USFS/SPA cost share</i>	<u>\$161,792.24</u>
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USFS Portion	74.05%	\$119,807.15
Member cost share	25.95%	\$41,985.09
Add NRCS reimbursement (total)		\$71,907.76

Total Member Cost Share	<u>\$113,892.85</u>
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<i>2. Power Line</i>	
McKenzie Electric Cooperative	<u>\$60,000.00</u>

USFS Portion	75%	\$45,000.00
Member cost share	25%	\$15,000.00

Project Expenses (2021 estimates):	Amount
<i>1. Water well</i>	
Gregory Water & Energy	\$25,000.00
<i>(pump, installation of pump, electrician's hook-up costs & mobilization)</i>	

<u>\$25,000.00</u>

Estimated total project cost (cash):	\$318,700.00
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BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 28615
ORDER NO. 31157

IN THE MATTER OF A HEARING CALLED ON
A MOTION OF THE COMMISSION TO
CONSIDER THE APPLICATION OF MEDORA
GRAZING ASSOCIATION FOR AN ORDER
AUTHORIZING THE CONVERSION OF THE
SQUARE BUTTE SWD SYSTEM #D01 WELL
(FILE NO. 10600), FORMERLY OPERATED BY
COBRA OIL & GAS CORPORATION, LOCATED
IN THE SE/4 SW/4 OF SECTION 10, T.139N.,
R.103W., SQUARE BUTTE FIELD, GOLDEN
VALLEY COUNTY, ND, TO A FRESHWATER
WELL PURSUANT TO NDAC 43-02-03-35.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

- (1) This cause came on for hearing at 9:00 a.m. on the 19th day of November, 2020.
- (2) Pursuant to North Dakota Administrative Code (NDAC) Section 43-02-03-88.1, the Director is authorized to sign, on behalf of the Commission, orders relating to, inter alia, converting a mineral well to a freshwater well under NDAC Section 43-02-03-35.
- (3) The Cobra Oil & Gas Corporation #D01 Square Butte SWD System well (File No. 10600), located 500 feet from the south line and 1,817 feet from the west line in the SE/4 SW/4 of Section 10, Township 139 North, Range 103 West, Golden Valley County, North Dakota (Section 10), was drilled to a total depth of 9,295 feet and completed in the Madison Pool from 9,175 feet to 9,177 feet. It was subsequently recompleted as a saltwater disposal well in the Inyan Kara Formation from 5,590 feet to 5,615 feet.
- (4) Order Nos. 30988 and 31069 entered in Case No. 28495 on June 19, 2020 and July 29, 2020, respectively, confiscated the production and injection related equipment and salable oil associated with the Square Butte SWD System #D01 well for the purpose of compensating the Commission for plugging and reclamation costs. Pursuant to North Dakota Century Code Section 38-08-04.9, the confiscation order transferred title to the Commission.
- (5) The Medora Grazing Association (MGA) is desirous of converting the Square Butte SWD System #D01 well to a freshwater well in the Fox Hills Formation. The proposed water well will be used for livestock use.

(6) Section 10 is land managed by the United States Forest Service (USFS), and also managed for livestock grazing by the MGA under a ten-year Standard Grazing Agreement effective February 12, 2020. Past practice with water wells on lands managed by the USFS has been for the MGA to assume the account supplying power to the well from the electrical cooperative and responsibility for maintenance.

(7) Misty Hays, District Ranger for the USFS Medora Ranger District, approved the request to convert the Square Butte SWD System #D01 well to a freshwater well with the following conditions: the plugging will need to isolate the top of the fish that was stuck in the bore at lower depths; the well bore will need to have additional cleaning/scraping to ensure all saltwater contaminants are removed from the bore; due to the potential for salt water contamination around the well site, areas within the pad need to be tested for contamination (electrical conductivity) and any contaminated soil needs to be removed prior to reclamation; due to the proximity of the site to historic properties, future opportunities for development of pipelines or watering facilities may be limited to prevent damage to the historic site, these developments will be reviewed on a case by case basis; watering facilities cannot be placed on the pad to prevent any impacts from the buried production pit and any buried flowlines; and the pad and road will need to be reclaimed to original contours and seeded.

The plugging procedure will require perforating of the 5-1/2 inch casing at \pm 2,750 feet, setting of a Cast Iron Cement Retainer (CICR) at \pm 2,650 feet, a cement squeeze of 90 sacks of cement through the perforations with 10 sacks left on top of the CICR, cutting and pulling of the 5-1/2 inch casing from \pm 1,806 feet, spotting of a 125 sack cement plug in and above the casing stub, making a bit and scraper run in the 9-5/8 inch surface casing, setting a Cast Iron Bridge Plug (CIBP) in the surface casing above the tagged cement plug, rolling of the hole with freshwater, and pressure testing of the casing.

The plugging procedure will involve the removal of the production casing so additional scraping is not necessary and the surface casing will be rolled with fresh water. The well bore will be left in a safe and mechanically sound condition for use as a water well.

The site will be tested for contamination and any contaminated soil will be removed. This is standard procedure for reclamation of sites. The site will not be left as an environmental hazard.

It is assumed the pad will not be fully reclaimed to original contour as some leveled area will need to remain to rig up on the well for completion and maintenance as a water well.

(8) 9-5/8 inch, 40 pound per foot surface casing is set at 1,756 feet, which is below the base of the Fox Hills Formation. The Pierre Shale top is at 1,680 feet.

(9) The 5-1/2 inch casing was cut at 1,806 feet and laid down. A balanced cement plug was set in the 5-1/2 inch casing stub and tagged at 1,598 feet. A bit and scraper trip was made and a CIBP was set at 1,402 feet in the 9-5/8 inch surface casing. It was then rolled with fresh water and successfully pressure tested to 550 psi.

(10) The MGA submitted an affidavit stating it has the authority and assumes all liability for the use and plugging of the proposed freshwater well.

(11) The MGA submitted a procedure for converting the mineral well to a freshwater well.

(12) The Square Butte SWD System #D01 well may safely be used as a freshwater well, therefore, this application should be granted.

IT IS THEREFORE ORDERED:

(1) The Medora Grazing Association is hereby authorized to convert the Square Butte SWD System #D01 well (File No. 10600), located 500 feet from the south line and 1,817 feet from the west line in the SE/4 SW/4 of Section 10, Township 139 North, Range 103 West, Golden Valley County, North Dakota, to a freshwater well pursuant to NDAC Section 43-02-0-35.

(2) The Medora Grazing Association shall submit a written follow-up report to the Commission within thirty (30) days of converting said well to a freshwater well. Such notice shall include the following:

- (a) Depth to which a drilling bit was run in the hole, if applicable.
- (b) The depth at which the cement or tool was tagged in the well and the method of tagging, if applicable.
- (c) The amount of fluid circulated out of the well bore, the type of container such fluid was circulated in, and the approved facility at which such fluid was disposed, if applicable.
- (d) Exact depths the freshwater interval was perforated in the well.
- (e) Date(s) the work was performed.
- (f) Contractor(s) utilized.

(3) This order shall remain in full force and effect until further order of the Commission.

Dated this 2nd day of December, 2020.

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA

By the Director, on behalf of the Commission

/s/ Lynn D. Helms, Director

November 23, 2020

RE: Well Plug Back and Conversion to Freshwater Well

Dear Landowner or Land Manager,

You are receiving this letter because you have expressed interest or support in having the confiscated Square Butte SWD System #D01 well (File No. 10600) located 500 feet from the south line and 1,817 feet from the west line in the SE/4 SW/4 of Section 10, Township 139 North, Range 103 West, Golden Valley County, North Dakota, on United States Forest Service managed property plugged back in a manner that will allow conversion of the well to a freshwater well.

North Dakota Administrative Code Section 43-02-03-35. CONVERSION OF MINERAL WELLS TO FRESHWATER WELLS.

Any person desiring to convert a mineral well to a freshwater well, as provided by North Dakota Century Code section 61-01-27, shall file an application for approval with the commission. The application must include, but is not limited to, the following:

- 1. If the well is to be used for other than individual domestic and livestock use, a conditional water permit issued by the state water commission.*
- 2. An affidavit by the person desiring to obtain approval for the conversion stating that such person has the authority and assumes all liability for the use and plugging of the proposed freshwater well.*
- 3. The procedure which will be followed in converting the mineral well to a freshwater well.*
- 4. If the well is not currently plugged and abandoned, an affidavit must be executed by the operator of the well indicating that the parties responsible for plugging the mineral well have no objection to the conversion of the mineral well to a freshwater well.*

If the commission, after notice and hearing, determines that a mineral well may safely be used as a freshwater well, the commission may approve the conversion.

At this time, the North Dakota Industrial Commission, Department of Mineral Resources is requesting you sign the below acknowledgement that you accept and will follow all the above terms.

