

Operations & Education Committee Meeting
Wednesday, November 2, 2016 8:30 AM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. UNFINISHED BUSINESS

Nothing to recount

2. WILD NE/CREP REPORT

There are no contract payments.

3. OPERATION & MAINTENANCE & OTHER ITEMS

The O & M Crew assisted in the land judging event by shredding the area, digging the holes then filling, plus the event. Continue to cut out invasive trees at Czechland and Homestead. Sprayed 50 acres of grassland in the first phase of the grassland renovation at Homestead. Moved a gate for the landowner on Sand/Duck Creek dam 16. Sprayed a problem thistle area at Lake Wanhoo. Hauled sheet pile to Rawhide Ditch 8 for project repair.

3.A. Wildlife Viewing Area Wanhoo

Heimann met with Saunders County regarding a parking area off of County Road O for wildlife viewing at Wanhoo. The County will replace the existing culvert, clean out the ditch for proper drainage and use the material to build up the parking area. Anticipating it to be done this fall.

3.B. Czechland Lake

Dan Ourada has paid the District \$4,376.84 for 84.17 tons of hay taken from Czechland.

The tree removal contractor has not started.

Staff filled the geo-web on the east shoreline with gabion rock. See attached photos. We also need to add some rock to the handicap jetty to help prevent erosion under the sidewalk. Also, rip-rap on each side of the boat ramp at Homestead Lake.

3.C. Rawhide Land Partnership Paul Gifford Drive

The District is obtaining two informal bids from two contractors on the Paul Gifford drive with a culvert. With the two bids, the City of Fremont and the NRD will negotiate a settlement on this issue. Gifford did not accept the previous offer of \$39,503 for a 90' culvert made by the District and Fremont. If not resolved at a proper price for construction, the District and Fremont may contract it out ourselves.

3.D. Lake Wanhoo Hay

Meduna Family Farms on the late cutting harvested 155.9 tons of hay, paying the District \$7,016.09. Both cuttings generated \$14,245.79 from the Lake Wanhoo property.

3.E. Lake Wanhoo Lake Level

The Lake Wanhoo Lake Level Advisory Committee will meet on Thursday, November 10 at 5:00 pm at the Lower Platte North NRD office.

It was stated that an Engineering Firm attend the Advisory Committee meetings. Who do we want to have attend - FYRA Engineering with experience in hydrology and structural or Olssons with experience in the 408 application process. Both firms will charge an hourly rate.

3.F. Seven Sand/Duck Creek Dam Deficiencies

Heimann has put together a narrative of post construction deficiencies (attached) on the Seven Sand/Duck Creek dams and sent it to the Corp of Engineers asking for assistance in correcting them. The COE has responded with an explanation (attached) of why it is not their responsibility, or that it's built to specs, or it's an O & M issue for the District. Staff will send a rebut to their response.

3.G. Fremont GI Study

The Corps of Engineers has organized a Non-Federal partners meeting for Thursday, November 10 at 9:00 a.m. in the Fremont City Counsel Chambers. The COE will update us on the study and tell us how we will proceed with a public meeting most likely after the first of the year.

3.H. Tractor Rental

John Deere has offered the District a rental agreement for the 2017 season. They will rent a John Deere 8245R to the District for \$3,500 not to exceed 200 hours. This is the same price as the current rental agreement.

3.I. Lake Wanahoo Dam Instrumentation Monitoring Contract

The contract with Olsson Associates to monitor the Lake Wanahoo Dam relief wells and piezometers has expired. An amendment to the contract is attached to monitor the dam this fall at the contracted price of \$1,363.92. A new contract will be developed with Olsson Associate beginning in 2017.

3.J. Community Forestry Program

Mead Public Schools has submitted a request for \$1,000 to plant trees north of the high school. (See attachment) They are replacing an old Scotch Pine windbreak that was taken by Pine Wilt Disease. They will have Kasper Landscaping do the work. Currently, they are in the process of taking out the old trees. Total project cost estimate is \$12,510.

4. ROCK AND JETTY

The previous months approval of David Marshall was inspected by Heimann & Mountford and found in compliance.

5. EROSION & SEDIMENT RULES & REGULATIONS

The Public Hearing for the Districts revised Erosion & Sediment Rules & Regulations was opened at 8:15 a.m. at the Lower Platte North NRD office on Wednesday, November 2. There were no public comments and the hearing closed at 8:30 a.m.

The revised Erosion & Sediment Rules & Regulations will be approved by our board of directors, forwarded to the Department of Natural Resources who sends them to the Commissioners for review before their December 12th meeting. With approval from the Natural Resource Commission the document is then sent to the Director of the Dept. of Natural Resources for his signature.

6. INFORMATION AND EDUCATION

6.A. Information

6.A.1. Radio & eAds

The KTIC Radio Ad for November will focus on the fertilizer application report deadlines. This month's Wahoo Newspaper eAd will promote the abandoned well program. The ads are attached.

6.B. Education

6.B.1. Land Judging

The 2016 East Central Region Land Judging Contest was held on October 12th. 177 students from 13 FFA chapters participated. The number of individual registrations was similar to previous years, but the number of FFA chapters participating has increased. LPNNRD sent \$354 to the chairman of the state land judging committee for student registrations.

The individual and team results are attached. 23 students qualified for the state competition on October 26th. These students represented Mead, East Butler, Raymond Central, Norris, and Milford.

6.B.2. Schuyler FFA Donation Request

We received a donation request from the Schuyler FFA for their tree seedling project. The FFA Chapter (50 students) has been collecting and storing a variety of locally sourced seeds (acorns, walnuts, etc.) and will begin planting in the spring. Initial costs will be the purchase of propagation trays and flats for spring planting (\$300). These will be transferred to #1 nursery containers (\$350). The chapter has not officially decided what to do with the trees. They have discussed selling to the community, planting in public spaces around town, or possibly providing them to rural landowners in the area.

6.B.3. Nature Education Trail/Disc Golf Course

Construction will begin for the tee pads for the Nature Education Trail/Disc Golf Course. Attached is an invoice from Arps Red-E-Mix for concrete. The invoice indicates the price for one cubic yard. The project requires 6 cubic yards.

6.C. Computer

7. RURAL WATER SYSTEMS

We are meeting with Neil (Phoenix Group) this afternoon for an update and review of their work on our remote meter reading project. If everything works out as planned, we will be able to remote read all meters daily and create individual usage reports as needed.

7.A. Colon System

All meters were read and bills are being mailed today. Scheduled samples have been drawn and submitted to the State for analysis.

Meter pit has been installed, line ran and main tapped for new customer service on Colon line.

Staff has assisted two Colon customers with tracing water leaks on customer side of meter.

Quarterly sewer rate reimbursement has been submitted to village of Colon.

New accounting firm, ADP, now has access to our billing software and will be able to generate needed monthly reports related to the Colon line.

7.B. Bruno System

All meters were read and bills are being mailed today. Scheduled samples have been drawn and submitted to the State for analysis.

New accounting firm, ADP, now has access to our billing software and will be able to generate needed monthly reports related to the Bruno line.

7.C. Other

8. Adjournment





Seven Sand/Duck Creek Dam Sites

Post Construction Issues

Lower Platte North NRD

Item 1

With all sites, 2, 3, 6, 13, 15, 16 and 24 there is still concern regarding the principle spillway trash racks and railings. See attached photos. A) The sidewalk type grates easily plug with debris. B) The newly created riser does not pass small braches/logs creating the potential to plug by catching smaller debris. C) The bottom rail on the railing is too low stopping debris that should pass through the principle spillway. Many of these lakes have standing timber in the pool area, in time much of this timber comes down creating the potential to plug the spillway risers. We have had large frequency rains in which the entire principle spillway was covered, if the riser is fully plugged or semi-plugged it creates a hazard if we have another large frequency rainfall by not draining the water in a proper time frame.

Item 2

Site 3 - there are low spots in the emergency spillway in which wetland vegetation is growing. We do not know if there are springs creating these low wetland areas and/or was the area over excavated. See aerial Site 3.

Item 3

Site 6 - there is a drainage issue coming from the south. This drain has cut a gully approximately 3' deep across the emergency spillway (see photos). With large construction projects and the area consumed by said large projects, surrounding drainage should be taken into consideration. The water from these drains should be slowed to prevent the cutting that has occurred.

Item 4 (see aerial photo)

Site 16 – the lower half of the emergency spillway is saturated and growing wetland vegetation. It's unclear as to whether the site was over excavated, if there are springs contributing to this problem or if it's drainage. The site is so wet that you cannot drive a vehicle in this area.

There is a drainage area to the northwest which drains into the emergency spillway and has created a head cut/gully on the bank of the emergency spillway. This also creates an access problem for the landowner.

On the south end of the dam, the project cut into two terraces that had risers and tile outlets. We are unsure as to how it was laid out but, one riser and its tile is buried and cannot drain, another terrace should have had a riser and tile added or excavated to allow the water to drain around the end of the terrace.

Item 5 (see aerial photo)

Site 24 – there is a drain to the north and east of the dam which drains from north to south and also cuts through the emergency spillway creating gullying which crosses our O & M access. Surrounding drainage should be taken into consideration.





