



## DAKOTA GOLD

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SEP 05 2023

MINERALS & MINING PROGRAM

30 August 2023

Roberta Hudson  
Engineering Manager I  
South Dakota Department of Agriculture and Natural Resources  
Minerals and Mining Program  
Joe Foss Building  
523 East Capitol Avenue  
Pierre, South Dakota, 57501

**RE: DTRC LLC Maitland IV Exploration Notice of Intent**

Dear Mrs. Hudson:

Dakota Gold Corp. herein submits on behalf of DTRC LLC this Exploration Notice of Intent (EXNI) for Maitland IV Exploratory Drill Program. The program comprises drilling and coring from exploration drill pads constructed exclusively on private land within Lawrence County.

Included in this EXNI are the following:

- Notice of Intent to Conduct Mineral Exploration Operation Application Form,
- A plan of reclamation pursuant to Section 8,
- A topographic map pursuant to Section 9,
- A fee of \$250 pursuant to Section 17 in check form, and
- Landowner Ownership documentation (Confidential).

Dakota Gold Corp. is committed to working with DANR and meeting or exceeding all statutes and regulations.

Thank you for your time as it pertains to this matter. Should you have any question or comments, please contact Timm Comer at (719) 203-0567 or [tcomer@dakotagoldcorp.com](mailto:tcomer@dakotagoldcorp.com).

Regards,

Gerald M Aberle  
Chief Operating Officer

Attachment: Complete EXNI Application Package  
Enclosures: Check No. 2254 for \$250

+1 778 655 9638

[info@dakotagoldcorp.com](mailto:info@dakotagoldcorp.com)  
[www.dakotagoldcorp.com](http://www.dakotagoldcorp.com)

Lead Office

106 Glendale Drive, Suite A,  
Lead, South Dakota,  
57754, USA

Vancouver Office

1588 609 Granville Street  
Vancouver, British Columbia  
V7Y 1G5, Canada

Department of Agriculture and Natural Resources  
Minerals and Mining Program  
523 East Capitol Avenue  
Pierre, South Dakota 57501-3182  
605 773-4201; Fax: 605 773-5286

NOTICE OF INTENT TO CONDUCT  
MINERAL EXPLORATION OPERATION  
(Excluding Uranium)

Pursuant to SDCL 45-6C

Operator's name:

**DTRC LLC**

Mailing Address:

**106 Glendale Drive, Suite A  
Lead, South Dakota 57754**

Telephone:

**605.717.2640**

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**SEP 15 2023**

**MINERALS & MINING PROGRAM**

Resident agent (if out-of-state corporation):

**Gerald M. Aberle**

Resident agent address:

**106 Glendale Drive, Suite A  
Lead, South Dakota 57754**

Telephone:

**605.717.2640**

Legal description of area to be explored by Section, Township, and Range:

**Portions of Section 18  
Township 5 North, Range 3 East  
Black Hills Meridian**

County:

**Lawrence**

Give a brief description of the type of exploration to be conducted. Include a list of all minerals to be explored and a description of methods (e.g. drill rig type, number of holes to be drilled, number of drill pads to be constructed, proposed depth for each test hole, length of existing access roads and/or new access road construction).

DTRC LLC will explore for potential hardrock gold deposits within the proposed project area. It is anticipated that exploration test hole drilling will be completed using skid-mounted core and/or truck-mounted reverse circulation drilling methods/drill rigs. The project would include up to 13 exploration test hole drill pad sites (drill pads) with drill pad location on previously disturbed lands that include current reclaimed lands, existing roads and/or trails and new disturbed lands for new drill trials in the area. Three (3) of the proposed pads may only be constructed after review of test drilling results from the other drill pads warrants the construction and use. There are approximately 2,100 feet of new drill trail development proposed as part of this project on previously undisturbed and previously reclaimed lands. Additionally, access activities will occur on approximately 1,800 feet of drill trail development on previously disturbed lands in the project area. Additional access trails (approximately 800'), existing trails (approximately 1,800 feet) and new drill trails (approximately 2,100 feet) within the project areas would be utilized for access to the proposed drill pads in the project area for an approximate disturbance of 1.6 acres. Exploration test hole drilling from these 13 pads will be drilled both azimuth and vertical and up to a depth of approximate 6,000 feet in vertical depth, with the possibility of multiple (up to 20) exploration test holes drilled from each drill pad. The drill pads that are constructed may measure approximately 200 ft x 200 ft (approximately 0.92 acres) each.

Date exploration will commence:

**Immediately following approval of this EXNI.**

What legal authority does the operator have to conduct exploration on the above-described land? Include a copy if available.

☒ Deed ☐ Lease ☐ US Forest Service Permit ☐ Pending US Forest Service Permit ☒ Other

Will the operator conduct uranium exploration? ☐ Yes ☒ No If yes, a permit pursuant to SDCL 45-6D must be obtained.

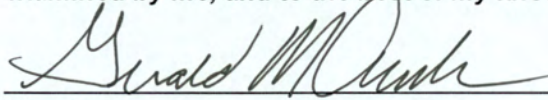
INSTRUCTIONS:

Please reference SDCL 45-6C. This Notice of Intent must be accompanied by:

1. A plan of reclamation pursuant to Section 8.
2. A topographic map pursuant to Section 9.
3. A fee of \$250 payable to the Department of Agriculture and Natural Resources pursuant to Section 17.
4. A surety in an amount to be determined by the department pursuant to Section 19.
5. Any written landowner consultations giving alternative preferences for the reclamation of the affected land pursuant to Section 16.

Applicant affirms that the surface owner has been notified of the proposed mineral development and that said surface owner is aware of his rights to compensation for damages to property pursuant to SDCL 45-5A. Applicant hereby affirms that the mineral exploration will be conducted pursuant and subject to the provisions of SDCL 45-6C, and all regulations promulgated thereunder, that he will grant access to the SD Board of Minerals and Environment or its agents to the area under notice from the date of the notice and thereafter to assure compliance with the provisions of SDCL 45-6C.

*I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct.*



Date: August 29, 2023

Signature

**Chief Operating Officer**

Title: \_\_\_\_\_

STATE OF South Dakota

COUNTY OF Lawrence

On this 29 day of August, 2023, before me personally appeared

**Gerald M. Aberle**

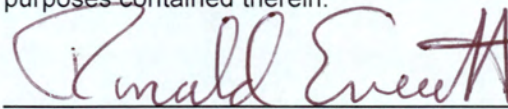
**Chief Operating Officer**

, who acknowledged himself to be the

(Title)

for DTRC LLC

(Operator)  
and that he is authorized to execute the Notice of Intent for the purposes contained therein.