I RENE FICK (MGA SEC.), having the authority to do so, understand that I am requesting to have a confiscated well located on property managed by the United States Forest Service plugged back in a manner that will allow the possible use as a freshwater well. I understand that I accept the liability as stated in North Dakota Administrative Code Section 43-02-03-35. I hold no liability with the state of North

Bruce E. Hicks
ASSISTANT DIRECTOR
OIL AND GAS DIVISION

Lynn D. Helms
DIRECTOR
DEPT. OF MINERAL RESOURCES

Edward C. Murphy
STATE GEOLOGIST
GEOLOGICAL SURVEY

R103W

Allotment 174



T139N

T139N

Range Developments

- Cattle Guard
- Corral
- Dam
- Dugout
- Spring
- Stock Tank
- Well
- Windmill
- Natural Barrier
- Range Water Pipeline

- Allotment
- Pasture
- Named Steams
- Road/Trail
- Surface Roads
- Highway
- Surface Ownership**
 - National Grassland
 - Non Federal
 - National Park Service
 - State

0 0.5 1 Miles

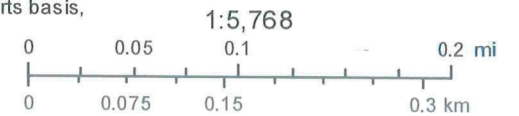
R103W



November 24, 2020
11:43 AM

DISCLAIMER: This map is not intended for conveyances, nor is it a legal survey. The information is presented on a best-efforts basis, and should not be relied upon for making financial, survey, legal or other commitments.

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|------------------|------------|--------------------------|----------------------|
| ● Address Points | □ Parcels | □ Legal Lot | ■ City Streets Emerg |
| □ Additions | □ Sections | ■ City Streets Digitized | ■ Streets Sentinel |
| □ CityLimits | □ Blocks | ■ City Streets | ■ Streets Golva |



BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 28577
ORDER NO. 31120

IN THE MATTER OF A HEARING CALLED ON
A MOTION OF THE COMMISSION TO
CONSIDER THE APPLICATION OF THE
MEDORA GRAZING ASSOCIATION, FOR AN
ORDER AUTHORIZING THE CONVERSION OF
THE SCOUT ENERGY MANAGEMENT LLC #4-
35 SFTU WELL (FILE NO. 13311), LOCATED IN
THE NWNW OF SECTION 35, T.139N., R.101W.,
FRYBURG FIELD, BILLINGS COUNTY, ND, TO
A FRESHWATER WELL PURSUANT TO NDAC
43-02-03-35.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

- (1) This cause came on for hearing at 9:00 a.m. on the 22nd day of October, 2020.
- (2) Pursuant to North Dakota Administrative Code (NDAC) Section 43-02-03-88.1, the Director is authorized to sign, on behalf of the Commission, orders relating to, inter alia, converting a mineral well to a freshwater well under NDAC Section 43-02-03-35.
- (3) The Scout Energy Management LLC #4-35 SFTU well (File No. 13311), located 860 feet from the north line and 695 feet from the west line in the NW/4 NW/4 of Section 35, Township 139 North, Range 101 West, Billings County, North Dakota (Section 35), was drilled to a total depth of 9,300 feet and completed in the Tyler Pool from 7,974 feet to 7,992 feet.
- (4) Order Nos. 31026 and 31071 entered in Case No. 28495 on June 19, 2020 and July 29, 2020 respectively, confiscated the production and injection related equipment and salable oil associated with the SFTU #4-35 well for the purpose of compensating the Commission for plugging and reclamation costs. Pursuant to North Dakota Century Code Section 38-08-04.9, the confiscation order transferred title to the Commission.
- (5) The Medora Grazing Association (MGA) is desirous of converting the SFTU #4-35 well to a freshwater well in the Fox Hills Formation. The proposed water well will be used for livestock use.
- (6) Section 35 is land managed by the United States Forest Service (USFS), and also managed for livestock grazing by the MGA under a ten-year Standard Grazing Agreement effective February 12, 2020. Past practice with water wells on lands managed by the USFS has

been for the MGA to assume the account supplying power to the well from the electrical cooperative and responsibility for maintenance.

(7) Misty Hays, District Ranger for the USFS Medora Ranger District, approved the request to convert the SFTU #4-35 well to a freshwater well.

(8) 9-5/8 inch, 36 pound per foot surface casing is set at 2,003 feet, which is below the base of the Fox Hills Formation. The Pierre Shale top is at 1,672 feet.

(9) A balanced cement plug was set in the 5-1/2 inch casing and tagged at 1,773 feet. The 5-1/2 inch casing was cut at 1,660 feet and laid down. A bit and scraper trip was made and a cast iron cement retainer was set at 1,610 feet in the 9-5/8 inch surface casing. It was then rolled with fresh water and successfully pressure tested to 450 psi.

(10) The MGA submitted an affidavit stating it has the authority and assumes all liability for the use and plugging of the proposed freshwater well.

(11) The MGA submitted a procedure for converting the mineral well to a freshwater well.

(12) The SFTU #4-35 well may safely be used as a freshwater well, therefore, this application should be granted.

IT IS THEREFORE ORDERED:

(1) The Medora Grazing Association is hereby authorized to convert the SFTU #4-35 well (File No. 13311), located 860 feet from the north line and 695 feet from the west line in the NW/4 NW/4 of Section 35, Township 139 North, Range 101 West, Billings County, North Dakota, to a freshwater well pursuant to NDAC Section 43-02-03-35.

(2) The Medora Grazing Association shall submit a written follow-up report to the Commission within thirty (30) days of converting said well to a freshwater well. Such notice shall include the following:

- (a) Depth to which a drilling bit was run in the hole, if applicable.
- (b) The depth at which the cement or tool was tagged in the well and the method of tagging, if applicable.
- (c) The amount of fluid circulated out of the well bore, the type of container such fluid was circulated in, and the approved facility at which such fluid was disposed, if applicable.
- (d) Exact depths the freshwater interval was perforated in the well.
- (e) Date(s) the work was performed.
- (f) Contractor(s) utilized.

(3) This order shall remain in full force and effect until further order of the Commission.

November 13, 2020

RE: Well Plug Back and Conversion to Freshwater Well

Dear Landowner or Land Manager,

You are receiving this letter because you have expressed interest or support in having the confiscated SFTL #4-35 well (File No. 13311) located 860 feet from the north line and 695 feet from the west line in the NW/4 NW/4 of Section 35, Township 139 North, Range 101 West, Billings County, North Dakota, on United States Forest Service managed property plugged back in a manner that will allow conversion of the well to a freshwater well.

North Dakota Administrative Code Section 43-02-03-35. CONVERSION OF MINERAL WELLS TO FRESHWATER WELLS.

Any person desiring to convert a mineral well to a freshwater well, as provided by North Dakota Century Code section 61-01-27, shall file an application for approval with the commission. The application must include, but is not limited to, the following:

- 1. If the well is to be used for other than individual domestic and livestock use, a conditional water permit issued by the state water commission.*
- 2. An affidavit by the person desiring to obtain approval for the conversion stating that such person has the authority and assumes all liability for the use and plugging of the proposed freshwater well.*
- 3. The procedure which will be followed in converting the mineral well to a freshwater well.*
- 4. If the well is not currently plugged and abandoned, an affidavit must be executed by the operator of the well indicating that the parties responsible for plugging the mineral well have no objection to the conversion of the mineral well to a freshwater well.*

If the commission, after notice and hearing, determines that a mineral well may safely be used as a freshwater well, the commission may approve the conversion.

At this time, the North Dakota Industrial Commission, Department of Mineral Resources is requesting you sign the below acknowledgement that you accept and will follow all the above terms.

I RENE FICK, having the authority to do so, understand that I am requesting to have a confiscated well located on property managed by the United States Forest Service plugged back in a manner that will allow the possible use as a freshwater well. I understand that I accept the liability as stated in North Dakota Administrative Code Section 43-02-03-35. I hold no liability with the state of North

