# Rules and Regulations

for the

# LOWER NIOBRARA NATURAL RESOURCES DISTRICT

The Erosion and Sediment Control Program Rules and Regulations are included in the District Rules and Regulations under Section 25. The Reporting Forms, Erosion and Sediment Complaint Flow Chart and Soil Loss Tolerances are appendixes to the Rules and Regulation so they can be adjusted as needed.

#### 25. Erosion and Sediment Control Program

25.1. <u>Authority</u>: These rules and regulations are adopted pursuant to the authority granted in Section 2-4605, R.R.S. 1948, as amended.

25.2. <u>Purpose</u>: 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 storm water runoff and the danger of flooding, 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.

25.3. <u>Applicability</u>: 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 25.4, Section (h), sub-sections (2), (3), (4) and (5).

25.4. Definitions as Related the Erosion and Sediment Act:

25.4.1. <u>Alleged violator</u> means the owner of record and the operator, if any, of land which is the subject of a complaint filed in accordance with section 25.8.

25.4.2. <u>Board</u> means the Board of Directors of the Lower Niobrara Natural Resources District. 25.4.3. <u>Committee</u> means the Erosion and Sediment Committee of the Lower Niobrara Natural Resources District.

25.4.4. <u>Conservation Agreement</u> 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. 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 practices necessary to implement the plan or portion of the plan.

25.4.5. District means the Lower Niobrara Natural Resources District.

25.4.6. <u>Excess Erosion</u> 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.

25.4.7. <u>Farm Unit</u> 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.

25.4.7.1. <u>Non-Agricultural Land-Disturbing Activity</u> 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: a.) Activities related directly to the production of agricultural, horticultural or silvicultural crops, including, but not limited to, tilling, planting, or harvesting of such crops; b.) Installation of above ground public utility lines and connections, fence posts, sign posts, telephone poles, electric poles, and other kinds of posts or poles; c.) Emergency work to protect life or property; and d.) Activities related to the construction of housing, industrial, and commercial developments on sites under two acres in size; and e.) 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 of federal law or is part of the operational plan for such facility or site.

25.4.8. <u>Sediment Damage</u> means: a.) 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; b.) 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. c.) 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.

25.5. <u>Soil-Loss Tolerance Level</u> 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: a.) 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; b.) 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. 25.6. <u>T value</u> 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.

25.7. <u>Soil-Loss Tolerance Level</u>: USDA Soil Survey data provides value 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 20. Each soil series listed may contain one or more soil mapping units-referred to in Rule 25.10. The permitted soil-loss tolerance levels for particular lands may not exceed the T value noted in Appendix 20.

25.8. <u>Administration</u>: 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.

25.8.1. Keep an accurate record of all complaints received, investigations made, and other official actions.

25.8.2. 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. (See Appendix 10)

25.8.3. Monitor compliance with all farm unit conservation plans approved and orders issued by the Board.

25.8.4. 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:

25.8.4.1. 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.

25.8.4.2. 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,

25.8.4.3. At the direction of the Board, and in accordance with Section 25.13 and 25.18, to commence any legal proceedings necessary to enforce these rules and regulations and any order issued pursuant to them.

25.9. <u>Violation</u>: 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 damage are exceeding the soil-loss tolerance level adopted in rule 25.5; c.) the activity causing the soil loss is not an exempted non-agricultural land distributing activity (Rule 25.4.7.1 b.) to e.) and d.) the land which is the source of the damage is not in strict compliance with a conservation agreement approved by the District.

25.10. <u>Complaint</u>: 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.

25.10.1. Complaints shall be made in writing and signed on a form provided by the director. 25.11. <u>Investigation of Complaint</u>:

25.11.1. 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.

25.11.2. If 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, the complaint shall be dismissed. The alleged violator, complainant, and Board shall be notified.

25.11.3. 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).

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

25.12. Determination of Soil Loss:

25.12.1. 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.

25.12.2. 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.

25.12.3. 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.

25.12.3.1. The guide may be applied to such smaller portion only if such portion is two acres or greater.

25.12.4. The cover and crop management factor, "C", used in calculating sheet and rill 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.

25.13. Committee and Board Action:

25.13.1. 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 Section 25.9 and an on-site inspection by the committee, if warranted. The committee shall report its findings to the Board, the alleged violator and the complainant with a recommendation of further action as follows:

25.13.2. If the staff and committee determines 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.

25.13.3. 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.

25.13.4. If the committee determines that a probable violation of these rules and regulations has occurred, it shall proceed in accordance with Section 25.12.

25.14. <u>Notice of Violation</u>: 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:

25.14.1. 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.

25.14.2. 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.

25.14.3. 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 25.15 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. 25.15. Development and Approval of Plan for Compliance:

25.15.1. If the alleged violator contacts the District pursuant to Section 25.12 (a) and indicates a desire to jointly develop either a farm unit conservation plan or a 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.

25.15.2. 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. 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 Section 12.15, 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.

25.15.3. 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.

25.15.4. 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 Section 12.12.1.2. 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 non-agricultural land distributing activities.

25.15.5. Following refusal of a landowner to discontinue an activity causing erosion which constitutes a violation in Section 25.7, 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. 25.16. Practices:

25.16.1. Practices designed to reduce or control soil erosion or sediment damage may be approved in developing a plan under Section 12.13 and may be required by the District in an administrative order pursuant to Section 12.15.

25.16.2. Soil and water conservation practices, applicable only to land used for agricultural, horticultural, or silvicultural purposes, may include:

25.16.2.1. 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.

25.16.2.2. 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.

25.16.3. 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.

25.16.4. Erosion and sediment control practices, which are applicable to activities other than agricultural, horticultural, or silvicultural activities, may include:

25.16.4.1. 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;

25.16.4.2. 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 if it is directly affected by any non-agricultural land-distributing activity; or

25.16.4.3. 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.

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

25.17. <u>Order</u>: If, after Board consideration of the complaint at a meeting or hearing for which the alleged violator has been given notice in accordance with Section 12.12, 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 has not been developed nor is being implemented according to a conservation agreement, it shall issue an administrative order to the violator stating:

25.17.1. The date of the order,

25.17.2. The identity of the source of the violation and its location;

25.17.3. The authority of the Board to issue such order;

25.17.4. 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;

25.17.5. 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-distributing 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;

25.17.6. Any requirements concerning the operation, utilization, or maintenance of the

#### alternative practices identified;

25.17.7. 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 or permanent erosion and sediment control 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 an extension has been granted upon a showing of good cause; b.)The time for initiating work for temporary erosion and sediment control practices for nonagricultural land-distributing activities shall be not less than five (5) days nor more than fifteen (15) days after service or mailing of the order and shall be completed not longer than forty-five (45) days after service or mailing 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.

25.17.8. The action to be taken by the Board if the violator does not comply.

25.17.9. 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. 25.18. <u>Cost-Share Assistance</u>: 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.

25.19. <u>Supplemental Orders</u>: 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.

25.20. <u>Non-Compliance</u>: 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:

25.20.1. 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;

25.20.2. 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;

25.20.3. 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-distributing activity, will not or does not prevent sediment resulting from excessive erosion from leaving the land involved, or

25.20.4. The person to whom the order is directed informs the District that he or she does not intend to comply.

#### APPENDIX 10: FORM 1

#### Lower Niobrara NRD Erosion & Sediment Control Program

NOTICE OF FILING OF COMPLAINT AND INSPECTION DATE

COMPLAINT NO.

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

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

A complaint has been filed with the Lower Niobrara Natural Resources District by <u>( name of complainant</u>) stating that sediment damages have occurred on <u>( his/her/their )</u> property and alleging that this sediment is originating for soil erosion occurring on your lands at an excess rate. The tract of land against which the complaint was filed is described as follows: <u>( legal description )</u>.

In order to determine the validity of this complaint, it will be necessary for the District Board of Directors and their agents to inspect this tract of land to ascertain whether such excess soil loss is actually occurring. This inspection will be made on (<u>date</u>) at (<u>time</u>). You are invited to accompany the inspection team.

This letter is sent in compliance with the notice requirements of Section 2-4608 of the Revised Statutes of Nebraska and Rule (\_\_\_\_\_\_) of the Rules and Regulations of the (\_\_\_\_\_\_) Natural Resources District. You will be sent a copy of the inspection report when completed. If you have any questions, please contact me at our District office: (\_\_\_\_\_\_).

Signature:\_\_\_\_\_, General Manager

Lower Niobrara Natural Resources District

APPENDIX 11:

#### NOTICE OF VIOLATION

COMPLAINT NO. \_\_\_\_\_

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

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

You were notified on <u>( date )</u> that a complaint had been filed with the Lower Niobrara Natural Resources District by <u>( name )</u> alleging that sediment originating from excess rates of soil erosion on your land was causing sediment damages on <u>( his/her/their )</u> property. An inspection of these lands was conducted on <u>( date )</u>.

Based on this inspection and the report of the investigator, the Committee designated by the District Board for this purpose, has determined that there is reasonable cause to believe that sediment damages have occurred and were the result of soil loss from your land in excess of the tolerance level established by the District in violation of the Erosion and Sediment Control Rules and Regulations.

The portions of your land believed to be in violation are identified on the map which is included in the investigator's report accompanying this notice.

You are further advised that you have two options at this point.

- 1. Should you develop an acceptable conservation plan or erosion and sediment control plan to eliminate excess erosion on the areas of your land, which are in violation, and sign a conservation agreement with the District, no further action will be taken on this complaint, provided that you remain in compliance with the plan and agreement. Cost-share assistance may be available for installation of permanent soil and water conservation practices at a cost-share rate set by the counties FSA boards or the District. If you are interested in pursuing this option, you must contact the District office within 10 days after receiving this notice. We are ready to assist you in developing a plan.
- Should you wish to contest the findings in the report and/or the conclusions of the Committee, you are entitled to do so at a meeting of the District Board (<u>date and time</u>) at (<u>location</u>). If you wish to have a formal adjudicatory hearing, you must request it within 10 days after receiving this notice. Hearing information will be provided to you.

Finally, you are advised that if you do not respond to this notice in either of the preceding ways, the District Board shall proceed to make a final determination on the complaint, and if appropriate, issue an administrative order requiring you to correct the excess erosion, which may be enforced by court action as prescribed by law.

We encourage you to select the first option and we remain ready to assist you in eliminating the excess erosion on your land.