My Commission Expires: November 18, 2027

Notary Public

SEAL



FOR DEPARTMENT USE ONLY

DATE APPROVED: BOND AMOUNT: EXNI NUMBER:

\_\_\_\_\_  
Chairman, SD Board of Minerals & Environment



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SEP 05 2023  
MINERALS & MINING PROGRAM

STATE OF SOUTH DAKOTA  
BEFORE THE SECRETARY OF

THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

IN THE MATTER OF THE	)	
APPLICATION OF	)	
DTRC LLC	)	CERTIFICATION OF
_____	)	
STATE OF <u>South Dakota</u>	)	APPLICANT
_____	)	
COUNTY OF <u>Lawrence</u>	)	
_____	)	

I, Gerald M. Aberle, the applicant in the above matter after being duly sworn upon oath hereby certify the following information in regard to this application:

I have read and understand South Dakota Codified Law Section 1-41-20 which provides:

*"The secretary may reject an application for any permit filed pursuant to Titles 34A or 45, including any application by any concentrated swine feeding operation for authorization to operate under a general permit, upon making a specific finding that:*

- (1) The applicant is unsuited or unqualified to perform the obligations of a permit holder based upon a finding that the applicant, any officer, director, partner, or resident general manager of the facility for which application has been made:*
  - (a) Has intentionally misrepresented a material fact in applying for a permit;*
  - (b) Has been convicted of a felony or other crime involving moral turpitude;*
  - (c) Has habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage;*
  - (d) Has had any permit revoked under the environmental laws of any state or the United States; or*
  - (e) Has otherwise demonstrated through clear and convincing evidence of previous actions that the applicant lacks the necessary good character and competency to reliably carry out the obligations imposed by law upon the permit holder; or*
- (2) The application substantially duplicates an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Nothing in this subdivision may be construed to prohibit an applicant from submitting a new application for a permit previously denied, if the new application represents a good faith attempt by the applicant to correct the deficiencies that served as the basis for the denial in the original application.*

*All applications filed pursuant to Titles 34A and 45 shall include a certification, sworn to under oath and signed by the applicant, that he is not disqualified by reason of this section from obtaining a permit. In the absence of evidence to the contrary, that certification shall constitute a prima facie showing of the suitability and qualification of the applicant. If at any point in the application review, recommendation or hearing process, the secretary finds the applicant has intentionally made any material misrepresentation of fact in regard to this certification, consideration of the application*



may be suspended and the application may be rejected as provided for under this section.

*Applications rejected pursuant to this section constitute final agency action upon that application and may be appealed to circuit court as provided for under chapter 1-26.*

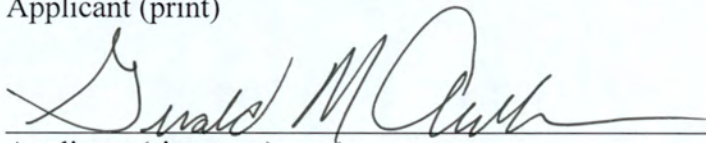
I certify pursuant to 1-41-20, that as an applicant, officer, director, partner, or resident general manager of the activity or facility for which the application has been made that I; a) have not intentionally misrepresented a material fact in applying for a permit; b) have not been convicted of a felony or other crime of moral turpitude; c) have not habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage; (d) have not had any permit revoked under the environmental laws of any state or the United States; or e) have not otherwise demonstrated through clear and convincing evidence of previous actions that I lack the necessary good character and competency to reliably carry out the obligations imposed by law upon me. I also certify that this application does not substantially duplicate an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Further;

*"I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct."*

Dated this 29 day of August, 2023

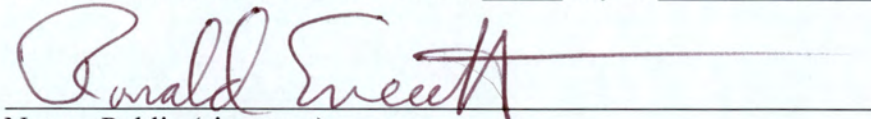
**Gerald M. Aberle**

Applicant (print)



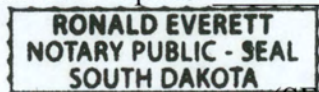
Applicant (signature)

Subscribed and sworn before me this: 29 day of August, 2023.



Notary Public (signature)

My commission expires: 18 November 2027



(SEAL)

**PLEASE ATTACH ANY ADDITIONAL INFORMATION NECESSARY TO DISCLOSE  
ALL FACTS AND DOCUMENTS PERTAINING TO  
SDCL 1-41-20 (1) (a) THROUGH (e).  
ALL VIOLATIONS MUST BE DISCLOSED, BUT WILL NOT  
AUTOMATICALLY RESULT IN THE REJECTION OF AN APPLICATION**



In preparing this reclamation plan, please address each item in detail, referencing SDCL 45-6C-8 and 45-6D-9. Please refer to the reclamation standards outlined in SDCL 45-6C-27 through 45-6C-34, SDCL 45-6D-33 through 45-6D-39, and the state's hole plugging regulations as detailed in ARSD 74:11.