Bruce E. Hicks
ASSISTANT DIRECTOR
OIL AND GAS DIVISION

Lynn D. Helms
DIRECTOR
DEPT. OF MINERAL RESOURCES

Edward C. Murphy
STATE GEOLOGIST
GEOLOGICAL SURVEY

R102W

R101W

Allotment 186



T140N

T140N

T139N

T139N

T138N

T138N

R102W

R101W

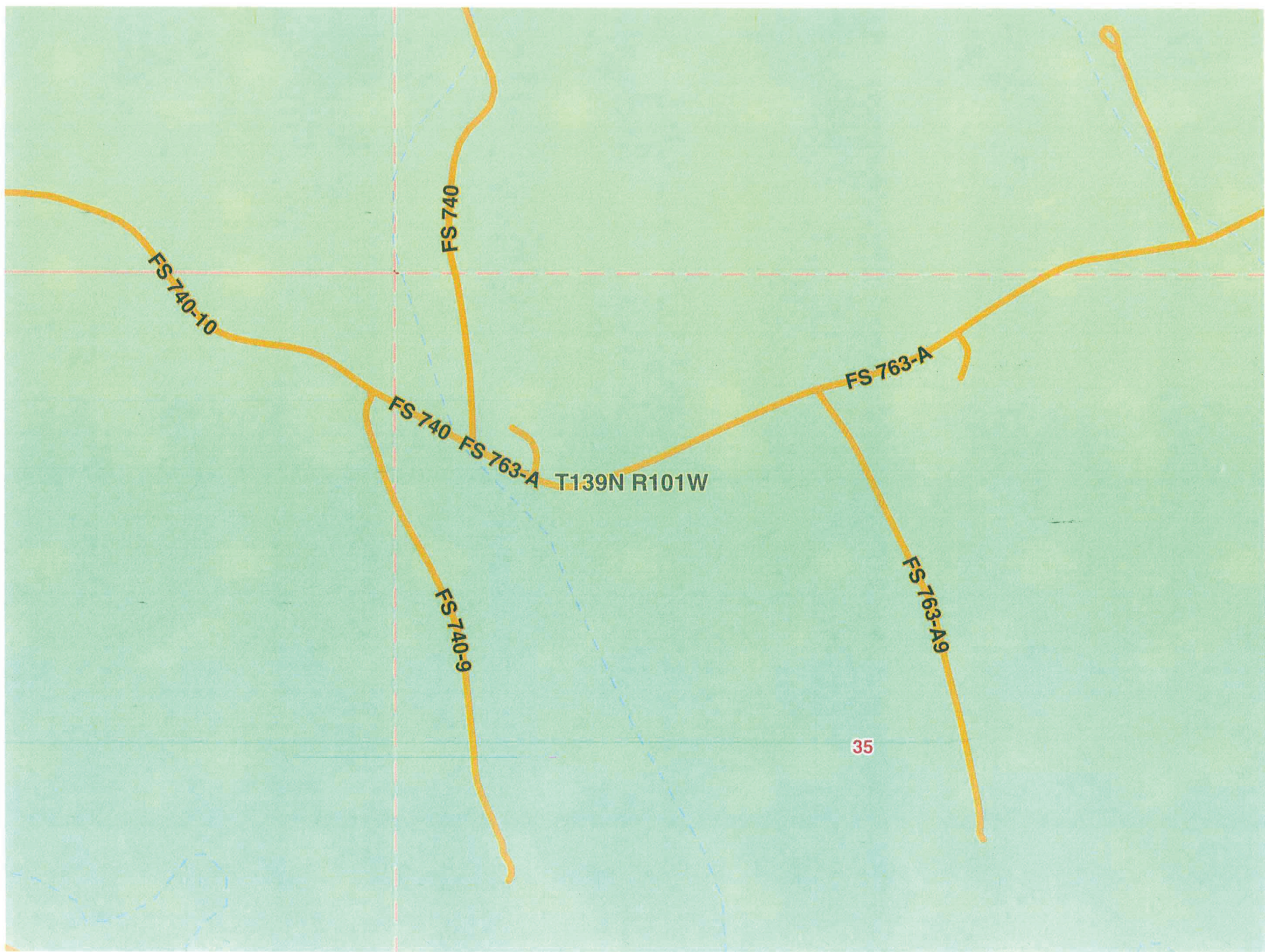
Range Developments

- Cattle Guard
- Corral
- Dam
- Dugout
- Spring
- Stock Tank
- Well
- Windmill
- Allotment
- Pastures
- Road/Trail
- Surface Roads
- Highway
- Natural Barrier
- Range Water Pipeline
- Named Steams

Surface Ownership

- National Grassland
- Non Federal
- National Park Service
- State

0 1 2 Miles



BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 28578
ORDER NO. 31121

IN THE MATTER OF A HEARING CALLED ON
A MOTION OF THE COMMISSION TO
CONSIDER THE APPLICATION OF THE
MEDORA GRAZING ASSOCIATION FOR AN
ORDER AUTHORIZING THE CONVERSION OF
THE SCOUT ENERGY MANAGEMENT LLC
#14-19T SOUTH FRYBURG WELL (FILE NO.
12476), LOCATED IN THE SESW OF SECTION
19, T.139N., R.100W., FRYBURG FIELD,
BILLINGS COUNTY, ND, TO A FRESHWATER
WELL PURSUANT TO NDAC 43-02-03-35.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

- (1) This cause came on for hearing at 9:00 a.m. on the 22nd day of October, 2020.
- (2) Pursuant to North Dakota Administrative Code (NDAC) Section 43-02-03-88.1, the Director is authorized to sign, on behalf of the Commission, orders relating to, inter alia, converting a mineral well to a freshwater well under NDAC Section 43-02-03-35.
- (3) The Scout Energy Management LLC #14-19T South Fryburg well (File No. 12476), located 885 feet from the south line and 1,400 feet from the west line in the SE/4 SW/4 of Section 19, Township 139 North, Range 100 West, Billings County, North Dakota (Section 19), was drilled to a total depth of 9,489 feet and completed in the Madison Pool from 9,402 feet to 9,426 feet.
- (4) Order Nos. 31026 and 31071 entered in Case 28495 on June 19, 2020, and July 29, 2020, respectively, confiscated the production and injection related equipment and salable oil associated with the South Fryburg #14-19T well for the purpose of compensating the Commission for plugging and reclamation costs. Pursuant to North Dakota Century Code Section 38-08-04.9, the confiscation order transferred title to the Commission.
- (5) The Medora Grazing Association (MGA) is desirous of converting the South Fryburg #14-19T well to a freshwater well in the Fox Hills Formation. The proposed water well will be used for livestock use.
- (6) The SW/4 of Section 19 is land managed by the United States Forest Service (USFS), and also managed for livestock grazing by the MGA under a ten-year Standard Grazing Agreement effective February 12, 2020. Past practice with water wells on lands managed by the

USFS has been for the MGA to assume the account supplying power to the well from the electrical cooperative and responsibility for maintenance.

(7) Misty Hays, District Ranger for the USFS Medora Ranger District, approved the request to convert the South Fryburg #14-19T well to a freshwater well.

(8) 8-5/8 inch, 24 pound per foot surface casing is set at 2,046 feet, which is below the base of the Fox Hills Formation. The Pierre Shale top is at 1,996 feet.

(9) A balanced cement plug was set in the 5-1/2 inch casing and tagged at 1,810 feet. The 5-1/2 inch casing was cut at 1,617 feet and laid down. A bit and scraper trip was made and a cast iron cement retainer was set at 1,610 feet in the 8-5/8 inch surface casing. It was then rolled with fresh water and successfully pressure tested to 500 psi.

(10) The MGA submitted an affidavit stating it has the authority and assumes all liability for the use and plugging of the proposed freshwater well.

(11) The MGA submitted a procedure for converting the mineral well to a freshwater well.

(12) The South Fryburg #14-19T well may safely be used as a freshwater well, therefore, this application should be granted.

IT IS THEREFORE ORDERED:

(1) The Medora Grazing Association is hereby authorized to convert the South Fryburg #14-19T well (File No. 12476), located 885 feet from the south line and 1,400 feet from the west line in the SE/4 SW/4 of Section 19, Township 139 North, Range 100 West, Billings County, North Dakota, to a freshwater well pursuant to NDAC Section 43-02-03-35.

(2) The Medora Grazing Association shall submit a written follow-up report to the Commission within thirty (30) days of converting said well to a freshwater well. Such notice shall include the following:

- (a) Depth to which a drilling bit was run in the hole, if applicable.
- (b) The depth at which the cement or tool was tagged in the well and the method of tagging, if applicable.
- (c) The amount of fluid circulated out of the well bore, the type of container such fluid was circulated in, and the approved facility at which such fluid was disposed, if applicable.
- (d) Exact depths the freshwater interval was perforated in the well.
- (e) Date(s) the work was performed.
- (f) Contractor(s) utilized.

(3) This order shall remain in full force and effect until further order of the Commission.

November 19, 2020

RE: Well Plug Back and Conversion to Freshwater Well

Dear Landowner or Land Manager,

You are receiving this letter because you have expressed interest or support in having the confiscated South Fryburg #14-19T well (File No. 12476) located 885 feet from the south line and 1,400 feet from the west line in the SE/4 SW/4 of Section 19, Township 139 North, Range 100 West, Billings County, North Dakota, on United States Forest Service managed property plugged back in a manner that will allow conversion of the well to a freshwater well.

North Dakota Administrative Code Section 43-02-03-35. CONVERSION OF MINERAL WELLS TO FRESHWATER WELLS.

Any person desiring to convert a mineral well to a freshwater well, as provided by North Dakota Century Code section 61-01-27, shall file an application for approval with the commission. The application must include, but is not limited to, the following:

- 1. If the well is to be used for other than individual domestic and livestock use, a conditional water permit issued by the state water commission.*
- 2. An affidavit by the person desiring to obtain approval for the conversion stating that such person has the authority and assumes all liability for the use and plugging of the proposed freshwater well.*
- 3. The procedure which will be followed in converting the mineral well to a freshwater well.*
- 4. If the well is not currently plugged and abandoned, an affidavit must be executed by the operator of the well indicating that the parties responsible for plugging the mineral well have no objection to the conversion of the mineral well to a freshwater well.*

If the commission, after notice and hearing, determines that a mineral well may safely be used as a freshwater well, the commission may approve the conversion.

At this time, the North Dakota Industrial Commission, Department of Mineral Resources is requesting you sign the below acknowledgement that you accept and will follow all the above terms.