Sand/Duck Dam 3

Low areas of wetland vegetation

Legend

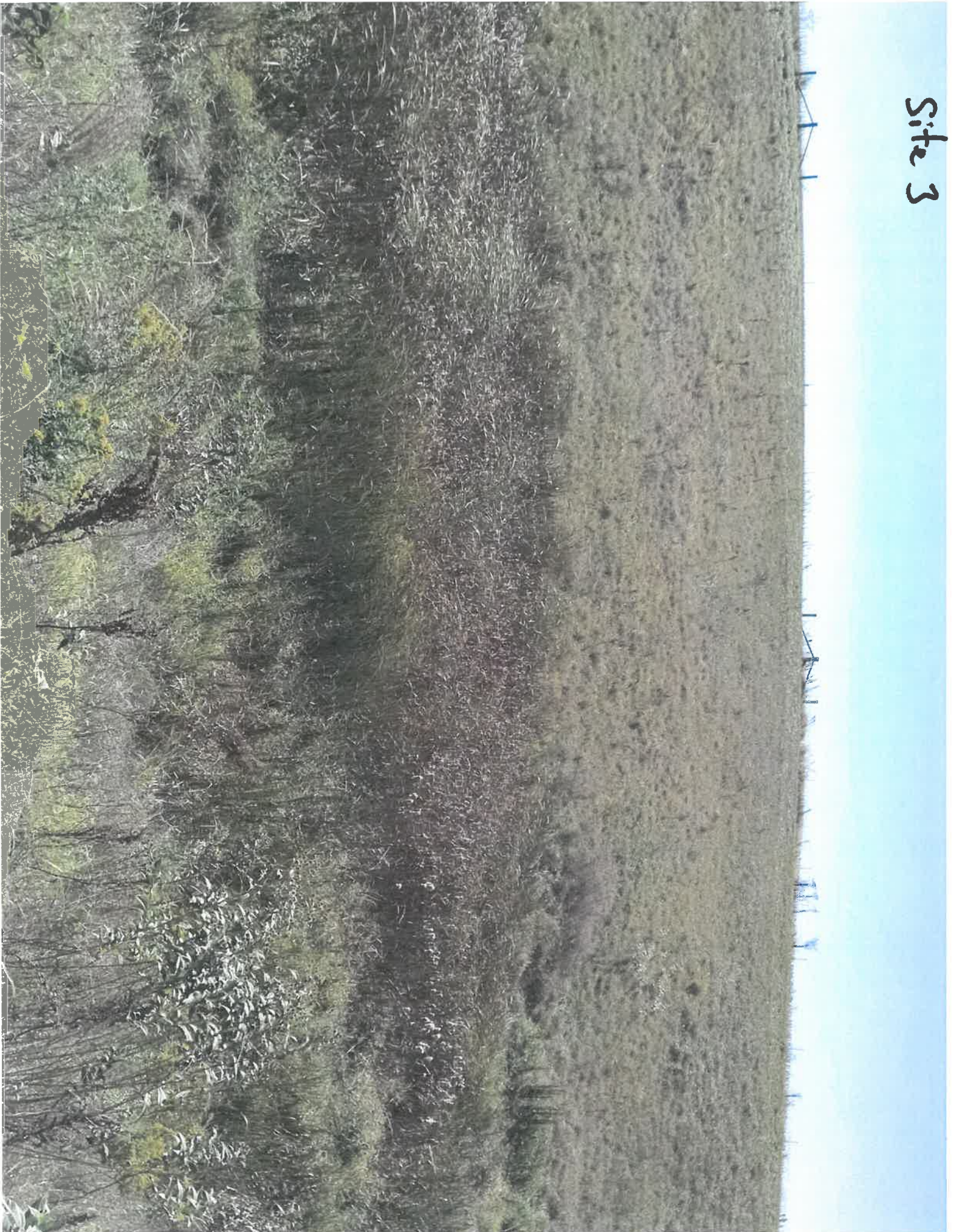


400 ft

Google earth

© 2016 Google

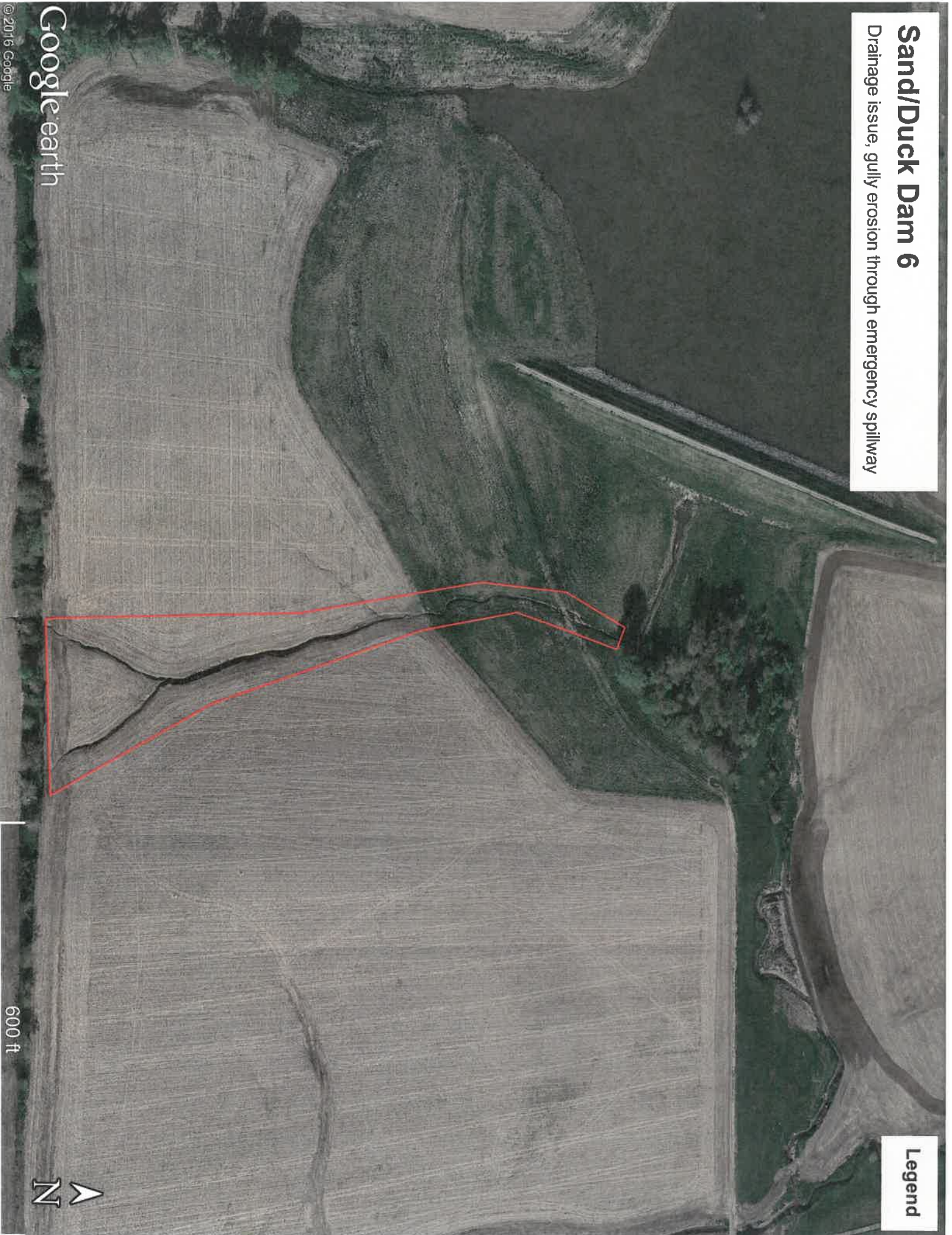
Site 3



Sand/Duck Dam 6

Drainage issue, gully erosion through emergency spillway

Legend



Google earth

© 2016 Google

600 ft

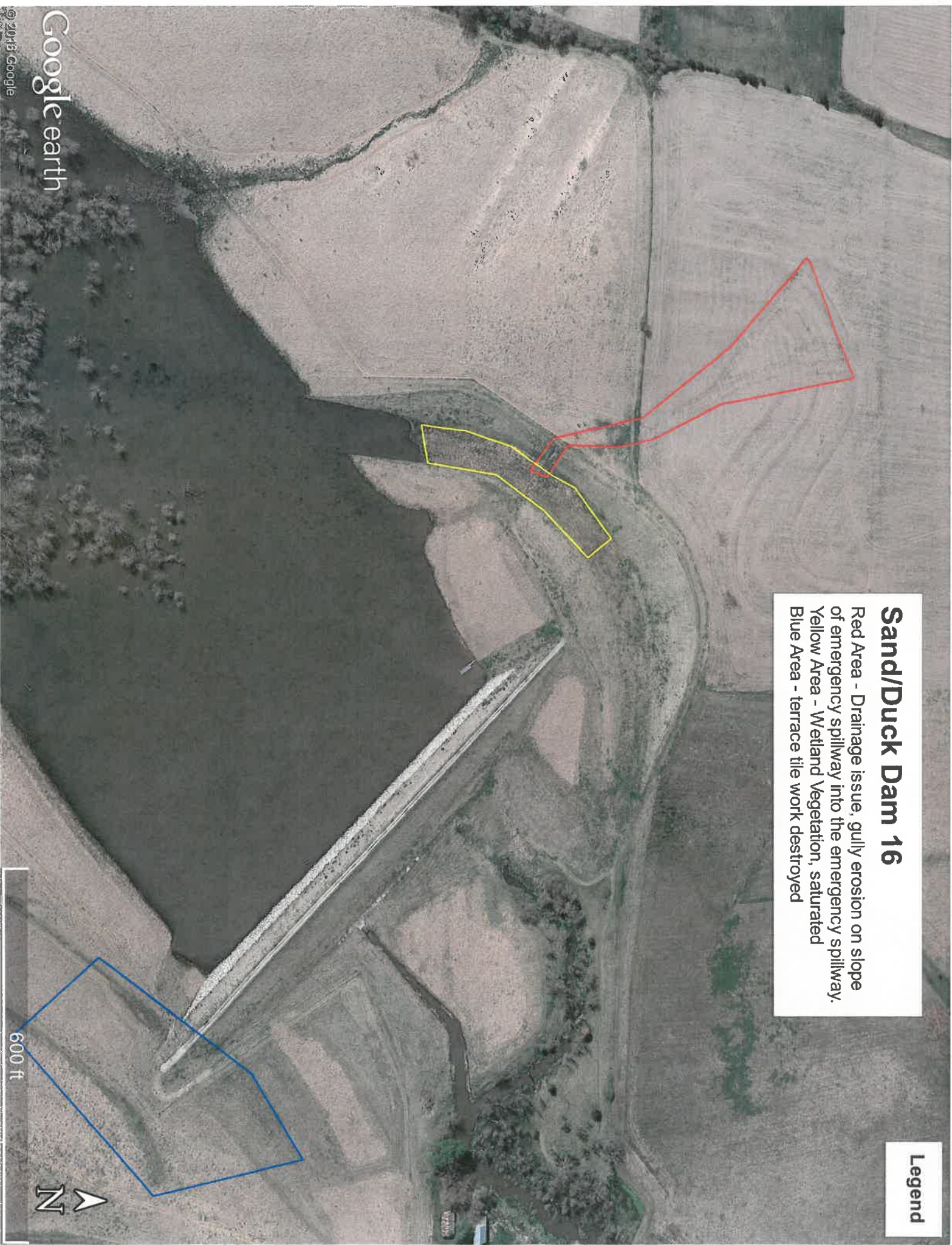


Site 6



Sand/Duck Dam 16

Red Area - Drainage issue, gully erosion on slope of emergency spillway into the emergency spillway.
Yellow Area - Wetland Vegetation, saturated
Blue Area - terrace tile work destroyed



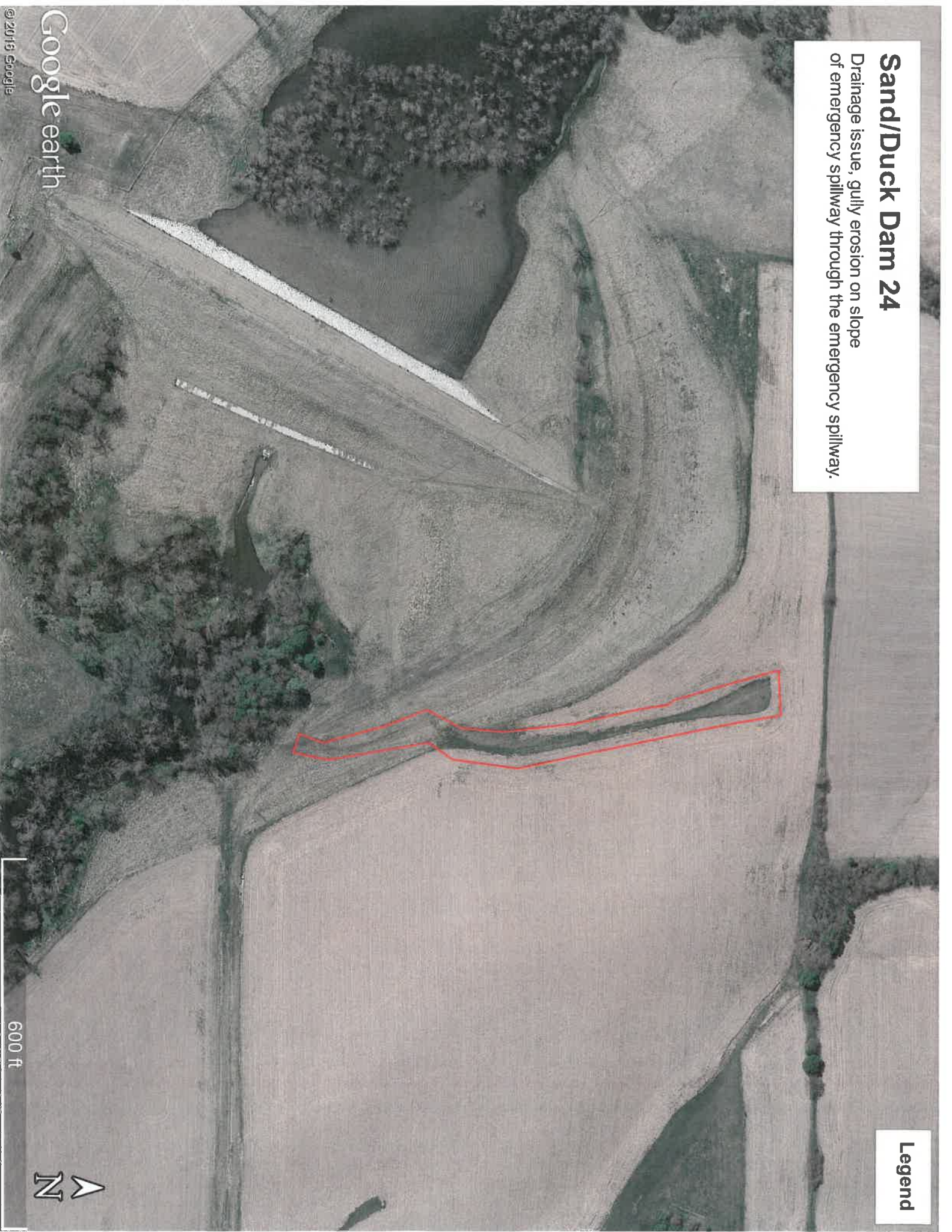
600 ft



Sand/Duck Dam 24

Drainage issue, gully erosion on slope of emergency spillway.

Legend



Google earth

© 2013 Google

600 ft



SAND CREEK SEVEN SEDIMENT DAMS
Responses by USACE to Items from LPNNRD

I. Item 1. It may be redundant to say, but the trash racks are operating as intended, catching small trash on the rack. It is better to catch debris on the rack than have it stuck in the conduit, a bigger issue to remove. The openings should not be smaller than half the size of the outlet or conduit, which equates to not less 15" opening. The only exception is horizontal openings (grating) but this is a safety requirement. We included the trash racks as a change from the original per NRD concerns, and a big USACE concern was safety for people and that was our compromise with operability in the design for using horizontal grating. The vertical openings are sized adequately. The small debris can be easily pulled from the rack.

The LPNNRD was included in the review process and comments submitted to the Corps of Engineers on 28 December 2012 were incorporated into a modification, with one exception. The LPNNRD had stated they would like for the trash rack to be made of angle iron, similar to their other projects. The Corps used Extra Strong pipe, and has used Extra Strong pipe for trash racks on many of our intake structures over the years, and durability has not been an issue at any of these locations. Extra Strong pipe is very durable as well as more design friendly in an application such as this.

II. Items 2 through 5. The LPNNRD had questions on erosion gullies and lack of vegetation in the spillways. The Corps Hydraulics Section had responded as long as the crest is not damaged and affected by erosion, the spillway should function adequately. However, the basic cause of a lot of this is related to the effects of the farming operations above the spillways and outside of the project boundary, and is discussed more in following sentences.

II.a. Background. When the Corps proceeded with an accelerated design, it was agreed and relayed to the LPNNRD we would use the Olsson Associates layout and siting as done in their cost comparison report of NRCS criteria versus USACE criteria. Olsson Associates had prepared an earlier pre-design report for the dams. In the comparison report, they revised some of the spillway locations from their original pre-design study of sediment dams by moving them from one side of the dam to the other. As the Corps proceeded with design, it became apparent that the agricultural fields containing terraces with drain pipes would be affected and create a large issue with added real estate, design time, and landowner coordination. To alleviate some of the problems, the farm field would have to be regraded and terraces redone. The project manager was notified and he contacted the LPNNRD and it was agreed it would be handled by the NRD during construction. The problem is again is related to siting of the dams and spillway locations.

II.b. Site Specific. The following is what we have knowledge of being changed in relation to the farm operations and excessive runoff, and opinion of condition.

Site 3 – item 2, this relates to our previously stated hydraulics opinion on the non-impact to the crest.

Site 6 - item 3, the area at the downstream of the spillway was filled near the end of the contract to waste excess excavation, so eventually must have washed again. This relates to our previously stated hydraulics opinion on the non-impact to the crest.

Site 16 – item 4, This site has an elevated groundwater level in the spillway entrance and combined with the spillway flat slope and capillary water action, is causing wet conditions. A drain tile that had an impact on the site was on the opposite side of the dam and was corrected by the Contractor. It is not ideal to have large amount of vegetation in the spillway but can be controlled by certain methods.

Site 24 – item 5, this relates to our previously stated hydraulics opinion on the non-impact to the crest.

It is suspected the terraces may be overpowered by larger rain events and causing flows exceeding terrace capacity to pass down the terrain. It appears from historical aerial photos this may have occurred in the

past, but with addition of changes in grading it may have caused problems in the graded areas. This also indicates the overall coordination between the LPNNRD and the landowners/farmers was not taken to full implementation. Positively, it does not appear to have progressed to an uncontrollable situation over the years.

Any issues related to inability to mowing by the sponsor will be handled with guidance in the operation and maintenance manual.



LETTER AGREEMENT AMENDMENT #1

Date: October 26, 2016

This AMENDMENT (“Amendment”) shall amend and become a part of the Letter Agreement for Professional Services dated July 28, 2011 between Lower Platte North NRD (“Client”) and Olsson Associates, Inc. (“Olsson”) providing for professional services for the following Project (the “Agreement”):

PROJECT DESCRIPTION AND LOCATION

Project is located at: Wahoo, Nebraska

Project Description: Lake Wanahoo Dam – July 2011 to 2012
Instrumentation Monitoring/Data Evaluation

SCOPE OF SERVICES

Scope of Services is consistent with the previous letter agreement dated July 28, 2011. The time frame and compensation has been adjusted as listed below:

SCHEDULE FOR OLSSON’S SERVICES

Unless otherwise agreed, Olsson expects to perform its services covered by this Amendment as follows:

Anticipated Start Date: July 1, 2012
Anticipated Completion Date: October 8, 2016

Olsson will endeavor to start its services on the Anticipated Start Date and to complete its services on the Anticipated Completion Date. However, the Anticipated Start Date, the Anticipated Completion Date, and any milestone dates are approximate only, and Olsson reserves the right to adjust its schedule and any or all of those dates at its sole discretion, for any reason, including, but not limited to, delays caused by Client or delays caused by third parties.

COMPENSATION

For the additional Scope of Services specifically set forth in this Amendment, Client shall pay Olsson the following fee in addition to the fee(s) set forth in the Agreement:

Client shall pay to Olsson for the performance of the Scope of Services a Time and Expense Not to Exceed Fee of One Thousand Three Hundred Sixty-Three Dollars and 92/100s (\$1,363.92).

TERMS AND CONDITIONS OF SERVICE

All provisions of the original Agreement not specifically amended herein shall remain unchanged.

If this Contract Amendment satisfactorily sets forth your understanding of our agreement, please sign in the space provided below. Retain a copy for your files and return an executed original to Olsson. This proposal will be open for acceptance for a period of 30 days from the date set forth above, unless changed by us in writing.

OLSSON ASSOCIATES, INC.

By  _____
Andrew Phillips

By  _____
Sean Parks

By signing below, you acknowledge that you have full authority to bind Client to the terms of this Amendment. If you accept this Amendment, please sign:

Lower Platte North NRD

By _____
Signature

Printed Name _____

Title _____

Dated: _____



ACCREDITED
SINCE 1942

Mead Public Schools

115 North Elm P.O. Box 158
Mead, NE 68041-0158

Preparing For The Future . . .



ORGANIZED 1875
CONSOLIDATED 1918

Dr. Dale Rawson, Superintendent
402-624-2745 Fax: 402-624-2001
e-mail: drawson@esu2.org

P.J. Quinn, Principal
402-624-3435 Fax: 402-624-2069
e-mail: pquinn@esu2.org

Terry Hickman, Athletic Director
402-624-3435 Fax: 402-624-2069
e-mail: thickman@esu2.org

October 27, 2016

Bob Heimann
Lower Platte North Natural Resource District
P.O. Box 126
Wahoo, NE 68066

RECEIVED
NOV 01 2016
Lower Platte North
N.R.D.

RE: Grant Funding Request

Dear Mr. Heimann:

Thank you for visiting with me about the possibility of a grant for financial assistance to replace the windbreak north of the Mead High School that was destroyed by the pine blight that has destroyed so many trees in the area.

As we discussed, the school district is working with Kaspar Tree Farms to replace this windbreak. I have attached their proposal for the replacement and respectfully request consideration for the \$1,000 grant that may be available. As you can see, our share is well over fifty percent (50%) of this amount.

I have also enclosed a photograph of the area as seen from Nebraska Highway 92. As you can see, the windbreak will not only provide shelter from the north winds in the winter but will also help absorb the sound and highway noise that can distract from student learning.

Thank you in advance for your consideration.

Sincerely,

Dr. Dale V. Rawson, Superintendent
Mead Public School District
115 North Elm, P. O. Box 158
Mead, NE 68041-0158
402.624.2745 work, 402.480.2705 cell, 402.624.5180 home

enc: Proposal
Photo



Kaspar Landscaping LLC
 2151 County Rd 11
 NE 68041

2016 Quote

Date	Estimate #
10/13/2016	2016-0009

Name / Address
Mead High School 114 N Vine St. Mead, NE 68041

Ship To
Mead High School 114 N Vine St. Mead, NE 68041

P.O. No.	Due Date	Rep	Terms
	10/13/2016	CK	

Qty	Item	Description	U/M	Catolog Price	Rate	Total
22	blackhills	PHASE ONE Black Hills Spruce 6-7' installed 2 year Warranty			250.00	5,500.00
20	coloradoblues...	Colorado Blue Spruce 6-7' installed 2 year Warranty			250.00	5,000.00
1	removal	Grind all stumps, cleanup and refill holes to grade			750.00	750.00
42	mulch	ADDITIONAL OPTION 2017 Tree care plan package- Spring fertilizer, Fall fertilizer & Mulch			15.00	630.00
42	mulch	2018 Tree care plan package- Spring fertilizer, Fall fertilizer & Mulch			15.00	630.00
		Sales Tax			5.50%	688.05

Thank you for choosing Kaspar Landscaping! We appreciate your business!

Total 12,570.00 ~~\$13,198.05~~

Thank you for the opportunity to provide this quotation. To confirm this order, please sign, date, and return by mail, email, or fax. Claims for errors, shortages, or rejections will only be considered if made in writing, within 5 business days of delivery of nursery stock. Interest will be charged on all accounts over 30 days at the rate of 1.33% per month (16% per annum) after a 30 day grace period. Additionally, you may be subject to the loss of all discounts previously given and re-charged full catalog price if your account is overdue, and be responsible to bear any/all costs of collection, including attorney fees. Price is valid for 30 days.

Confirmation Signature: _____ Date: _____

August 15, 2016

LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT

EROSION AND SEDIMENT CONTROL PROGRAM

RULES AND REGULATIONS

Proposed by the Board of Directors – April 12, 2016

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**LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT
RULES AND REGULATIONS FOR IMPLEMENTING
EROSION AND SEDIMENT CONTROL ACT**

1. AUTHORITY

These rules and regulations are adopted pursuant to the authority granted in Section 2-4605, R.R.S. 1948, as amended.