1. Describe the type of reclamation the operator proposes to achieve in the reclamation of the affected land.

DTRC LLC and its exploration drilling contractors strive to minimize the potential surface impacts of the exploratory drilling program. The exploration drilling operations would include removal of existing growth media (topsoil) when feasible, then stockpiling, reshaping, and interim reseeding of the topsoil, which would then be utilized for future reclamation activities at the project site. Topsoil stockpiles would be clearly located and appropriately marked as such. Best Management Practices (BMPs) for potential sedimentation and erosion control would be implemented at the project site for areas of new disturbance. These BMP (e.g. ditches, sumps, berms, wattles, straw bales or silt fences) at potential affected area pursuant to SDCL 45-6C-32. Exploration drill pad sumps would be located on the uphill side of the exploration drill pad site when feasible and constructed with a liner system suitable to retain liquids from the exploration drilling activities. Multiple drill pad sumps may be located on each drill pad to ensure proper containment of water test hole drilling activities. Each sump will incorporate wildlife protection measures for small mammals in the area. Areas where exploration drilling pads (up to 13 [approximately 12 acres]) and/or access and exploration drill trails (up to 4,700 feet [approximately 2 acres]) are constructed would be reclaimed following completion of exploration drilling activities. Reclamation activities for exploration drill trails would occur with disturbed area of the exploration drill pads, which would be recontoured and regraded as necessary, the exploration drill pad sump liner system would be folded in place and then the entire sump area backfilled with native materials to the area. The entire exploration drill pad area, including sump areas would be reclaimed. Reclamation activities would include recontouring, regraded, placement of topsoil and seeding with reclamation seed mixture. For areas where exploration trials and/or exploration drill pad construction are necessary, the newly disturbed affected area of the exploration access trial would be regraded to approximate original contours where feasible using native materials to the area. Once these regrading activities are completed, the area of the exploration access trials would be reclaimed. Reclamation of one site would be conducted concurrent while exploration drilling activities continue at another site, when feasible and pending weather conditions. The post-mining land use for the exploration project area would be woodland grazing, which would be accomplished by reclaiming to an open canopy area within the forested surroundings.

2. Provide a proposed timetable for seeding and replanting indicating when and how the reclamation plan will be implemented. Such timetable shall be developed in consultation with the County District Conservationist as to the nature of the soils and native vegetation in the area of the proposed operation. These recommendations shall be followed, if any are provided, and copies of all correspondence shall be provided to the Department.

Reclamation seeding will take place after recontouring and regrading of disturbed areas is completed. Seedings would be done on a clean, semi-smooth, weed free seedbed with effective seeding methods. DTRC LLC would control potential noxious weeds on newly disturbed areas impacted by exploration drilling activities throughout operations of the project and for 1-year post-reclamation. Weeds would be clipped and/or sprayed by licensed applicator before potential noxious weed species compete against the seeding for moisture and light. All reclamation processes, seed mixtures, seasonal constraints and timing and guidance will be based on South Dakota NRCS Conservation Practice Standard (CPS) Critical Area Planting Code 342 as suggested by the Lawrence County Conservation District and the local NRCS requirements and recommendations, per 45-6C-16; Consultation with surface owner--Preferences for reclamation and travel restrictions, as well as with the conservation district and NRCS offices. Fertilizer would be applied as necessary. Reseeding of the reclaimed sites would be conducted if the initial reclamation is not successful.



The seed mixture or reseeding exploration drill pad sites and exploration and access trails consists of local native species and was developed based on recommendations following consultation by the local Natural Resources Conservation Service (NRCS) office. Consultation with NRCS was completed on 02 August 2023 for this project. A revised recommended reclamation seed mixtures presented to DTRC LLC for this new Exploration Notice of Intents (EXNIs) was recommended for this projects site based on that consultation. A copy of that recommended revised reclamation seed mixture by NRCS for only this application is attached to this EXNI.

3. Describe how the reclamation plan will rehabilitate the affected land.

The goal of the reclamation plan is to rehabilitate and restore the newly affected lands to woodland grazing habitat. Planting of grasses would control erosion and protect the topsoil. Numerous forb and shrub species are expected to volunteer on the reclaimed areas because ground disturbance associated with exploration activities would be limited as compared to surrounding areas of vegetation. A grass, forb, shrub, and subshrub community is expected to develop as reclamation matures, which would support woodland grazing and provide an edge effect to support the wildlife in the area

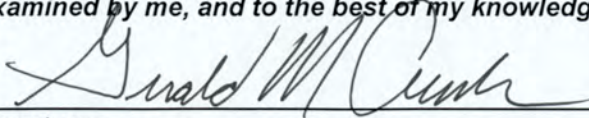
4. Describe the anticipated temporary and permanent plugging and capping procedures to be used. Please refer to SDCL 45-6C-28 through 45-6C-30, SDCL 45-6D-33 through 45-6D-35, and the state's hole plugging regulations as detailed in ARSD 74:11.

At a minimum DTRC LLC commits to following all South Dakota laws and statues concerning hole plugging and abandonment and alternatively would execute a full cement grout where needed, such as any instance where aquifer cross contamination is feasible. All exploration drill holes would be plugged in accordance with ARSD 74:11:08 and SDCL 45-6C-28 through 45-6C-30. Additionally, DTRC LLC would utilized, if required, the *General Alternate Plugging Plan* that was submitted on 11 August 2022 to DANR and approved by DANR on 05 October 2022 for all DTRC LLC EXNI permits. DTRC LLCC would again request application of that alternative plugging plan for this application. The drill holes may penetrate the Deadwood Formation and the Precambrian, which are water-bearing units or aquifers in the Black Hills. If an aquifer is penetrated, the exploration drill holes will be plugged from bottom to top using bentonite grout, which complies with the requirements of ARSD 74:11:08:05 and ARSD 74:11:08:05:01 (i.e. requirements for plugging exploration drill holes that penetrate single unconfined aquifers and confined or multiple aquifers). In the event that a confined aquifer is penetrated, the weight of the bentonite grout column would be sufficient to overcome formation pressure, or the hole would be plugged using cement grout. Records regarding aquifers encountered during drilling and plugging methods used would be retained for each exploration hole and those records would be provided to the South Dakota Department of Agriculture and Natural Resources (DANR) upon request. All exploration drill holes will be plugged immediately upon completion while the drill rig is still on the exploration drill pad. In the event that a drill hole needs to remain open for more than 30 days, DTRC LLC will apply for an alternate plugging schedule to temporarily keep the hole open.

5. Provide the estimated cost of implementing and completing the proposed reclamation, and, the estimated cost of plugging and sealing each test hole.

Reclamation of each drill pad is estimated to cost approximately \$1,000. Reclamation of exploration access roads and trails is expected to cost approximately \$5,000 per linear mile. Plugging and sealing drill holes is estimated to cost \$1,000 per hole. DTRC LLC has a statewide surety bond of \$20,000 in place with the State of South Dakota in lieu of drill program specific surety bonds (SDCL 45-6C-19).