I RENÉ FICK (MGA Sec.), having the authority to do so, understand that I am requesting to have a confiscated well located on property managed by the United States Forest Service plugged back in a manner that will allow the possible use as a freshwater well. I understand that I accept the liability as stated in North Dakota Administrative Code Section 43-02-03-35. I hold no liability with the state of North

Bruce E. Hicks
ASSISTANT DIRECTOR
OIL AND GAS DIVISION

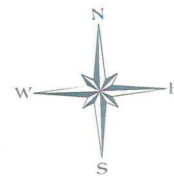
Lynn D. Helms
DIRECTOR
DEPT. OF MINERAL RESOURCES

Edward C. Murphy
STATE GEOLOGIST
GEOLOGICAL SURVEY

R101W

R100W

Allotment 207



T139N

T139N

Range Developments

- CattleGuard
- Corral
- Dam
- Dugout
- Spring
- Stock Tank
- Well
- Windmill
- Natural Barrier
- Range Water Pipeline

Allotment

Pastures

Named Steams

Road/Trail

Surface Roads

Highway

Surface Ownership

National Grassland

Non Federal

National Park Service

State

0

0.25

0.5

Miles

R101W

R100W

T139N R100W

FS 762-1

FS 762-1

FS 762-1



129/302 Ice Caves Well & Power line - 2019 - 2021

Project Expenses:	Amount
<i>1. Water well</i>	
Gregory Water & Energy	\$233,700.00
Less NRCS reimbursement (total)	(\$71,907.76)

<i>Project amount eligible for USFS/SPA cost share</i>	<u>\$161,792.24</u>
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USFS Portion	74.05%	\$119,807.15
Member cost share	25.95%	\$41,985.09
Add NRCS reimbursement (total)		\$71,907.76

Total Member Cost Share	<u>\$113,892.85</u>
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<i>2. Power Line</i>	
McKenzie Electric Cooperative	<u>\$60,000.00</u>

USFS Portion	75%	\$45,000.00
Member cost share	25%	\$15,000.00

Project Expenses (2021 estimates):	Amount
<i>1. Water well</i>	
Gregory Water & Energy	\$25,000.00
<i>(pump, installation of pump, electrician's hook-up costs & mobilization)</i>	

<u>\$25,000.00</u>

Estimated total project cost (cash):	\$318,700.00
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Subject: Conversion of mineral to water wells in grasslands

Date: May 6, 2021

From: Chris Augustin
NDSU Dickinson Research Extension Center Director
1041 State Ave. Dickinson, ND 58601
701-456-1103
chris.augustin@ndsu.edu

Greetings,

Dependable fresh water is needed for sustainable livestock production. The conversion of mineral wells to fresh water wells is a "make lemonade from lemons" opportunity existing throughout the National Grasslands. The opportunity exists from the already drilled well that can save money for North Dakota ranchers in the area.

The North Dakota State University Dickinson Research Extension Center supports and is happy to partner with the Medora Grazing Association to improve freshwater sources. The freshwater project at the Pyramid Park research site will not only provide water for the important research cattle, but neighbors will have access to fresh water. This can positively impact rancher's livelihood, cattle health, and performance. Fresh water is especially important as this area has been classified as being in an extreme drought for months.

Sincerely,



Chris Augustin

5/7/2021

To whom it may concern:

My name is Allan Richard, I live south of Medora. I am writing in regards to the reduced water supply crisis in the area. There is a great need for a better water system for the cattle, wildlife, and oilfield operations.

There is currently an abandoned oil well located in Sec26139R101 West which needs to be revitalized. I am proposing to use this oil well and repurpose it to create a more stable and cleaner water supply for the area. This well would be very beneficial to the local ranchers in the area.

Thank you for your consideration in the matter. I look forward to your response.

Warm regards,

Allan Richard

Allan Richard



May 7, 2021

To Whom It May Concern,

We are a ranching family in Billings County and members of the Medora Grazing Association.

With the challenge of the drought and dry conditions that currently surround us, we are reminded more than ever of the value of fresh water.

And when given the opportunity to develop water and strategically make it available throughout these ranches, it becomes so much more than just a watering hole for livestock.

Water development allows for increased grazing rotations and better land management. It keeps livestock off creeks, promotes an improved environment for wildlife, and benefits ranchers with better daily gains on cattle.

Fresh water allows us to be successful land stewards while maximizing our resources. There is a need for it, and everybody wins.

Whether it's ranching families, Medora Grazing Association, wildlife, Forest Service or public lands...the development of fresh water can have a positive impact on us all.

Thank you for your time.

Sincerely,

Roger & Naomi Rossow

Medora, ND

May 8, 2021

North Dakota Outdoor Heritage Fund Committee

Bismarck, ND

Dear Committee members:

We want to ask for financial support to develop water sources on the National Grasslands in western North Dakota. We have ranched in the Medora area for 50 years and the needed water developments will help ensure that young ranching families will be able to continue ranching in these badlands. These developments will greatly enhance the grasslands by distributing cattle to areas where water sources were non-existent or unusable. For example, the most of the stock dams built in the 1940's and 1950's have either silted in or washed out and fresh water is so much better and healthier. For many years funding has been unavailable for many of these projects and in addition to helping the livestock and the pastures, the wildlife will also benefit. The Forest Service has a cost-share program with the Grazing Association to develop water. In the last several years there has been only enough funding for 1 or 2 projects that were approved out of 10 that were requested because of lack of funds. So you can see that the water development is far behind.

Sincerely,

Ted and Kay Tescher

Medora, ND

May 11, 2021

To whom it may concern,

I am a member of the Medora Grazing Association and I am writing in regards to water development within the Grazing Association allotments.

My family has been ranching for four generations, and I have learned the importance and necessity that water is to nature, wildlife, and cattle. In a year of drought, it has become more and more evident how crucial quality water development and water resources are to strengthening and preserving the National Grasslands.

With the multiple fires occurring around the area during this drought, having more reliable water sources throughout the badlands would greatly benefit our fire departments in their jobs without having to go great distances to find readily available water.

Please take into consideration that improving and expanding water development throughout the area will benefit everyone and every living thing involved.

I appreciate your time.

Sincerely,

A handwritten signature in dark ink, appearing to be 'Colin Madzo', written in a cursive style.

Colin Madzo
Medora, ND



File Code: 1580
Date: May 11, 2021

Andrea Pfennig
North Dakota Industrial Commission
ATTN: Outdoor Heritage Fund
State Capitol, 14th Floor
600 E Boulevard Ave, Dept. 405
Bismarck, ND 58505-0840

To Whom it May Concern:

Please accept this letter documenting the Forest Service's commitment to a partnership with the North Dakota Industrial Commission and Medora Grazing Association, for the well conversion and pipeline projects identified on the Little Missouri National Grassland through the Outdoor Heritage Fund for the purpose of implementing improved grassland management in western North Dakota. The implementation of these projects will further the progress of moving Grassland resources toward our Land & Resource Management Plan objectives providing for sustainable multiple use on the Dakota Prairie Grasslands.

The Forest Service is committed to providing range management and watershed technical assistance; botany, wildlife and archeological survey clearances; and engineering review. In addition, monitoring will play an integral part displaying the effectiveness of the applied management tools in meeting or moving towards resource objectives.

My staff and I look forward to advancing this partnership for the Outdoor Heritage Fund. If you have questions or require further details, please feel free to contact Misty Hays at (701) 227-7824.

Sincerely,

MISTY HAYS
District Ranger



May 10, 2021

To Whom It May Concern,

I am a member of the Medora Grazing Association and a third generation rancher in Billings County.

Water development throughout the Grazing Association Allotments enhances our ability to better manage our grass resources and benefit our own ranches, as well as wildlife and tourism on public lands.

Water plays an important role in providing a readily available resource for firefighting, which we've seen to be a real challenge throughout the Badlands. Water development could be a proactive solution to these situations.

Water is a necessity and a resource that is needed to sustain the existence of all living things.

Expanded water resources, with cooperation and healthy management, will benefit everyone involved.

Thank you for your time.

Sincerely,

A handwritten signature in black ink that reads "Donovan O'Brien". The signature is written in a cursive, flowing style.

Donovan O'Brien
Medora, ND

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 28615
ORDER NO. 31157

IN THE MATTER OF A HEARING CALLED ON
A MOTION OF THE COMMISSION TO
CONSIDER THE APPLICATION OF MEDORA
GRAZING ASSOCIATION FOR AN ORDER
AUTHORIZING THE CONVERSION OF THE
SQUARE BUTTE SWD SYSTEM #D01 WELL
(FILE NO. 10600), FORMERLY OPERATED BY
COBRA OIL & GAS CORPORATION, LOCATED
IN THE SE/4 OF SECTION 10, T.139N.,
R.103W., SQUARE BUTTE FIELD, GOLDEN
VALLEY COUNTY, ND, TO A FRESHWATER
WELL PURSUANT TO NDAC 43-02-03-35.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

- (1) This cause came on for hearing at 9:00 a.m. on the 19th day of November, 2020.
- (2) Pursuant to North Dakota Administrative Code (NDAC) Section 43-02-03-88.1, the Director is authorized to sign, on behalf of the Commission, orders relating to, inter alia, converting a mineral well to a freshwater well under NDAC Section 43-02-03-35.
- (3) The Cobra Oil & Gas Corporation #D01 Square Butte SWD System well (File No. 10600), located 500 feet from the south line and 1,817 feet from the west line in the SE/4 SW/4 of Section 10, Township 139 North, Range 103 West, Golden Valley County, North Dakota (Section 10), was drilled to a total depth of 9,295 feet and completed in the Madison Pool from 9,175 feet to 9,177 feet. It was subsequently recompleted as a saltwater disposal well in the Inyan Kara Formation from 5,590 feet to 5,615 feet.
- (4) Order Nos. 30988 and 31069 entered in Case No. 28495 on June 19, 2020 and July 29, 2020, respectively, confiscated the production and injection related equipment and salable oil associated with the Square Butte SWD System #D01 well for the purpose of compensating the Commission for plugging and reclamation costs. Pursuant to North Dakota Century Code Section 38-08-04.9, the confiscation order transferred title to the Commission.
- (5) The Medora Grazing Association (MGA) is desirous of converting the Square Butte SWD System #D01 well to a freshwater well in the Fox Hills Formation. The proposed water well will be used for livestock use.

(6) Section 10 is land managed by the United States Forest Service (USFS), and also managed for livestock grazing by the MGA under a ten-year Standard Grazing Agreement effective February 12, 2020. Past practice with water wells on lands managed by the USFS has been for the MGA to assume the account supplying power to the well from the electrical cooperative and responsibility for maintenance.