2. PURPOSE

The purpose of these rules and regulations is to provide an orderly method for implementing the Erosion and Sediment Control Act, sections 2-4601 et. seq. R.R.S. 1943, as amended to provide for the conservation and preservation of the land, water and other resources of the District, and to thereby:

- (a) reduce damages caused from wind erosion,
- (b) reduce damages caused from storm water runoff,
- (c) reduce sediment damage to lands within the District,
- (d) reduce non-point pollution from sedimentation and related pollutants
- (e) preserve the value of land and its productive capability for present and future generations, and
- (f) safeguard the health, safety and welfare of the District's citizens,

3. APPLICABILITY

These rules and regulations apply to all lands within the District except to those lands which lie within the respective jurisdiction of a county or municipality which has adopted and is implementing erosion and sediment control regulations in substantial conformance with the state erosion and sediment control program. Some non-agricultural land-disturbing activities are also excluded and are identified in Rule 4, Section (i), sub-sections (2), (3), (4) and (5).

4. DEFINITIONS

- (a) **Alleged violator** means the owner of record and the operator, if any, of land which is the subject of a complaint filed in accordance with Rule 8.
- (b) **Board** means the Board of Directors of the Lower Platte North Natural Resources District.
- (c) **Committee** means the Operations, Education & Rural Water Committee of the Lower Platte North Natural Resources District,
- (d) **Conservation agreement** means an agreement between the owner and operator, if any, of a farm unit and the District in which the owner and operator, if any, agrees to implement all or a portion of a farm unit conservation plan or erosion and sediment control plan. The agreement shall include a schedule for implementation and may be conditioned on the District or other public entity furnishing technical, planning or financial assistance in the establishment of the soil and water conservation or erosion and sediment control practices necessary to implement the plan or portion of the plan.
- (e) **District** means the Lower Platte North Natural Resources District.
- (f) **Excess erosion** means the occurrence of erosion in excess of the applicable soil-loss tolerance level which causes or contributes to an accumulation of sediment upon the lands of any other person to the detriment or damage of such other person.
- (g) **Farm unit conservation plan** means a plan jointly developed by the owner and, if appropriate, the operator of a farm unit and the District. Such plan shall be based on the determined conservation needs of the farm unit and identification of practices which may be expected to prevent soil loss by erosion to the applicable soil-loss tolerance level. The plan may also, if practicable, identify alternative practices by which such objective may be

attained.

- (h) Erosion and Sediment Control Plan** means a plan, developed for a parcel of land used for non-agricultural purposes, which identifies the permanent or temporary practices which may be expected to either prevent sediment from leaving that parcel or prevent soil loss / erosion from that parcel in excess of the applicable soil-loss tolerance level.
- (i) Non-agricultural land-disturbing activity** means a land change including, but not limited to, tilling, clearing, grading, excavating, transporting, or filling land which may result in soil erosion from wind or water and the movement of sediment and sediment-related pollutants into the waters of the state or onto lands in the state, but shall not include:

 - (1)** Activities related directly to the production of agricultural, horticultural or silvicultural crops, including, but not limited to, tilling, planting, or harvesting of such crops;
 - (2)** Installation of aboveground public utility lines and connections, fence posts, sign posts, telephone poles, electric poles, and other kinds of posts or poles;
 - (3)** Emergency work to protect life or property; and
 - (4)** Activities related to the construction of housing, industrial, and commercial developments on sites under two acres in size; and
 - (5)** Activities related to the operation, construction, or maintenance of industrial or commercial public power district or public power and irrigation district facilities or sites when such activity is conducted pursuant to state or federal law or is part of the operational plan for such facility or site.
- (j) Sediment damage** means:

 - (1)** the economic or physical damage to the land or other property of one person resulting from the deposition of sediment, by water or wind, or soil eroded from the lands of another person;
 - (2)** the degradation of water quality and/or the reduced beneficial use of the water in the stream or lake involved resulting from soil sedimentation or the deposition of chemical laden sediments. For the purpose of this program, chemicals shall include, but is not limited to, any agricultural, municipal, or industrial chemicals or waste deposited on the soil.

Physical effects to land or property which are relatively short term in nature and which cause no economic damage and no lasting physical damage shall not constitute sediment damage for the purpose of these rules and regulations.
- (k) Soil-loss tolerance level** means the maximum amount of soil loss due to erosion by wind or water, expressed in terms of tons per acre per year, which is determined to be acceptable in accordance with the Erosion and Sediment Control Act. Soil loss from water erosion may include:

 - (1)** sheet and rill erosion which includes relatively uniform soil loss across the entire field slope which may leave small channels located at regular intervals across the slope and
 - (2)** ephemeral gully erosion which occurs in well-defined depressions or natural drainage ways where concentrated overland flow results in the convergence of rills forming deeper and wider channels.
- (l) T value** means the average annual tons per acre soil loss that a given soil may experience and still maintain its productivity over an extended period of time.

5. SOIL-LOSS TOLERANCE LEVEL

USDA Soil Survey data provides values of soil loss tolerance (T) for various soil series across the District and are described as Soil-Loss Tolerance Levels in the NRCS TECHNICAL GUIDES. These soil-loss tolerance levels for the soils of the District have been adopted by the Board and are attached hereto as Appendix A. Each soil series listed may contain one or more soil mapping units-referred to in Rule 10. The permitted soil-loss tolerance levels for particular lands may not exceed the T value noted in Appendix A.

6. ADMINISTRATION

- (a)** The Board delegates the responsibility for administering these rules and regulations to the District manager

except to the extent Board action is specifically required by these rules and regulations or by law. The following duties shall be performed by or under the direction of the District manager.

- (1) Keep an accurate record of all complaints received, investigations made, and other official actions.
 - (2) Investigate all complaints made in writing to the District office relating to the application of these rules and regulations and report in writing all alleged violations to the Board.
 - (3) Monitor compliance with all approved farm unit conservation plans, erosion and sediment control plans, and administrative orders issued by the Board.
- (b)** Except to the extent jurisdiction has been assumed by a municipality or county in accordance with section 2-4606, and after a written and signed complaint has been made, the District manager and such staff as he or she shall designate shall have the following powers and responsibilities:
- (1) At any reasonable time, after notice to the owner and operator, if any, to enter upon any public or private lands within the area affected by these rules and regulations for the purpose of investigating complaints and to make inspections to determine compliance. The owner, operator, if any, and any other necessary technical personnel and representatives of the District may accompany the inspector.
 - (2) Upon reasonable cause, to report to the Board any violations of any administrative order issued by the Board pursuant to Section 2-4608, R.R.S. 1943, as amended, and these rules and regulations,
 - (3) At the direction of the Board, and in accordance with Rule 13 (e) and 18, to commence any legal proceedings necessary to enforce these rules and regulations and any order issued pursuant to them.

7. VIOLATION

A violation of these rules and regulations exists if:

- (a)** sediment damage is occurring;
- (b)** average annual soil losses on the land which is the source of that sediment are exceeding the soil-loss tolerance level adopted in rule 5;
- (c)** the activity causing the soil loss is not an exempted non-agricultural land-disturbing activity (Rule 4(i) (2) to (5); and
- (d)** the land which is the source of the damage is not in strict compliance with a conservation agreement approved by the District,

8. COMPLAINT

A complaint alleging that soil erosion is occurring in excess of the soil loss tolerance level or that sediment damage is occurring, may be filed in the District office by:

- (a)** any owner or operator of land damaged by sediment,
- (b)** any authorized representative of a state agency or political subdivision whose roads or other public facilities are being damaged by sediment,
- (c)** any authorized representative of a state agency or political subdivision with responsibility for water quality maintenance if it is alleged that the soil erosion complained of is adversely affecting water quality, or
- (d)** any District staff member, or other person authorized by the Board to file complaints.

Complaints shall be made in writing and signed on a form provided by the Director of Department of Natural Resources.

The flow chart for handling a complaint is found in Appendix C.

9. INVESTIGATION OF COMPLAINT

Upon receipt of a properly filed complaint, a representative of the District shall notify the alleged violator within ten (10) days that a complaint has been filed and that an investigation will be initiated to determine whether a violation of these rules and regulations has occurred. The investigation shall take place as soon as possible after the complaint has been filed and notice given. The alleged violator shall be given an opportunity to accompany the person conducting the investigation.

If a farm unit conservation plan or erosion and sediment control plan previously approved by the District is being implemented and maintained in strict conformance with a conservation agreement including the land subject to the complaint, the complaint shall be dismissed. The alleged violator, complainant, and Board shall be notified.

Upon completion of the investigation, the investigator shall file a report of his or her findings with the Committee and shall provide copies to the alleged violator and the complainant. The report shall include:

- (a) the location and estimated acreage involved in the alleged violation;
- (b) the investigator's conclusions concerning the existence of any sediment damage and a description of the location and nature of any sediment damage identified; and
- (c) the location of land(s) which the investigator concludes are the source of the sediment, the nature of the land use on such lands, and the estimated average annual soil losses from such land(s).

The investigator may utilize the services of professional staff, consultants, or technicians of other state or federal agencies, if necessary.

10. DETERMINATION OF SOIL LOSS

Soil losses shall be determined by using the applicable portions of the then current version of the United States Department of Agriculture, Natural Resources Conservation Service Field Office Technical Guide to estimate the average annual sheet and rill erosion, ephemeral erosion or wind erosion.

The soil losses normally will be calculated on a soil survey mapping unit basis. If it is determined that soil loss in excess of the applicable soil loss tolerance level is occurring in the portion of one or more mapping units under the ownership and control of the alleged violator, they may not be averaged with other non-violating units for the purpose of determining overall soil loss.

If it is determined that the sediment damage complained of is resulting from erosion from a land parcel smaller than the soil mapping unit, the soil loss equation in the Field Office Tech.

Guide may be applied to such smaller portion only if such portion is two acres or greater.

The cover and crop management factor, "C", used in calculating erosion may incorporate a cropping history of up to five years. Crop rotation patterns longer than five years but not more than ten years may be used for the purpose of planning future compliance with soil loss tolerance levels but exceeding the limits may not be planned for more than two consecutive years. Soil losses from irrigation and gully erosion may also be determined by using acceptable scientific procedures and may, if deemed appropriate by the Board, be added to soil losses for sheet and rill, ephemeral and wind erosion. Soil losses from streambank erosion shall not be calculated and these rules and regulations are not applicable to this type of erosion. Application of the soil loss equation formulas will be made by someone whose qualifications to make such determinations can be supported in court.

11. COMMITTEE AND BOARD ACTION ON COMPLAINT

The committee shall assist the District staff in administering these rules and regulations and make determinations as to whether a probable violation of these rules and regulations has or has not occurred. Such determination shall be based upon the investigator's report completed pursuant to Rule 9 and an on-site inspection by the committee, if warranted. The committee may also request that both the alleged violator and the complainant appear before them to discuss the complaint. The committee shall report its findings to the Board, the alleged violator and the complainant with a recommendation of further action as follows:

- (a) If the staff and committee determine that no violation of these rules and regulations has occurred, it shall recommend and the Board may approve dismissal of the complaint. The complainant shall be given the opportunity to appear before the entire Board before the Board acts on the recommendation.
- (b) If the committee determines that a farm unit conservation plan previously approved by the District is being

implemented and maintained in strict conformance with a conservation agreement including the land subject to the complaint, it shall recommend and the Board may approve dismissal of the complaint.

- (c) If the committee determines that the land which is identified in the complaint is being used for non-agricultural purposes, and is under an erosion and sediment control plan that has been approved by the District, is in conformance with any NPDES (National Pollution Discharge Elimination System) permit issued by the Nebraska Department of Environmental Quality (NDEQ), or any political subdivision of the state designated by NDEQ to issue such permits, it shall recommend and the Board may approve dismissal of the complaint.
- (d) If the committee determines that a probable violation of these rules and regulations has occurred, it shall proceed in accordance with Rule 12.

12. NOTICE OF VIOLATION

If the committee determines that a probable violation of these rules and regulations has occurred, the alleged violator shall be informed of its findings by letter delivered in person or sent by registered or certified mail. The letter shall specify the options available to the alleged violator, including:

- (a) The alleged violator shall be given an opportunity to contact the District within ten days after receipt of notice concerning the development of a plan and schedule for eliminating excess erosion and sedimentation from the land that generated the complaint. If appropriate at this time, alternative practices for inclusion in a plan may be suggested. Information on cost-share programs and an indication of whether cost-share money is available may also be supplied.
- (b) The alleged violator shall be given an opportunity to contest the committee's findings at a regularly scheduled Board meeting or, if desired, a Board hearing to be held no sooner than fifteen days after receipt of notice. Notice of the date shall be given. The alleged violator may request a formal public hearing within ten (10) days of receipt of notice. The District's rules for formal adjudicatory hearings shall govern the conduct of all such hearings.
- (c) The alleged violator shall be further notified that if he or she does not respond to the notice and does not appear at the Board meeting for which notice was given, the Board shall proceed in accordance with Rule 15 in his or her absence to make a final determination on the complaint and issue an administrative order if the Board concludes that a violation has occurred.

13. DEVELOPMENT AND APPROVAL OF PLAN FOR COMPLIANCE

- (a) If the alleged violator contacts the District pursuant to Rule 12 (a) and indicates a desire to jointly develop either a farm unit conservation plan or an erosion and sediment control plan for eliminating excess erosion on or sedimentation from the land that generated the complaint, Board action on the complaint shall be delayed until further action is taken by the committee pursuant to (b) or (d) of this Rule. The District manager and the alleged violator shall promptly secure the assistance of the Natural Resources Conservation Service (NRCS) or such other professional resource planners as are deemed necessary to assist in preparation of such a plan and shall attempt to prepare a mutually acceptable plan in accordance with the NRCS Field Office Technical Guide. Any plan developed in accordance with this section shall identify, as applicable, the soil and water conservation practice(s) or erosion and sediment control practice(s) to be applied or utilized and shall be accompanied by a proposed conservation agreement setting forth a schedule for compliance.
- (b) Any plan developed by the alleged violator and the District manager shall be presented to the committee. If the committee agrees to the proposed plan and to the accompanying conservation agreement, the Board may thereafter approve such plan and agreement. The complainant shall be notified of such action and shall be provided copies of the approved plan and conservation agreement. In considering the schedule for compliance contained within the conservation agreement, the Board may approve a longer time for compliance than would be permissible if an order were issued pursuant to Rule 15, but shall not do so without consideration of the nature and extent of any additional sediment damages the complainant is likely to suffer until the plan has been

fully implemented.

- (c) Strict conformance with a plan and agreement approved pursuant to this Rule shall be deemed compliance with these rules and regulations for the lands which are subject to the agreement.
- (d) If no mutually acceptable plan and conservation agreement have been prepared by the alleged violator and the District manager within an acceptable time period or if the committee concludes at any time that progress is not being made and is no longer likely on preparation of such a plan, the complaint shall be again referred to the Board and the alleged violator shall be so notified in person or by registered or certified mail and shall be given the information and option described in Rule 12(b). For purposes of this rule, acceptable time period shall mean (1) 90 days for alleged violations involving agricultural, horticultural, or silvicultural activities and (2) 15 days for alleged violations involving a non-agricultural land-disturbing activity.
- (e) Following refusal of a landowner to discontinuing an activity causing erosion which constitutes a violation in Rule 7, and to establish a plan and schedule for eliminating excess erosion pursuant to these rules, and if the immediate discontinuance of such activity is necessary to reduce or eliminate damage to neighboring property, the District may petition the District court for an order to the owner and, if appropriate, the operator, to immediately cease and desist such activity until excess erosion can be brought into conformance with the soil-loss tolerance level or sediment resulting from excess erosion is prevented from leaving the property.

14. PRACTICES

Practices designed to reduce or control soil erosion and/or sediment damage may be approved in developing a plan under Rule 13 and may be required by the District in an administrative order pursuant to Rule 15.

- (a) Soil and water conservation practices, applicable only to land used for agricultural, horticultural, or silvicultural purposes, may include:
 - (1) permanent practices, such as the planting of perennial grasses, legumes, shrubs, or trees, the establishment of grassed waterways, the construction of terraces, grade control structures, tile outlets, and other practices approved by the District.
 - (2) temporary soil and water conservation practices, such as the planting of annual or biennial crops, use of strip-cropping, contour planting, conservation tillage or residue management system, and other cultural practices approved by the District.

The District shall maintain a complete list of approved permanent and temporary soil and water conservation practices as part of its local erosion and sediment control program. See Appendix B.