*I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct.*

  
Signature

Date: August 29, 2023

Title: Chief Operating Officer



SEP 05 2023

MINERALS &amp; MINING PROGRAM

From: Timm Comer  
Sent: Friday, July 28, 2023 8:36 AM  
To: Mitch Faulkner (NRCS)  
Cc: Karl Jensen Lawrence County CD; Tuschen, Victor - NRCS, Belle Fourche, SD; Yvette.Kirkman Butte County Conservation District; Crystal Hocking (Respect)  
Subject: Consultation with local Conservation District for Reclamation Plan - Maitland IV  
Attachments: Maitland\_IV\_EXNI\_TopoProjectPublic\_2023July26.pdf; USDS\_All Ecological Sites\_DTLC LLC\_EXNI Maitland IV Application.pdf; Proposed Reclamation Seed Mix.pdf

Mitch,

Dakota Gold Corp. ("DGC") is preparing for submittal an Exploration Notices of Internet ("EXNI") Application with the South Dakota Department of Agriculture and Natural Resources ("DANR") for DTRC LLC. DGC would request consultation on a recommended seed mixture to be utilized under the reclamation plan that will be submit as part of the EXNI application for DTRC LLC, per SDCL 45-6C-8(2).

Enclosed with the email are the following for use for your review to assist in your consultation on a recommended seed mixture.

The following is a description of what is included with this email:

- **Maitland IV\_EXNI\_TopoProjectPublic\_ 2012July20.pdf:** Proposed project site (highlighted in tan) in the Maitland area of Lawrence County Titled "Maitland IV Drill Program".
- **USDA\_All\_Ecological Sites\_DTRC LLC\_EXNI Maitland IV Application.pdf:** All Ecological Sites report that was created from the NRCS website on the project area.
- **Proposed Reclamation Seed Mix.pdf:** Previously recommended seed mixture being utilized on eight (8) current EXNI Permits, including EXNI 439, EXNI 442 and EXNI 443 at Maitland area, currently held by DTRC LLC.

DGC would prefer to also utilizes the currently recommended seed mixture for this EXNI, and would request you concurrence if appropriate. The recommended seed mixture for existing DTCR LLC EXNI 439, EXNI 442 and EXNI 443 approved by DANR are in the same area as this proposed project area. However, should you recommend an alternative seed mixture, DGC would implement that recommended seed mixture as part of the submitted reclamation plan to the DANR as part of the EXNI Application.

Thank you for your time as it pertains to this matter and your assistance. Should you need any further information, please contact me.

Regards,  
Timm

**Timm Comer**  
ENVIRONMENTAL DIRECTOR  
[tcomer@dakotagoldcorp.com](mailto:tcomer@dakotagoldcorp.com)  
O +1 605 717 2541  
C +1 719 203 0567





## SEEDING PLAN

SEP 05 2023

MINERALS &amp; MINING PROGRAM

MLRA

62

Producer Dakota Gold Corp-Maitland IV Conservation District: LawrenceProgram CTA Practice No. 342 Practice Name: Critical Area Seeding

CI or Referral No. \_\_\_\_\_ Contract # \_\_\_\_\_

Resource Concern (CPPE Impact)

Purpose:

342- Stabilize areas with existing or expected high rates of soil erosion by wind or water

## PLANNED

Tract	NA	Seedbed Preparation
Field	NA	Clean, smooth, weed free seedbed will be prepared
Acres	18.60	
Group or Site	Critical Area Group	
Site	Loamy or Silty Texture	Have the past 3 years of Herbicide Carryover been considered?
Date to be Planted	Early Spring Prior to 5/15	
Alternative planting dates		Protection Provided
Alternative planting dates		
Seeding Equipment	Special Grass Drill	Clip weeds before they compete for moisture and light
Companion Crop		

## PLANNED

Species * **	1/ Select Improved Variety (recommended) or select common seed (see note below)	Percent in Mixture	Pure Live Seeds (PLS) per square foot	Pure Live Seed (PLS) lbs/ac Needed	Acres to Seed	Pure Live Seed (PLS) lbs Required
		100	40.35			
Western wheatgrass		26.0	9.75	3.79	18.60	70.53
Big bluestem		20.0	9.00	2.23	18.60	41.43
Sideoats grama		5.0	2.25	0.54	18.60	10.13
Slender wheatgrass		20.0	7.50	2.11	18.60	39.20
Green needlegrass		10.0	4.50	1.09	18.60	20.26
Little bluestem		2.0	0.90	0.14	18.60	2.55
Western yarrow		1.0	0.38	0.01	18.60	0.11
Purple prairie clover		1.0	0.38	0.06	18.60	1.05
Virginia wildrye		6.0	3.60	1.63	18.60	30.38
Canada wildrye		7.0	2.10	0.80	18.60	14.80

To meet SD NRCS

Standards Please Note:

1/ Improved varieties recommended above have no restrictions on their origin.

1/ Origin of Common grass seed must be ND, SD, NE, MT, WY, MN, or IA. Exception: Smooth Bromegrass any locale.

1/ Common Native forbs and legumes will originate or be grown in

(USA): ND, SD, NE, MT, IA, WY, ID, WA, OR, MN, WI, and (CAN): AB, BC, MB, ON, SK.

- Seed test must be completed according to SD Seed laws (see link below) and no more than 9 months prior to the date planted.

- All legumes must be pre-inoculated. Producer will provide all seed tags to NRCS

[Legume inoculants](#)

- Tetrazolium (TZ) tests may be used as a substitute for germination tests ONLY for Green Needlegrass

- For Alfalfa Salinity tolerance use F or G from the web site link ---&gt;

[Alfalfa Variety Ratings](#)

\* Pubescent wheatgrass and Intermediate wheatgrass are the same species and can be substituted for one another at any time.

\*\* Thickspike wheatgrass may be substituted for western wheatgrass if the later is not available but only west of the Missouri River.

To calculate the amount needed multiply the western wheatgrass seeding rate by .72

SD Seed Laws [Codified Laws Statute 38-12A](#)Seed testing [SD state seed-lab](#)

## LOCATION MAP



Tract

N

S.

T.

R.