Signature: \_\_\_\_\_

Print:
--------

#### APPENDIX 12 : Lower Niobrara NRD Erosion & Sediment Control Program

#### FORM 3

#### CONSERVATION AGREEMENT

COMPLAINT NO			
DATE:	-		
NAME:	ADDRESS:		
LEGAL:	COUNTY:		
This agreement is made and entered int Lower Niobrara Natural Resources Distri	o thisday of ict, herein called DISTRICT, and	_, 20	_, by and between the

\_\_\_\_\_, herein called COOPERATOR; and is executed to satisfy the

requirements of Nebraska Revised Statute Section 2-4603(2) and should be interpreted and performed in a manner which promotes the policies of the Nebraska Erosion and Sediment Control Act, Nebraska Revised Statutes Sections 2-4601 to 2-4613.

#### WITNESSETH:

COOPERATOR agrees to implement the farm unit conservation plan (or a portion of the farm unit conservation plan), or in the case of nonagricultural land-disturbing activities, an erosion and sediment control plan, attached to this agreement according to the Schedule for Completion accompanying the plan. Both the plan and schedule are incorporated herein by reference.

DISTRICT agrees to provide assistance to COOPERATOR in applying the plan to COOPERATOR'S farm and furnish, as available, technical and financial assistance, equipment, and materials to COOPERATOR at rates established by DISTRICT.

DISTRICT AND COOPERATOR mutually agree that:

- 1. Compliance with this agreement shall be deemed compliance with the requirements of the Nebraska Erosion and Sediment Control Act and the erosion and sediment control program approved by the District.
- Cost-share for erosion and sediment control practices may be available from the DISTRICT. However, lack of available cost-share assistance does not offset the requirement that the COOPERATOR implement this farm unit conservation plan in the timed prescribed.
- 3. Neither DISTRICT nor COOPERATOR shall be liable for damages to the other in connection with the performance of this agreement unless such damages are caused by negligence or misconduct.
- 4. This agreement may be amended upon thirty days notice.

This agreement shall be in effect when signed by both parties and remain in effect unless it is terminated by either party by giving sixty days notice in writing to the other party.

	Date:	
Owner/Operator		
Address	-	
	Date:	

Lower Niobrara Natural Resources District

Lower Niobrara	NRD Frosion	& Sediment	Control Program
		a beament	Control i rogi ann

FORM

<u>3a</u>

**APPENDIX 13:** 

#### CONSERVATION PLAN FOR COMPLETION

AND

#### COOPERATOR'S RECORD OF COMPLIANCE

COMPLAINT NO	
DATE:	
NAME:	ADDRESS:
LEGAL:	COUNTY:

Attach photograph, map, or diagram designating fields or tracts involved by number.

A. Planned

- 1. Record land use planned by field or tracts listing conservation practice(s) and/or resource management systems to be applied. Describe briefly, what will be done and how it will be done.
- 2. Indicate the amount of conservation practices planned and completion date(s).
- B. Practice(s) Completion
  - 1. Indicate conservation practice(s) completed and completion date(s).

Cooperator:	Date:	
•		

Preparer:	Date:
•	

**APPENDIX 14** 

#### ADMINISTRATIVE ORDER

COMPLAINT NO.

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

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

The District Board has considered this complaint and makes the following findings:

1. On <u>( date</u>) this complaint was filed in the District office by <u>( complainant</u>) alleging that sediment damage <u>( has occurred/was occurring</u>) on <u>( his/her/their</u>) property and further alleged that sediment originating from excess erosion on the land of <u>( alleged violator</u> ) was causing this damage. The District notified <u>( alleged violator</u> ) of this complaint by letter dated <u>( date</u> ).

2. On (<u>date</u>), as requested by the District investigator, (<u>inspector</u>) inspected the

lands of <u>( complainant</u> ) and <u>( alleged violator</u> ) filed a report with the Committee of the Board designated for this purpose.

3. On ( date ) the Committee notified ( alleged violator ) of its preliminary finding of

probable violation of the Rules and Regulations of the District.

4. The District General Manager or appropriate designee and ( alleged violator ) have

attempted to develop mutually a conservation plan or erosion and sediment control plan for the lands which are the subject of this complaint but have been unable to reach agreement. The Committee properly concluded that no progress was being made or likely to be made on preparation of an acceptable plan.

-or-

4a. The District Board held a public hearing on this complaint on (<u>date</u>) as requested by

( alleged violator ). (Summarize).

-or-

4b. ( <u>alleged violator</u>) did not respond to the Notice of Violation.

The District Board further FINDS:

1. Sediment damage has occurred on the land of <u>( complainant )</u>. (Describe).

2. The source of this sediment damage is the land of <u>( alleged violator )</u>. The average annual soil loss on <u>( alleged violator's )</u> land, determined by using the NRCS Technical Guides, is estimated to be <u>(</u>

<u>rate</u>), which is in excess of the applicable soil-loss tolerance level(s) of <u>(established rate)</u> for soil series (<u>)</u> adopted in Rule 25 of the District's Rules and Regulations.

Based on the foregoing findings, the District Board CONCLUDES:

1. The land of <u>( alleged violator )</u> is in violation of the Rules and Regulations of the

District and the Nebraska Erosion and Sediment Control Act.

Therefore, by virtue of the authority vested in the District Board by Nebraska Revised Statute Section 2-4608, the District Board ORDERS:

#### (For agricultural land)

1. (<u>alleged violator</u>) shall bring those areas of (<u>his/her/their</u>) land which exceed the applicable soil-loss tolerance level(s) into conformance with the Rules and Regulations of the District. The District Board has determined that implementation of the following alternative soil and water conservation practices will bring the land into conformance and which may be used to comply with this order. (List two or more practices).

Work needed to establish these practices must be commenced <u>( date )</u> (no later than six (6) months after service or mailing of this order) and satisfactorily completed by <u>( date )</u> (no later than one year after service of mailing of this order).

2. (<u>alleged violator</u>) is hereby advised that should the work required by this order to correct the erosion, which is occurring not be initiated and satisfactorily completed by the time specified in this order or should (<u>alleged violator</u>) advise the District that (<u>he/she/they</u>) (<u>does/do</u>) not intend to comply with this order, the District Board will commence proceedings to enforce this order as prescribed by law.

-or-

#### (For non-agricultural Land-Disturbing Activity)

1. (<u>alleged violator</u>) shall either bring those areas of (<u>his/her/their</u>) land which exceed the applicable soil-loss tolerance level(s) into conformance with the District Rules and Regulations or prevent sediment resulting from excess erosion from leaving said land areas. The following erosion and sediment control practices will accomplish this and may be used to comply with this order. (List two or more practices).

Work necessary to establish these practices must be initiated by <u>( date )</u> (shall not exceed five (5) days after service or mailing of the order). Temporary practices shall be satisfactorily completed by

<u>( date )</u> (no longer than fifteen (15) days after service or mailing of this order) and permanent practices shall be satisfactorily completed by <u>( date )</u> (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.

2. (<u>alleged violator</u>) is hereby advised that should the work required by this order to correct the erosion, which is occurring not be initiated and satisfactorily completed by the time specified in this order or should (<u>alleged violator</u>) advise the District that (<u>he/she/they</u>) (<u>does/do</u>) not intend to comply with this order, the District Board will commence proceedings to enforce this order as prescribed by law.

Chairperson: \_\_\_\_\_

Lower Niobrara Natural Resources District

APPENDIX 15	Lower Niobrara NRD Erosion & Sediment Control Program	<u>FORM</u>
<u>5a</u>		
DISMISSAL	OF VERBAL COMPLAINT, CONSERVATION AGREEMENT APPLIES	
COMPLAINT NO.		
DATE:		
NAME:	ADDRESS:	
The Lower Niobrara N	Natural Resources District's Investigator having found that ( <u>name</u>	<u>e )</u> :

1. Has land which was the subject to the complaint filed by <u>( name )</u> on <u>( date )</u>, from which soil loss is not exceeding soil-loss tolerance levels, or

2. Has a farm unit conservation plan or erosion and sediment control plan covering the land subject to the complaint filed by <u>( name )</u> on <u>( date )</u>, and

3. Is implementing said plan in strict compliance with a conservation agreement signed with the District on <u>( date )</u>, and therefore said complaint is dismissed.

Signature: \_\_\_\_\_

|--|

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

 APPENDIX 16
 Lower Niobrara NRD Erosion & Sediment Control Program
 FORM

 5b
 DISMISSAL OF COMPLAINT, CONSERVATION AGREEMENT APPLIES

 COMPLAINT NO.
 \_\_\_\_\_\_

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

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

The Lower Niobrara Natural Resources District's Investigator having found that (<u>name</u>):

1. Has a farm unit conservation plan or erosion and sediment control plan covering the land subject to the complaint filed by <u>(name)</u> on <u>(date)</u>, and

2. Is implementing said plan in strict compliance with a conservation agreement signed with the District on <u>( date )</u>, dismisses said complaint.

Signature: \_\_\_\_\_

Print: \_\_\_\_\_

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

#### APPENDIX 17 Lower Niobrara NRD Erosion & Sediment Control Program

#### FORM 6

#### DISMISSAL OF COMPLAINT, AFTER FINDINGS

COMPLAINT NO.

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

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

The District Board has considered this complaint and makes the following FINDINGS:

1. On <u>( date</u> ), this complaint was filed in the District office by <u>( complainant</u> ) alleging that sediment damage has <u>( occurred/was occurring</u> ) on <u>( his/her/their</u> ) property and further alleged that sediment originating from excess erosion on the land of <u>( alleged violator</u> ) was causing this damage. The District notified <u>( alleged violator</u> ) of this complaint by letter dated <u>( date</u> ).

2. On <u>( date</u> ), the District investigator <u>( inspector</u> ), inspected the lands of <u>( complainant</u> ) and <u>( alleged violator</u> ) and filed a report with the Committee of the board designated for this purpose.

3. On <u>( date</u> ), the Committee notified <u>( alleged violator</u> ) of its preliminary findings of probable violation of the Rules and Regulations of the District.

4. The District and <u>( alleged violator )</u> have attempted to develop mutually a conservation plan or erosion and sediment control plan for the lands, which are the subject of this complaint but have been unable to reach agreement. The Committee properly concluded that no progress was being made or

likely to be made on preparation of an acceptable plan.