- (b) Erosion and sediment control practices, which are applicable to activities other than agricultural, horticultural, or silvicultural activities, may include:
 - (1) the construction or installation and maintenance of permanent structures or devices necessary to carry to a suitable outlet away from any building site, any commercial or industrial development or any publicly or privately owned recreational or service facility not served by a central storm sewer system, any water which would otherwise cause erosion in excess of the applicable soil-loss tolerance level and which does not carry or constitute sewage or industrial or other waste to a suitable outlet away from any development or facility not served by a central storm sewer system;
 - (2) the use of temporary devices or structures, temporary seeding, mulching (including fiber mats, plastic, straw), diversions, silt fences, sediment traps or other measures adequate either to prevent erosion in excess of the applicable soil loss tolerable levels or to prevent excessive downstream sedimentation from land which is the site of or is directly affected by any non-agricultural land-disturbing activity; or
 - (3) the establishment and maintenance of vegetation upon the right-of-way of any completed portion of any public street, road, highway or the construction or installation thereon of permanent structures or devices or other measures adequate to prevent erosion on the right-of-way in excess of the applicable soil-loss tolerance level.

The District shall maintain a complete list of approved erosion and sediment control practices as part of its local erosion and sediment control program. See Appendix B.

15. ADMINISTRATIVE ORDER

If, after Board consideration of the complaint at a meeting or hearing for which the alleged violator has been given notice in accordance with Rule 12, the Board finds that sediment damage has occurred, that average annual erosion on the land which is the source of the damage is occurring in excess of the applicable soil-loss tolerance level(s), and that a conservation plan or erosion and sediment control plan has not been developed nor is being implemented according to a conservation agreement, it shall issue an administrative order to the violator stating:

- a) the date of the order,
- b) the identity of the source of the violation and its location;
- c) the authority of the Board to issue such order;
- d) the specific findings, including (i) the estimated average annual soil loss and the extent to which erosion exceeds the applicable soil-loss tolerance level and, (ii) the nature of the sediment damage or water quality impairment resulting from such excessive erosion;
- e) if desired by the Board, the alternative soil and water conservation practices or erosion and sediment control practices required to bring the land into conformance with these rules and regulations. When the erosion is the result of agricultural, horticultural, or silvicultural activities, the soil and water conservation practices required shall be those necessary to bring the land into conformance with the applicable soil-loss tolerance level. Where the erosion complained of is the result of a non-agricultural land-disturbing activity, the Board may authorize the violator to either bring the land into conformance with applicable soil loss tolerance level or to prevent sediment resulting from excessive erosion from leaving the land;
- f) any requirements concerning the operation, utilization, or maintenance of the alternative practices identified;
- g) the deadlines for commencing and completing work necessary to comply with this order.
 - a. The time for initiating work needed to establish the necessary soil and water conservation practices shall not exceed six months after service or mailing of the order to the violator and shall be completed no later than one year after service or mailing of the order to the violator unless and extension has been granted upon a showing of good cause
 - b. A reasonable time for initiating work needed to establish erosion and sediment control practices for nonagricultural land-distributing activities shall not exceed five days after service or mailing of the order. Temporary practices shall be completed not longer than fifteen days after service or mailing of the order and permanent practices shall be completed no longer than forty-five (45) days after service or mailing of the order unless an extension has been granted upon a showing of good cause. An extension shall only be granted after review and affirmative action of the Board.
- (h) the action to be taken by the Board if the violator does not comply.

A copy of the dismissal or administrative order shall be delivered to the owner and to the operator, if any, of the land in question by personal service or certified or registered mail.

16. COST-SHARE ASSISTANCE

To prevent excess erosion and sediment from leaving the land due to any agricultural or nonagricultural land-disturbing activity, cost-share assistance may be available from the District. Such assistance, if available, may be used for any erosion or sediment control practice. The lack of available cost-sharing assistance does not offset the requirement that the owner and, if appropriate, the operator of such land comply with the terms of an approved plan of compliance or an administrative order.

17. SUPPLEMENTAL ORDERS

The Board may issue supplemental orders, as necessary, to extend the time of compliance with an administrative order if, in its judgment, the failure to commence or complete work as required by the administrative order is due to factors beyond the control of the person to whom the order is directed and the person can be relied upon to commence and complete the necessary work at the earliest possible time.

18. NON-COMPLIANCE

Subject to any limitations imposed by the Board, the District manager may cause the District to commence legal proceedings by filing a petition in the name of the District in the District court in which a majority of the land is located requesting a court order requiring immediate compliance with the administrative order or any supplemental order issued previously, if he or she has reasonable cause to believe after inspection that an administrative order issued previously by the Board is not being complied with because:

- (1) the work necessary to comply with the order is not commenced on or before the date specified in the order or in any supplemental orders;
- (2) the work is not being performed with due diligence, is not satisfactorily completed by the date specified in the order, or is not being operated, utilized, or maintained in accordance with requirements set forth in the order;
- (3) the work is not of a type or quantity specified by the District, and when completed, it will not or does not reduce soil loss to within the applicable soil-loss tolerance level for the identified land or, in the case of non-agricultural land-disturbing activity, will not or does not prevent sediment resulting from excessive erosion from leaving the land involved, or
- (4) the person to whom the order is directed informs the District that he or she does not intend to comply.

APPENDIX A

Soil-Loss Tolerance Levels & Erosion Factors

The following pages summarize the various soil types and soil-loss limits of soils by county, for each of the counties which make up the Lower Platte North Natural Resources District. Each soil is listed by its new NRCS assigned numerical symbol for that soil type.

Soil erosion factors are listed as follows:

T – Soil-loss tolerance levels

I – Wind erodibility index

K – Soil erodibility measured under a standard condition

The Frozen Factors list remain the same for all soils listed.

C – Cover management number

R – Climatic erodibility

See Soils Tables on accompanying pages.

Soil Loss Tolerance Values (T-Factors) For Boone County

Map Unit Symbol	Map Unit Name	Dominant Component	T-Factor
2115	Inavale soils, frequently flooded	Inavale	5
2288	Wann loam, occasionally flooded	Wann	5
2332	Inavale fine sand, occasionally flooded	Inavale	5
2349	Inavale soils, 0 to 3 percent slopes	Inavale	5
2534	Coly silt loam, 17 to 30 percent slopes	Coly	5
2538	Coly silt loam, 6 to 11 percent slopes, eroded	Coly	5
2555	Coly-Uly silt loams, 11 to 17 percent slopes, eroded	Coly	5
2666	Holdrege silt loam, 0 to 1 percent slopes, cool	Holdrege	5
2668	Holdrege silt loam, 1 to 3 percent slopes	Holdrege	5
2672	Holdrege silty clay loam, 3 to 7 percent slopes, eroded	Holdrege	5
2812	Uly-Holdrege silt loams, 7 to 11 percent slopes, eroded	Uly	5
2817	Uly silt loam, 3 to 6 percent slopes	Uly	5
2821	Uly silt loam, 6 to 11 percent slopes, eroded	Uly	5
2828	Uly, eroded-Hersh complex, 11 to 60 percent slopes	Uly	5
2831	Uly-Coly silt loams, 17 to 30 percent slopes, eroded	Uly	5
2833	Uly-Coly silt loams, 17 to 30 percent slopes, eroded, moist	Uly	5
2844	Uly-Coly silt loams, 6 to 11 percent slopes, eroded	Uly	5
2845	Uly-Coly silt loams, 11 to 17 percent slopes, eroded	Uly	5
3518	Lamo silty clay loam, 0 to 2 percent slopes, occasionally flooded	Lamo	5
3545	Hobbs silt loam, channeled, 0 to 2 percent slopes, frequently flooded	Hobbs	5
3553	Hobbs silt loam, 0 to 2 percent slopes, frequently flooded, cool	Hobbs	5
3561	Hobbs silt loam, 0 to 2 percent slopes, occasionally flooded, cool	Hobbs	5
3775	Muir silt loam, rarely flooded	Muir	5
3912	Scott silty clay loam, frequently ponded	Scott	5
3951	Fillmore silt loam, occasionally ponded	Fillmore	4
4243	Ord loam, rarely flooded	Ord	3
4266	Loup loam, occasionally flooded	Loup	5
4376	Loup fine sandy loam, rarely flooded	Loup	2
4451	Valentine severely eroded-Valentine complex, moist 0 to 60 percent slopes	Valentine	4
4485	Dunday loamy fine sand, 0 to 3 percent slopes	Dunday	5
4488	Dunday loamy fine sand, 3 to 6 percent slopes	Dunday	5
4550	Elsmere fine sand, 0 to 3 percent slopes	Elsmere	5
4553	Elsmere loamy fine sand, 0 to 3 percent slopes	Elsmere	5
4575	Gannett fine sandy loam, 0 to 1 percent slopes	Gannett	3
4786	Valentine fine sand, 0 to 6 percent slopes	Valentine	5
4792	Valentine fine sand, 3 to 9 percent slopes, moist	Valentine	5
4806	Valentine fine sand, rolling, 9 to 24 percent slopes, moist	Valentine	5

4809	Valentine fine sand, rolling and hilly, 9 to 60 percent slopes , moist	Valentine	5
4835	Valentine loamy fine sand, undulating	Valentine	5
4857	Valentine-Dunday loamy fine sands, moist, 3-9 percent slopes	Valentine	5
6314	Barney silt loam, channeled, frequently flooded	Barney	5
6352	Leshara silt loam, occasionally flooded	Leshara	5
6385	Shell silt loam, occasionally flooded	Shell	5
6459	Inglewood-Boel complex, channeled, occasionally flooded	Inglewood	5
6534	Loretto fine sandy loam, 0 to 2 percent slopes, eroded	Loretto	5
6555	Shell silty clay loam, 0 to 1 percent slopes	Shell	5
6556	Shell silt loam, rarely flooded	Shell	5
6570	Thurman loamy fine sand, terrace, 0 to 2 percent slopes	Thurman	5
6603	Alcester silty clay loam, 2 to 6 percent slopes	Alcester	5
6628	Belfore silty clay loam, 0 to 2 percent slopes	Belfore	5
6636	Boelus loamy fine sand, 0 to 2 percent slopes	Boelus	4
6681	Crofton silt loam, 17 to 30 percent slopes, eroded	Crofton	5
6686	Crofton silt loam, 30 to 60 percent slopes	Crofton	5
6694	Crofton-Nora complex, 6 to 11 percent slopes, eroded	Crofton	5
6697	Crofton-Nora complex, 17 to 30 percent slopes	Crofton	5
6700	Thurman loamy fine sand, 0 to 2 percent slopes	Thurman	5
6703	Thurman loamy fine sand, 2 to 6 percent slopes	Thurman	5
6706	Thurman loamy fine sand, 6 to 11 percent slopes	Thurman	5
6714	Thurman-Valentine complex, 0 to 2 percent slopes	Thurman	5
6754	Nora silt loam, 2 to 6 percent slopes, eroded	Nora	5
6756	Nora silt loam, 6 to 11 percent slopes, eroded	Nora variant	5
6767	Nora silty clay loam, 6 to 11 percent slopes	Nora	5
6774	Nora-Crofton complex, 11 to 17 percent slopes, eroded	Nora	5
6775	Nora-Crofton complex, 2 to 6 percent slopes, eroded	Nora	5
6776	Nora-Crofton complex, 11 to 17 percent slopes	Nora	5
6778	Nora-Crofton complex, 6 to 11 percent slopes, eroded	Nora	5
6780	Nora-Moody complex, 2 to 6 percent slopes, eroded	Nora	5
6789	Crofton-Nora complex, 11 to 17 percent slopes, eroded	Crofton	5
6793	Loretto loam, 3 to 6 percent slopes, eroded	Loretto	5
6796	Loretto fine sandy loam, 3 to 6 percent slopes, eroded	Loretto	5
6799	Loretto sandy loam, 3 to 6 percent slopes	Loretto	5
6800	Loretto-Nora fine sandy loams, 6 to 12 percent slopes, eroded	Loretto	5
6808	Moody silty clay loam, 0 to 2 percent slopes	Moody	5
6811	Moody silty clay loam, 2 to 6 percent slopes	Moody	5
6812	Moody silty clay loam, 2 to 6 percent slopes, eroded	Moody	5
6843	Ortello fine sandy loam, 1 to 3 percent slopes	Ortello	5
6847	Ortello fine sandy loam, 6 to 11 percent slopes	Ortello	5
6860	Crofton silt loam, 8 to 17 percent slopes, eroded	Crofton	5

7230	Alcester silty clay loam, 0 to 2 percent slopes	Alcester	5
8426	Boel fine sandy loam, occasionally flooded	Boel	5
8439	Cass silt loam, occasionally flooded	Cass	2
8440	Cass soils, rarely flooded	Cass	2
8470	Gibbon silt loam, occasionally flooded	Gibbon	5
8493	Gothenburg loamy sand, frequently flooded	Gothenburg	5
8840	Hall silt loam, 0 to 1 percent slopes	Hall	5
8841	Hall silt loam, 1 to 3 percent slopes	Hall	5
8844	Hall silt loam, 3 to 6 percent slopes, eroded	Hall	5
8851	Hall-Gayville complex, 1 to 3 percent slopes	Hall	5
8862	Hord and Ortello fine sandy loams, 1 to 3 percent slopes	Hord	5
8864	Hord-Uly complex, 0 to 6 percent slopes	Hord	5
8869	Hord silt loam, 0 to 1 percent slopes	Hord	5
9038	Gates very fine sandy loam, 6 to 11 percent slopes, eroded	Gates	5
9900	Fluvaquents, frequently flooded	Fluvaquents	5
9903	Fluvaquents, sandy, frequently flooded	Fluvaquents, sandy	5
9966	Blown-out land	Blownout land	5
9970	Aquolls	Aquolls	5
9983	Gravel pit	Pits	
9986	Miscellaneous water, sewage lagoon	Water	
9999	Water	Water	

Soil Loss Tolerance Values (T-Factors) For Butler County

Map Unit Symbol	Map Unit Name	Dominant Component	T-Factor
1438	Grigston silt loam, rarely flooded	Grigston	5
2342	Inavale loamy sand, 3 to 6 percent slopes, rarely flooded	Inavale	5
2351	Inavale-Boel complex, 0 to 6 percent slopes, occasionally flooded	Inavale	5
2536	Coly silt loam, 30 to 60 percent slopes	Coly	5
2821	Uly silt loam, 6 to 11 percent slopes, eroded	Uly	5
2823	Uly silt loam, 11 to 17 percent slopes, eroded	Uly	5
2831	Uly-Coly silt loams, 17 to 30 percent slopes, eroded	Uly	5
2835	Uly-Hobbs silt loams, 0 to 30 percent slopes, eroded	Uly	5
2840	Uly variant silty clay loam, 3 to 6 percent slopes, eroded	Uly variant	5
3157	Brocksburg sandy loam, 0 to 2 percent slopes	Brocksburg	5
3404	Longford silty clay loam, 3 to 7 percent slopes, eroded	Longford	5
3518	Lamo silty clay loam, 0 to 2 percent slopes, occasionally flooded	Lamo	5
3537	Gibbon silty clay loam, occasionally flooded	Gibbon	5
3545	Hobbs silt loam, channeled, frequently flooded	Hobbs	5
3561	Hobbs silt loam, occasionally flooded	Hobbs	5
3640	Kezan silt loam, frequently flooded	Kezan	5
3775	Muir silt loam, rarely flooded	Muir	5
3776	Muir silt loam, 1 to 3 percent slopes	Muir	5
3777	Muir silt loam, 3 to 7 percent slopes	Muir	5
3812	Olbut-Butler silt loams, 0 to 1 percent slopes	Olbut	3
3820	Butler silt loam, 0 to 1 percent slopes	Butler	3
3864	Hastings silt loam, 0 to 1 percent slopes	Hastings	5
3866	Hastings silt loam, 1 to 3 percent slopes	Hastings	5
3868	Hastings silt loam, 3 to 7 percent slopes	Hastings	5
3869	Hastings silt loam, 7 to 11 percent slopes	Hastings	5
3870	Hastings silty clay loam, 3 to 7 percent slopes, eroded	Hastings	5
3910	Scott silt loam, frequently ponded	Scott	3
3952	Fillmore silt loam, frequently ponded	Fillmore	3
3962	Hastings silty clay loam, 7 to 11 percent slopes, eroded	Hastings	5
4182	Longford silty clay loam, 7 to 11 percent slopes, eroded	Longford	5
6312	Barney loam, frequently flooded	Barney	2
6315	Barney silty clay loam, frequently flooded	Barney	5
6353	Leshara silt loam, drained, rarely flooded	Leshara	4
6381	Saltine-Gibbon silt loams, occasionally flooded	Saltine	5
6457	Inglewood loamy fine sand, rarely flooded	Inglewood	5
6508	Blendon fine sandy loam, 0 to 2 percent slopes	Blendon	5

