### RULE 8

# UPPER BIG BLUE NATURAL RESOURCES DISTRICT EROSION AND SEDIMENT CONTROL PROGRAM RULES AND REGULATIONS

Adopted by the Board of Directors – August 18, 2016

### RULE 8

### UPPER BIG BLUE NATURAL RESOURCES DISTRICT RULES AND REGULATIONS FOR IMPLEMENTING EROSION AND SEDIMENT CONTROL ACT

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#### **CHAPTER 1 - AUTHORITY**

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

#### **CHAPTER 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:
  - 01.01 reduce damages caused from wind erosion,
  - 01.02 reduce storm water runoff and the danger of flooding,
  - 01.03 reduce sediment damage to lands within the District,
  - 01.04 reduce non-point pollution from sedimentation and related pollutants
  - 01.05 preserve the value of land and its productive capability for present and future generations, and
  - 01.06 safeguard the health, safety and welfare of the District's citizens,

### **CHAPTER 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 Chapter 4, ¶ 09.02 through ¶ 09.05.

#### **CHAPTER 4 – DEFINITIONS**

- O1 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 Chapter 8.
- 02 Board means the Board of Directors of the Upper Big Blue Natural Resources District.

#### 03 Committee means -

the Water and Regulations Committee of the Upper Big Blue Natural Resources District.

### 04 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.

### 05 District means -

the Upper Big Blue Natural Resources District.

### 06 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.

### 07 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.

### 08 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.

### 09 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:

09.01 Activities related directly to the production of agricultural, horticultural or silvicultural crops, including, but not limited to, tilling, planting, or harvesting of such crops;

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- 09.02 Installation of aboveground public utility lines and connections, fence posts, sign posts, telephone poles, electric poles, and other kinds of posts or poles;
- 09.03 Emergency work to protect life or property; and
- 09.04 Activities related to the construction of housing, industrial, and commercial developments on sites under two acres in size; and
- 09.05 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.

### 10 Sediment damage means -

- 10.01 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;
- 10.02 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.
- 10.03 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.

#### 11 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:

- 11.01 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
- 11.02 ephemeral gully erosion which occurs in well-defined depressions or natural drainageways where concentrated overland flow results in the convergence of rills forming deeper and wider channels.

### 12 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.

#### **CHAPTER 5 - SOIL-LOSS TOLERANCE LEVEL**

O1 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 Chapter 10. The permitted soil-loss tolerance levels for particular lands may not exceed the T value noted in Appendix A.

#### **CHAPTER 6 – ADMINISTRATION**

- 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.
  - 01.01 Keep an accurate record of all complaints received, investigations made, and other official actions.
  - 01.02 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.
  - 01.03 Monitor compliance with all approved farm unit conservation plans, erosion and sediment control plans, and administrative orders issued by the Board.
- O2 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:
  - O2.01 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.
  - 02.02 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,
  - 02.03 At the direction of the Board, and in accordance with Chapter 13, ¶ 05 and Chapter 18, to commence any legal proceedings necessary to enforce these rules and regulations and any order issued pursuant to them.

#### **CHAPTER 7 – VIOLATION**

- 01 A violation of these rules and regulations exists if:
  - 01.01 sediment damage is occurring;
  - 01.02 average annual soil losses on the land which is the source of that sediment are exceeding the soil-loss tolerance level adopted in Chapter 5;
  - 01.03 the activity causing the soil loss is not an exempted non-agricultural land-disturbing activity (Chapter 4, ¶ 09.02 through ¶ 09.05) and
  - 01.04 the land which is the source of the damage is not in strict compliance with a conservation agreement approved by the District.

#### **CHAPTER 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:
  - 01.01 any owner or operator of land damaged by sediment,
  - 01.02 any authorized representative of a state agency or political subdivision whose roads or other public facilities are being damaged by sediment
  - 01.03 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
  - 01.04 any District staff member, or other person authorized by the Board to file complaints.
- O2 Complaints shall be made in writing and signed on a form provided by the Director of Department of Natural Resources.

### **CHAPTER 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.
- O2 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:
  - 03.01 the location and estimated acreage involved in the alleged violation;
  - 03.02 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
  - 03.03 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.