(7) Misty Hays, District Ranger for the USFS Medora Ranger District, approved the request to convert the Square Butte SWD System #D01 well to a freshwater well with the following conditions: the plugging will need to isolate the top of the fish that was stuck in the bore at lower depths; the well bore will need to have additional cleaning/scraping to ensure all saltwater contaminants are removed from the bore; due to the potential for salt water contamination around the well site, areas within the pad need to be tested for contamination (electrical conductivity) and any contaminated soil needs to be removed prior to reclamation; due to the proximity of the site to historic properties, future opportunities for development of pipelines or watering facilities may be limited to prevent damage to the historic site, these developments will be reviewed on a case by case basis; watering facilities cannot be placed on the pad to prevent any impacts from the buried production pit and any buried flowlines; and the pad and road will need to be reclaimed to original contours and seeded.

The plugging procedure will require perforating of the 5-1/2 inch casing at $\pm 2,750$ feet, setting of a Cast Iron Cement Retainer (CICR) at $\pm 2,650$ feet, a cement squeeze of 90 sacks of cement through the perforations with 10 sacks left on top of the CICR, cutting and pulling of the 5-1/2 inch casing from $\pm 1,806$ feet, spotting of a 125 sack cement plug in and above the casing stub, making a bit and scraper run in the 9-5/8 inch surface casing, setting a Cast Iron Bridge Plug (CIBP) in the surface casing above the tagged cement plug, rolling of the hole with freshwater, and pressure testing of the casing.

The plugging procedure will involve the removal of the production casing so additional scraping is not necessary and the surface casing will be rolled with fresh water. The well bore will be left in a safe and mechanically sound condition for use as a water well.

The site will be tested for contamination and any contaminated soil will be removed. This is standard procedure for reclamation of sites. The site will not be left as an environmental hazard.

It is assumed the pad will not be fully reclaimed to original contour as some leveled area will need to remain to rig up on the well for completion and maintenance as a water well.

(8) 9-5/8 inch, 40 pound per foot surface casing is set at 1,756 feet, which is below the base of the Fox Hills Formation. The Pierre Shale top is at 1,680 feet.

(9) The 5-1/2 inch casing was cut at 1,806 feet and laid down. A balanced cement plug was set in the 5-1/2 inch casing stub and tagged at 1,598 feet. A bit and scraper trip was made and a CIBP was set at 1,402 feet in the 9-5/8 inch surface casing. It was then rolled with fresh water and successfully pressure tested to 550 psi.

(10) The MGA submitted an affidavit stating it has the authority and assumes all liability for the use and plugging of the proposed freshwater well.

(11) The MGA submitted a procedure for converting the mineral well to a freshwater well.

(12) The Square Butte SWD System #D01 well may safely be used as a freshwater well, therefore, this application should be granted.

IT IS THEREFORE ORDERED:

(1) The Medora Grazing Association is hereby authorized to convert the Square Butte SWD System #D01 well (File No. 10600), located 500 feet from the south line and 1,817 feet from the west line in the SE/4 SW/4 of Section 10, Township 139 North, Range 103 West, Golden Valley County, North Dakota, to a freshwater well pursuant to NDAC Section 43-02-0-35.

(2) The Medora Grazing Association shall submit a written follow-up report to the Commission within thirty (30) days of converting said well to a freshwater well. Such notice shall include the following:

- (a) Depth to which a drilling bit was run in the hole, if applicable.
- (b) The depth at which the cement or tool was tagged in the well and the method of tagging, if applicable.
- (c) The amount of fluid circulated out of the well bore, the type of container such fluid was circulated in, and the approved facility at which such fluid was disposed, if applicable.
- (d) Exact depths the freshwater interval was perforated in the well.
- (e) Date(s) the work was performed.
- (f) Contractor(s) utilized.

(3) This order shall remain in full force and effect until further order of the Commission.

Dated this 2nd day of December, 2020.

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA

By the Director, on behalf of the Commission

/s/ Lynn D. Helms, Director

November 23, 2020

RE: Well Plug Back and Conversion to Freshwater Well

Dear Landowner or Land Manager,

You are receiving this letter because you have expressed interest or support in having the confiscated Square Butte SWD System #D01 well (File No. 10600) located 500 feet from the south line and 1,817 feet from the west line in the SE/4 SW/4 of Section 10, Township 139 North, Range 103 West, Golden Valley County, North Dakota, on United States Forest Service managed property plugged back in a manner that will allow conversion of the well to a freshwater well.

North Dakota Administrative Code Section 43-02-03-35. CONVERSION OF MINERAL WELLS TO FRESHWATER WELLS.

Any person desiring to convert a mineral well to a freshwater well, as provided by North Dakota Century Code section 61-01-27, shall file an application for approval with the commission. The application must include, but is not limited to, the following:

- 1. If the well is to be used for other than individual domestic and livestock use, a conditional water permit issued by the state water commission.*
- 2. An affidavit by the person desiring to obtain approval for the conversion stating that such person has the authority and assumes all liability for the use and plugging of the proposed freshwater well.*
- 3. The procedure which will be followed in converting the mineral well to a freshwater well.*
- 4. If the well is not currently plugged and abandoned, an affidavit must be executed by the operator of the well indicating that the parties responsible for plugging the mineral well have no objection to the conversion of the mineral well to a freshwater well.*

If the commission, after notice and hearing, determines that a mineral well may safely be used as a freshwater well, the commission may approve the conversion.

At this time, the North Dakota Industrial Commission, Department of Mineral Resources is requesting you sign the below acknowledgement that you accept and will follow all the above terms.

I RENE FICK (MGA SEC.), having the authority to do so, understand that I am requesting to have a confiscated well located on property managed by the United States Forest Service plugged back in a manner that will allow the possible use as a freshwater well. I understand that I accept the liability as stated in North Dakota Administrative Code Section 43-02-03-35. I hold no liability with the state of North

Bruce E. Hicks
ASSISTANT DIRECTOR
OIL AND GAS DIVISION

Lynn D. Helms
DIRECTOR
DEPT. OF MINERAL RESOURCES

Edward C. Murphy
STATE GEOLOGIST
GEOLOGICAL SURVEY

R103W

Allotment 174



T139N

T139N

Range Developments

- Cattle Guard
- Corral
- Dam
- Dugout
- Spring
- Stock Tank
- Well
- Windmill
- Natural Barrier
- Range Water Pipeline

Allotment

Pasture

Named Steams

Road/Trail

Surface Roads

Highway

Surface Ownership

National Grassland

Non Federal

National Park Service

State

0 0.5 1 Miles

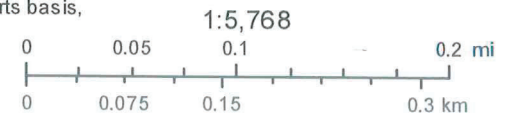
R103W



November 24, 2020
11:43 AM

DISCLAIMER: This map is not intended for conveyances, nor is it a legal survey. The information is presented on a best-efforts basis, and should not be relied upon for making financial, survey, legal or other commitments.

- | | | | |
|------------------|------------|--------------------------|----------------------|
| ● Address Points | □ Parcels | □ Legal Lot | ■ City Streets Emerg |
| □ Additions | □ Sections | ■ City Streets Digitized | ■ Streets Sentinel |
| □ CityLimits | □ Blocks | ■ City Streets | ■ Streets Golva |



BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 28577
ORDER NO. 31120

IN THE MATTER OF A HEARING CALLED ON
A MOTION OF THE COMMISSION TO
CONSIDER THE APPLICATION OF THE
MEDORA GRAZING ASSOCIATION, FOR AN
ORDER AUTHORIZING THE CONVERSION OF
THE SCOUT ENERGY MANAGEMENT LLC #4-
35 SFTU WELL (FILE NO. 13311), LOCATED IN
THE NWNW OF SECTION 35, T.139N., R.101W.,
FRYBURG FIELD, BILLINGS COUNTY, ND, TO
A FRESHWATER WELL PURSUANT TO NDAC
43-02-03-35.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

- (1) This cause came on for hearing at 9:00 a.m. on the 22nd day of October, 2020.
- (2) Pursuant to North Dakota Administrative Code (NDAC) Section 43-02-03-88.1, the Director is authorized to sign, on behalf of the Commission, orders relating to, inter alia, converting a mineral well to a freshwater well under NDAC Section 43-02-03-35.
- (3) The Scout Energy Management LLC #4-35 SFTU well (File No. 13311), located 860 feet from the north line and 695 feet from the west line in the NW/4 NW/4 of Section 35, Township 139 North, Range 101 West, Billings County, North Dakota (Section 35), was drilled to a total depth of 9,300 feet and completed in the Tyler Pool from 7,974 feet to 7,992 feet.
- (4) Order Nos. 31026 and 31071 entered in Case No. 28495 on June 19, 2020 and July 29, 2020 respectively, confiscated the production and injection related equipment and salable oil associated with the SFTU #4-35 well for the purpose of compensating the Commission for plugging and reclamation costs. Pursuant to North Dakota Century Code Section 38-08-04.9, the confiscation order transferred title to the Commission.
- (5) The Medora Grazing Association (MGA) is desirous of converting the SFTU #4-35 well to a freshwater well in the Fox Hills Formation. The proposed water well will be used for livestock use.
- (6) Section 35 is land managed by the United States Forest Service (USFS), and also managed for livestock grazing by the MGA under a ten-year Standard Grazing Agreement effective February 12, 2020. Past practice with water wells on lands managed by the USFS has

been for the MGA to assume the account supplying power to the well from the electrical cooperative and responsibility for maintenance.