6510	Blendon fine sandy loam, 2 to 6 percent slopes	Blendon	5
6518	Blendon-Muir complex, 0 to 2 percent slopes	Blendon	5
6681	Crofton silt loam, 17 to 30 percent slopes, eroded	Crofton	5
6686	Crofton silt loam, 30 to 60 percent slopes	Crofton	5
6687	Crofton silt loam, 6 to 11 percent slopes, eroded	Crofton	5
6703	Thurman loamy fine sand, 2 to 6 percent slopes	Thurman	5
6737	Thurman-Monona complex, 6 to 11 percent slopes	Thurman	5
6860	Crofton silt loam, 8 to 17 percent slopes, eroded	Crofton	5
7049	Kenridge silty clay loam, occasionally flooded	Kenridge	5
7099	Zook silty clay loam, 0 to 2 percent slopes, occasionally flooded	Zook	5
7204	Aksarben silty clay loam, 6 to 11 percent slopes, eroded	Aksarben	5
7205	Aksarben silty clay loam, 0 to 2 percent slopes	Aksarben	5
7206	Aksarben silty clay loam, 2 to 6 percent slopes	Aksarben	5
7215	Burchard loam, 6 to 11 percent slopes	Burchard	5
7216	Burchard loam, 11 to 17 percent slopes	Burchard	5
7230	Judson silt loam, 0 to 2 percent slopes	Judson	5
7231	Judson silt loam, 2 to 6 percent slopes	Judson	5
7266	Burchard-Steinauer clay loams, 11 to 17 percent slopes, eroded	Burchard	5
7268	Burchard-Steinauer clay loams, 6 to 11 percent slopes, eroded	Burchard	5
7280	Tomek silt loam, 0 to 2 percent slopes	Tomek	5
7353	Malmo clay loam, 6 to 11 percent slopes, eroded	Malmo	4
7501	Pawnee clay loam, 4 to 8 percent slopes, eroded	Pawnee	5
7507	Pawnee clay loam, 6 to 11 percent slopes, eroded	Pawnee	5
7611	Steinauer clay loam, 11 to 30 percent slopes	Steinauer	5
7614	Steinauer clay loam, 6 to 11 percent slopes, eroded	Steinauer	5
7619	Steinauer clay loam, 30 to 50 percent slopes	Steinauer	5
7641	Yutan silty clay loam, 2 to 6 percent slopes, eroded	Yutan	5
7644	Yutan silty clay loam, 6 to 11 percent slopes, eroded	Yutan	5
7645	Yutan silty clay loam, 11 to 17 percent slopes, eroded	Yutan	5
7646	Yutan, eroded-Judson complex, 6 to 11 percent slopes	Yutan	5
7647	Yutan, eroded-Aksarben silty clay loams, 2 to 6 percent slopes	Yutan	5
7750	Nodaway silt loam, occasionally flooded	Nodaway	5
7867	Nodaway silt loam, channeled, frequently flooded	Nodaway	5
7868	Nodaway silt loam, channeled, occasionally flooded	Nodaway	5
7891	Zook silt loam, overwash, 0 to 2 percent slopes, occasionally flooded	Zook	5
8013	Ida-Steinauer complex, 17 to 60 percent slopes	Ida	5
8070	Monona silt loam, 11 to 17 percent slopes	Monona	5
8073	Monona silt loam, 17 to 30 percent slopes	Monona	5
8075	Monona silt loam, 2 to 6 percent slopes	Monona	5
8118	Pohocco silt loam, 6 to 11 percent slopes, eroded	Pohocco	5
8119	Pohocco silty clay loam, 11 to 17 percent slopes, eroded	Pohocco	5

8123	Pohocco silty clay loam, 2 to 6 percent slopes, eroded	Pohocco	5
8125	Pohocco silty clay loam, 6 to 11 percent slopes, eroded	Pohocco	5
8127	Pohocco, eroded-Crofton complex, 11 to 17 percent slopes	Pohocco	5
8128	Pohocco, eroded-Crofton complex, 17 to 30 percent slopes	Pohocco	5
8130	Pohocco, eroded-Crofton complex, 6 to 11 percent slopes	Pohocco	5
8401	Alda fine sandy loam, occasionally flooded	Alda	3
8418	Boel loam, occasionally flooded	Boel	2
8420	Boel loamy fine sand, occasionally flooded	Boel	5
8424	Boel-Alda complex, occasionally flooded	Boel	2
8470	Gibbon silt loam, occasionally flooded	Gibbon	5
8495	Gothenburg soils, frequently flooded	Gothenburg	5
8503	Lex loam, occasionally flooded	Lex	3
8542	Ovina loamy fine sand, rarely flooded	Ovina	5
8550	Silver Creek complex, rarely flooded	Silver Creek	4
8562	Platte fine sandy loam, occasionally flooded	Platte	2
8569	Platte-Barney complex, channeled, frequently flooded	Platte	2
8573	Platte-Inavale complex, channeled, frequently flooded	Platte	2
8815	Cozad silt loam, 0 to 1 percent slopes	Cozad	5
8816	Cozad silt loam, 1 to 3 percent slopes	Cozad	5
8840	Hall silt loam, 0 to 1 percent slopes	Hall	5
8909	Ovina-Thurman complex, 0 to 6 percent slopes	Ovina	5
8925	Simeon loamy sand, 0 to 3 percent slopes	Simeon	5
8961	Wood River silt loam, 1 to 3 percent slopes	Wood River	2
9970	Aquolls	Aquolls	5
9971	Arents, earthen dam	Arents	
9983	Gravel pit	Pits	
9986	Miscellaneous water, sewage lagoon	Water	
9999	Water	Water	

Soil Loss Tolerance Values (T-Factors) For Colfax County

Map Unit Symbol	Map Unit Name	Dominant Component	T-Factor
2100	Boel fine sandy loam, occasionally flooded	Boel	5
2110	Inavale loamy fine sand, occasionally flooded	Inavale	5
2288	Wann loam, occasionally flooded	Wann	5
2331	Inavale loamy fine sand, rarely flooded	Inavale	5
2340	Inavale loamy fine sand, 3 to 11 percent slopes, rarely flooded	Inavale	5
3545	Hobbs silt loam, channeled, 0 to 2 percent slopes, frequently flooded	Hobbs	5
3561	Hobbs silt loam, 0 to 2 percent slopes, occasionally flooded, cool	Hobbs	5
3640	Kezan silt loam, frequently flooded	Kezan	5
3837	Geary silty clay loam, 11 to 17 percent slopes, eroded	Geary	5
3839	Geary silty clay loam, 11 to 30 percent slopes	Geary	5
3840	Geary silty clay loam, 7 to 11 percent slopes, eroded	Geary	5
3951	Fillmore silt loam, occasionally ponded	Fillmore	3
3952	Fillmore silt loam, frequently ponded	Fillmore	3
4106	Geary variant silty clay loam, 11 to 30 percent slopes, eroded	Geary variant	5
4241	Ord fine sandy loam, occasionally flooded	Ord	2
6312	Barney loam, frequently flooded	Barney	5
6324	Coleridge silty clay loam, 0 to 2 percent slopes, occasionally flooded	Coleridge	5
6335	Lawet silt loam, rarely flooded	Lawet	5
6336	Lawet silt loam, occasionally flooded	Lawet	5
6341	Lawet silty clay loam, occasionally flooded	Lawet	5
6385	Shell silt loam, occasionally flooded	Shell	5
6386	Shell silt loam, clayey substratum, occasionally flooded	Shell	5
6405	Napa-Luton complex, occasionally flooded	Napa	5
6505	Belfore silty clay loam, terrace, 0 to 2 percent slopes	Belfore	5
6508	Blendon fine sandy loam, 0 to 2 percent slopes	Blendon	5
6515	Blendon loam, 2 to 6 percent slopes	Blendon	5
6545	Moody silty clay loam, terrace, 0 to 2 percent slopes	Moody	5
6603	Alcester silty clay loam, 2 to 6 percent slopes	Alcester	5
6628	Belfore silty clay loam, 0 to 2 percent slopes	Belfore	5
6681	Crofton silt loam, 17 to 30 percent slopes, eroded	Crofton	5
6685	Crofton silt loam, 2 to 6 percent slopes, eroded	Crofton	5
6687	Crofton silt loam, 6 to 11 percent slopes, eroded	Crofton	5
6693	Crofton-Nora complex, 2 to 6 percent slopes, eroded	Crofton	5
6740	Thurman-Moody complex, 2 to 6 percent slopes, eroded	Thurman	5

6742	Thurman-Moody complex, 6 to 11 percent slopes, eroded	Thurman	5
6753	Nora silt loam, 2 to 6 percent slopes	Nora	5
6754	Nora silt loam, 2 to 6 percent slopes, eroded	Nora	5
6758	Nora silty clay loam, 11 to 17 percent slopes	Nora	5
6767	Nora silty clay loam, 6 to 11 percent slopes	Nora	5
6774	Nora-Crofton complex, 11 to 17 percent slopes, eroded	Nora	5
6775	Nora-Crofton complex, 2 to 6 percent slopes, eroded	Nora	5
6778	Nora-Crofton complex, 6 to 11 percent slopes, eroded	Nora	5
6789	Crofton-Nora complex, 11 to 17 percent slopes, eroded	Crofton	5
6811	Moody silty clay loam, 2 to 6 percent slopes	Moody	5
6812	Moody silty clay loam, 2 to 6 percent slopes, eroded	Moody	5
6813	Moody silty clay loam, 6 to 11 percent slopes	Moody	5
6814	Moody silty clay loam, 6 to 11 percent slopes, eroded	Moody	5
6824	Moody-Thurman complex, 2 to 6 percent slopes, eroded	Moody	5
6860	Crofton silt loam, 8 to 17 percent slopes, eroded	Crofton	5
7099	Zook silty clay loam, 0 to 2 percent slopes, occasionally flooded	Zook	5
7122	Eudora loam, rarely flooded	Eudora	4
7612	Steinauer clay loam, 11 to 30 percent slopes, eroded	Steinauer	5
7614	Steinauer clay loam, 6 to 11 percent slopes, eroded	Steinauer	5
7787	Luton silty clay, occasionally flooded	Luton	5
8401	Alda fine sandy loam, occasionally flooded	Alda	3
8403	Alda loam, occasionally flooded	Alda	3
8420	Boel loamy fine sand, occasionally flooded	Boel	5
8462	Gayville variant silty clay loam, rarely flooded	Gayville variant	2
8495	Gothenburg soils, frequently flooded	Gothenburg	5
8563	Platte loam, occasionally flooded	Platte	2
8573	Platte-Inavale complex, channeled, frequently flooded	Platte	2
8848	Hall silty clay loam, sandy substratum, 0 to 1 percent slopes	Hall	3
9967	Sanitary landfill	Sanitary landfill	
9983	Gravel pit	Pits	
9986	Miscellaneous water, sewage lagoon	Miscellaneous water	
9999	Water	Water	

Soil Loss Tolerance Values (T-Factors) For Dodge County

Map Unit Symbol	Map Unit Name	Dominant Component	T-Factor
2110	Inavale loamy fine sand, occasionally flooded	Inavale	5
2288	Wann loam, occasionally flooded	Wann	5
3521	Cass fine sandy loam, occasionally flooded	Cass	4
3529	Gibbon loam, occasionally flooded	Gibbon	5
3537	Gibbon silty clay loam, occasionally flooded	Gibbon	5
3545	Hobbs silt loam, channeled, 0 to 2 percent slopes, frequently flooded	Hobbs	5
3640	Kezan silt loam, frequently flooded	Kezan	5
3710	Cass fine sandy loam, rarely flooded	Cass	3
3951	Fillmore silt loam, occasionally ponded	Fillmore	4
3952	Fillmore silt loam, frequently ponded	Fillmore	3
6315	Barney silty clay loam, frequently flooded	Barney	5
6324	Coleridge silty clay loam, 0 to 2 percent slopes, occasionally flooded	Coleridge	5
6327	Fontanelle silty clay loam, frequently flooded	Fontanelle	5
6380	Saltine-Gibbon complex, occasionally flooded	Saltine	5
6385	Shell silt loam, occasionally flooded	Shell	5
6401	Calco silty clay loam, occasionally flooded	Calco	5
6403	Calco silty clay loam, wet, occasionally flooded	Calco	5
6405	Napa-Luton complex, occasionally flooded	Napa	5
6456	Inglewood loamy fine sand, occasionally flooded	Inglewood	5
6457	Inglewood loamy fine sand, rarely flooded	Inglewood	5
6460	Inglewood-Novina complex, occasionally flooded	Inglewood	5
6505	Belfore silty clay loam, terrace, 0 to 2 percent slopes	Belfore	5
6526	Janude loam, rarely flooded	Janude	5
6528	Janude loam, clayey substratum, rarely flooded	Janude	5
6545	Moody silty clay loam, terrace, 0 to 2 percent slopes	Moody	5
6603	Alcester silty clay loam, 2 to 6 percent slopes	Alcester	5
6628	Belfore silty clay loam, 0 to 2 percent slopes	Belfore	5
6681	Crofton silt loam, 17 to 30 percent slopes, eroded	Crofton	5
6686	Crofton silt loam, 30 to 60 percent slopes	Crofton	5
6687	Crofton silt loam, 6 to 11 percent slopes, eroded	Crofton	5
6703	Thurman loamy fine sand, 2 to 6 percent slopes	Thurman	5
6706	Thurman loamy fine sand, 6 to 11 percent slopes	Thurman	5
6717	Thurman-Valentine loamy fine sands, 2 to 6 percent slopes	Thurman	5
6722	Thurman and Valentine loamy fine sands, 6 to 11 percent slopes	Valentine	5

6738	Thurman-Moody complex, 11 to 30 percent slopes, eroded	Thurman	5
6742	Thurman-Moody complex, 6 to 11 percent slopes, eroded	Thurman	5
6750	Nora silt loam, 11 to 17 percent slopes, eroded	Nora	5
6754	Nora silt loam, 2 to 6 percent slopes, eroded	Nora	5
6767	Nora silty clay loam, 6 to 11 percent slopes	Nora	5
6768	Nora silty clay loam, 6 to 11 percent slopes, eroded	Nora variant	5
6774	Nora-Crofton complex, 11 to 17 percent slopes, eroded	Nora	5
6778	Nora-Crofton complex, 6 to 11 percent slopes, eroded	Nora	5
6811	Moody silty clay loam, 2 to 6 percent slopes	Moody	5
6812	Moody silty clay loam, 2 to 6 percent slopes, eroded	Moody	5
6813	Moody silty clay loam, 6 to 11 percent slopes	Moody	5
6814	Moody silty clay loam, 6 to 11 percent slopes, eroded	Moody	5
6831	Leisy fine sandy loam, 2 to 6 percent slopes	Leisy	5
6860	Crofton silt loam, 8 to 17 percent slopes, eroded	Crofton	5
7010	Calco silty clay loam, frequently flooded	Calco	5
7050	Kennebec silt loam, occasionally flooded	Kennebec	5
7055	Kennebec and Colo soils, channeled, frequently flooded	Kennebec	5
7099	Zook silty clay loam, 0 to 2 percent slopes, occasionally flooded	Zook	5
7266	Burchard-Steinauer clay loams, 11 to 17 percent slopes, eroded	Burchard	5
7612	Steinauer clay loam, 11 to 30 percent slopes, eroded	Steinauer	5
7787	Luton silty clay, occasionally flooded	Luton	5
7891	Zook silt loam, overwash, 0 to 2 percent slopes, occasionally flooded	Zook	5
7901	Monona silt loam, terrace, 0 to 2 percent slopes	Monona	5
7902	Monona silt loam, terrace, 2 to 6 percent slopes	Monona	5
8013	Ida-Steinauer complex, 17 to 60 percent slopes	Ida	5
8401	Alda fine sandy loam, occasionally flooded	Alda	3
8403	Alda loam, occasionally flooded	Alda	3
8418	Boel loam, occasionally flooded	Boel	5
8433	Cass fine sandy loam, clayey substratum, rarely flooded	Cass	4
8435	Cass loam, rarely flooded	Cass	3
8436	Cass loam, occasionally flooded	Cass	4
8438	Cass loam, clayey substratum, rarely flooded	Cass	4
8468	Gibbon loamy sand, overwash, 0 to 2 percent slopes, occasionally flooded	Gibbon	3
8475	Gibbon variant soils, frequently flooded	Gibbon variant	5
8480	Gibbon-Wann complex, occasionally flooded	Gibbon	5
8485	Gilliam-Eudora silt loams, occasionally flooded	Gilliam	5
8562	Platte fine sandy loam, occasionally flooded	Platte	2
8563	Platte loam, occasionally flooded	Platte	2
8569	Platte-Barney complex, channeled, frequently flooded	Platte	2
8573	Platte-Inavale complex, channeled, frequently flooded	Platte	2
8574	Platte-Inavale complex, channeled, occasionally flooded	Platte	2

8580	Wann fine sandy loam, occasionally flooded	Wann	5
9901	Fluvaquents sandy and Aquolls silty, frequently flooded	Fluvaquents, sandy	5
9903	Fluvaquents, sandy, frequently flooded	Fluvaquents	5
9970	Aquolls	Aquolls	5
9971	Arents, earthen dam	Arents	
9976	Borrow pit	Pits	
9983	Gravel pit	Pits	
9986	Miscellaneous water, sewage lagoon	Water	
9999	Water	Water	