Planning Assistance By:

Mitch Faulkner 8/1/2023

Name

Date)

Plan Meets SD Standards (if no explain)

Yes ☒ No ☐



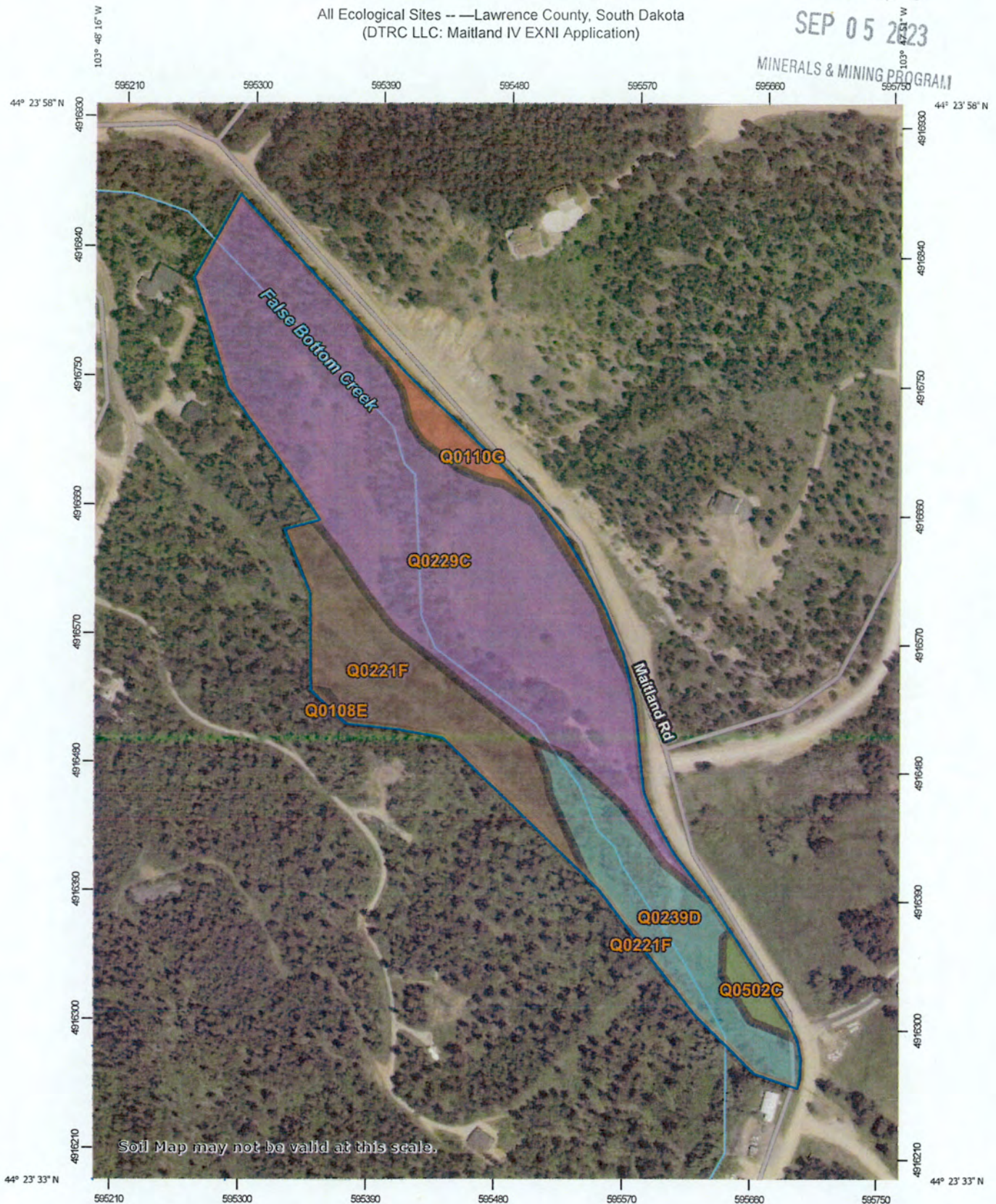
# ATTACHMENT 1

All Ecological Sites -- Lawrence County, South Dakota  
(DTRC LLC: Maitland IV EXNI Application)

RECEIVED

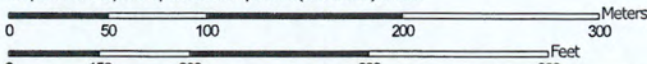
SEP 05 2023

MINERALS & MINING PROGRAM



Soil Map may not be valid at this scale.

Map Scale: 1:3,660 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 13N WGS84



Natural Resources  
Conservation Service


Web Soil Survey  
National Cooperative Soil Survey

7/28/2023  
Page 1 of 5









## MAP LEGEND

## Area of Interest (AOI)







 Area of Interest (AOI)

## Soils

## Soil Rating Polygons

-  F062XY051SD  
 F062XY052SD  
 F062XY053SD  
 R062XA010SD  
 R062XA020SD  
 Not rated or not available

## Soil Rating Lines

-  F062XY051SD  
 F062XY052SD  
 F062XY053SD  
 R062XA010SD  
 R062XA020SD  
 Not rated or not available






## Soil Rating Points

-  F062XY051SD  
 F062XY052SD  
 F062XY053SD  
 R062XA010SD  
 R062XA020SD  
 Not rated or not available

## Water Features

Streams and Canals

## Transportation

-  Rails  
 Interstate Highways  
 US Routes  
 Major Roads  
 Local Roads

## Background

-  Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lawrence County, South Dakota

Survey Area Data: Version 25, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 16, 2022—Aug 8, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



## All Ecological Sites —

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
Q0108E	Grizzly-Mineshaft complex, 10 to 40 percent slopes	Grizzly (50%)	F062XY052SD — Mod. Steep to Steep Low Mountain Slopes	0.0	0.2%
		Mineshaft (30%)	F062XY052SD — Mod. Steep to Steep Low Mountain Slopes		
		Mineshaft, shallow (5%)	F062XY052SD — Mod. Steep to Steep Low Mountain Slopes		
		Pactola (5%)	F062XY052SD — Mod. Steep to Steep Low Mountain Slopes		
		Rock outcrop, igneous (5%)	R062XY999SD — Non-site		
		Virkula (5%)	F062XY052SD — Mod. Steep to Steep Low Mountain Slopes		
Q0110G	Grizzly-Rock outcrop complex, 40 to 80 percent slopes	Grizzly, sandy surface (55%)	F062XY051SD — Very Steep Low Mountain Slopes	0.8	4.1%
		Rock outcrop, igneous (25%)	R062XY999SD — Non-site		
		Mineshaft, shallow (5%)	F062XY051SD — Very Steep Low Mountain Slopes		
		Mineshaft (5%)	F062XY051SD — Very Steep Low Mountain Slopes		
		Rubbleland, igneous (5%)	R062XY999SD — Non-site		
		Pactola (4%)	F062XY051SD — Very Steep Low Mountain Slopes		
		Virkula (1%)	F062XY051SD — Very Steep Low Mountain Slopes		
Q0221F	Pactola-Buska channery silt loams, 20 to 60 percent slopes	Pactola (40%)	F062XY052SD — Mod. Steep to Steep Low Mountain Slopes	3.2	17.1%



Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
		Buska (35%)	F062XY052SD — Mod. Steep to Steep Low Mountain Slopes		
		Hisega (6%)	F062XY052SD — Mod. Steep to Steep Low Mountain Slopes		
		Rock outcrop, schist (6%)	R062XY999SD — Non-site		
		Cordeston (5%)	R062XY043SD — Valley Loam		
		Heely (4%)	R062XA032SD — Channery Loam - North		
		Virkula (4%)	F062XY052SD — Mod. Steep to Steep Low Mountain Slopes		
Q0229C	Rapidcreek very gravelly loam, noncalcareous, 1 to 9 percent slopes, rarely flooded	Rapidcreek, nonacid, rarely flooded (70%)	R062XA020SD — Loamy Overflow - North	11.4	61.5%
		Rapidcreek, nonacid, occasionally flooded (20%)	R062XA020SD — Loamy Overflow - North		
		Rapidcreek, nonacid, wet (5%)	R062XY003SD — Subirrigated		
		Cordeston, rarely flooded (3%)	R062XY043SD — Valley Loam		
		Riverwash (2%)	R062XY999SD — Non-site		
Q0239D	Virkula-Pactola complex, 2 to 15 percent slopes	Virkula (50%)	F062XY053SD — Low Mountain Terrace and Benches	2.8	15.1%
		Pactola (30%)	F062XY054SD — Mod. Steep to Steep High Mountain Slopes		
		Cordeston (5%)	R062XY043SD — Valley Loam		
		Heely (5%)	R062XA032SD — Channery Loam - North		
		Mocmont, moist (5%)	F062XY052SD — Mod. Steep to Steep Low Mountain Slopes		
		Rock outcrop, schist (5%)	R062XY999SD — Non-site		



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SEP 05 2023

All Ecological Sites -- —Lawrence County, South Dakota

DTRC LLC: Maitland IV EXNI  
Application

MINERALS &amp; MINING PROGRAM

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
Q0502C	Bullflat, moist-Cordeston silt loams, 2 to 9 percent slopes	Bullflat (50%)	R062XA010SD — Loamy - North	0.4	2.0%
		Cordeston (25%)	R062XY043SD — Valley Loam		
		Cordeston, rarely flooded (10%)	R062XY043SD — Valley Loam		
		Gurney, moist (5%)	R062XA010SD — Loamy - North		
		Hilger, moist (5%)	R062XY029SD — Stony Hills		
		Marshbrook (5%)	R062XY003SD — Subirrigated		
Totals for Area of Interest				18.6	100.0%









Timm Comer

RECEIVED  
SEP 05 2023

MINERALS & MINING PROGRAM

**From:** Timm Comer  
**Sent:** Wednesday, August 2, 2023 7:04 AM  
**To:** Faulkner, Mitch - FPAC-NRCS, SD  
**Cc:** kfjensensd@gmail.com; Kirkman, Yvette - FPAC-NRCS, SD; Crystal Hocking; Syversen, Maggie - FPAC-NRCS, SD  
**Subject:** RE: [External]RE: [External Email]Consultation with local Conservation District for Reclamation Plan - Maitland IV

Mitch,

Thank you! Your recommended reclamation seed mixture will be included in the EXNI application.

I appreciate your assistance and recommendation.

Regards,  
Timm

**From:** Faulkner, Mitch - FPAC-NRCS, SD <mitch.faulkner@usda.gov>  
**Sent:** Tuesday, August 1, 2023 1:52 PM  
**To:** Timm Comer <tcomer@dakotagoldcorp.com>  
**Cc:** kfjensensd@gmail.com; Kirkman, Yvette - FPAC-NRCS, SD <Yvette.Kirkman@sd.nacdnet.net>; Crystal Hocking <crystal.hocking@respec.com>; Syversen, Maggie - FPAC-NRCS, SD <Maggie.Syversen@usda.gov>  
**Subject:** [External]RE: [External Email]Consultation with local Conservation District for Reclamation Plan - Maitland IV

**Caution:** This is an external email. Please take care when clicking links or opening attachments.

Hello Timm, .

Find attached a seeding plan for the Maitland IV project. It also contains our varietal recommendations and the NRCS critical area seeding guide. The seeding reflects the changes we talked about this morning due to the amount of lowland site types in this particular project. This seeding is specific to the area described in the attached map and soils report, which I made for 18.6 acres.

Let me know if you have any questions,

Mitch

Mitch Faulkner  
Area Rangeland Management Specialist  
USDA-NRCS  
Belle Fourche, SD  
Cell: (605) 519-1446

**From:** Timm Comer <tcomer@dakotagoldcorp.com>  
**Sent:** Friday, July 28, 2023 8:36 AM  
**To:** Faulkner, Mitch - FPAC-NRCS, SD <mitch.faulkner@usda.gov>  
**Cc:** kfjensensd@gmail.com; Tuschen, Victor - FPAC-NRCS, ME <victor.tuschen@usda.gov>; Kirkman, Yvette - FPAC-NRCS, SD <Yvette.Kirkman@sd.nacdnet.net>; Crystal Hocking <crystal.hocking@respec.com>  
**Subject:** [External Email]Consultation with local Conservation District for Reclamation Plan - Maitland IV

[External Email]

If this message comes from an unexpected sender or references a vague/unexpected topic;



Mitch,

Dakota Gold Corp. ("DGC") is preparing for submittal an Exploration Notices of Internet ("EXNI") Application with the South Dakota Department of Agriculture and Natural Resources ("DANR") for DTRC LLC. DGC would request consultation on a recommended seed mixture to be utilized under the reclamation plan that will be submit as part of the EXNI application for DTRC LLC, per SDCL 45-6C-8(2).

Enclosed with the email are the following for use for your review to assist in your consultation on a recommended seed mixture.