(7) Misty Hays, District Ranger for the USFS Medora Ranger District, approved the request to convert the SFTU #4-35 well to a freshwater well.

(8) 9-5/8 inch, 36 pound per foot surface casing is set at 2,003 feet, which is below the base of the Fox Hills Formation. The Pierre Shale top is at 1,672 feet.

(9) A balanced cement plug was set in the 5-1/2 inch casing and tagged at 1,773 feet. The 5-1/2 inch casing was cut at 1,660 feet and laid down. A bit and scraper trip was made and a cast iron cement retainer was set at 1,610 feet in the 9-5/8 inch surface casing. It was then rolled with fresh water and successfully pressure tested to 450 psi.

(10) The MGA submitted an affidavit stating it has the authority and assumes all liability for the use and plugging of the proposed freshwater well.

(11) The MGA submitted a procedure for converting the mineral well to a freshwater well.

(12) The SFTU #4-35 well may safely be used as a freshwater well, therefore, this application should be granted.

IT IS THEREFORE ORDERED:

(1) The Medora Grazing Association is hereby authorized to convert the SFTU #4-35 well (File No. 13311), located 860 feet from the north line and 695 feet from the west line in the NW/4 NW/4 of Section 35, Township 139 North, Range 101 West, Billings County, North Dakota, to a freshwater well pursuant to NDAC Section 43-02-03-35.

(2) The Medora Grazing Association shall submit a written follow-up report to the Commission within thirty (30) days of converting said well to a freshwater well. Such notice shall include the following:

- (a) Depth to which a drilling bit was run in the hole, if applicable.
- (b) The depth at which the cement or tool was tagged in the well and the method of tagging, if applicable.
- (c) The amount of fluid circulated out of the well bore, the type of container such fluid was circulated in, and the approved facility at which such fluid was disposed, if applicable.
- (d) Exact depths the freshwater interval was perforated in the well.
- (e) Date(s) the work was performed.
- (f) Contractor(s) utilized.

(3) This order shall remain in full force and effect until further order of the Commission.

November 13, 2020

RE: Well Plug Back and Conversion to Freshwater Well

Dear Landowner or Land Manager,

You are receiving this letter because you have expressed interest or support in having the confiscated SFTL #4-35 well (File No. 13311) located 860 feet from the north line and 695 feet from the west line in the NW/4 NW/4 of Section 35, Township 139 North, Range 101 West, Billings County, North Dakota, on United States Forest Service managed property plugged back in a manner that will allow conversion of the well to a freshwater well.

North Dakota Administrative Code Section 43-02-03-35. CONVERSION OF MINERAL WELLS TO FRESHWATER WELLS.

Any person desiring to convert a mineral well to a freshwater well, as provided by North Dakota Century Code section 61-01-27, shall file an application for approval with the commission. The application must include, but is not limited to, the following:

- 1. If the well is to be used for other than individual domestic and livestock use, a conditional water permit issued by the state water commission.*
- 2. An affidavit by the person desiring to obtain approval for the conversion stating that such person has the authority and assumes all liability for the use and plugging of the proposed freshwater well.*
- 3. The procedure which will be followed in converting the mineral well to a freshwater well.*
- 4. If the well is not currently plugged and abandoned, an affidavit must be executed by the operator of the well indicating that the parties responsible for plugging the mineral well have no objection to the conversion of the mineral well to a freshwater well.*

If the commission, after notice and hearing, determines that a mineral well may safely be used as a freshwater well, the commission may approve the conversion.

At this time, the North Dakota Industrial Commission, Department of Mineral Resources is requesting you sign the below acknowledgement that you accept and will follow all the above terms.

I RENE FICK, having the authority to do so, understand that I am requesting to have a confiscated well located on property managed by the United States Forest Service plugged back in a manner that will allow the possible use as a freshwater well. I understand that I accept the liability as stated in North Dakota Administrative Code Section 43-02-03-35. I hold no liability with the state of North

Bruce E. Hicks
ASSISTANT DIRECTOR
OIL AND GAS DIVISION

Lynn D. Helms
DIRECTOR
DEPT. OF MINERAL RESOURCES

Edward C. Murphy
STATE GEOLOGIST
GEOLOGICAL SURVEY

R102W

R101W

Allotment 186



T140N

T140N

T139N

T139N

T138N

T138N

R102W

R101W

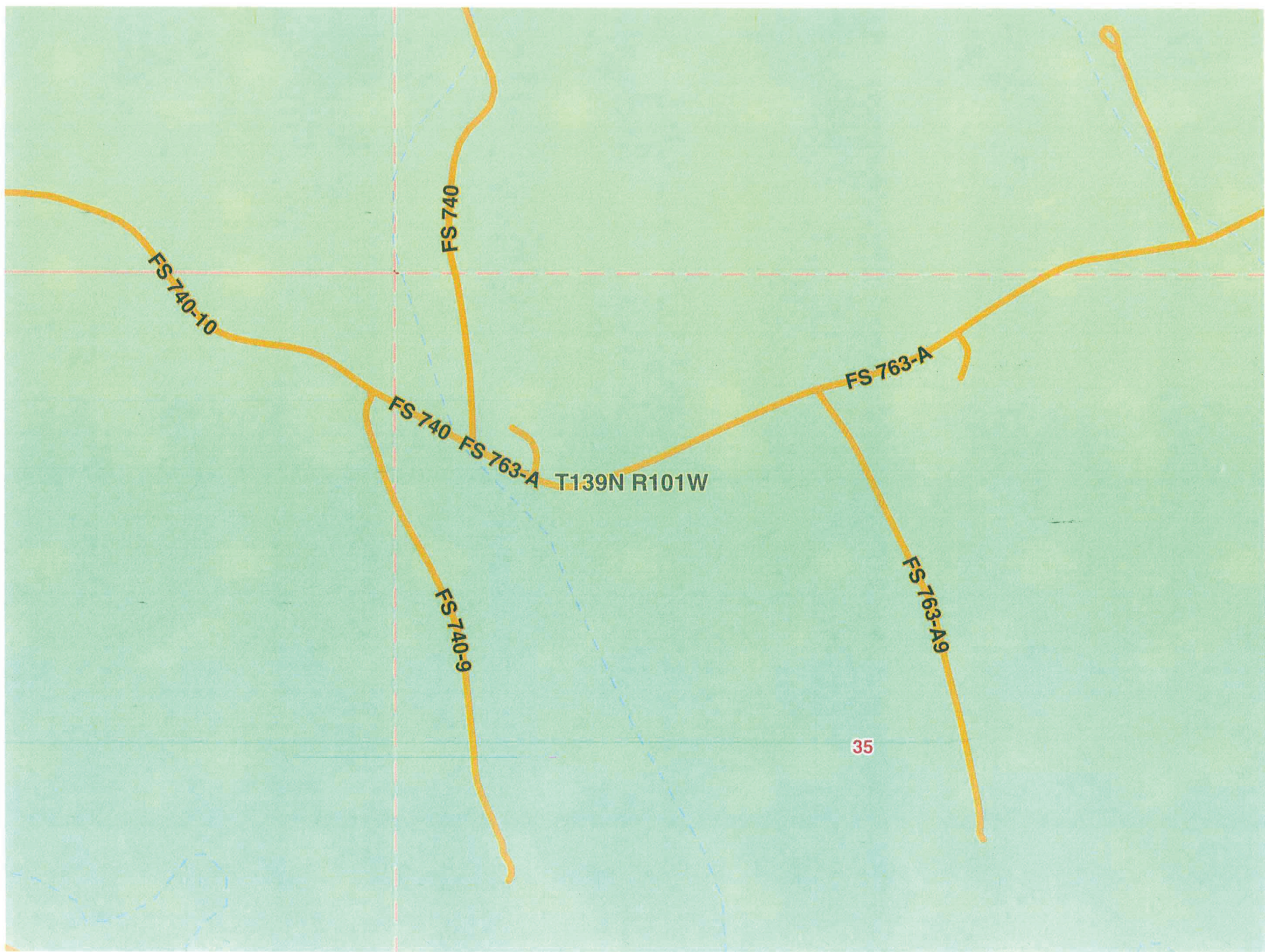
Range Developments

- Cattle Guard
- Corral
- Dam
- Dugout
- Spring
- Stock Tank
- Well
- Windmill
- Allotment
- Pastures
- Road/Trail
- Surface Roads
- Highway
- Natural Barrier
- Range Water Pipeline
- Named Steams

Surface Ownership

- National Grassland
- Non Federal
- National Park Service
- State

0 1 2 Miles



35

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 28578
ORDER NO. 31121

IN THE MATTER OF A HEARING CALLED ON
A MOTION OF THE COMMISSION TO
CONSIDER THE APPLICATION OF THE
MEDORA GRAZING ASSOCIATION FOR AN
ORDER AUTHORIZING THE CONVERSION OF
THE SCOUT ENERGY MANAGEMENT LLC
#14-19T SOUTH FRYBURG WELL (FILE NO.
12476), LOCATED IN THE SESW OF SECTION
19, T.139N., R.100W., FRYBURG FIELD,
BILLINGS COUNTY, ND, TO A FRESHWATER
WELL PURSUANT TO NDAC 43-02-03-35.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

- (1) This cause came on for hearing at 9:00 a.m. on the 22nd day of October, 2020.
- (2) Pursuant to North Dakota Administrative Code (NDAC) Section 43-02-03-88.1, the Director is authorized to sign, on behalf of the Commission, orders relating to, inter alia, converting a mineral well to a freshwater well under NDAC Section 43-02-03-35.
- (3) The Scout Energy Management LLC #14-19T South Fryburg well (File No. 12476), located 885 feet from the south line and 1,400 feet from the west line in the SE/4 SW/4 of Section 19, Township 139 North, Range 100 West, Billings County, North Dakota (Section 19), was drilled to a total depth of 9,489 feet and completed in the Madison Pool from 9,402 feet to 9,426 feet.
- (4) Order Nos. 31026 and 31071 entered in Case 28495 on June 19, 2020, and July 29, 2020, respectively, confiscated the production and injection related equipment and salable oil associated with the South Fryburg #14-19T well for the purpose of compensating the Commission for plugging and reclamation costs. Pursuant to North Dakota Century Code Section 38-08-04.9, the confiscation order transferred title to the Commission.
- (5) The Medora Grazing Association (MGA) is desirous of converting the South Fryburg #14-19T well to a freshwater well in the Fox Hills Formation. The proposed water well will be used for livestock use.
- (6) The SW/4 of Section 19 is land managed by the United States Forest Service (USFS), and also managed for livestock grazing by the MGA under a ten-year Standard Grazing Agreement effective February 12, 2020. Past practice with water wells on lands managed by the

USFS has been for the MGA to assume the account supplying power to the well from the electrical cooperative and responsibility for maintenance.