Soil Loss Tolerance Values (T-Factors) For Madison County

Map Unit Symbol	Map Unit Name	Dominant Component	T-Factor
2100	Boel fine sandy loam, occasionally flooded	Boel	2
2110	Inavale loamy fine sand, occasionally flooded	Inavale	5
2351	Inavale-Boel complex, 0 to 6 percent slopes, occasionally flooded	Inavale	5
3514	Lamo silt loam, overwash, 0 to 2 percent slopes, occasionally flooded	Lamo	5
3518	Lamo silty clay loam, 0 to 2 percent slopes, occasionally flooded	Lamo	5
3521	Cass fine sandy loam, occasionally flooded	Cass	3
3537	Gibbon silty clay loam, occasionally flooded	Gibbon	5
3545	Hobbs silt loam, channeled, 0 to 2 percent slopes, frequently flooded	Hobbs	5
3561	Hobbs silt loam, 0 to 2 percent slopes, occasionally flooded, cool	Hobbs	5
3774	Muir silty clay loam, rarely flooded	Muir	5
3775	Muir silt loam, rarely flooded	Muir	5
3952	Fillmore silt loam, frequently ponded	Fillmore	3
4241	Ord fine sandy loam, occasionally flooded	Ord	3
4244	Ord loam, occasionally flooded	Ord	3
4352	Elsmere fine sandy loam, rarely flooded	Elsmere	2
4371	Libory loamy fine sand, 3 to 6 percent slopes	Libory	5
4376	Loup fine sandy loam, rarely flooded	Loup	5
4553	Elsmere loamy fine sand, 0 to 3 percent slopes	Elsmere	5
4674	Loup loamy fine sand, frequently ponded	Loup	5
4686	Marlake loam, frequently ponded	Marlake	5
4791	Valentine fine sand, undulating	Valentine	5
4796	Valentine fine sand, rolling, moist	Valentine	5
6324	Coleridge silty clay loam, 0 to 2 percent slopes, occasionally flooded	Coleridge	5
6330	Lawet loam, rarely flooded	Lawet	5

6364	Obert silty clay loam, frequently ponded	Obert	5
6385	Shell silt loam, occasionally flooded	Shell	5
6387	Shell variant silty clay loam, 0 to 1 percent slopes	Shell variant	5
6459	Inglewood-Boel complex, channeled, occasionally flooded	Inglewood	5
6508	Blendon fine sandy loam, 0 to 2 percent slopes	Blendon	5
6533	Loretto fine sandy loam, 0 to 2 percent slopes	Loretto	5
6545	Moody silty clay loam, terrace, 0 to 2 percent slopes	Moody	5
6555	Shell silty clay loam, 0 to 1 percent slopes	Shell	5
6570	Thurman loamy fine sand, terrace, 0 to 2 percent slopes	Thurman	5
6603	Alcester silty clay loam, 2 to 6 percent slopes	Alcester	5
6605	Bazile loam, 2 to 6 percent slopes	Bazile	3
6628	Belfore silty clay loam, 0 to 2 percent slopes	Belfore	5
6637	Boelus loamy fine sand, 2 to 6 percent slopes	Boelus	4
6668	Clarno loam, 2 to 6 percent slopes	Clarno	5
6681	Crofton silt loam, 17 to 30 percent slopes, eroded	Crofton	5
6685	Crofton silt loam, 2 to 6 percent slopes, eroded	Crofton	5
6686	Crofton silt loam, 30 to 60 percent slopes	Crofton	5
6687	Crofton silt loam, 6 to 11 percent slopes, eroded	Crofton	5
6700	Thurman loamy fine sand, 0 to 2 percent slopes	Thurman	5
6703	Thurman loamy fine sand, 2 to 6 percent slopes	Thurman	5
6706	Thurman loamy fine sand, 6 to 11 percent slopes	Thurman	5
6753	Nora silt loam, 2 to 6 percent slopes	Nora	5
6754	Nora silt loam, 2 to 6 percent slopes, eroded	Nora	5
6758	Nora silty clay loam, 11 to 17 percent slopes	Nora	5
6764	Hadar loamy fine sand, 2 to 6 percent slopes	Hadar	5
6767	Nora silty clay loam, 6 to 11 percent slopes	Nora	5
6775	Nora-Crofton complex, 2 to 6 percent slopes, eroded	Nora	5
6778	Nora-Crofton complex, 6 to 11 percent slopes, eroded	Nora	5
6789	Crofton-Nora complex, 11 to 17 percent slopes, eroded	Crofton	5
6790	Loretto fine sandy loam, 2 to 6 percent slopes	Loretto	5
6791	Loretto loam, 0 to 2 percent slopes	Loretto	5
6792	Loretto loam, 2 to 6 percent slopes	Loretto	5
6808	Moody silty clay loam, 0 to 2 percent slopes	Moody	5
6811	Moody silty clay loam, 2 to 6 percent slopes	Moody	5
6845	Ortello fine sandy loam, 3 to 6 percent slopes	Ortello	5
7099	Zook silty clay loam, 0 to 2 percent slopes, occasionally flooded	Zook	5
8421	Boel loamy fine sand, channeled, frequently flooded	Boel	5
8436	Cass loam, occasionally flooded	Cass	3
8476	Gibbon-Gayville silty clay loams, occasionally flooded	Gibbon	5
8540	Ovina fine sandy loam, rarely flooded	Ovina	5
8869	Hord silt loam, cool, 0 to 2 percent slopes	Hord	5

8908	Ovina loamy fine sand, 0 to 3 percent slopes	Ovina	5
9900	Fluvaquents, frequently flooded	Fluvaquents	5
9967	Sanitary landfill	Sanitary landfill	
9970	Aquolls	Aquolls	5
9971	Arents, earthen dam	Arents	
9983	Gravel pit	Pits	
9986	Miscellaneous water, sewage lagoon	Water	
9999	Water	Water	

Soil Loss Tolerance Values (T-Factors) For Platte County

Map Unit Symbol	Map Unit Name	Dominant Component	T-Factor
1041	Grigston silt loam, wet substratum, rarely flooded	Grigston	5
1438	Grigston silt loam, rarely flooded	Grigston	5
2100	Boel fine sandy loam, occasionally flooded	Boel	2
2288	Wann loam, occasionally flooded	Wann	5
2327	Inavale fine sandy loam, rarely flooded	Inavale	5
2331	Inavale loamy fine sand, rarely flooded	Inavale	5
2340	Inavale loamy fine sand, 3 to 11 percent slopes, rarely flooded	Inavale	5
2342	Inavale loamy sand, 3 to 6 percent slopes, rarely flooded	Inavale	5
2351	Inavale-Boel complex, 0 to 6 percent slopes, occasionally flooded	Inavale	5
3260	O'Neill fine sandy loam, 0 to 2 percent slopes	O'Neill	3
3518	Lamo silty clay loam, 0 to 2 percent slopes, occasionally flooded	Lamo	5
3545	Hobbs silt loam, channeled, 0 to 2 percent slopes, frequently flooded	Hobbs	5
3561	Hobbs silt loam, 0 to 2 percent slopes, occasionally flooded, cool	Hobbs	5
3640	Kezan silt loam, frequently flooded	Kezan	5
3774	Muir silty clay loam, rarely flooded	Muir	5
3775	Muir silt loam, rarely flooded	Muir	5
3778	Muir silt loam, sandy substratum, 0 to 1 percent slopes	Muir	4
3820	Butler silt loam, 0 to 1 percent slopes	Butler	3
3837	Geary silty clay loam, 11 to 17 percent slopes, eroded	Geary	5
3839	Geary silty clay loam, 11 to 30 percent slopes	Geary	5
3840	Geary silty clay loam, 7 to 11 percent slopes, eroded	Geary	5
3951	Fillmore silt loam, occasionally ponded	Fillmore	3
3952	Fillmore silt loam, frequently ponded	Fillmore	3
4527	Els loamy fine sand, 0 to 3 percent slopes	Els	5
4654	lpage-Els loamy fine sands, 0 to 3 percent slopes	lpage	5

4673	Loup loam, frequently ponded	Loup	5
4791	Valentine fine sand, 3 to 9 percent slopes	Valentine	5
4807	Valentine fine sand, rolling	Valentine	5
4886	Valentine-Thurman complex, 3 to 9 percent slopes	Valentine	5
6312	Barney loam, frequently flooded	Barney	5
6324	Coleridge silty clay loam, 0 to 2 percent slopes, occasionally flooded	Coleridge	5
6336	Lawet silt loam, occasionally flooded	Lawet	5
6364	Obert silty clay loam, frequently ponded	Obert	5
6385	Shell silt loam, occasionally flooded	Shell	5
6386	Shell silt loam, clayey substratum, occasionally flooded	Shell	5
6508	Blendon fine sandy loam, 0 to 2 percent slopes	Blendon	5
6525	Janude fine sandy loam, 0 to 1 percent slopes	Janude	5
6526	Janude loam, rarely flooded	Janude	5
6545	Moody silty clay loam, terrace, 0 to 2 percent slopes	Moody	5
6603	Alcester silty clay loam, 2 to 6 percent slopes	Alcester	5
6628	Belfore silty clay loam, 0 to 2 percent slopes	Belfore	5
6637	Boelus loamy fine sand, 2 to 6 percent slopes	Boelus	4
6681	Crofton silt loam, 17 to 30 percent slopes, eroded	Crofton	5
6693	Crofton-Nora complex, 2 to 6 percent slopes, eroded	Crofton	5
6701	Thurman loamy fine sand, 1 to 3 percent slopes	Thurman	5
6703	Thurman loamy fine sand, 2 to 6 percent slopes	Thurman	5
6710	Thurman loamy fine sand, loamy substratum, 0 to 3 percent slopes	Thurman	5
6754	Nora silt loam, 2 to 6 percent slopes, eroded	Nora	5
6767	Nora silty clay loam, 6 to 11 percent slopes	Nora	5
6774	Nora-Crofton complex, 11 to 17 percent slopes, eroded	Nora	5
6778	Nora-Crofton complex, 6 to 11 percent slopes, eroded	Nora	5
6789	Crofton-Nora complex, 11 to 17 percent slopes, eroded	Crofton	5
6808	Moody silty clay loam, 0 to 2 percent slopes	Moody	5
6811	Moody silty clay loam, 2 to 6 percent slopes	Moody	5
6812	Moody silty clay loam, 2 to 6 percent slopes, eroded	Moody	5
6814	Moody silty clay loam, 6 to 11 percent slopes, eroded	Moody	5
6824	Moody-Thurman complex, 2 to 6 percent slopes, eroded	Moody	5
6825	Moody-Thurman complex, 6 to 11 percent slopes, eroded	Moody	5
6860	Crofton silt loam, 8 to 17 percent slopes, eroded	Crofton	5
7099	Zook silty clay loam, 0 to 2 percent slopes, occasionally flooded	Zook	5
8403	Alda loam, occasionally flooded	Alda	3
8420	Boel loamy fine sand, occasionally flooded	Boel	5
8425	Boel-Inavale complex, channeled, frequently flooded	Boel	2
8470	Gibbon silt loam, occasionally flooded	Gibbon	5
8476	Gibbon-Gayville silty clay loams, occasionally flooded	Gibbon	5
8490	Gothenburg fine sandy loam, frequently flooded	Gothenburg	5

8495	Gothenburg soils, frequently flooded	Gothenburg	5
8520	Merrick loam, rarely flooded	Merrick	5
8530	Novina fine sandy loam, rarely flooded	Novina	5
8563	Platte loam, occasionally flooded	Platte	2
8573	Platte-Inavale complex, channeled, frequently flooded	Platte	2
8840	Hall silt loam, 0 to 1 percent slopes	Hall	5
8925	Simeon loamy sand, 0 to 3 percent slopes	Simeon	5
9725	Ustorthents, level	Ustipsamments	5
9726	Ustorthents, steep	Ustorthents	5
9903	Fluvaquents, sandy, frequently flooded	Fluvaquents	5
9906	Fluvaquents, silty, frequently flooded	Fluvaquents	5
9967	Sanitary landfill	Sanitary landfill	5
9970	Aquolls	Aquolls	
9983	Gravel pit	Pits	
9986	Miscellaneous water, sewage lagoon	Miscellaneous water	
9999	Water	Water	

Soil Loss Tolerance Values (T-Factors) For Saunders County

Map Unit Symbol	Map Unit Name	Dominant Component	T-Factor
3518	Lamo silty clay loam, occasionally flooded	Lamo	5
3911	Scott silt loam, terrace, frequently ponded	Scott	3
3948	Fillmore silt loam, terrace, occasionally ponded	Fillmore	4
4109	Hedville cobbly loam, 7 to 30 percent slopes	Hedville	1
6315	Barney silty clay loam, frequently flooded	Barney	5
6367	Obert silty clay loam, occasionally flooded	Obert	5
6368	Obert silty clay loam, frequently flooded	Obert	5
6457	Inglewood loamy fine sand, rarely flooded	Inglewood	5
6528	Janude loam, clayey substratum, rarely flooded	Janude	5
7049	Kenridge silty clay loam, occasionally flooded	Kenridge	5
7061	Muscotah silty clay loam, occasionally flooded	Muscotah	5
7067	Saltillo silt loam, occasionally flooded	Saltillo	5
7087	Sarpy-Haynie complex, occasionally flooded	Sarpy	5
7105	Yutan silty clay loam, terrace, 2 to 6 percent slopes, eroded	Yutan	5
7205	Aksarben silty clay loam, 0 to 2 percent slopes	Aksarben	5
7230	Judson silt loam, 0 to 2 percent slopes	Judson	5

7231	Judson silt loam, 2 to 6 percent slopes	Judson	5
7258	Deroin silty clay loam, 6 to 11 percent slopes, eroded	Deroin	5
7266	Burchard-Steinauer clay loams, 11 to 17 percent slopes, eroded	Burchard	5
7268	Burchard-Steinauer clay loams, 6 to 11 percent slopes, eroded	Burchard	5
7280	Tomek silt loam, 0 to 2 percent slopes	Tomek	5
7297	Malcolm silt loam, 6 to 11 percent slopes, eroded	Malcolm	5
7340	Filbert silt loam, 0 to 1 percent slopes	Filbert	3
7353	Malmo clay loam, 6 to 11 percent slopes, eroded	Malmo	4
7422	Morrill clay loam, 6 to 11 percent slopes, eroded	Morrill	5
7507	Pawnee clay loam, 6 to 11 percent slopes, eroded	Pawnee	5
7611	Steinauer clay loam, 11 to 30 percent slopes	Steinauer	5
7620	Steinauer clay loam, 20 to 40 percent slopes	Steinauer	5
7645	Yutan silty clay loam, 11 to 17 percent slopes, eroded	Yutan	5
7646	Yutan, eroded-Judson complex, 6 to 11 percent slopes	Yutan	5
7647	Yutan, eroded-Aksarben silty clay loams, 2 to 6 percent slopes	Yutan	5
7750	Nodaway silt loam, occasionally flooded	Nodaway	5
7852	Sarpy loamy fine sand, frequently flooded	Sarpy	5
7868	Nodaway silt loam, channeled, occasionally flooded	Nodaway	5
8013	Ida-Steinauer complex, 17 to 60 percent slopes	Ida	5
8110	Olmitz loam, 2 to 6 percent slopes	Olmitz	5
8119	Pohocco silty clay loam, 11 to 17 percent slopes, eroded	Pohocco	5
8125	Pohocco silty clay loam, 6 to 11 percent slopes, eroded	Pohocco	5
8145	Pohocco-Pahuk complex, 6 to 11 percent slopes, eroded	Pohocco	5
8146	Pohocco-Pahuk complex, 11 to 17 percent slopes, eroded	Pohocco	5
8401	Alda fine sandy loam, occasionally flooded	Alda	3
8420	Boel loamy fine sand, occasionally flooded	Boel	5
8470	Gibbon silt loam, occasionally flooded	Gibbon	5
8477	Gibbon-Saltine loams, occasionally flooded	Gibbon	5
8503	Lex loam, occasionally flooded	Lex	3
8560	Platte and Alda soils, frequently flooded	Platte	2
8562	Platte fine sandy loam, occasionally flooded	Platte	2
8569	Platte-Barney complex, channeled, frequently flooded	Platte	2
8580	Wann fine sandy loam, occasionally flooded	Wann	5
9906	Fluvaquents, silty, frequently flooded	Fluvaquents	5
9971	Arents, earthen dam	Arents	
9975	Mine or quarry	Mine or quarry	
9983	Gravel pit	Pits	
9999	Water	Water	

Appendix B

Recommended Practices for Controlling Erosion and Sedimentation

The following practices are listed in three general categories: permanent agricultural, temporary agricultural, and non-agricultural. The lists are not mutually exclusive in that some practices are on more than one list. All practices on the lists are deemed to be suitable under proper circumstances, for controlling erosion and sedimentation within the District. Many are potential components of resource management systems for lands in the District. Actual application depends on the particular circumstances and needs being addressed. NRCS has plans, specifications, or technical guides for most of these practices.

1. Permanent Soil and Water Conservation Practices for Controlling Erosion and Sedimentation on Agricultural Lands

Permanent soil and water conservation practices are activities which often are part of an on-going (longer than one year) resource management system and may be recommended and adopted as part of a conservation plan. For those practices found on both this list and the "Temporary Soil and Water Conservation Practices" lists, the District will determine on a case by case basis whether the practice is required as a permanent or temporary measure.