-or-

4a. The District Board held a public hearing on this complaint on <u>( date )</u>, as requested by <u>( alleged violator )</u>. (Summarize briefly).

-or-

4b. ( <u>alleged violator</u> ) did not respond to the Notice of Violation. The District Board further finds:

1. Sediment damage (<u>has not/has</u>) occurred on the land of (<u>complainant</u>). (Describe).

2. The average annual soil loss on <u>( alleged violator's )</u> land, determined by using the NRCS Technical Guides, is estimated to be <u>( rate )</u>, which <u>( is/is not )</u> in excess of the applicable soil-loss tolerance level(s) of <u>( established rate )</u> for soil series <u>( )</u> adopted in Rule <u>( )</u> of the District's Rules and Regulations.

Based on the foregoing findings, the District Board CONCLUDES:

1. The land of <u>( alleged violator</u>) is not in violation of the Rules and Regulations of the District and the Nebraska Erosion and Sediment Control Act.

Therefore, the District Board dismissed this complaint.

Chairman: \_\_\_\_\_

Lower Niobrara Natural Resources District

### APPENDIX 18 FORM 7

Lower Niobrara Natural Resources District

# Erosion & Sediment Control Program

## COMPLAINT CHECKLIST

Complaint #:		Complainant:	
Date Form Filed:		Alleged Violator:	
Pre-inspection	<ul> <li>Review rules &amp; regulations</li> <li>Verify ownership/lienhold</li> <li>Contact NRCS re: conservative</li> <li>average annual soil loss, et</li> <li>Certified letter to alleged via</li> <li>a. Include notification</li> <li>b. Copy of applicable</li> <li>Control Program</li> <li>c. Invitation to be present</li> <li>Letter to complainant, alleginspection date, time and on</li> <li>Pertinent inspection equipier</li> <li>Location of alleged violation</li> <li>Damages - measurements of</li> <li>invoices of damaged proper</li> </ul>	s/statutes for timetables - procedures er of land where problem is originating ation plan or erosion and sediment control plan status, ic. iolator sent within 10-day period. n of alleged violation e statutes pertaining to the Sediment and Erosion esent for the investigation ged violator, NRCS and other agencies regarding ther pertinent information. nent as necessary on: verified legal description and acres involved s, soil types and other pertinent information of extent of damage, photograph, copies of costs, erty and other pertinent documentation port with the Committee designated by the Board	
<u>Follow-up</u>	<ul> <li>Notify all parties of NRD b         <ul> <li>a. Recommendation o</li> <li>b. Recommendation o</li> <li>certified letter informing v</li> <li>Action.                 <ul></ul></li></ul></li></ul>	board recommendation. of dismissal. (Complainant may appeal) of Action violator of probable violation and recommended ys after receipt of letter to respond re: conservation assistance is not required but may be available evenent with schedule of compliance robable violation opportunity is given to contest board hearing or other formal public hearing. ation plan or erosion and sediment control plan the trative order.	

b. Violator has 30 days to appeal



\_\_\_\_\_ If violator continues to refuse to cooperate a court order is issued.

**APPENDIX 19** 

#### **APPENDIX 20 – NRCS SOIL LOSS TOLARANCES**

oldmusy	m oldmuname
Aa	Albaton silty clay, 0 to 2 percent slopes
Ab	Albaton silty clay, 0 to 2 percent slopes
AcC	Alcester silt loam, 2 to 6 percent slopes
AcD	Alcester silt loam, 6 to 11 percent slopes
	Arents, earthen dam
ALD	Alenta, earthen dann
AmB	Anselmo loamy fine sand, 0 to 3 percent slopes
An	Albaton silty clay, ponded, frequently flooded
An	Anselmo fine sandy loam, 0 to 2 percent slopes
AnC	Anselmo fine sandy loam, 2 to 6 percent slopes
AnD	Anselmo fine sandy loam, 6 to 11 percent slopes
	Anselmo fine sandy loam, 11 to 20 percent
AnF	slopes
Ao	Aowa silt loam, 0 to 2 percent slopes
A . 4	Aowa silt loam, somewhat poorly drained, 0 to 2
A01	percent slopes, occasionally flooded
Ao2	slopes, occasionally flooded
A = 04	Aowa silt loam, poorly drained, 0 to 2 percent
A0ZI Ar	Siopes, frequently flooded
AI	Adwa silt loam, charineled, 0 to 2 percent slopes
Ar2	percent slopes, frequently flooded
	Anselmo-Rock outcrop complex, 11 to 20
ArF	percent slopes
As	Aowa silt loam, channeled, frequently flooded
At	Albaton silty clay, occasionally flooded
At	Anselmo loam, 0 to 2 percent slopes
Aw	Aowa silt loam, occasionally flooded
	Anselmo-O'Neill sandy loams, 0 to 2 percent
Ax	slopes
	Anselmo-O'Neill sandy loams, 2 to 6 percent
AxC	slopes
Ba	Barney fine sandy loam, 0 to 2 percent slopes
Ba	Barney loam, 0 to 2 percent slopes
Ba	Barney silt loam, channeled
Ba	Barney-Boel complex, channeled
Bb	Barney loam, frequently flooded
Bb	Barney-Balant complex, channeled
DD DD	Barrieg-Doleni Complex, Glanneleu Bazila silt loom 0 to 2 porcent elence
BDD	$\begin{array}{c} \text{Dazile sill loam, 0 to 2 percent slopes} \\ \text{Pazile sill loam, 2 to 6 percent slopes} \end{array}$
Bo	Blackloup loam 0 to 1 percent clopes
DC DC	Blackloup loam, wet 0 to 1 percent closes
Du Dd	Diackioup idam, wel, 0 to 1 percent slopes
Bu	Dazile loarity line sand, o to z percent slopes

musym	muname
7710	Albaton silty clay, occasionally flooded
7710	Albaton silty clay, occasionally flooded
6600	Alcester silt loam, 2 to 6 percent slopes
6601	Alcester silt loam, 6 to 11 percent slopes
9971	Arents, earthen dam
	Anselmo loamy fine sand, 0 to 3 percent
9012	slopes
7711	Albaton silty clay, frequently flooded
	Anselmo fine sandy loam, 0 to 1 percent
9001	slopes
0004	Anselmo fine sandy loam, 3 to 6 percent
9004	siopes
0000	Anselmo fine sandy loam, 6 to 11 percent
9006	siopes
0000	Anselmo fine sandy loam, 11 to 20 percent
9003	siopes
6300	Aowa silt loam, occasionally flooded
6300	Aowa silt loam, occasionally flooded
6300	Aowa silt loam, occasionally flooded
6300	Aowa silt loam, occasionally flooded
6301	Aowa silt loam, channeled, frequently flooded
6301	Aowa silt loam, channeled, frequently flooded
	Anselmo-Rock outcrop complex, 11 to 17
9021	percent slopes
6301	Aowa silt loam, channeled, frequently flooded
7710	Albaton silty clay, occasionally flooded
9010	Anselmo loam, 0 to 1 percent slopes
6300	Aowa silt loam, occasionally flooded
	Anselmo-O'Neill sandy loams, 0 to 3 percent
8807	slopes
	Anselmo-O'Neill sandy loams, 3 to 6 percent
9020	slopes
6311	Barney fine sandy loam, frequently flooded
6312	Barney loam, frequently flooded
6314	Barney silt loam, channeled, frequently flooded
6319	Barney-Boel complex, channeled
6312	Barney loam, frequently flooded
	Barney-Bolent complex, channeled,
6321	occasionally flooded
6613	Bazile silt loam, 0 to 2 percent slopes
6615	Bazile silt loam, 2 to 6 percent slopes
4215	Blackloup loam, rarely flooded
4216	Blackloup loam, occasionally flooded
6608	Bazile loamy fine sand, 0 to 2 percent slopes

Bd	Blake silty clay loam, 0 to 2 percent slopes
BdC	Bazile loamy fine sand, 2 to 6 percent slopes
BdD	Bazile loamy fine sand, 6 to 11 percent slopes
Re	Blendon fine sandy loam 0 to 2 percent slopes
Re	Boel loamy fine sand, occasionally flooded
DC DoC	Plenden fine andy learn 2 to 6 percent along
Dec	Biendon nine sandy loan, 2 to 6 percent slopes
_	Blown-out land-Valentine complex, 6 to 60
Bg	percent slopes
Bg	Blyburg silt loam, rarely flooded
Bm	Boel loamy fine sand, 0 to 2 percent slopes
Bn	Boel fine sandy loam, 0 to 2 percent slopes
Bn	Bazile loam, 0 to 2 percent slopes
BnC	Bazile loam, 2 to 6 percent slopes
BnD	Bazile loam, 6 to 11 percent slopes
	Boel silty clay loam overwash 0 to 2 percent
Bo	slones
BoD	Boyd silty clay, 6 to 11 percent slopes
DOD	boyd sitty day; o to i i percent slopes
BoD2	Betts clay loam, 6 to 11 percent slopes, eroded
BoE2	Betts clay loam 11 to 15 percent slopes eroded
BoE	Betts clay loam, 15 to 30 percent slopes, cloued
BoC	Betts clay loam, 10 to 50 percent slopes
DUG	Blanden fine andy learn 0 to 2 percent alonge
ър	Biendon line sandy loam, 0 to 2 percent slopes
Bn	Roel-Inavale complex channeled
BnB	Boolus loamy sand 0 to 3 percent slopes
Dr	Buburg silt loom 0 to 2 percent slopes
DI	Biyburg siit loan, 0 to 2 percent slopes
D.4	Blyburg silt loam, somewhat poorly drained, 0 to
Bri	2 percent slopes, rarely flooded
-	Blyburg silt loam, poorly drained, 0 to 2 percent
Br2	slope, occasionally flooded
	Brunswick-Tassel loamy sands, 3 to 11 percent
BrD	slopes
BrG	Bristow silty clay, 20 to 40 percent slopes
	Brocksburg fine sandy loam, 0 to 2 percent
Bs	slopes
Bs	Boel loamy fine sand, 0 to 2 percent slopes
	Boel loamy fine sand, poorly drained, 0 to 2
Bs2	percent slopes, occasionally flooded
BsB	Boelus loamy sand, 0 to 3 percent slopes
BsC	Boelus loamy sand, 3 to 6 percent slopes
BsD	Boelus loamy sand, 6 to 11 percent slopes
Bt	Brocksburg loam, 0 to 2 percent slopes
Bt	Brocksburg loam, 0 to 1 percent slopes
Bt	Boelus loamy sand 0 to 2 percent slopes
DI	Boolus learny sand, o to 2 percent slopes
BtB	percent slopes
BtC	Boelus loamy sand 2 to 6 percent slopes
BtD	Boolus loamy sand 6 to 11 percent slopes
טוט	Duenus luanty sanu, u tu i i percent slopes
BtF	percent slopes