#### **CHAPTER 10 - DETERMINATION OF SOIL LOSS**

- O1 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.
  - 02.01 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.
  - O2.02 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.
  - O2.03 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.
  - 02.04 Soil losses from streambank erosion shall not be calculated and these rules and regulations are not applicable to this type of erosion.
  - 02.05 Application of the soil loss equation formulas will be made by someone

whose qualifications to make such determinations can be supported in court.

#### CHAPTER 11 - COMMITTEE AND BOARD ACTION ON COMPLAINT

- O1 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 Chapter 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:
- 02 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.
- O3 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.
- O4 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.
- 15 If the committee determines that a probable violation of these rules and regulations has occurred, it shall proceed in accordance with Chapter 12.

#### **CHAPTER 12 - NOTICE OF VIOLATION**

Of 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:

- O1.01 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.
- O1.02 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.
- O1.03 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 Chapter 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.

#### CHAPTER 13 - DEVELOPMENT AND APPROVAL OF PLAN FOR COMPLIANCE

- If the alleged violator contacts the District pursuant to Chapter 12, ¶ 01 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 ¶ 02 or ¶ 04 of this Chapter. 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.
- O2 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 approve 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 Chapter 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.

- O3 Strict conformance with a plan and agreement approved pursuant to this Chapter shall be deemed compliance with these rules and regulations for the lands which are subject to the agreement.
- 16 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 Chapter 12,¶ 02. For purposes of this, acceptable time period shall mean:
  - 04.01 90 days for alleged violations involving agricultural, horticultural, or silvicultural activities and
  - 04.02 15 days for alleged violations involving a non-agricultural land-disturbing activity.
- O5 Following refusal of a landowner to discontinuing an activity causing erosion which constitutes a violation in Chapter 7, and to establish a plan and schedule for eliminating excess erosion pursuant to this rule, 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.

#### **CHAPTER 14 – PRACTICES**

- O1 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 Chapter 15.
- O2 Soil and water conservation practices, applicable only to land used for agricultural, horticultural, or silvicultural purposes, may include:
  - 02.01 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.

- 02.02 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.
- O4 Erosion and sediment control practices, which are applicable to activities other than agricultural, horticultural, or silvicultural activities, may include:
  - 04.01 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;
  - 04.02 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
  - 04.03 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.

### **CHAPTER 15 - ADMINISTRATIVE ORDER**

01 If, after Board consideration of the complaint at a meeting or hearing for which the alleged violator has been given notice in accordance with Chapter 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:

- 01.01 the date of the order,
- 01.02 the identity of the source of the violation and its location;
- 01.03 the authority of the Board to issue such order;
- 01.04 the specific findings, including
  - 01.04.2 the estimated average annual soil loss and the extent to which erosion exceeds the applicable soil-loss tolerance level and.
  - 01.04.1 the nature of the sediment damage or water quality impairment resulting from such excessive erosion;
- of 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;
  - 02.01 any requirements concerning the operation, utilization, or maintenance of the alternative practices identified;
  - 02.02 the deadlines for commencing and completing work necessary to comply with this order.
  - O2.03 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
  - O2.04 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.
  - 02.05 the action to be taken by the Board if the violator does not comply.
- O3 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.

#### **CHAPTER 16 - COST-SHARE ASSISTANCE**

- O1 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.
- O2 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.

#### **CHAPTER 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.

#### **CHAPTER 18 - NON-COMPLIANCE**

- O1 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:
  - 01.01 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;
  - 01.02 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:
  - 01.03 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