The following is a description of what is included with this email:

- ***Maitland IV\_EXNI\_TopoProjectPublic\_2012July20.pdf***: Proposed project site (highlighted in tan) in the Maitland area of Lawrence County Titled "Maitland IV Drill Program".
- ***USDA\_All\_Ecological\_Sites\_DTRC LLC\_EXNI Maitland IV Application.pdf***: All Ecological Sites report that was created from the NRCS website on the project area.
- ***Proposed Reclamation Seed Mix.pdf***: Previously recommended seed mixture being utilized on eight (8) current EXNI Permits, including EXNI 439, EXNI 442 and EXNI 443 at Maitland area, currently held by DTRC LLC.

DGC would prefer to also utilizes the currently recommended seed mixture for this EXNI, and would request you concurrence if appropriate. The recommended seed mixture for existing DTRC LLC EXNI 439, EXNI 442 and EXNI 443 approved by DANR are in the same area as this proposed project area. However, should you recommend an alternative seed mixture, DGC would implement that recommended seed mixture as part of the submitted reclamation plan to the DANR as part of the EXNI Application.

Thank you for your time as it pertains to this matter and your assistance. Should you need any further information, please contact me.

Regards,  
Timm

**Timm Comer**

ENVIRONMENTAL DIRECTOR

[tcomer@dakotagoldcorp.com](mailto:tcomer@dakotagoldcorp.com)

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SEP 05 2023

## SEEDING PLAN

MINERALS & MINING PROGRAM MLRA

Producer	Dakota Gold Corp-Maitland IV	Conservation District:	Lawrence
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62 MLRA

Program	CTA	Practice No.	342	Practice Name:	Critical Area Seeding
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CI or Referral No.	Contract #
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Resource Concern (CPPE Impact)

**Purpose:**

342- Stabilize areas with existing or expected high rates of soil erosion by wind or water

**PLANNED**

Tract	NA	Seedbed Preparation
Field	NA	
Acres	18.60	
Group or Site	Critical Area Group	Clean, smooth, weed free seedbed will be prepared
Site <a href="#">Web Soil Survey</a>	Loamy or Silty Texture	Have the past 3 years of Herbicide Carryover been considered?
Date to be Planted <a href="#">TechNote4</a>	Early Spring Prior to 5/15	
<i>Alternative planting dates</i>		Protection Provided
<i>Alternative planting dates</i>		
Seeding Equipment	Special Grass Drill	Clip weeds before they compete for moisture and light
Companion Crop		

## PLANNED

Species * **	1/ Select Improved Variety (recommended) or select common seed (see note below)	Percent in Mixture	Pure Live Seeds (PLS) per square foot	Pure Live Seed (PLS) lbs/ac Needed	Acres to Seed	Pure Live Seed (PLS) lbs Required
Western wheatgrass		100	40.35			
Big bluestem		26.0	9.75	3.79	18.60	70.53
Sideoats grama		20.0	9.00	2.23	18.60	41.43
Slender wheatgrass		5.0	2.25	0.54	18.60	10.13
Green needlegrass		20.0	7.50	2.11	18.60	39.20
Little bluestem		10.0	4.50	1.09	18.60	20.26
Western yarrow		2.0	0.90	0.14	18.60	2.55
Purple prairie clover		1.0	0.38	0.01	18.60	0.11
Virginia wildrye		1.0	0.38	0.06	18.60	1.05
Canada wildrye		8.0	3.60	1.63	18.60	30.38
		7.0	2.10	0.80	18.60	14.80

To meet SD NRCS Standards Please Note:

1/ Improved varieties recommended above have no restrictions on their origin.

1/ Origin of Common grass seed must be ND, SD, NE, MT, WY, MN, or IA. Exception: Smooth Bromegrass any locale.

1/ Common Native forbs and legumes will originate or be grown in

(USA): ND, SD, NE, MT, IA, WY, ID, WA, OR, MN, WI, and (CAN): AB, BC, MB, ON, SK.

- Seed test must be completed according to SD Seed laws (see link below) and no more than 9 months prior to the date planted.
- All legumes must be pre-inoculated. Producer will provide all seed tags to NRCS [Legume inoculants](#)
- Tetrazolium (TZ) tests may be used as a substitute for germination tests ONLY for Green Needlegrass
- For Alfalfa Salinity tolerance use F or G from the web site link ---> [Alfalfa Variety Ratings](#)

\* Pubescent wheatgrass and Intermediate wheatgrass are the same species and can be substituted for one another at any time.

\*\* Thickspike wheatgrass may be substituted for western wheatgrass if the later is not available but only west of the Missouri River.

To calculate the amount needed multiply the western wheatgrass seeding rate by .72

SD Seed Laws	Codified Laws Statute 38-12A	Seed testing	<a href="#">SD state seed-lab</a>
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### LOCATION MAP


Tract

Planning Assistance By: Mitch Faulkner 8/1/2023

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Name \_\_\_\_\_ Date) \_\_\_\_\_

Plan Meets SD Standards (if no explain)

Yes ☒ No ☐



Common Name

## 62



Western wheatgrass Artes Recovery	Salton Ruben	Common Routine	Fishback Wash
Big bluestem Baton Central Iowa Geomorph Pawnee	Bonanza Champ Routine	Bottle Common Sunnyview	Bourly Northern Iowa Geomorph
Sideoats grama Belle Northern Iowa Geomorph	Central Iowa Geomorph Pawnee	Common Southern Iowa Geomorph	Kildeer Trailview
S slender wheatgrass AC Pinal (Cover) (Seeded) Common Pyrar	AC Spring (Cover) (Seeded) Elbow Recovery	Adams FirstStrike	AEC Milecrest Pinar
Green needlegrass AC Midland (Cover)	Common	Ludom	
Little bluestem Bullheads Escalope Common	Blue Ravala	Camp Northern Iowa Geomorph	Central Iowa Geomorph Southern Iowa Geomorph
Western yarrow Common			
Purple prairie clover Bismarck	Common	Kanab	
Virginia wildrye Common	Omaha	Tabor Geomorph	
Canada wildrye Common	Mandan		



## Guidance for Critical Area Planting (342)

The following is an excerpt from RANGE TECHNICAL NOTE NO. 4 PERENNIAL VEGETATION ESTABLISHMENT GUIDE.

[SD/Range Tech Note 4.pdf](#)

### 14. GUIDANCE FOR CRITICAL AREA PLANTING (342)

Seeding of a critical area may take place at any time of the year as long as a reasonable expectation of a successful seeding establishment is expected.