7722	Blake silty clay loam, occasionally flooded
6609	Bazile loamy fine sand 2 to 6 percent slopes
6610	Bazile loamy fine sand, 6 to 11 percent slopes
6508	Blendon fine sandy loam 0 to 2 percent slopes
8420	Boel loamy fine sand occasionally flooded
6510	Blendon fine sandy loam 2 to 6 percent slopes
0010	Blown out land Valenting complex 0 to 60
1150	percent slopes
7765	Blyburg silt loam, rarely flooded
8/20	Boel loamy fine sand, occasionally flooded
2100	Boel fine sandy loam, occasionally flooded
6500	Bazile loam 0 to 2 percent slopes
6605	Bazile loam, 2 to 6 percent slopes
6606	Bazile loam, 2 to 0 percent slopes
0000	Bask silts alou loom sugrash seesionally
0400	Boel slity clay loam, overwash, occasionally
0422	Roud eithe day. 6 to 11 percent clance
3152	Boyd slity clay, 6 to 11 percent slopes
5/78	eroded
5470	Botta alay loom 11 to 15 percent alapsa
5475	eroded
5/76	Betts clay loam 15 to 30 percent slopes
5477	Betts clay loam, 30 to 60 percent slopes
6508	Blendon fine sandy loam 0 to 2 percent slopes
0000	Beel Incycle complex, channeled, frequently
9425	flooded
6640	Realize learny sand 0 to 2 percent slopes
7765	Buburg silt loom, receiv flooded
1105	Biyburg siit loam, rarely hooded
7765	Blyburg silt loam, rarely flooded
7765	Blyburg silt loam, rarely flooded
	Brunswick-Longpine loamy sands, 3 to 11
6664	percent slopes
3150	Bristow silty clay, 20 to 40 percent slopes
	Brocksburg fine sandy loam, 0 to 2 percent
3155	slopes
8420	Boel loamy fine sand, occasionally flooded
8420	Boel loamy fine sand. occasionally flooded
6640	Boelus loamy sand, 0 to 3 percent slopes
6641	Boelus loamy sand, 3 to 6 percent slopes
6642	Boelus loamy sand, 6 to 11 percent slopes
3156	Brocksburg loam, 0 to 2 percent slopes
3156	Brocksburg loam 0 to 2 percent slopes
6640	Boelus loamy sand 0 to 3 percent slopes
50.0	Boelus loamy sand gravelly substratum 0 to 2
6643	percent slopes
6641	Boelus loamy sand 3 to 6 percent slopes
6642	Boelus loamy sand, 6 to 11 percent slopes
5012	Brunswick-I ongoing fine sandy loams 11 to
6662	40 percent slopes

BuD BvG	Boelus-Meadin complex, 6 to 11 percent slopes Bristow silty clay, 30 to 60 percent slopes
סייים	Brunswick fine sandy loam, 6 to 11 percent
BwD BwG	Bristow silty clay, 20 to 40 percent slopes
BxE	Brunswick-Paka complex, 6 to 15 percent slopes
BxF	slopes
BxF By	Brunswick-Pivot complex, 9 to 30 percent slopes Butler silt loam, 0 to 2 percent slopes
BvF	Brunswick-Tassel fine sandy loams, 11 to 40 percent slopes
Cb	Cass fine sandy loam, 0 to 2 percent slopes
Cb	Cass loam, 0 to 2 percent slopes
CcB	Cass loam, channeled, 0 to 3 percent slopes
Ce	Cass fine sandy loam, 0 to 2 percent slopes
Co	Coleridge silt loam, 0 to 2 percent slopes
Ср	Coleridge silt loam, occasionally flooded
CrC2	Crofton silt loam, 2 to 6 percent slopes, eroded
CrD2	Crofton silt loam, 6 to 11 percent slopes, eroded
CrE2	eroded
CrE2	Crofton silt loam, 11 to 15 percent slopes, eroded
CrF	Crofton silt loam, 15 to 30 percent slopes
CrG	Crofton silt loam, 30 to 60 percent slopes
CsC2	Crofton-Nora complex, 2 to 6 percent slopes, eroded
CsD2	Crofton-Nora complex, 6 to 11 percent slopes, eroded
CsE2	Crofton-Nora complex, 11 to 15 percent slopes, eroded
CtD2	Crofton-Thurman complex, 6 to 11 percent slopes, eroded
CtE2	Crofton-Thurman complex, 11 to 15 percent slopes, eroded
CtF	Crofton-Thurman complex, 15 to 30 percent slopes
DdB	Duda loamy fine sand, 0 to 3 percent slopes
DdC	Duda loamy fine sand, 3 to 6 percent slopes
DuB	Dunday loamy fine sand, 0 to 3 percent slopes
DuB	Dunday loamy sand, 0 to 3 percent slopes
DuC	Dunday loamy fine sand, 3 to 6 percent slopes
DuC	Dunday loamy sand, 3 to 6 percent slopes
DuD	Dunday loamy fine sand, 6 to 11 percent slopes

	Boelus-Meadin complex, 6 to 11 percent
6648	slopes
3151	Bristow silty clay, 30 to 60 percent slopes
	Brunswick fine sandy loam, 6 to 11 percent
6659	slopes
3150	Bristow silty clay, 20 to 40 percent slopes
	Brunswick-Paka complex, 6 to 17 percent
6661	slopes
6663	Brunswick-Paka complex, 17 to 30 percent slopes
	Brunswick-Pivot complex, 11 to 30 percent
6665	slopes
3820	Butler silt loam, 0 to 1 percent slopes
	Brunswick-Longpine fine sandy loams, 11 to
6662	40 percent slopes
3521	Cass fine sandy loam, occasionally flooded
8435	Cass loam, rarely flooded
8437	Cass loam, channeled, frequently flooded
3710	Cass fine sandy loam, rarely flooded
6323	Coleridge silt loam, occasionally flooded
6323	Coleridge silt loam, occasionally flooded
6685	Crofton silt loam, 2 to 6 percent slopes, eroded
6697	Crofton silt loam, 6 to 11 percent slopes,
0007	Crotten eilt leem 11 te 17 nereent elenee
6673	eroded
0070	Crofton silt loam 11 to 17 percent slopes
6673	eroded
6680	Crofton silt loam, 17 to 30 percent slopes
6686	Crofton silt loam, 30 to 60 percent slopes
	Crofton-Nora complex, 2 to 6 percent slopes.
6693	eroded
	Crofton-Nora complex, 6 to 11 percent slopes,
6694	eroded
	Crofton-Nora complex, 11 to 17 percent
6789	slopes, eroded
	Crofton-Thurman complex, 6 to 11 percent
6672	slopes, eroded
0070	Crofton-Thurman complex, 11 to 17 percent
6670	slopes, eroded
0074	Crofton-Thurman complex, 17 to 30 percent
6671	siopes
4474	Duda loamy fine sand, 0 to 3 percent slopes
4475	Duda loamy fine sand, 3 to 6 percent slopes
4485	Dunday loamy fine sand, U to 3 percent slopes
4498	Dunday loamy sand 0 to 3 percent slopes
4488	Dunday loamy fine sand 3 to 6 percent slopes
4499	Dunday loamy sand 3 to 6 percent slopes
1100	Dunday loamy fine sand, 6 to 11 percent
4493	slopes

DxB	Dunday loamy fine sand, loamy substratum, 0 to 3 percent slopes
	Dunday-Duda loamy fine sands, 0 to 3 percent
DxB	slopes
DxB	Dunn loamy sand, 0 to 3 percent slopes
Eb	Els loamy sand, 0 to 2 percent slopes
Ef	Elsmere loamy fine sand, 0 to 2 percent slopes
EfB	Els-Ipage complex, 0 to 3 percent slopes
Eh	Elsmere fine sandy loam, 0 to 2 percent slopes
Em	Elsmere fine sandy loam, rarely flooded
Em	Elsmere loamy fine sand, 0 to 2 percent slopes
En	Elsmere loamy fine sand, clayey substratum, 0 to 2 percent slopes
Eo	Els fine sand, 0 to 2 percent slopes
Ep	Elsmere fine sandy loam, 0 to 2 percent slopes
Es	Elsmere loamy fine sand, 0 to 2 percent slopes
	Elsmere-Ipage loamy fine sands, 0 to 3 percent
EsB	slopes
Et	Eltree silt loam, 0 to 2 percent slopes
Et	Eltree silt loam, 0 to 2 percent slopes
EtC	Eltree silt loam, 2 to 6 percent slopes
	Elsmere-Selia loamy fine sands 0 to 2 percent
Eu	slopes
Fm	Fillmore silt loam. 0 to 2 percent slopes
Fm	Fillmore silt loam, 0 to 1 percent slopes
Ft	Fluvaguents, frequently flooded
	Eluvaquents sandy-Eluvaquents loamy
Ft	complex, 0 to 1 percent slopes
	Fluvaguents, sandy-Fluvaguents, loamy
Ft	complex, 0 to 1 percent slopes
Fu	Fluvaquents, silty, 0 to 2 percent slopes
Fu	Fluvaguents
GaG	Gavins silt loam, 30 to 60 percent slopes
Gb	Gannett loam, 0 to 2 percent slopes
Gb	Gibbon silt loam, occasionally flooded
Gf	Gannett loam, wet, 0 to 2 percent slopes
Gf	Gibbon silt loam, 0 to 2 percent slopes
•	Gibbon silt loam, poorly drained 0 to 2 percent
Gf2	slopes occasionally flooded
0.2	Gibbon silt loam poorly drained 0 to 2 percent
Gf2f	slopes frequently flooded
0121	Cibbon silt loam, very poorly drained 0 to 2
Gf3	nercent slopes, occasionally flooded
Go	Grigston silt loam 0 to 2 percent slopes
GP	Gravel nit
01	Grigston silt loam channeled 0 to 2 percent
GrB	slopes
Ha	Hall silt loam 0 to 2 percent slopes
Hd	Hobbs silt loam () to 2 percent slopes
He	Havnie silt loam 0 to 2 percent slopes