01.04 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**

### HIGHLY ERODIBLE LAND REPORT

Survey Area: Adams County, Nebraska		100000000	Frozen actor =		HEL Classification  1 = HEL  2 = PHEL			
		RI	actor	150		2= PH 3= NH		
Symbol	Soil Map Unit Name	T *	I	K	Wind		Map Uni	
2An	Anselmo Pine Sandy Loam, Terrace, 0 to 1 Percent Slopes	5	86	0.2	3	3	3	
2AnA	Anselmo Fine Sandy Loam, Terrace, I to 3 Percent Slopes	5	86	0.2	3	3	3	
2Ap	Anselmo Loam, Terrace, 0 to 1 Percent Slopes	5	56	0.28	3	3	3	
2Cm	Cass Loam, Occasionally Flooded	5	56	0.28	3	3	3	
2Hb	Hobbs Silt Loam, Occasionally Flooded	5	48	0.32	3	3	3	
2Hd	Hord Silt Loam, Terrace, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
2HdA	Hord Silt Loam, Terrace, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
2Hs	Hastings Silt Loam, Thin Solum Variant	5	48	0.32	3	3	3	
2Ks	Kenesaw Silt Loam, Terrace, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
AED	Arents, Earthen Dam	0	0	0	2	2	2	
вР	Botrow Pit	0	0	0	2	2	2	
Bu	Butler Silt Loam	4	48	0.37	3	3	3	
Ву	Breaks-Alluvial Land Complex	5	48	0.32	3	2	2	
СРС	Coly Silt Loam, 7 to 11 Percent Slopes	5	86	0.43	3	1	1	
СРО	Coly Silt Loam, 11 to 31 Percent Slopes	5	86	0.43	3	1	ï	
Ce	Crete Silt Loam	4	48	0.37	3	3	3	
2m	Cass Loam	5	56	0.28	3	3	3	
Os	Cass Fine Sandy Loam	5	86	0.2	3	3	3	
<sup>2</sup> m	Fillmore Silt Loam	4	48	0.37	3	3	3	
GeB2	Geary Silty Clay Loam, 3 to 7 Percent Slopes, Broded	5	48	0.32	3	2	2	
GeC2	Geary Silty Clay Loam, 7 to 11 Percent Slopes, Eroded	5	48	0.32	3	2	2	
3P	Gravel Pit	0	0	0	2	2	2	
GsB	Geary Silt Loam, 3 to 7 Percent Slopes	5	48	0.32	3	2	2	
GsC	Geary Silt Loam, 7 to 11 Percent Slopes	5	48	0.32	3	2	2	
GsE	Geary Silt Loam, 11 to 31 Percent Slopes	5	48	0.32	3	1	1	
Ha	Hall Silt Loam	5	48	0.32	3	3	3	
ld.	Hord Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
	Holder Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
Hg Jaa	Holder Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
IgA	Holder Silt Loam, 3 to 7 Percent Slopes	5	48	0.32	3	2	2	
HgB Lance	Holder Silt Loam, 3 to 7 Percent Slopes, Eroded	5	48	0.32	3	2	2	
IgB2	Holder Silty Clay Loam, 3 to 7 Percent Slopes, Severely Eroded	5	38	0.32	3	2	2	
igB3 igC	Holder Sitt Lown, 7 to 11 Percent Slopes	5	48	0.32	3	2	2	
igC3	Holder Silty Clay Loam, 7 to 11 Percent Slopes, Severely Eroded	5	38	0.32	3	2	2	
igC3 ImB		5	86	0.34	3	2	2	
inds IR	Hersh Fine Sandy Loam, 3 to 7 Percent Stopes Hersh-Kenesaw Complex, Undulating	5	86	0.24	3	3	3	
ik Is		5	48	0.32	3	3	3	
is IsA	Hastings Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
	Hastings Silt Loam, I to 3 Percent Slopes	5		0.32	3	3		
Iv «	Hobbs Silt Loam Inavale Loamy Fine Sand	5	48 J34	0.32	1	3	3 1	
g n	Inavale Fine Sandy Loam	5	86	0.17	3	3	3	
n Nati	Aquolis	0	0	0.2	2	2	2	
NT -	And the state of t			100000	1 7 7 7 7 7			
Ls 	Kenesaw Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
CsA C=D	Kenesaw Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3			
SB	Kenesaw Silt Loam, 3 to 7 Percent Slopes Lex and Alda Soils	5	48 86	0.32 0.28	3	2	2	