#### Site Preparation:

Follow guidance for seedbed preparation (Section 2 above) and the additional following criteria.

If necessary, divert offsite water away from the critical area. This may require a permanent conservation practice, or in other instances, a temporary measure that will be effective during the period of establishment.

Where practical, grade to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, and anchoring. Cabling of equipment to prevent rollover may be necessary on some slopes such as newly constructed dams.

On construction sites where the exposed and underlying soil material will not support adequate vegetation, minimum topsoil dressing of six inches will be applied as part of construction.

After construction is complete, the seedbed will be worked to a depth of three to five inches to break up compacted areas and permit rapid root development. Drag or pack to break up large clods and firm the seedbed.

Where slopes are steeper than 1.5:1, use some means other than vegetation to stabilize slopes.

#### Species Selection:

Allowable species will be selected from Table 7 for the appropriate MLRA.

Between 50 to 75% of the mixture will be made up of sod forming species. Grass mixtures may include all native species, all introduced species, or a mixture of native and introduced species. Mixing smooth brome grass, Kentucky bluegrass, and/or crested wheatgrass with native species is not recommended.

When smooth brome is to be seeded in a mixture, do not include more than 10% of other native or introduced species for early establishment.

Single species may be used on saline or wet areas (Table 7).

Do not select aggressive species such as smooth brome grass when the adjacent area is dominated by native species.

When quick growth and/or protection of a critical area is needed, a quick establishing grass can be added in addition to the selected permanent seeding mixture. Use either slender wheatgrass or annual ryegrass. Slender wheatgrass can be used statewide and annual rye grass can be used in MLRAs 102A, 102B, 102C, 53B, 53C, 55B, 55C, 63B, 66, and 62. Add a maximum of three PLS lbs./ac of slender wheatgrass or a maximum of two PLS lbs./ac of annual ryegrass to the selected full seeding.

#### Conventional Seeding:

Seeding activities will follow recommendations found elsewhere in this technical note unless otherwise stated in this section.

Seeding rates will be 1.5 times those recommended in Table 2 when using a drill (recommended rate multiplied by 1.5).

When possible, drilling will be accomplished perpendicular to the slope. On grassed waterways, drilling will follow a serpentine pattern.

#### Broadcasting:

Many critical area plantings are too steep or too small to efficiently and safely utilize a drill. In these cases, seed may be broadcast and incorporated by harrowing, packing, or raking by hand. When broadcast seeding, increase the seeding rates found in Table 2 by two times (recommended rate multiplied by two).

#### Hydroseeding:

On sites that are too steep for regular equipment to operate, the use of a hydro seeder is an acceptable alternative. Seed, fertilizer, and mulch materials will be applied in one operation. Limit the application of 150 lbs. of solids per 100 gallons of water. If a legume seed is included in the mixture, any lime or fertilizer should be applied separately. A second trip may also be needed to apply an asphalt emulsion to long fiber mulches.

When using hydroseeding technique, increase seeding rates found in Table 2 by a factor of two (recommended rate multiplied by two).



**Sodding:**

Sod may be used on areas requiring immediate cover to prevent erosion. The sod should be in strips or blocks of native grass mixture, switchgrass, prairie cordgrass, reed canary grass, or other suitable grasses. Bluegrass sod is to be used only when the areas is irrigated and is desired for aesthetic purposes. Sod materials are to be taken from solid, thick growing stands.

Sod will be cut in strips of uniform width and to a uniform thickness of at least three inches for tall grass and ½ to 1½ inches for short grasses. Lay sod within 24 hours after it was cut.

Sod strips should be carefully placed in rows across (at right angles) to the direction of slope. The sod strips will be placed together tightly so that no open joints are left between the strips or between the end of strips. Joints between the end strips will be staggered. Any spaces between the joints will be filled with topsoil and all edges covered with topsoil at least two inches deep. The edge of the sod at the top of slopes will be turned under and a layer of soil compacted over the edge so as to conduct surface water over and onto the top of the sod. The sod will be well tramped to help it remain in place.

**Fertilizing:**

Do not fertilize predominantly warm-season grass seeding unless the soil material is very infertile.

Thoroughly mix all fertilizer into the upper three to five inches of the soil during final seedbed preparation.

Apply fertilizer based on the recommendations from a soil test or apply 30 to 40 lbs. of actual Nitrogen (N) and 40 to 60 lbs. of Phosphorus pentoxide (P<sub>2</sub>O<sub>5</sub>) per ac. Ten to 15 tons of manure per ac may be used in lieu of the commercial fertilizer and will also increase organic matter.

On medium textured soils, the addition of 5 to 10 lbs. of zinc per ac may speed up growth.

**Mulching:**

All mulching will be done in accordance with the SD CPS for Mulching (484). Mulching of critical area plantings is required for any of the following conditions:

Where seeding cannot be accomplished during the approved seeding periods and a cover crop is not used;

On grassed waterways, where a cover crop or companion crop is not used, and seeding is placed on a bare seedbed, and the design velocity is more than 2.5 ft per second;

Where a grassed waterway is established at the time of terrace construction, and the channel slope is 2% or greater;

On slopes 3:1 or steeper that are 10 ft or more in vertical height or longer than 20 ft; on cut south and west facing slopes; On all saline and alkaline areas.

Drill grass in the prepared seedbed, immediately prior to mulching or at the next suitable seeding period after mulching.

**Management of Critical Areas During and After Establishment:**

Weeds will be controlled as described elsewhere in this technical note. All use will be excluded until vegetation is well established.

Mow grassed waterways for hay annually after establishment. Other critical areas may be mowed as needed for stand maintenance.

Fertilize as necessary to maintain stand.

Inspect critical areas each spring and following heavy rain. Reshape and reseed eroded areas promptly. Reinforce grass seeding where stands are thin.

Manage any grazing use to ensure long-term survival of the stand.

Lift tillage implements and shut off sprayers when crossing critical areas. Do not till parallel to grassed waterways.

Avoid vehicular travel on critical areas.

**Providing Food, Cover, and Shelter for Wildlife:**

Wildlife habitat should be considered when developing critical area planting plans and species selection. For plant species to improve wildlife habitat, refer to the SD CPS Upland Wildlife Habitat Management (645).