	Dunday loomy find cond, loomy substratum, 0
4496	to 3 percent slopes
1100	Dunday-Duda loamy fine sands 0 to 3 percent
4502	slopes
4512	Dunn loamy sand, 0 to 3 percent slopes
4533	Els loamy sand, 0 to 3 percent slopes
4553	Elsmere loamy fine sand, 0 to 3 percent slopes
4542	Els-Ipage complex, 0 to 3 percent slopes
4352	Elsmere fine sandy loam, rarely flooded
4352	Elsmere fine sandy loam, rarely flooded
4553	Elsmere loamy fine sand, 0 to 3 percent slopes
	Elsmere loamy fine sand, clayey substratum, 0
4557	to 3 percent slopes
4521	Els fine sand, 0 to 3 percent slopes
4352	Elsmere fine sandy loam, rarely flooded
4553	Elsmere loamy fine sand, 0 to 3 percent slopes
	Elsmere-Ipage loamy fine sands, 0 to 3
4560	percent slopes
2561	Eltree silt loam, 0 to 3 percent slopes
2561	Eltree silt loam, 0 to 3 percent slopes
2563	Eltree silt loam, 3 to 6 percent slopes
	Elsmere-Selia loamy fine sands, 0 to 3 percent
4562	slopes
3951	Fillmore silt loam, occasionally ponded
3952	Fillmore silt loam, frequently ponded
9900	Fluvaquents, frequently flooded
	Fluvaquents, sandy-Fluvaquents, loamy
9905	complex, frequently flooded
	Fluvaquents, sandy-Fluvaquents, loamy
9905	complex, frequently flooded
9900	Fluvaquents, frequently flooded
	Fluvaquents, sandy-Fluvaquents, loamy
9905	complex, frequently flooded
6/61	Gavins silt loam, 30 to 60 percent slopes
4576	Gannett loam, 0 to 1 percent slopes
8470	Gibbon silt loam, occasionally flooded
4579	Gannett Ioam, frequently ponded
8470	Gibbon silt loam, occasionally flooded
0470	Cibbon silt loom, coopsignally flooded
0470	Gibbon sin Ioani, occasionally hooded
8470	Gibbon silt loam, occasionally flooded
8470	Gibbon silt loam, occasionally flooded
1039	Grigston silt loam, occasionally flooded
9983	Gravel pit
6301	Aowa silt loam, channeled, frequently flooded
8840	Hall silt loam, 0 to 1 percent slopes
3561	Hobbs silt loam, occasionally flooded

7741 Haynie silt loam, occasionally flooded

Ho	Holt fine sandy loam, 0 to 2 percent slopes
Ho	Hord silt loam, 0 to 2 percent slopes
HoC	Holt fine sandy loam, 2 to 6 percent slopes
Hr	Hord silt loam, 0 to 2 percent slopes
	Holt-Tassel fine sandy loams, 3 to 6 percent
HtC	slopes
	Holt-Tassel fine sandy loams, 6 to 11 percent
HtD	slopes
la	Inavale fine sand, rarely flooded
la	Inavale sand, channeled
lb	Inavale fine sand, 0 to 2 percent slopes
ld	Inavale loamy fine sand, 0 to 2 percent slopes
le	Inavale loamy fine sand, rarely flooded
lf	Inavale fine sand, 0 to 2 percent slopes
	Inavale fine sand, somewhat poorly drained, 0 to
lf1	2 percent slopes, rarely flooded
lfB	Ipage sand, 0 to 3 percent slopes
lfD	Inavale fine sand, 3 to 11 percent slopes
	Inavale fine sand, channeled, 0 to 2 percent
lg	slopes
	Inavale fine sand, poorly drained, channeled, 0
lg2	to 2 percent slopes, frequently flooded
	Inavale fine sand, channeled, 0 to 3 percent
lgB	slopes
lgB	Ipage loamy sand, 0 to 3 percent slopes
lh	Inavale loamy fine sand, 0 to 2 percent slopes
	Inavale loamy fine sand, somewhat poorly
lh1	drained, 0 to 2 percent slopes, rarely flooded
lhB	Inavale loamy fine sand, 0 to 3 percent slopes
Im	Inavale fine sandy loam, 0 to 2 percent slopes
	Inavale fine sandy loam, somewhat poorly
lm1	drained, 0 to 2 percent slopes, rarely flooded
	Inavale fine sandy loam, poorly drained, 0 to 2
lm2	percent slopes, rarely flooded
	Inavale fine sandy loam, poorly drained, 0 to 2
Im2f	percent slopes, frequently flooded
In	Inavale fine sandy loam, rarely flooded
In	Inavale fine sandy loam, 0 to 2 percent slopes
	Aquolis
ІрВ	Ipage loamy fine sand, 0 to 3 percent slopes
ItB	Ipage-Tryon fine sands, 0 to 3 percent slopes
lv.	Inavale fine sand, channeled, frequently flooded
lw	Indewood loamy fine sand, rarely flooded
Ja	Jansen fine sandy loam. 0 to 2 percent slopes
Jn	Jansen Joam 0 to 2 percent slopes
JnC	Jansen Joam, 2 to 6 percent slopes
JnD	Jansen Joam, 6 to 11 percent slopes
JoB	Jansen-Meadin Joams 0 to 3 percent slopes
JsC	Jansen-Meadin Joams, 3 to 6 percent slopes
Jt	Josburg fine sandy loam, 0 to 2 percent slopes
Jw	Josburg loam, 0 to 2 percent slopes

3170	Holt fine sandy loam, 0 to 2 percent slopes
8869	Hord silt loam, 0 to 1 percent slopes
3171	Holt fine sandy loam, 2 to 6 percent slopes
8869	Hord silt loam, 0 to 1 percent slopes
	Holt-Longpine fine sandy loams, 2 to 6 percent
3172	slopes
	Holt-Longpine fine sandy loams, 6 to 11
3173	percent slopes
2330	Inavale fine sand, rarely flooded
2346	Inavale sand, channeled, frequently flooded
2330	Inavale fine sand, rarely flooded
2331	Inavale loamy fine sand, rarely flooded
2331	Inavale loamy fine sand, rarely flooded
2330	Inavale fine sand, rarely flooded
2330	Inavale fine sand, rarely flooded
4653	Ipage sand, 0 to 3 percent slopes
2325	Inavale fine sand, 3 to 11 percent slopes
2322	Inavale fine sand, channeled, frequently flooded
	Inavale fine sand, channeled, frequently
2322	flooded
	Inavale fine sand, channeled, frequently
2322	flooded
4650	Ipage loamy sand, 0 to 3 percent slopes
2331	Inavale loamy fine sand, rarely flooded
2331	Inavale loamy fine sand, rarely flooded
2110	Inavale loamy fine sand, occasionally flooded
2327	Inavale fine sandy loam, rarely flooded
2327	Inavale fine sandy loam, rarely flooded
2327	Inavale fine sandy loam, rarely flooded
2327	Inavale fine sandy loam, rarely flooded
2327	Inavale fine sandy loam, rarely flooded
2328	Inavale fine sandy loam, occasionally flooded
9970	Aquolls
4646	Ipage loamy fine sand, 0 to 3 percent slopes
4656	Ipage-Tryon fine sands, 0 to 3 percent slopes
	Inavale fine sand, channeled, frequently
2322	flooded
6457	Inglewood loamy fine sand, rarely flooded
3180	Jansen fine sandy loam, 0 to 2 percent slopes
3183	Jansen loam, 0 to 2 percent slopes
3184	Jansen loam, 2 to 6 percent slopes
3186	Jansen loam, 6 to 11 percent slopes
3192	Jansen-Meadin loams, 0 to 2 percent slopes
3193	Jansen-Meadin loams, 2 to 6 percent slopes
3205	Josburg fine sandy loam, 0 to 2 percent slopes
3206	Josburg loam, 0 to 2 percent slopes

Ke	Kezan silt loam, 0 to 2 percent slopes	3642
	Kezan silt loam, poorly drained, 0 to 2 percent	
Kef	slopes, frequently flooded	3642
Kn	Kezan silt loam, occasionally flooded	3642
KzB	Kezan silt loam, channeled, 0 to 2 percent slopes	3641
LaC	Labu silty clay, 2 to 6 percent slopes	3220
LaD	Labu silty clay, 6 to 11 percent slopes	3221
LaD	Labu silty clay, 6 to 11 percent slopes	3221
LaD	Labu silty clay, 6 to 11 percent slopes	3221
LbD	Labu silty clay, 6 to 11 percent slopes	3221
LcF	Labu-Sansarc silty clays, 11 to 30 percent slopes	3225
LcF	Labu-Sansarc complex, 11 to 30 percent slopes	3227
Ld	Lamo-Lute loams, 0 to 2 percent slopes	3523
LD	Sanitary landfill	9967
Le	Leshara silt loam, 0 to 2 percent slopes	6352
Lf	Lawet loam, drained, 0 to 2 percent slopes	6331
La	Lawet-Lute complex. 0 to 2 percent slopes	6345
-9 Ih	Lex-Lute loams 0 to 2 percent slopes	8509
<u> </u>	Longford ailty alow loom 2 to 6 percent along	0000
	eroded	3404
LIIOZ	Longford eilty clay loom. C to 11 noreant clance	5404
LhD2	eroded	4182
Lk	Loretto fine sandy loam, 0 to 2 percent slopes	6533
L kB	Libory loamy fine sand 0 to 3 percent slopes	4370
	Loretto fine sandy loam 2 to 6 percent slopes	6790
LKO	Libery Whiteleke learny fine conde. 0 to 2	0730
l m D	Libory-whitelake loarny line sands, 0 to 3	1071
	percent slopes	6700
	Lorento loani, 2 to 6 percent slopes	4000
LO	Loup line sandy loam, 0 to 2 percent slopes	4062
Lp	Loup fine sandy loam, 0 to 2 percent slopes	4662
Lp	Loup fine sandy loam, wet, 0 to 2 percent slopes	4669
Lr	Loup fine sandy loam, wet, 0 to 2 percent slopes	4669
Ls	Barney-Boel-Calamus complex, channeled	6320
LsC	Lynch silty clay, 2 to 6 percent slopes	3230
LsD	Lynch silty clay, 6 to 11 percent slopes	3231
LxC	Lynch silty clay, 2 to 6 percent slopes	3230
LxD	Lynch silty clay, 6 to 11 percent slopes	3231
LyD	Lynch-Bristow silty clays, 6 to 11 percent slopes	3233
LyF	Lynch-Bristow complex, 11 to 30 percent slopes	3232
LvF	Lynch-Bristow silty clavs. 11 to 30 percent slopes	3234
ĹzD	Lynch-Verdel complex, 6 to 11 percent slopes	3235
Ma	Marlake fine sandy loam 0 to 2 percent slopes	4683
Ma	Marlake loamy fine sand 0 to 1 percent slopes	4697
ivia	manake loarny line sand, o to i percent slopes	-1007
MaB	Manter loamy fine sand, 0 to 3 percent slopes	3178
MaC	Manter loamy fine sand, 3 to 6 percent slopes	3179