(7) Misty Hays, District Ranger for the USFS Medora Ranger District, approved the request to convert the South Fryburg #14-19T well to a freshwater well.

(8) 8-5/8 inch, 24 pound per foot surface casing is set at 2,046 feet, which is below the base of the Fox Hills Formation. The Pierre Shale top is at 1,996 feet.

(9) A balanced cement plug was set in the 5-1/2 inch casing and tagged at 1,810 feet. The 5-1/2 inch casing was cut at 1,617 feet and laid down. A bit and scraper trip was made and a cast iron cement retainer was set at 1,610 feet in the 8-5/8 inch surface casing. It was then rolled with fresh water and successfully pressure tested to 500 psi.

(10) The MGA submitted an affidavit stating it has the authority and assumes all liability for the use and plugging of the proposed freshwater well.

(11) The MGA submitted a procedure for converting the mineral well to a freshwater well.

(12) The South Fryburg #14-19T well may safely be used as a freshwater well, therefore, this application should be granted.

IT IS THEREFORE ORDERED:

(1) The Medora Grazing Association is hereby authorized to convert the South Fryburg #14-19T well (File No. 12476), located 885 feet from the south line and 1,400 feet from the west line in the SE/4 SW/4 of Section 19, Township 139 North, Range 100 West, Billings County, North Dakota, to a freshwater well pursuant to NDAC Section 43-02-03-35.

(2) The Medora Grazing Association shall submit a written follow-up report to the Commission within thirty (30) days of converting said well to a freshwater well. Such notice shall include the following:

- (a) Depth to which a drilling bit was run in the hole, if applicable.
- (b) The depth at which the cement or tool was tagged in the well and the method of tagging, if applicable.
- (c) The amount of fluid circulated out of the well bore, the type of container such fluid was circulated in, and the approved facility at which such fluid was disposed, if applicable.
- (d) Exact depths the freshwater interval was perforated in the well.
- (e) Date(s) the work was performed.
- (f) Contractor(s) utilized.

(3) This order shall remain in full force and effect until further order of the Commission.

November 19, 2020

RE: Well Plug Back and Conversion to Freshwater Well

Dear Landowner or Land Manager,

You are receiving this letter because you have expressed interest or support in having the confiscated South Fryburg #14-19T well (File No. 12476) located 885 feet from the south line and 1,400 feet from the west line in the SE/4 SW/4 of Section 19, Township 139 North, Range 100 West, Billings County, North Dakota, on United States Forest Service managed property plugged back in a manner that will allow conversion of the well to a freshwater well.

North Dakota Administrative Code Section 43-02-03-35. CONVERSION OF MINERAL WELLS TO FRESHWATER WELLS.

Any person desiring to convert a mineral well to a freshwater well, as provided by North Dakota Century Code section 61-01-27, shall file an application for approval with the commission. The application must include, but is not limited to, the following:

- 1. If the well is to be used for other than individual domestic and livestock use, a conditional water permit issued by the state water commission.*
- 2. An affidavit by the person desiring to obtain approval for the conversion stating that such person has the authority and assumes all liability for the use and plugging of the proposed freshwater well.*
- 3. The procedure which will be followed in converting the mineral well to a freshwater well.*
- 4. If the well is not currently plugged and abandoned, an affidavit must be executed by the operator of the well indicating that the parties responsible for plugging the mineral well have no objection to the conversion of the mineral well to a freshwater well.*

If the commission, after notice and hearing, determines that a mineral well may safely be used as a freshwater well, the commission may approve the conversion.

At this time, the North Dakota Industrial Commission, Department of Mineral Resources is requesting you sign the below acknowledgement that you accept and will follow all the above terms.

I RENÉ FICK (MGA Sec.), having the authority to do so, understand that I am requesting to have a confiscated well located on property managed by the United States Forest Service plugged back in a manner that will allow the possible use as a freshwater well. I understand that I accept the liability as stated in North Dakota Administrative Code Section 43-02-03-35. I hold no liability with the state of North

Bruce E. Hicks
ASSISTANT DIRECTOR
OIL AND GAS DIVISION

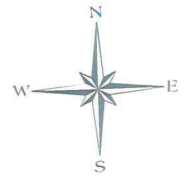
Lynn D. Helms
DIRECTOR
DEPT. OF MINERAL RESOURCES

Edward C. Murphy
STATE GEOLOGIST
GEOLOGICAL SURVEY

R101W

R100W

Allotment 207



T139N

T139N

002

Sally Creek

24

19

001

HQ1

Range Developments

- CattleGuard
- Corral
- Dam
- Dugout
- Spring
- Stock Tank
- Well
- Windmill
- Natural Barrier
- Range Water Pipeline

Allotment

Pastures

Named Steams

Road/Trail

Surface Roads

Highway

Surface Ownership

- National Grassland
- Non Federal
- National Park Service
- State

0

0.25

0.5

Miles

R101W

R100W

T139N R100W

FS 762-1

FS 762-1

FS 762-1



Shane Goettle

From: Wes Obrigewitch <wesober45@gmail.com>
Sent: Sunday, May 2, 2021 6:02 PM
To: Jim Arthaud; Shane Goettle
Subject: Fwd: Research of 3 Oil Wells to Convert

Follow Up Flag: FollowUp
Flag Status: Flagged

----- Forwarded message -----

From: Rex Honeyman <rexmiss@bis.midco.net>
Date: Fri, Apr 30, 2021, 7:11 PM
Subject: Research of 3 Oil Wells to Convert
To: Wes Obrigewitch <wesober45@gmail.com>

Wes,

I did some research on the three oil wells you plan to convert to stock wells. You maybe able to get by without running a wireline based on existing data. Please take a look and let me know if you have any questions.

You and I discussed how much of the well should be perforated. After thinking about it more, I think you would want to perforate as much of the aquifer as you can. If the geophysical log shows a good 60 foot zone, I would perforate the 60 feet. If the log only shows a thirty foot zone then perforate the entire 30 foot zone. The more you perforate the more gallons per minute you can expect, but you'd only want to perforate producing zones that look promising on the logs.

South Fryburg #14-19

The South Fryburg (SFTU) #14-19T Well is SW of Fryburg and is located in the SE1/4 SW1/4 of Section 19 Two 139N Rng 100W. The NDIC Report indicates the Top of the Pierre Formation (Also known the bottom of the Fox Hills Formation) is 1996 feet.

1) Estimated Depth to Fox Hills - Based on State Water Commission Reports

Based on maps generated for two State Water Commission Publications they indicate the depth to Fox Hills could range from 1600 to 1800 feet below land surface in this area.

2) Estimated Depth to Fox Hills - Based Nearby Domestic Well

A Fox Hills well drilled for domestic purposes (13910114BDC2) was completed approximately 2.5 miles NW of the South Fryburg #14-19T Well and was screened from 1513 to 1555 below land surface. Land surveyed surface at this domestic well is 2529 feet (NAVD88). The rough land surface elevation at the oil well is approximately 2788 feet (based on the Digital Elevation Model) or 259 higher than the domestic well, suggest the good part of the Fox Hills aquifer would be at 1772-1814 feet below land surface.

3) Estimated Depth to Fox Hills - Based on Nearby Stock Well

Another Fox Hills well drilled for stock purposes 5.8 miles northeast (14010028CAB) appears to be drilled to a depth of 1770 feet below land surface. The land surface in the area of the stock well is roughly 2749 Feet (NAVD88) or 39 feet lower than the oil well, suggesting the good part of the Fox Hills aquifer would be at 1807 feet below land surface.

4) Estimated Depth to Fox Hills - Based on nearby Geophysical Log (In Same Section)

Another oil well SFTU 13-19 in the same section SW1/4 NE1/4 of Section 19, Twp 139N Rng. 100W has a gamma ray log from the land surface down into the oil producing zone. This geophysical log should provide insight in the depth to the Fox Hills as well. After reviewing the log myself it appears the Fox Hills aquifer is at a depth from 1550 feet to 1850 feet below land surface. It is difficult to determine if this entire zone would produce a lot of water or not.

Conclusion

From my understanding of the NDIC report you provided me, it appears the well was cemented off at 1810' and the producing casing cut at 1617 feet. That being the case the Fox Hills highest producing zone are maybe below where the 5 1/2 casing was cut. However there maybe other producing zones of the Fox Hills shallower or other aquifers shallower. There is a nearby domestic well approximately 1/2 mile away drilled for Ronald Bock by Gregory Drilling in 1980 into an aquifer and was screened from 580 to 628 feet below land surface and produced 10 gpm.