- Channel Vegetation
- Critical Area Planting
- Diversions
- Field Borders
- Field Windbreaks
- Gabions
- Grade Stabilization Structures
- Grassed Waterways or Outlets
- Pasture and Hay land Planting
- Sediment Retention Basins
- Terraces
- Tree Plantings
- Underground Outlets
- Water and Sediment Control Structures

2. Temporary Soil and Water Conservation Practices for Controlling Erosion and Sedimentation on Agricultural Lands

Temporary soil and water conservation practices range from one-time only actions to activities which could continue for a number of years. Those on-going activities generally involve management decisions where a practice may be maintained, modified, or eliminated on an annual basis, rather than practices involving more permanent construction or installation activities. These practices generally require no, or lower, capital investments, and the availability of cost share assistance is not required.

- Conservation Cropping Systems
- Conservation Tillage Systems
- Contour Farming
- Cover and Green Manure Crop
- Crop Residue Management
- Livestock Exclusion
- Mulching
- Pasture and Hay land Management
- Contour Strip Cropping

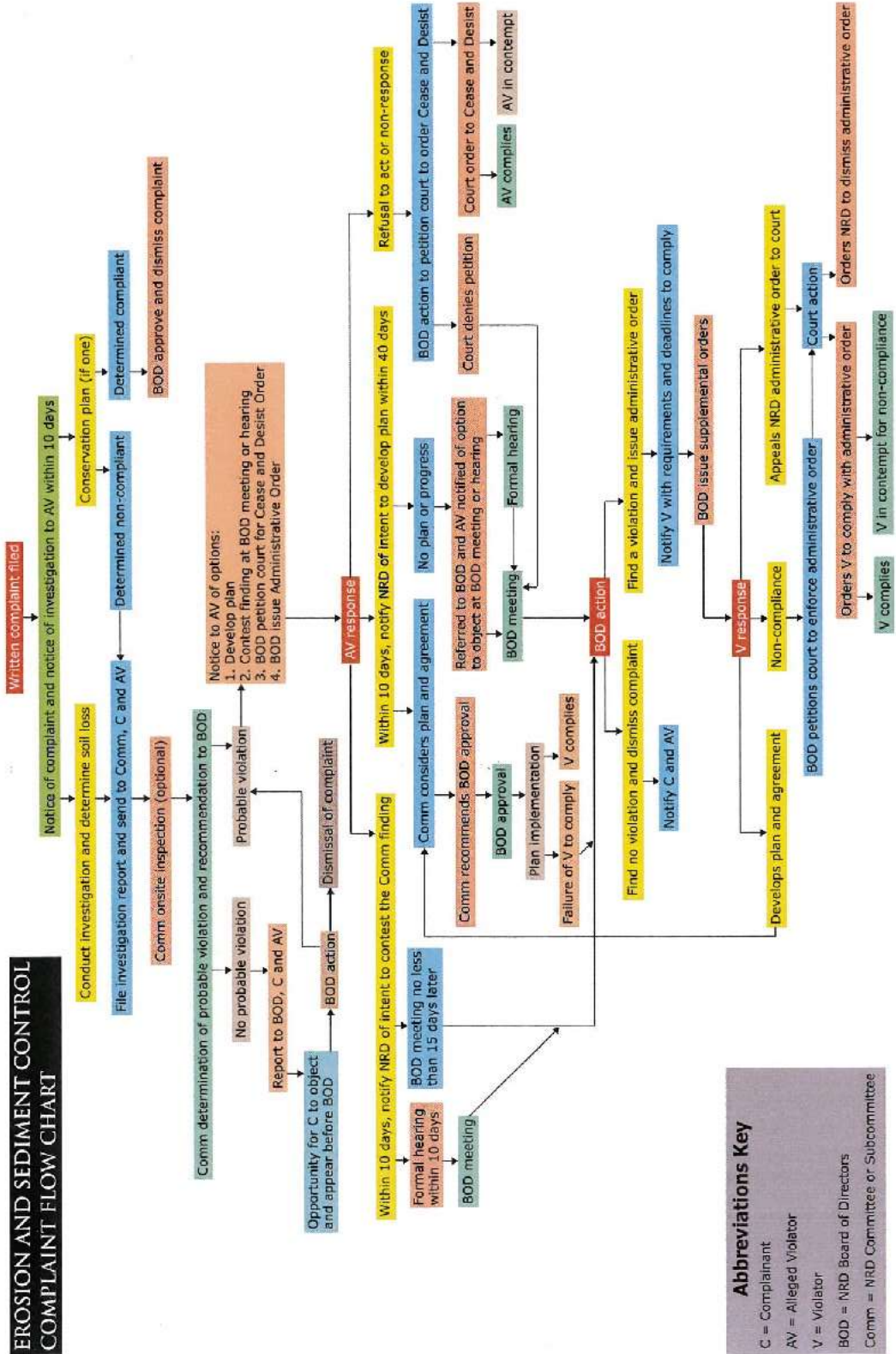
3. Erosion and Sediment Control Practices for Controlling Erosion and Sedimentation on Land Not used for Agriculture, Horticulture, or Silvicultural Purposes

There are many land disturbing activities which, are not related to agriculture, horticulture, or silviculture. Erosion and sedimentation as a result of these activities can be a significant problem. The following practices include permanent and temporary structure and devices that may be required to treat erosion on, *and* sedimentation from, these lands, but cost share assistance need not be made available.

- Channel Vegetation
- Check Dams
- Chutes/Flumes
- Cover Crops
- Critical Area Planting
- Dams
- Dikes
- Diversions
- Gabions
- Grade Stabilization Structures
- Grassed Waterways or Outlets
- Interceptor or Perimeter Swales
- Lining of Waterways or Outlets
- Mulching
- Riprap
- Roadside Seeding
- Sandbag Sediment Barriers
- Silt Fences
- Straw Bale Sediment Barriers
- Stream Channel Stabilization
- Terraces

Tree Plantings
Underground Outlets
Water and Sediment Control Structures

EROSION AND SEDIMENT CONTROL COMPLAINT FLOW CHART



Abbreviations Key
 C = Complainant
 AV = Alleged Violator
 V = Violator
 BOD = NRD Board of Directors
 Comm = NRD Committee or Subcommittee

Abandoned Well Program

The NRD offers cost-share assistance up to 75% to decommission abandoned wells. To qualify, a licensed well driller must do the commission work. For more information, please call the NRD at 402.443.4675.



Lower Platte North
Natural Resources District

Name	SCHOOL	ID	FIELD-1	FIELD-2	FIELD-3	FIELD-4	TOTAL	Rank	Ribbon	State Qualifier
Aaron Deunk	Norris	261	90	95	61	90	336	1	Purple	State
Summer Kohl	Raymond Central	353	100	70	80	82	332	2	Purple	State
Adam Essink	Norris	271	80	95	53	92	320	3	Purple	State
Josh Palensky	Raymond Central	332	100	75	61	82	318	4	Purple	State
Emmett Hughes	Raymond Central	362	90	85	71	72	318	5	Purple	State
Janae Nitzsche	Milford	444	90	85	61	82	318	6	Purple	State
Ashley Kroese	Milford	434	85	65	67	100	317	7	Purple	State
Riley Mayfield	Mead	242	100	80	43	90	313	8	Blue	State
Caleb Dickes	Mead	224	90	75	47	100	312	9	Blue	State
Gable Van Cleave	Norris	292	70	85	76	80	311	10	Blue	State
Cydney Kremer	Milford	432	90	70	61	87	308	11	Blue	
Leah Bos	Raymond Central	361	75	80	81	71	307	12	Blue	
Renea Mitchell	Norris	262	100	55	61	90	306	13	Blue	State
Hallie Jensen	Milford	461	65	65	90	80	300	14	Blue	
Elizabeth Ross	Milford	464	80	65	85	70	300	15	Blue	
Brittany Timoney	East Butler	141	75	80	65	75	295	16	Blue	State
Justin Sousek	East Butler	142	100	75	55	64	294	17	Blue	State
Kale Strizek	Raymond Central	331	90	65	63	70	288	18	Blue	State
Makenzi Isaac	Raymond Central	354	80	75	75	57	287	19	Blue	
Logan Thomas	Ashland Greenwood	11	65	75	75	70	285	20	Blue	
Kaili Jorgens	Norris	264	85	55	55	90	285	21	Blue	State
Abby Jeppesen	Milford	521	70	75	65	75	285	22	Blue	
Katelyn Roth	Milford	442	70	75	61	77	283	23	Red	State
Devon Rietz	Milford	454	100	60	51	72	283	24	Red	
Levi Belew	East Butler	123	60	85	47	90	282	25	Red	
Austin Barber	Norris	263	80	70	51	80	281	26	Red	State
Zach Schluckebier	Milford	451	80	80	49	72	281	27	Red	
Ali Beran	Milford	441	40	85	75	80	280	28	Red	State
Javynn Zozaya	Milford	494	45	80	65	90	280	29	Red	
Mickayla Yard	Ashland Greenwood	23	100	50	57	70	277	30	Red	
Tresta Zerr	Norris	273	80	70	61	66	277	31	Red	
Dylan Hafer	Norris	274	90	65	49	72	276	32	Red	
Matthew Janak	East Butler	143	75	65	65	70	275	33	Red	State

Taylor Nelson	Raymond Central	344	100	50	43	80	273	34 Red	
Jacob Uhlman	Wilber Clatonia	393	90	65	57	60	272	35 Red	
Jacob Grant	Ashland Greenwood	12	90	50	61	70	271	36 Red	
Tucker Randall	Raymond Central	333	50	60	71	90	271	37 Red	State
Aidan Mongan	Mead	223	85	60	62	62	269	38 Red	
Rebecca Meusch	David City	82	100	65	53	50	268	39 Red	
Elizabeth Swanson	Bishop Neumann	32	85	55	61	66	267	40 Red	
Brad Pomajzl	Wilber Clatonia	391	55	85	53	74	267	41 Red	
Jacob Felty	Mead	221	75	70	61	60	266	42 Red	
Carson Bates	Wilber Clatonia	392	75	55	61	72	263	43 Red	
Jake Eickhoff	Career Academy	62	45	70	60	87	262	44 Red	
Haley Kabourek	Bishop Neumann	41	55	70	77	57	259	45 White	
Aubreanna Miller	Milford	471	50	55	71	80	256	46 White	
Kody Swartz	Raymond Central	334	55	75	65	60	255	47 White	State
Miranda Mueller	Mead	222	65	75	33	80	253	48 White	
Calyn Mowinkle	Milford	433	60	80	51	62	253	49 White	
Collin Morrisey	Bishop Neumann	34	60	75	64	52	251	50 White	
Brayden Hansen	Career Academy	61	100	90	41	20	251	51 White	
Nick Springer	Raymond Central	363	55	65	61	70	251	52 White	
Zack Keller	Wilber Clatonia	394	55	60	85	50	250	53 White	
Miranda Hornung	Raymond Central	343	75	45	61	67	248	54 White	
Erin Timoney	East Butler	151	70	60	59	56	245	55 White	
Hailey Hula	Raymond Central	341	40	45	75	82	242	56 White	
Tyler Kinghorn	Career Academy	63	45	85	71	40	241	57 White	
Ethan Zegers	Milford	453	45	65	41	90	241	58 White	
Bryce Christensen	Waverly	381	40	70	61	69	240	59 White	
Nancy Skutchan	Milford	443	45	65	46	82	238	60 White	State
Caeden Pierce	David City	102	80	55	17	85	237	61 White	
Jordan Nielsen	Waverly	384	70	50	46	71	237	62 White	
Spencer Allen	David City	111	55	90	55	36	236	63 White	
Catherine Benes	East Butler	132	75	55	53	52	235	64 White	
Easton Henkel	Wilber Clatonia	411	90	45	50	50	235	65 White	
Tyler Engle	Mead	241	55	35	71	72	233	66 White	
Jackson Lautzenhiser	Milford	452	55	45	51	82	233	67 White	

Dylan Green	Ashland Greenwood	13	55	70	37	70	232	68	White
Marissa Napolitano	Mead	214	60	45	70	57	232	69	White
Owen Eickhoff	Milford	502	65	35	65	67	232	70	White
Ty Hayes	Norris	281	75	65	30	60	230	71	White
Roxanne Bergman	East Butler	121	55	45	68	59	227	72	White
Nolan Makovicka	East Butler	133	55	70	49	53	227	73	White
Luke Sender	Ashland Greenwood	14	60	45	59	62	226	74	
Chase Stanley	Career Academy	64	45	35	54	92	226	75	
Alexis Keib	Milford	483	40	60	55	70	225	76	
Sophia Bergman	East Butler	134	30	75	63	55	223	77	
Macie Hayes	Ashland Greenwood	21	40	60	67	55	222	78	
Jack Jakub	David City	112	65	60	57	36	218	79	
Robert Graybill	David City	113	85	60	31	42	218	80	
Morgan Osmera	East Butler	124	55	50	33	80	218	81	
Chase Herrick	Raymond Central	351	40	35	71	71	217	82	
Tyler Vavrina	David City	84	80	50	53	32	215	83	
Dylan Taylor	Mead	211	70	50	53	42	215	84	
Naudia Larsen	Milford	431	55	55	45	60	215	85	
Samantha Bordovsky	East Butler	153	65	50	43	56	214	86	
Jared Stander	Ashland Greenwood	22	50	75	41	45	211	87	
Nate Thompson	Wilber Clatonia	404	45	70	56	40	211	88	
Emily Hanson	Mead	232	55	55	45	55	210	89	
Haily Mays	Milford	504	50	50	37	72	209	90	
Ryan Worm	David City	81	55	60	43	50	208	91	
Justin White	David City	103	65	35	29	77	206	92	
Lauryn Fransen	Milford	484	30	65	57	54	206	93	
Wallace Wilkins	Milford	501	45	25	82	54	206	94	
Ashley Roth	Milford	463	15	75	53	62	205	95	
Hunter Betzen	David City	92	80	40	54	30	204	96	
Hannah Reiter	Waverly	383	30	75	44	55	204	97	
Jacob Hefner	Wilber Clatonia	413	50	40	40	74	204	98	
Gage Hansmeyer	Norris	283	35	70	21	77	203	99	
Tyler Rezabek	Wilber Clatonia	401	50	65	22	66	203	100	
Abbey Vales	Wilber Clatonia	402	65	40	41	57	203	101	

Madison Zumpfe	Friend	163	55	60	51	36	202	102	
Maylie Brestl	Mead	231	30	50	77	45	202	103	
Lali Stevens	Milford	482	40	50	59	51	200	104	
Amber Heyen	Raymond Central	342	30	40	53	76	199	105	
Dustin Boling	Milford	473	50	50	53	46	199	106	
Kate Cooper	Waverly	382	40	55	57	46	198	107	
Cameron Fossler	Wilber Clatonia	421	15	55	45	82	197	108	
Emma Stutzman	Milford	491	40	35	43	79	197	109	
Erin Barta	East Butler	144	35	45	55	61	196	110	State
Devon Benes	Bishop Neumann	44	55	30	44	65	194	111	
Mason Helgoth	David City	104	35	45	47	65	192	112	
Ethan Lihs	Mead	204	45	25	55	65	190	113	
Wyatt Teselle	Milford	503	45	50	30	65	190	114	
Dylan Berner	Mead	203	50	55	23	61	189	115	
Tyler Ryan	Milford	474	70	45	31	42	188	116	
Carter Rohrer	Norris	284	55	45	33	54	187	117	
Ashley Rosburg	Milford	472	45	25	45	72	187	118	
Ashlea Heyen	Milford	511	85	55	22	24	186	119	
Veronika Haase	Milford	513	40	30	43	72	185	120	
Nick Ruth	David City	101	50	45	39	50	184	121	
Lindsay Homolka	Wilber Clatonia	414	30	40	55	56	181	122	
Braden John	Mead	251	30	50	52	47	179	123	
Tiffany Hovendick	Milford	481	35	75	33	35	178	124	
Daniel Oldemeyer	Norris	282	60	25	31	57	173	125	
Dustin Jelinek	Wilber Clatonia	403	40	35	52	46	173	126	
Jesse Gerdes	Milford	492	30	45	57	40	172	127	
Maggie Vyhnalek	Friend	162	50	40	44	35	169	128	
Logon Marshalek	Raymond Central	364	45	35	47	42	169	129	
Cloe Hucceby	Mead	233	40	65	38	25	168	130	
Andrea Bagnato	Mead	202	45	35	39	47	166	131	
Chance Andersen	Mead	212	45	25	23	72	165	132	
Austin Mastera	David City	114	55	40	39	30	164	133	
Corden Novotny	East Butler	154	45	60	27	31	163	134	
Grant Gouldin	Norris	291	40	60	12	49	161	135	