3642	Kezan silt loam, occasionally flooded
3642	Kezan silt loam, occasionally flooded
3642	Kezan silt loam, occasionally flooded
3641	Kezan silt loam, channeled, frequently flooded
3220	Labu silty clay, 2 to 6 percent slopes
3221	Labu silty clay, 6 to 11 percent slopes
3221	Labu silty clay, 6 to 11 percent slopes
3221	Labu silty clay, 6 to 11 percent slopes
3221	Labu silty clay, 6 to 11 percent slopes
	Labu-Sansarc silty clays, 11 to 30 percent
3225	slopes Labu-Sansarc complex, 11 to 30 percent
3227	slopes
3523	Lamo-Lute loams, 0 to 2 percent slopes
9967	Sanitary landfill
6352	Leshara silt loam, occasionally flooded
6331	Lawet loam, drained, rarely flooded
6345	Lawet-Lute complex, rarely flooded
8509	Lex-Lute loams, rarely flooded
	Longford silty clay loam, 3 to 7 percent slopes,
3404	eroded
4182	Longford silty clay loam, 7 to 11 percent slopes, eroded
6533	Loretto fine sandy loam, 0 to 2 percent slopes
4370	Libory loamy fine sand, 0 to 3 percent slopes
6790	Loretto fine sandy loam, 2 to 6 percent slopes
	Libory-Whitelake loamy fine sands, 0 to 3
4374	percent slopes
6792	Loretto loam, 2 to 6 percent slopes
4662	Loup fine sandy loam, 0 to 1 percent slopes
4662	Loup fine sandy loam, 0 to 1 percent slopes
4669	Loup fine sandy loam, frequently ponded
4669	Loup fine sandy loam, frequently ponded
6320	Barney-Boel-Calamus complex, channeled
3230	Lynch silty clay, 2 to 6 percent slopes
3231	Lynch silty clay, 6 to 11 percent slopes
3230	Lynch silty clay, 2 to 6 percent slopes
3231	Lynch silty clay, 6 to 11 percent slopes
3233	Lynch-Bristow silty clays, 6 to 11 percent
0200	l vnch-Bristow complex 11 to 30 percent
3232	slopes
2224	Lynch-Bristow silty clays, 11 to 30 percent
3234 2225	Supes
0200 1600	Lynch-verder complex, 6 to 11 percent slopes
4003	Marlake line sandy loam, frequently ponded
400/	wanake loanty line sand, frequently ponded
3178	Holt variant loamy fine sand, 0 to 3 percent slopes
	Holt variant loamy fine sand, 3 to 6 percent
3179	slopes

MaG	Mariaville-Paka loams, 15 to 40 percent slopes
	Mariaville very fine sandy loam, 3 to 30 percent
MbF	slopes
MeB	Meadin sandy loam, 0 to 3 percent slopes
MeB	Meadin sandy loam, 0 to 3 percent slopes
MeE	Meadin sandy loam, 3 to 17 percent slopes
MeF	Meadin sandy loam, 3 to 30 percent slopes
MfB	Meadin loam, 0 to 3 percent slopes
MfC	Manter fine sandy loam, 2 to 6 percent slopes
MgF	Meadin-O'Neill complex, 3 to 30 percent slopes
Mk	Meckling loamy fine sand, occasionally flooded
MkG	Mariaville-Keota silt loams, 15 to 60 percent
Mm	Marlake loamy fine sand 0 to 1 percent slopes
Mm	Mondy loam 0 to 2 percent slopes
MmC	Moody loam, 2 to 6 percent slopes
WIIIO	Moodin grouply condy loom 2 to 20 percent
MnF	slopes
Мо	Moody silty clay loam, 0 to 2 percent slopes
MoC	Moody silty clay loam, 2 to 6 percent slopes
МрВ	McKelvie loamy fine sand, 0 to 3 percent slopes
Mu	Munjor fine sandy loam, 0 to 2 percent slopes
M-W	Miscellaneous water, sewage lagoons
Nb	Nimbro silt loam, 0 to 2 percent slopes
No	Nora silt loam, 0 to 2 percent slopes
NoC	Nora silt loam, 2 to 6 percent slopes
NoC	Nora silty clay loam, 2 to 6 percent slopes
NOD	Nora silt loam, 6 to 11 percent slopes
NOD	Nora silty clay loam, 6 to 11 percent slopes
NOE	Nora silty clay loam, 11 to 15 percent slopes
INW Oo	Norway loamy fine sand, frequently flooded
Oa OaD	Onawa silty clay, 0 to 2 percent slopes
Оар	O hell loamy line sand, 0 to 3 percent slopes
du	Obert silt loan, wet, 0 to 2 percent slopes
Obf	Obert slit loam, very poorly drained, 0 to 2
	Obert silt loam, occasionally flooded
00	Opawa silty clay, 0 to 2 percent slopes
Ou	Onawa silty clay, 0 to 2 percent slopes
Od2	slopes, rarely flooded
OdB	O'Neill loamy sand, 0 to 3 percent slopes
Oe	O'Neill fine sandy loam, 0 to 2 percent slopes
Oe	O'Neill sandy loam, 0 to 2 percent slopes
OeC	O'Neill fine sandy loam, 2 to 6 percent slopes
OeC	O'Neill sandy loam, 2 to 6 percent slopes
OeD	O'Neill fine sandy loam, 6 to 9 percent slopes
Of	O'Neill loam, 0 to 2 percent slopes
Of	Ord fine sandy loam, occasionally flooded

3240	Mariaville-Paka loams, 11 to 40 percent slopes
	Mariaville very fine sandy loam, 2 to 30
3238	percent slopes
3252	Meadin sandy loam, 0 to 2 percent slopes
3252	Meadin sandy loam, 0 to 2 percent slopes
3254	Meadin sandy loam, 2 to 20 percent slopes
3255	Meadin sandy loam, 2 to 30 percent slopes
3245	Meadin loam, 0 to 2 percent slopes
	Holt variant fine sandy loam, 3 to 6 percent
3177	slopes
	Meadin-O'Neill complex, 2 to 30 percent
3259	slopes
6357	Meckling loamy fine sand, occasionally flooded
	Mariaville-Keota silt loams, 11 to 60 percent
3239	slopes
4687	Marlake loamy fine sand, frequently ponded
6804	Moody loam, 0 to 2 percent slopes
6805	Moody loam, 2 to 6 percent slopes
	Meadin gravelly sandy loam, 2 to 30 percent
3244	slopes
6808	Moody silty clay loam, 0 to 2 percent slopes
6811	Moody silty clay loam, 2 to 6 percent slopes
4700	McKelvie loamy fine sand, 0 to 3 percent
4700	siopes
2360	Munjor fine sandy loam, rarely flooded
9986	Miscellaneous water, sewage lagoon
3105	Nimbro silt loam, 0 to 2 percent slopes
6746	Nora silt loam, 0 to 2 percent slopes
6753	Nora silt loam, 2 to 6 percent slopes
6765	Nora silty clay loam, 2 to 6 percent slopes
6755	Nora silt loam, 6 to 11 percent slopes
6/6/	Nora silty clay loam, 6 to 11 percent slopes
6758	Nora silty clay loam, 11 to 17 percent slopes
6358	Norway loamy fine sand, frequently flooded
7880	Onawa silty clay, occasionally flooded
3265	O'Neill loamy fine sand, 0 to 2 percent slopes
6366	Obert silt loam, occasionally flooded
6366	Obert silt loam, occasionally flooded
6366	Obert silt loam, occasionally flooded
7883	Onawa silty clay, rarely flooded
1000	chana only olay, raioly hoodod
7883	Onawa silty clay, rarely flooded
3266	O'Neill loamy sand, 0 to 2 percent slopes
3260	O'Neill fine sandy loam, 0 to 2 percent slopes
3267	O'Neill sandy loam, 0 to 2 percent slopes
3261	O'Neill fine sandy loam, 2 to 6 percent slopes
3268	O'Neill sandy loam, 2 to 6 percent slopes
3263	O'Neill fine sandy loam, 6 to 11 percent slopes
3264	O'Neill loam, 0 to 2 percent slopes
10.11	

4241 Ord fine sandy loam, occasionally flooded

	O'Neill-Meadin fine sandy loams, 3 to 9 percent
OfD	slopes
Og	Ord fine sandy loam, 0 to 2 percent slopes
Oh	Ord loam, 0 to 2 percent slopes
Oh2	Ord loam, poorly drained, 0 to 2 percent slopes, occasionally flooded
	O'Neill-Meadin fine sandy loams, 0 to 3 percent
OhB	slopes
Ok	Ord loam, occasionally flooded
OkD	O'Neill-Valentine complex, 1 to 9 percent slopes
OmC	O'Neill-Meadin fine sandy loams, 2 to 6 percent slopes
OmD	O'Neill-Meadin fine sandy loams, 6 to 11 percent slopes
omb	O'Neill-Meadin fine sandy loams 11 to 30
OmF	percent slopes
On	Onita silt loam 0 to 2 percent slopes
On	Onita silt loam 0 to 1 percent slopes
On	Onawa silty clay, rarely flooded
On	Ord fine sandy loam 0 to 2 percent slopes
Or	Ord fine sandy loam, 0 to 2 percent slopes
Or	Ord loam 0 to 2 percent slopes
01	Ord-Loup fine sandy loams 0 to 2 percent
Or	slopes
Or	Ortello fine sandy loam 0 to 2 percent slopes
OrC	Ortello fine sandy loam, 2 to 6 percent slopes
Os	Ord-Lute fine sandy loams 0 to 2 percent slopes
Ou	Orwet loam 0 to 2 percent slopes
0w	Orwet loam, rarely flooded
PaC	Paka fine sandy loam 2 to 6 percent slopes
Pf	Paka fine sandy loam, 2 to 2 percent slopes
Pa	Paka fine sandy loam, 0 to 2 percent slopes
PaC	Paka fine sandy loam, 2 to 6 percent slopes
Ph	Paka loam 0 to 2 percent slopes
Dh	Paka loam, 0 to 1 percent slopes
DhR	Paka loam, 1 to 3 percent slopes
	Paka loam, 2 to 6 percent slopes
DhD	Paka loam, 6 to 11 percent slopes
	Paka loam, 6 to 11 percent slopes
	Paka loam, 6 to 11 percent slopes, eroded
	Paka loani, 11 to 15 percent slopes
	Pils, Saliu aliu ylavel Daka Mariavilla Jaama 2 ta 6 paraant alanaa
	Paka-Mariaville Joams, 3 to 6 percent slopes
	Paka-Manaville loams, 11 to 30 percent slopes
POC	Promise slity clay, 2 to 6 percent slopes
Pt	Percival silty clay, 0 to 2 percent slopes
PtB	Pivot loamy sand, 0 to 3 percent slopes
PtC	Pivot loamy sand, 3 to 9 percent slopes
Pv	Percival silty clay, rarely flooded
PvD	Pivot-Valentine complex, 0 to 9 percent slopes
RaB	Ree loam, 1 to 3 percent slopes