Scout Energy Management LLC #4-35 SFTU

This well is 5.6 miles Southwest Fryburg (SFTU) #4-35 Well is located in the NW1/4 NW1/4 of Section 35 Two 139N Rng 101W. The NDIC Report indicates the Top of the Pierre Formation (Also known the bottom of the Fox Hills Formation) is 1672 feet.

1) Estimated Depth to Fox Hills - Based on State Water Commission Reports

Based on maps generated for two State Water Commission Publications they indicate the depth to Fox Hills could range from 1500 to 1700 feet below land surface in this area.

2) Estimated Depth to Fox Hills - Based Nearby Domestic Well

A Fox Hills well drilled for domestic purposes (13910114BDC2) was completed approximately 2.75 miles N of the South Fryburg #4-35 Well and was screened from 1513 to 1555 below land surface. Land surveyed surface at this domestic well is 2529 feet (NAVD88). The rough land surface elevation at the oil well is approximately 2569 feet (based on the Digital Elevation Model) or 40 higher than the domestic well, suggest the good part of the Fox Hills aquifer would be at 1553-1595 feet below land surface.

3) Estimated Depth to Fox Hills - Based on Geophysical Log from this Oil well

This well already has a gamma ray log from the land surface down into the oil producing zone. This gamma log may provide insight into the depth to the Fox Hills. The Gamma Ray log shows a prominent zone from 1450 feet to 1670 feet bis that may be a producing zone within the Fox Hills The a good water producing zone in the Fox Hills may be able to be determined from this gamma log without doing another new geophysical log.

Square Butte SWC System #D01 - Salt Water Disposal Well (Cobra Oil and Gas Corporation)

The Square Butte #D01 Salt Water Disposal Well is 7.5 miles SW of Medora and is located in the SE1/4 SW1/4 of Section 10 Two 139N Rng 103W. The oil well was originally completed to a total depth of 9295 feet bis in the Madison Pool form 9175 to 9177 feet. It was subsequently recompleted as a Salt Water Disposal well is currently completed in the Inyan Kara Formation (Dakota Aquifer) from 5590 feet to 5615 feet bis.

1) Estimated Depth to Fox Hills - Based on State Water Commission Reports

Based on maps generated for two State Water Commission Publications they indicate the depth to Fox Hills could range from 1,000 to 1,300 feet below land surface in this area.

2) Estimated Depth to Fox Hills - Based on Nearby Stock Well

A Fox Hills stock well was drilled 2.2 miles east (14910313ABB) of the Oil Well/SWD well and was drilled to a depth of 1260 feet below land surface. The land surface in the area of the stock well is 2721 Feet (NAVD88) or 22 feet lower than the oil well, suggesting the good part of the Fox Hills aquifer would be at 1280 feet below land surface.

3) Estimated Depth to Fox Hills - Based on Geophysical Log from this Oil well

This well already has a gamma ray log from the land surface down into the oil producing zone. This gamma log may provide insight into the depth to the Fox Hills. The Gamma Ray log shows a prominent zone that was perforated in the Inyan Kara formation for the salt water disposal well. Appears the Salt Water Disposal company used this gamma log to perforate the intended zone for their project and your project may be able to take advantage of this as well. it may be worth while to check with Cobra Oil to see if they already have geophysical logs or if they used the original gamma log as discussed above. The a good water producing zone in the Fox Hills may be able to be determined from this gamma log without doing another new geophysical log.

Rex Honeyman

701-220-9723

rexmiss@bis.midco.net

Subject: Conversion of mineral to water wells in grasslands

Date: May 6, 2021

From: Chris Augustin
NDSU Dickinson Research Extension Center Director
1041 State Ave. Dickinson, ND 58601
701-456-1103
chris.augustin@ndsu.edu

Greetings,

Dependable fresh water is needed for sustainable livestock production. The conversion of mineral wells to fresh water wells is a "make lemonade from lemons" opportunity existing throughout the National Grasslands. The opportunity exists from the already drilled well that can save money for North Dakota ranchers in the area.

The North Dakota State University Dickinson Research Extension Center supports and is happy to partner with the Medora Grazing Association to improve freshwater sources. The freshwater project at the Pyramid Park research site will not only provide water for the important research cattle, but neighbors will have access to fresh water. This can positively impact rancher's livelihood, cattle health, and performance. Fresh water is especially important as this area has been classified as being in an extreme drought for months.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Chris Augustin', with a stylized flourish at the end.

Chris Augustin

5/7/2021

To whom it may concern:

My name is Allan Richard, I live south of Medora. I am writing in regards to the reduced water supply crisis in the area. There is a great need for a better water system for the cattle, wildlife, and oilfield operations.

There is currently an abandoned oil well located in Sec26139R101 West which needs to be revitalized. I am proposing to use this oil well and repurpose it to create a more stable and cleaner water supply for the area. This well would be very beneficial to the local ranchers in the area.

Thank you for your consideration in the matter. I look forward to your response.

Warm regards,

Allan Richard

Allan Richard



May 7, 2021

To Whom It May Concern,

We are a ranching family in Billings County and members of the Medora Grazing Association.

With the challenge of the drought and dry conditions that currently surround us, we are reminded more than ever of the value of fresh water.

And when given the opportunity to develop water and strategically make it available throughout these ranches, it becomes so much more than just a watering hole for livestock.

Water development allows for increased grazing rotations and better land management. It keeps livestock off creeks, promotes an improved environment for wildlife, and benefits ranchers with better daily gains on cattle.

Fresh water allows us to be successful land stewards while maximizing our resources. There is a need for it, and everybody wins.

Whether it's ranching families, Medora Grazing Association, wildlife, Forest Service or public lands...the development of fresh water can have a positive impact on us all.

Thank you for your time.

Sincerely,

Roger & Naomi Rossow

Medora, ND

May 8, 2021

North Dakota Outdoor Heritage Fund Committee

Bismarck, ND

Dear Committee members:

We want to ask for financial support to develop water sources on the National Grasslands in western North Dakota. We have ranched in the Medora area for 50 years and the needed water developments will help ensure that young ranching families will be able to continue ranching in these badlands. These developments will greatly enhance the grasslands by distributing cattle to areas where water sources were non-existent or unusable. For example, the most of the stock dams built in the 1940's and 1950's have either silted in or washed out and fresh water is so much better and healthier. For many years funding has been unavailable for many of these projects and in addition to helping the livestock and the pastures, the wildlife will also benefit. The Forest Service has a cost-share program with the Grazing Association to develop water. In the last several years there has been only enough funding for 1 or 2 projects that were approved out of 10 that were requested because of lack of funds. So you can see that the water development is far behind.

Sincerely,

Ted and Kay Tescher

Medora, ND

May 11, 2021

To whom it may concern,

I am a member of the Medora Grazing Association and I am writing in regards to water development within the Grazing Association allotments.

My family has been ranching for four generations, and I have learned the importance and necessity that water is to nature, wildlife, and cattle. In a year of drought, it has become more and more evident how crucial quality water development and water resources are to strengthening and preserving the National Grasslands.

With the multiple fires occurring around the area during this drought, having more reliable water sources throughout the badlands would greatly benefit our fire departments in their jobs without having to go great distances to find readily available water.

Please take into consideration that improving and expanding water development throughout the area will benefit everyone and every living thing involved.

I appreciate your time.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Colin Madzo', with a stylized, cursive script.

Colin Madzo
Medora, ND



File Code: 1580
Date: May 11, 2021

Andrea Pfennig
North Dakota Industrial Commission
ATTN: Outdoor Heritage Fund
State Capitol, 14th Floor
600 E Boulevard Ave, Dept. 405
Bismarck, ND 58505-0840

To Whom it May Concern:

Please accept this letter documenting the Forest Service's commitment to a partnership with the North Dakota Industrial Commission and Medora Grazing Association, for the well conversion and pipeline projects identified on the Little Missouri National Grassland through the Outdoor Heritage Fund for the purpose of implementing improved grassland management in western North Dakota. The implementation of these projects will further the progress of moving Grassland resources toward our Land & Resource Management Plan objectives providing for sustainable multiple use on the Dakota Prairie Grasslands.

The Forest Service is committed to providing range management and watershed technical assistance; botany, wildlife and archeological survey clearances; and engineering review. In addition, monitoring will play an integral part displaying the effectiveness of the applied management tools in meeting or moving towards resource objectives.

My staff and I look forward to advancing this partnership for the Outdoor Heritage Fund. If you have questions or require further details, please feel free to contact Misty Hays at (701) 227-7824.

Sincerely,

MISTY HAYS
District Ranger



May 10, 2021

To Whom It May Concern,

I am a member of the Medora Grazing Association and a third generation rancher in Billings County.

Water development throughout the Grazing Association Allotments enhances our ability to better manage our grass resources and benefit our own ranches, as well as wildlife and tourism on public lands.

Water plays an important role in providing a readily available resource for firefighting, which we've seen to be a real challenge throughout the Badlands. Water development could be a proactive solution to these situations.

Water is a necessity and a resource that is needed to sustain the existence of all living things.

Expanded water resources, with cooperation and healthy management, will benefit everyone involved.

Thank you for your time.

Sincerely,

A handwritten signature in black ink that reads "Donovan O'Brien". The signature is written in a cursive, flowing style.

Donovan O'Brien
Medora, ND