Josh Seibert	David City	93	50	25	29	56	160	136
Alex Christiansen	East Butler	152	40	30	43	47	160	137
Carter Burenheide	Norris	272	55	25	19	59	158	138
Parker Samson	Milford	462	45	50	38	25	158	139
Marcus Jones	Raymond Central	352	50	25	33	46	154	140
Jamie Chvatal	Bishop Neumann	31	30	25	31	67	153	141
Lily Zoubek	Wilber Clatonia	423	40	30	32	45	147	142
Ireisy Hernandez Madrid	Omaha Bryan	313	55	30	24	36	145	143
Cali Carritt	Mead	234	45	40	23	31	139	144
Liz Benes	East Butler	122	45	40	21	30	136	145
Trevor Ricenbaw	Friend	182	35	15	24	62	136	146
Kyle Dickinson	Friend	161	40	40	16	37	133	147
Zach Pickworth	Mead	213	30	50	19	33	132	148
Kimberly Martinez	Omaha Bryan	321	55	15	25	35	130	149
Yoseline Lopez	Omaha Bryan	303	35	40	22	31	128	150
JT Haag	Mead	243	30	35	33	26	124	151
Slater Wells	Friend	172	40	5	16	60	121	152
Maggie Lawver	Friend	173	30	25	24	42	121	153
Jake Seibert	David City	83	40	40	29	11	120	154
Paola Jasso	Omaha Bryan	311	55	30	5	25	115	155
Josie Vyhnalek	Friend	192	20	35	14	41	110	156
Colin Riley	Friend	183	35	25	19	30	109	157
Brytany Gama	Omaha Bryan	301	30	25	18	35	108	158
Cole Woita	Bishop Neumann	42	40	30	8	29	107	159
Ashley Oaken	Milford	514	40	20	27	20	107	160
Dom Lew-Sang	Friend	191	15	30	22	37	104	161
Caleb Hauder	Milford	512	30	0	41	31	102	162
Abril Serrato	Omaha Bryan	302	30	10	18	41	99	163
Cassie Tweedy	Mead	244	10	40	33	15	98	164
Andrea Lopez-Tovar	Omaha Bryan	312	15	25	14	41	95	165
Kolby Burkhardt	Milford	493	55	5	6	26	92	166
William Yokel	Friend	193	10	25	16	39	90	167
Spencer Lofing	Friend	184	25	30	13	16	84	168
Bre Zoubek	Wilber Clatonia	412	35	20	16	11	82	169

Dulce M. Ibarra Rubio	Omaha Bryan	304	5	15	35	26	81	170
Collin hayek	Wilber Clatonia	422	25	5	24	20	74	171
Breauna Derr	Friend	164	30	5	5	26	66	172
Raymond Sharkey	Friend	181	25	5	12	22	64	173
Kjell Tietgen	Mead	201	5	5	16	30	56	174
Esmeralda Rodriguez-Mehjivar	Omaha Bryan	314	5	10	8	15	38	175
Tanner Woita	Bishop Neumann	33	0	0	0	0	0	176
Shannan Kadavy	Bishop Neumann	43	0	0	0	0	0	177

Name	SCHOOL	ID	FIELD-1	FIELD-2	FIELD-3	FIELD-4	TOTAL	TEAM	Rank	Ribbon
Aaron Deunk	Norris	261	90	95	61	90	336	927	1, State	Purple
Renea Mitchell	Norris	262	100	55	61	90	306	927		
Austin Barber	Norris	263	80	70	51	80	281	927		
Kaili Jorgens	Norris	264	85	55	55	90	285	927		
Ali Beran	Milford	441	40	85	75	80	280	881	2, State	Purple
Katelyn Roth	Milford	442	70	75	61	77	283	881		
Nancy Skutchan	Milford	443	45	65	46	82	238	881		
Janae Nitzsche	Milford	444	90	85	61	82	318	881		
Naudia Larsen	Milford	431	55	55	45	60	215	878		Purple
Cydney Kremer	Milford	432	90	70	61	87	308	878		
Calyn Mowinkle	Milford	433	60	80	51	62	253	878		
Ashley Kroese	Milford	434	85	65	67	100	317	878		
Kale Strizek	Raymond Central	331	90	65	63	70	288	877	3, State	Purple
Josh Palensky	Raymond Central	332	100	75	61	82	318	877		
Tucker Randall	Raymond Central	333	50	60	71	90	271	877		
Kody Swartz	Raymond Central	334	55	75	65	60	255	877		
Leah Bos	Raymond Central	361	75	80	81	71	307	876		Blue
Emmett Hughes	Raymond Central	362	90	85	71	72	318	876		
Nick Springer	Raymond Central	363	55	65	61	70	251	876		
Logon Marshalek	Raymond Central	364	45	35	47	42	169	876		
Adam Essink	Norris	271	80	95	53	92	320	873		Blue
Carter Burenheide	Norris	272	55	25	19	59	158	873		
Tresta Zerr	Norris	273	80	70	61	66	277	873		
Dylan Hafer	Norris	274	90	65	49	72	276	873		
Brittany Timoney	East Butler	141	75	80	65	75	295	864	4, State	Blue
Justin Sousek	East Butler	142	100	75	55	64	294	864		
Matthew Janak	East Butler	143	75	65	65	70	275	864		
Erin Barta	East Butler	144	35	45	55	61	196	864		
Jacob Felty	Mead	221	75	70	61	60	266	847		Blue
Miranda Mueller	Mead	222	65	75	33	80	253	847		
Aidan Mongan	Mead	223	85	60	62	62	269	847		
Caleb Dickes	Mead	224	90	75	47	100	312	847		
Chase Herrick	Raymond Central	351	40	35	71	71	217	836		Red

Marcus Jones	Raymond Central	352	50	25	33	46	154	836	
Summer Kohl	Raymond Central	353	100	70	80	82	332	836	
Makenzi Isaac	Raymond Central	354	80	75	75	57	287	836	
Zach Schluckebier	Milford	451	80	80	49	72	281	805	Red
Jackson Lautzenhiser	Milford	452	55	45	51	82	233	805	
Ethan Zegers	Milford	453	45	65	41	90	241	805	
Devon Rietz	Milford	454	100	60	51	72	283	805	
Hallie Jensen	Milford	461	65	65	90	80	300	805	Red
Parker Samson	Milford	462	45	50	38	25	158	805	
Ashley Roth	Milford	463	15	75	53	62	205	805	
Elizabeth Ross	Milford	464	80	65	85	70	300	805	
Brad Pomajzl	Wilber Clatonia	391	55	85	53	74	267	802	Red
Carson Bates	Wilber Clatonia	392	75	55	61	72	263	802	
Jacob Uhlman	Wilber Clatonia	393	90	65	57	60	272	802	
Zack Keller	Wilber Clatonia	394	55	60	85	50	250	802	
Tyler Rezabek	Wilber Clatonia	401	50	65	22	66	203	790	White
Abbey Vales	Wilber Clatonia	402	65	40	41	57	203	790	
Dustin Jelinek	Wilber Clatonia	403	40	35	52	46	173	790	
Nate Thompson	Wilber Clatonia	404	45	70	56	40	211	790	
Logan Thomas	Ashland Greenwood	11	65	75	75	70	285	788	White
Jacob Grant	Ashland Greenwood	12	90	50	61	70	271	788	
Dylan Green	Ashland Greenwood	13	55	70	37	70	232	788	
Luke Sender	Ashland Greenwood	14	60	45	59	62	226	788	
Hailey Hula	Raymond Central	341	40	45	75	82	242	763	White
Amber Heyen	Raymond Central	342	30	40	53	76	199	763	
Miranda Hornung	Raymond Central	343	75	45	61	67	248	763	
Taylor Nelson	Raymond Central	344	100	50	43	80	273	763	
Brayden Hansen	Career Academy	61	100	90	41	20	251	754	White
Jake Eickhoff	Career Academy	62	45	70	60	87	262	754	
Tyler Kinghorn	Career Academy	63	45	85	71	40	241	754	
Chase Stanley	Career Academy	64	45	35	54	92	226	754	
Roxanne Bergman	East Butler	121	55	45	68	59	227	727	White
Liz Benes	East Butler	122	45	40	21	30	136	727	
Levi Belew	East Butler	123	60	85	47	90	282	727	

Morgan Osmera	East Butler	124	55	50	33	80	218	727	White
Macie Hayes	Ashland Greenwood	21	40	60	67	55	222	710	
Jared Stander	Ashland Greenwood	22	50	75	41	45	211	710	
Mickayla Yard	Ashland Greenwood	23	100	50	57	70	277	710	
	Ashland Greenwood	24					0	710	
Ryan Worm	David City	81	55	60	43	50	208	691	
Rebecca Meusch	David City	82	100	65	53	50	268	691	
Jake Seibert	David City	83	40	40	29	11	120	691	
Tyler Vavrina	David City	84	80	50	53	32	215	691	
	East Butler	131					0	685	
Catherine Benes	East Butler	132	75	55	53	52	235	685	
Nolan Makovicka	East Butler	133	55	70	49	53	227	685	
Sophia Bergman	East Butler	134	30	75	63	55	223	685	
Bryce Christensen	Waverly	381	40	70	61	69	240	681	
Kate Cooper	Waverly	382	40	55	57	46	198	681	
Hannah Reiter	Waverly	383	30	75	44	55	204	681	
Jordan Nielsen	Waverly	384	70	50	46	71	237	681	
Spencer Allen	David City	111	55	90	55	36	236	672	
Jack Jakub	David City	112	65	60	57	36	218	672	
Robert Graybill	David City	113	85	60	31	42	218	672	
Austin Mastera	David City	114	55	40	39	30	164	672	
Jamie Chvatal	Bishop Neumann	31	30	25	31	67	153	671	
Elizabeth Swanson	Bishop Neumann	32	85	55	61	66	267	671	
Tanner Woita	Bishop Neumann	33	0	0	0	0	0	671	
Collin Morrisey	Bishop Neumann	34	60	75	64	52	251	671	
Tyler Engle	Mead	241	55	35	71	72	233	670	
Riley Mayfield	Mead	242	100	80	43	90	313	670	
JT Haag	Mead	243	30	35	33	26	124	670	
Cassie Tweedy	Mead	244	10	40	33	15	98	670	
Emma Stutzman	Milford	491	40	35	43	79	197	649	
Jesse Gerdes	Milford	492	30	45	57	40	172	649	
Kolby Burkhardt	Milford	493	55	5	6	26	92	649	
Javynn Zozaya	Milford	494	45	80	65	90	280	649	
Wallace Wilkins	Milford	501	45	25	82	54	206	647	

Owen Eickhoff	Milford	502	65	35	65	67	232	647
Wyatt Teselle	Milford	503	45	50	30	65	190	647
Haily Mays	Milford	504	50	50	37	72	209	647
Aubreanna Miller	Milford	471	50	55	71	80	256	643
Ashley Rosburg	Milford	472	45	25	45	72	187	643
Dustin Boling	Milford	473	50	50	53	46	199	643
Tyler Ryan	Milford	474	70	45	31	42	188	643
Nick Ruth	David City	101	50	45	39	50	184	635
Caeden Pierce	David City	102	80	55	17	85	237	635
Justin White	David City	103	65	35	29	77	206	635
Mason Helgoth	David City	104	35	45	47	65	192	635
Tiffany Hovendick	Milford	481	35	75	33	35	178	631
Lali Stevens	Milford	482	40	50	59	51	200	631
Alexis Keib	Milford	483	40	60	55	70	225	631
Lauryn Fransen	Milford	484	30	65	57	54	206	631
Erin Timoney	East Butler	151	70	60	59	56	245	622
Alex Christiansen	East Butler	152	40	30	43	47	160	622
Samantha Bordovsky	East Butler	153	65	50	43	56	214	622
Corden Novotny	East Butler	154	45	60	27	31	163	622
Ty Hayes	Norris	281	75	65	30	60	230	620
Daniel Oldemeyer	Norris	282	60	25	31	57	173	620
Gage Hansmeyer	Norris	283	35	70	21	77	203	620
Carter Rohrer	Norris	284	55	45	33	54	187	620
Easton Henkel	Wilber Clatonia	411	90	45	50	50	235	620
Bre Zoubek	Wilber Clatonia	412	35	20	16	11	82	620
Jacob Hefner	Wilber Clatonia	413	50	40	40	74	204	620
Lindsay Homolka	Wilber Clatonia	414	30	40	55	56	181	620
Dylan Taylor	Mead	211	70	50	53	42	215	612
Chance Andersen	Mead	212	45	25	23	72	165	612
Zach Pickworth	Mead	213	30	50	19	33	132	612
Marissa Napolitano	Mead	214	60	45	70	57	232	612
Maylie Brestl	Mead	231	30	50	77	45	202	580
Emily Hanson	Mead	232	55	55	45	55	210	580
Cloe Hucceby	Mead	233	40	65	38	25	168	580

Cali Carritt	Mead	234	45	40	23	31	139	580
Haley Kabourek	Bishop Neumann	41	55	70	77	57	259	560
Cole Woita	Bishop Neumann	42	40	30	8	29	107	560
Shannan Kadavy	Bishop Neumann	43	0	0	0	0	0	560
Devon Benes	Bishop Neumann	44	55	30	44	65	194	560
Kjell Tietgen	Mead	201	5	5	16	30	56	545
Andrea Bagnato	Mead	202	45	35	39	47	166	545
Dylan Berner	Mead	203	50	55	23	61	189	545
Ethan Lihs	Mead	204	45	25	55	65	190	545
Kyle Dickinson	Friend	161	40	40	16	37	133	504
Maggie Vyhnaek	Friend	162	50	40	44	35	169	504
Madison Zumpfe	Friend	163	55	60	51	36	202	504
Breauna Derr	Friend	164	30	5	5	26	66	504
Ashlea Heyen	Milford	511	85	55	22	24	186	478
Caleb Hauder	Milford	512	30	0	41	31	102	478
Veronika Haase	Milford	513	40	30	43	72	185	478
Ashley Oaken	Milford	514	40	20	27	20	107	478
Grant Gouldin	Norris	291	40	60	12	49	161	472
Gable Van Cleave	Norris	292	70	85	76	80	311	472
	Norris	293					0	472
	Norris	294					0	472
Cameron Fossler	Wilber Clatonia	421	15	55	45	82	197	418
Collin hayek	Wilber Clatonia	422	25	5	24	20	74	418
Lily Zoubek	Wilber Clatonia	423	40	30	32	45	147	418
	Wilber Clatonia	424					0	418
Brytany Gama	Omaha Bryan	301	30	25	18	35	108	416
Abril Serrato	Omaha Bryan	302	30	10	18	41	99	416
Yoseline Lopez	Omaha Bryan	303	35	40	22	31	128	416
Dulce M. Ibarra Rubio	Omaha Bryan	304	5	15	35	26	81	416
	David City	91					0	364
Hunter Betzen	David City	92	80	40	54	30	204	364
Josh Seibert	David City	93	50	25	29	56	160	364
	David City	94					0	364
Paola Jasso	Omaha Bryan	311	55	30	5	25	115	355

Andrea Lopez-Tovar	Omaha Bryan	312	15	25	14	41	95	355
Ireisy Hernandez Madrid	Omaha Bryan	313	55	30	24	36	145	355
Esmeralda Rodriguez-Mehjivar	Omaha Bryan	314	5	10	8	15	38	355
Raymond Sharkey	Friend	181	25	5	12	22	64	329
Trevor Ricenbaw	Friend	182	35	15	24	62	136	329
Colin Riley	Friend	183	35	25	19	30	109	329
Spencer Lofing	Friend	184	25	30	13	16	84	329
Dom Lew-Sang	Friend	191	15	30	22	37	104	304
Josie Vyhnaek	Friend	192	20	35	14	41	110	304
William Yokel	Friend	193	10	25	16	39	90	304
	Friend	194					0	304
Abby Jeppesen	Milford	521	70	75	65	75	285	285
	Milford	522					0	285
	Milford	523					0	285
	Milford	524					0	285
	Friend	171					0	242
Slater Wells	Friend	172	40	5	16	60	121	242
Maggie Lawver	Friend	173	30	25	24	42	121	242
	Friend	174					0	242
Braden John	Mead	251	30	50	52	47	179	179
	Mead	252					0	179
	Mead	253					0	179
	Mead	254					0	179
Kimberly Martinez	Omaha Bryan	321	55	15	25	35	130	130
	Omaha Bryan	322					0	130
	Omaha Bryan	323					0	130
	Omaha Bryan	324					0	130

Arps Red-E-Mix
250 West Vine Street
Fremont, NE 68025
Phone (402) 720-0408
Fax (402) 721-7262

QUOTE

Date: 10/22/1016

PROJECT: LPNNRD - Lake Wanahoo - Wahoo, Nebraska

ATTENTION: Bret Schomer
Water Resources Specialist
511 Commercial Park Rd.
Wahoo, NE 68066
Office: (402) 443-4675

I am offering you the following price confirmation(s) for the above project. These prices do not include winter service charges or sales tax.

Autumn Oak Colored Concrete (U-11) \$ 180.00 CY

Delivery and clean out of Ready Mix Truck: \$100.00

TERMS: Payment for materials shall be due on the 20th. of the month following the calendar month in which the same was delivered. A finance charge of 1-1/2% per month will be added to all past due accounts. This quotation becomes effective as a contract after its acceptance has been executed by the Purchaser and it has been approved as a contract for Arps Red-E-Mix by one of its duly authorized officials.

Best regards
Arps Red-E-Mix

Travis Mumford
Sales Manager

Accepted by purchaser

By: _____

By: _____

_____20,____

_____20,____