3070	O'Neill-Meadin fine sandy loams, 2 to 11
12/1	Ord fine sandy loam, occasionally flooded
4241	Ord line saidy loan, occasionally hooded
4244	Ord loan, occasionally hooded
4244	Ord loam, occasionally flooded
	O'Neill-Meadin fine sandy loams, 0 to 2
3269	percent slopes
4244	Ord loam, occasionally flooded
	O'Neill-Valentine complex, 2 to 11 percent
3277	slopes
	O'Neill-Meadin fine sandy loams, 2 to 6
3271	percent slopes
	O'Neill-Meadin fine sandy loams, 6 to 11
3273	percent slopes
	O'Neill-Meadin fine sandy loams, 11 to 30
3270	percent slopes
5220	Onita silt loam, 0 to 1 percent slopes
5220	Onita silt loam, 0 to 1 percent slopes
7883	Onawa silty clay, rarely flooded
4240	Ord fine sandy loam, rarely flooded
4241	Ord fine sandy loam, occasionally flooded
4243	Ord loam, rarely flooded
	Ord-Loup fine sandy loams 0 to 1 percent
4248	slopes
6578	Ortello fine sandy loam, 0 to 1 percent slopes
6845	Ortello fine sandy loam, 3 to 6 percent slopes
4249	Ord-Lute fine sandy loams, rarely flooded
6369	Orwet loam, rarely flooded
6369	Orwet loam, rarely flooded
3284	Paka fine sandy loam, 2 to 6 percent slopes
3283	Paka fine sandy loam 0 to 2 percent slopes
3283	Paka fine sandy loam 0 to 2 percent slopes
3284	Paka fine sandy loam, 2 to 6 percent slopes
3285	Paka loam 0 to 2 percent slopes
3285	Paka loam 0 to 2 percent slopes
3285	Paka loam 0 to 2 percent slopes
3286	Paka loam, 2 to 6 percent slopes
3287	Paka loam, 6 to 11 percent slopes eroded
3287	Paka loam, 6 to 11 percent slopes, eroded
3290	Paka loam, 11 to 20 percent slopes
9983	Gravel nit
3201	Paka-Mariaville loams 2 to 6 percent slopes
3207	Paka-Mariaville loams, 11 to 30 percent slopes
3292	Promise silty clay, 2 to 6 percent slopes
7804	Parcival silty clay, z to o percent slopes
/721	Pivot loamy sand 0 to 3 percent clopes
+121 1700	Pivot loamy sand 3 to 0 percent clopes
7801	Pareival silty clay, rarely flooded
1004 1700	Pivot Valentine complex. 0 to 0 percent classes
4123	Proviewalentine complex, 0 to 9 percent slopes
3290	Ree loam, u to 2 percent slopes

RaC	Ree silt loam, 2 to 6 percent slopes
RaD	Ree silt loam, 6 to 11 percent slopes
RaE	Ree silt loam, 11 to 15 percent slopes
	Ree loam, clayey substratum, 0 to 2 percent
Rb	slopes
RdD	Redstoe silt loam, 6 to 11 percent slopes
ReC	Reliance silt loam, 2 to 6 percent slopes
ReD	Reliance silt loam, 6 to 11 percent slopes
RfC	Reliance silty clay loam, 2 to 6 percent slopes
	Redstoe-Gavins complex, 11 to 30 percent
RgF	slopes
	Ronson-Anselmo fine sandy loams, 6 to 9
RoD	percent slopes
	Ronson-Anselmo fine sandy loams, 9 to 30
RoF	percent slopes
	Ronson-Tassel fine sandy loams, 0 to 3 percent
RtB	slopes
Rw	Riverwash
SaG	Sansarc silty clay, 20 to 40 percent slopes
SaG	Sansarc silty clay, 30 to 60 percent slopes
Sc	Scott silt loam, 0 to 1 percent slopes
	Schamber gravelly sandy loam, 11 to 30 percent
ScF	slopes
	Condek loom wine cond. 2 to 0 nercent clones
50D	Sardak loamy line sand, 2 to 9 percent slopes
Se	Shell silt loam, occasionally llooded
Sn	Shell slit loam, 0 to 2 percent slopes
0.64	Shell silt loam, somewhat poorly drained, 0 to 2
201	Simple loomy cond. 0 to 2 percent closes
SKB	Simeon loamy sand, 0 to 3 percent slopes
SKB	Simeon sand, 0 to 3 percent slopes
Sm	Simeon loamy sand, 0 to 2 percent slopes
SmB	Simeon loamy sand, 0 to 3 percent slopes
SmD	Simeon-Meadin complex 0 to 9 percent slopes
Onie	Simeon-Manter-Ronson complex, 6 to 17
SmF	percent slopes
So	Solomon silty clay, rarely flooded
SsF2	Simeon sand 6 to 30 percent slopes eroded
StC	Simeon loamy sand 0 to 6 percent slopes
SuC	Simeon sandy loam 0 to 6 percent slopes
ouo	Simoon Valenting learny sands, 0 to 6 percent
SuC	sineon-valentine loanty sands, 0 to 6 percent
ouo	Simeon-Thurman complex, 6 to 30 percent
SvF	slopes
011	Simeon-Valentine complex 3 to 30 percent
SvF2	slopes. eroded
<b>.</b>	Simeon-Valentine fine sands 6 to 17 percent
SvF2	slopes, eroded
	Simeon-Valentine sands, 9 to 60 percent slopes
SvG2	eroded

3301	Ree silt loam, 2 to 6 percent slopes
3302	Ree silt loam, 6 to 11 percent slopes
3300	Ree silt loam, 11 to 20 percent slopes
	Ree loam, clayey substratum, 0 to 2 percent
3299	slopes
6828	Redstoe silt loam, 6 to 11 percent slopes
3305	Reliance silt loam, 2 to 6 percent slopes
3306	Reliance silt loam, 6 to 11 percent slopes
3307	Reliance silty clay loam, 2 to 6 percent slopes
	Redstoe-Gavins complex, 11 to 30 percent
6829	slopes
0044	Ronson-Anselmo fine sandy loams, 6 to 11
3311	percent slopes
2240	Ronson-Anselmo fine sandy loams, 6 to 30
3312	percent slopes
2242	Ronson-Longpine fine sandy loams, 0 to 2
0010	percent slopes
3010	Riverwash Sanaara siltu alay 20 ta 40 paraant alapaa
3320 2221	Sansarc silty clay, 20 to 40 percent slopes
2010	South sill loom froquently pended
3910	Schember grouelly apply loam 0 to 20
5252	nercent slopes
0202	Sardak loamy fine sand 2 to 11 percent
6550	slopes very rare flooding
6385	Shell silt loam occasionally flooded
6385	Shell silt loam, occasionally flooded
6385	Shell silt loam, occasionally flooded
8925	Simeon loamy sand, 0 to 3 percent slopes
8929	Simeon sand, 0 to 3 percent slopes
8925	Simeon loamy sand, 0 to 3 percent slopes
8925	Simeon loamy sand, 0 to 3 percent slopes
	Simeon-Meadin complex, 0 to 9 percent
8936	slopes
~~~-	Simeon-Holt variant-Ronson complex, 6 to 17
8935	percent slopes
3926	Solomon silty clay, rarely flooded
8931	Simeon sand, 6 to 30 percent slopes, eroded
8926	Simeon loamy sand, 0 to 6 percent slopes
8933	Simeon sandy loam, 0 to 6 percent slopes
9046	Simeon-Valentine loamy sands, 0 to 6 percent
0940	Siopes
8038	Simeon-Thurman complex, 6 to 30 percent
0330	Simeen Valenting complex, 2 to 20 percent
8940	simeon-valentine complex, 3 to 30 percent
0040	Simpon-Valenting fine sands 6 to 17 percent
8943	slopes, eroded
50.0	Simeon-Valentine sands 11 to 60 percent
8947	slopes, eroded

Sw	Solomon silty clay, 0 to 2 percent slopes	36
SwB	slopes	89
TaF	Tassel loamy fine sand, 3 to 30 percent slopes	32
TdE	Tassel-Duda complex, 3 to 15 percent slopes	32
TdG	percent slopes	47
Те	Trent silt loam, 0 to 2 percent slopes	65
TfB	Thurman fine sand, 0 to 3 percent slopes	67
TfC	Thurman fine sand, 3 to 6 percent slopes	67
ThB	Thurman loamy fine sand, 0 to 3 percent slopes	67
ThC	Thurman loamy fine sand, 3 to 6 percent slopes	67
Tn	Tryon loamy fine sand, 0 to 2 percent slopes	47
То	Tryon loamy fine sand, 0 to 2 percent slopes	47
То	Tryon loamy fine sand, wet, 0 to 2 percent slopes	47
ТоВ	Thurman fine sandy loam, 0 to 3 percent slopes	65
ToD	Thurman fine sandy loam, 3 to 11 percent slopes	67
т.г	Thurman fine sandy loam, 11 to 30 percent	~
	slopes	67
тр ТрВ	Tryon loamy line sand, wet, 0 to 2 percent slopes	4
тры тг	Trent silt loam 0 to 2 percent slopes	41
11	Trent sit toarii, 0 to 2 percent slopes	0
TrG	slopes	32
Ts	Almeria-Calamus complex, channeled	42
Tu	Tuthill fine sandy loam, 0 to 2 percent slopes	3′
	Trent silt loam, moderately wet, 0 to 2 percent	
Тx	slopes	65
UbF	Urban land, 3 to 30 percent slopes	97
VaB	Valentine fine sand, 0 to 3 percent slopes	47
VaD	Valentine fine sand, 3 to 9 percent slopes	47
VaE	Valentine fine sand, 6 to 17 percent slopes	47
VaE	Valentine fine sand, 9 to 24 percent slopes	47
VaE	Valentine fine sand, rolling	48
Va⊦	Valentine fine sand, rolling	48
VaG	Valentine fine sand, hilly	48
VaG	Valentine fine sand, Rolling, and Hilly	48
vaG	valentine fine sand, rolling and hilly	48
VbB	Valentine loamy fine sand, 0 to 3 percent slopes	48
VbB	Valentine loamy sand, 0 to 3 percent slopes	48
VbD	Valentine loamy fine sand, 3 to 9 percent slopes	48

0047	
3617	Solomon silty clay, occasionally flooded
	Simeon-Valentine loamy sands, 0 to 3 percent
8945	slopes
	Longpine loamy fine sand, 3 to 30 percent
3213	slopes
	Longpine-Duda complex, 3 to 15 percent
3214	slopes
	McKelvie-Longpine-Ronson complex, 17 to 70
4706	percent slopes
6575	Trent silt loam, 0 to 2 percent slopes
6723	Thurman fine sand, 0 to 2 percent slopes
6724	Thurman fine sand, 2 to 6 percent slopes
	Thurman loamy fine sand, 0 to 2 percent
6700	slopes
	Thurman loamy fine sand, 2 to 6 percent
6703	slopes
4746	Tryon loamy fine sand, 0 to 3 percent slopes
4746	Tryon loamy fine sand, 0 to 3 percent slopes
4751	Tryon loamy fine sand, frequently ponded
	Thurman fine sandy loam, 0 to 2 percent
6561	slopes
	Thurman fine sandy loam, 2 to 11 percent
6727	slopes
	Thurman fine sandy loam, 11 to 30 percent
6726	slopes
4751	Tryon loamy fine sand, frequently ponded
4756	Tryon-Els loamy sands, 0 to 3 percent slopes
6575	Trent silt loam, 0 to 2 percent slopes
	Longpine-Ronson-Duda complex, 15 to 70
3215	percent slopes
	Almeria-Calamus complex, channeled,
4210	frequently flooded
	Hennings fine sandy loam, 0 to 3 percent
3167	slopes
	Trent silt loam, moderately wet, 0 to 2 percent
6576	slopes
9707	Urban land, 3 to 30 percent slopes
4781	Valentine fine sand, 0 to 3 percent slopes
4791	Valentine fine sand, 3 to 9 percent slopes
4794	Valentine fine sand, 9 to 17 percent slopes
4796	Valentine fine sand 9 to 24 percent slopes
4807	Valentine fine sand, rolling
4807	Valentine fine sand, rolling
4800	Valentine fine sand, follow
4000	Valentine fine sand, filling and hilly
4010	Valentine fine sand, rolling and hilly
4010	
1014	valentine loamy fine sand, 0 to 3 percent
4014	Slopes
4838	valentine loamy sand, 0 to 3 percent slopes
4040	Valentine loamy fine sand, 3 to 9 percent
4818	siopes

VbD	Valentine loamy fine sand, gently rolling
VcF	Valentine-Tassel complex, rolling
	Valentine-Wewela loamy fine sands, 3 to 6
VdC	percent slopes
	Valentine-Boelus fine sands, 0 to 9 percent
VdD	slopes
	Valentine-Wewela loamv fine sands, 6 to 30
VdF	percent slopes
Ve	Verdel silty clay loam, 0 to 1 percent slopes
Ve	Verdel silty clay, 0 to 2 percent slopes
	Verdel silty clay, somewhat poorly drained, 0 to 2
Ve1	percent slopes
	Verdel silty clay, poorly drained, 0 to 2 percent
Ve2	slopes
VeB	Verdel silty clay loam, 1 to 3 percent slopes
	Valentine-Dunday loamy fine sands 0 to 3
VeB	percent slopes
VeC	Verdel silty clay loam, 3 to 6 percent slopes
VeC	Verdel silty clay, 2 to 6 percent slopes
VeD	Verdel silty clay, 6 to 11 percent slopes
	Valentine-Dunday loamy fine sands 3 to 9
VeD	percent slopes
102	poroditi diopod
VfC	Verdigre fine sandy loam, 2 to 6 percent slopes
VfD	Verdigre fine sandy loam, 6 to 11 percent slopes
VfD	Valentine-Els fine sands, 0 to 9 percent slopes
	Verdiare fine sandy loam 11 to 30 percent
VfF	slopes
VaC	Verdiare loam, 2 to 6 percent slopes
VaD	Verdigre loam, 6 to 11 percent slopes
VaF	Verdigre loam, 11 to 30 percent slopes
VmD	Valentine-Els complex 0 to 9 percent slopes
Vo	Vetal fine sandy loam 0 to 2 percent slopes
VoB	Vetal loam 1 to 3 percent slopes
Vr	Verdel silty clay 0 to 2 percent slopes
VsD	Valentine-Simeon sands 3 to 9 percent slopes
VOD	Valentine-Simeon sands, 9 to 30 percent slopes
VsF2	eroded
Vt	Vetal loam 0 to 1 percent slopes
VtR	Vetal loam, 1 to 3 percent slopes
VtC	Vetal loam, 3 to 6 percent slopes
VIO	Velentine Truen fine conde 0 to 17 percent
\/+⊏	slopes
VIL	Velentine Wewele complex. 2 to 0 percent
	valentine-weweia complex, 3 to 9 percent
	Verdel silty clay loam. A to 2 percent slopes
V A \//	Water
WaR	Wewela fine sandy loam. 0 to 3 percent slopes
**ED	we we la fine sandy loan, 0 to 5 percent slopes
WeC	Wewela fine sandy loam, 3 to 6 percent slopes
Ws	Wewela fine sandy loam, 0 to 2 percent slopes

4827	Valentine loamy fine sand, gently rolling
4884	Valentine-Longpine complex, rolling
	Valentine-Wewela loamy fine sands, 3 to 6
4892	percent slopes
	Valentine-Boelus fine sands, 0 to 9 percent
4852	slopes
	Valentine-Wewela loamy fine sands, 6 to 30
4893	percent slopes
3325	Verdel silty clay loam, 0 to 2 percent slopes
3327	Verdel silty clay, 0 to 2 percent slopes
3327	Verdel silty clay, 0 to 2 percent slopes
2227	Vardal ailty alove 0 to 2 paragent alongo
3321 2225	Verdel silty clay, 0 to 2 percent slopes
3320	Velocitica Durdey learny fine conde. O to 2
1971	valentine-Dunday loamy line sands, 0 to 3
3326	Verdel silty clay loam 2 to 6 percent slopes
3328	Verdel silty clay 2 to 6 percent slopes
3320	Verdel silty clay, 6 to 11 percent slopes
0020	Valentine-Dunday loamy fine sands 3 to 9
4857	percent slopes
1001	Verdigre fine sandy loam, 2 to 6 percent
3331	slopes
	Verdigre fine sandy loam, 6 to 11 percent
3332	slopes
4861	Valentine-Els fine sands, 0 to 9 percent slopes
	Verdigre fine sandy loam, 11 to 30 percent
3330	slopes
3335	Verdigre loam, 2 to 6 percent slopes
3336	Verdigre loam, 6 to 11 percent slopes
3337	Verdigre loam, 11 to 30 percent slopes
4858	Valentine-Els complex, 0 to 9 percent slopes
5281	Vetal fine sandy loam, 0 to 3 percent slopes
5286	Vetal loam, 1 to 3 percent slopes
3327	Verdel silty clay, 0 to 2 percent slopes
4881	Valentine-Simeon sands, 3 to 9 percent slopes
4000	Valentine-Simeon sands, 9 to 30 percent
4882	Siopes, eroded
5285	Vetal loam, 0 to 1 percent slopes
5200	Vetal loam, 7 to 5 percent slopes
5267	Velantino Truen fine conde 0 to 17 nercent
4888	slopes
4000	Valenting Wewels complex 2 to 9 percent
4891	slopes
3325	Verdel silty clay loam 0 to 2 percent slopes
9999	Water
3340	Wewela fine sandy loam, 0 to 2 percent slopes
-	·, ··· ·· ··· ··· - ··· ··· ···
3341	Wewela fine sandy loam, 2 to 6 percent slopes
3340	Wewela fine sandy loam, 0 to 2 percent slopes

WsC Wewela fine sandy loam, 2 to 6 percent slop	pes
-------------------------------------------------	-----

- Wt Wewela loam, 0 to 2 percent slopes
- zw Water, undifferentiated
- zwa Water > 40 acres

Wewela fine sandy loam, 2 to 6 percent slopes

3342 Wewela loam, 0 to 2 percent slopes

9999 Water

3341

9999 Water



Pete Ricketts Governor

# STATE OF NEBRASKA

DEPARTMENT OF NATURAL RESOURCES

Gordon W. "Jeff" Fassett, P.E. Director

IN REPLY TO:

August 1, 2016

Terry Julesgard, Manager Lower Niobrara NRD 410 Walnut Street P.O. Box 350 Butte, NE 68722-0350 Dear Mr. Julesgard:

Thank you for filing the Lower Niobrara NRD's amended Erosion and Sediment Control program. After review, the Nebraska Natural Resources Commission, on June 27, 2016, recommended approval.

My staff and I have also reviewed your district's program and I find it to be reasonable, attainable, and in conformance with the state Erosion and Sediment Control program. Therefore, in accordance with § 2-4605, I hereby approve the Lower Niobrara NRD's amended Erosion and Sediment Control program.

Please feel free to contact Kent Zimmerman from the Department's staff if you have any questions regarding these matters.

With best regards,

Gordon W. Fassett, P.E. Director