<sup>\*</sup>T= tons per acre per year

#### HIGHLY ERODIBLE LAND REPORT

Survey Area: Adams County, Nebraska		CF	1990 Frozen Factors  C Factor = 0.3  R Factor = 150			HEL Classification 1 = HEL 2 = PHEL 3 = NHEL			
Symbol	Soil Map Unit Name	T*	1	K	Wind	Water	Map Unit		
M	Marsh	2	0	0.37	3	3	3		
Ms	Meadin Sandy Loam	3	86	0.2	1	3	1		
M-W	Miscellaneous Water (Sewage Lagoons)	0	0	0	2	2	2		
Pt	Platte Loam	3	86	0.28	1	3	1		
RB	Rough Broken Land, Locss	5	86	0.43	3	1	1		
Ru	Rusco Silt Loam	5	56	0.32	3	3	3		
Rw	Riverwash	5	0	0.17	3	3	3		
S	Spoil Banks	5	86	0.43	3	2	2		
Sc	Scott Silt Loam	3	48	0.37	3	3	3		
Sy	Silty Alfuvial Land	5	48	0.32	3	3	3		
TxB	Thurman-Valentine Loamy Fine Sands, Undulating	5	134	0.17	1	3	1		
VbC	Valentine Loamy Fine Sand, Rolling	5	134	0.17	1	2	1		
W	Water	0	0	0	2	2	2		

<sup>\*</sup>T= tons per acre per year

### HIGHLY ERODIBLE LAND REPORT

Survey	Area: Butler County, Nebraska	CF	Frozen actor =	Factors 0.15 150	HEL Classification 1 = HEL 2 = PHEL 3 = NHEL			
Symbol	Soil Map Unit Name	т*	I	ĸ	Wind	Water		
Af	Alda Fine Sandy Loam, 0 to 2 Percent Slopes	4	86	0.2	3	3	3	
Ва	Barney Loam, 0 to 2 Percent Slopes	2	86	0.28	3	3	3	
Bd	Blendon Fine Sandy Loam, 0 to 2 Percent Slopes	5	86	0.2	3	3	3	
BdC	Blendon Fine Sandy Loam, 2 to 6 Percent Slopes	5	86	0.2	3	3	3	
Bf	Blendon-Muir Complex, 0 to 2 Percent Slopes	5	86	0.2	3	3	3	
Bh	Boel Loam, 0 to 2 Percent Slopes	5	86	0.28	3	3	3	
Bn	Boel-Alda Complex, 0 to 2 Percent Slopes	5	86	0.28	3	3	3	
Br	Brocksburg Sandy Loam, 0 to 2 Percent Slopes	4	86	0.2	3	3	3	
BsD	Burchard Loam, 6 to 11 Percent Slopes	5	48	0.28	3	2	2	
BsE	Burchard Loam, 11 to 15 Percent Slopes	5	48	0.28	3	1	1	
BŒ2	Burchard-Steinauer Clay Loams, 11 to 15 Percent Slopes, Eroded	5	48	0.28	3	1	1	
Bu	Butler Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
CfG	Coly Silt Loam, 30 to 60 Percent Slopes	5	86	0.43	3	1	į	
CoB	Cozad Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
CrD2	Crofton Silt Loam, 6 to 11 Percent Slopes, Eroded	5	86	0.43	3	1	1	
CrE2	Crofton Silt Loam, 11 to 17 Percent Slopes, Eroded	5	86	0.43	3	1	1	
CrF2	Crofton Silt Loam, 17 to 30 Percent Slopes, Eroded	5	86	0.43	3	1	1	
ChG	Crofton Silt Loam, 30 to 60 Percent Slopes	5	86	0.43	3	1	1	
CaO Fin	Fillmore Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
Gb	Gibbon Silty Clay Loam, 0 to 2 Percent Slopes	5	86	0.32	3	3	3	
		5	48	0.32	3	3	3	
Gr Gr	Grigston Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
Ha Hic	Half Sift Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
	Hastings Sitt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
HcB u-c	Hastings Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	2	2	
HcC HcD	Hastings Sift Loam, 3 to 6 Percent Slopes	5	48	0.32	3	2	2	
	Hastings Sift Loam, 6 to 11 Percent Slopes	100.000	38	0.32	3	2	2	
HdC2	Hastings Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	5			3	2		
HdD2	Hastings Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	38	0.32	3	3	2	
Hg	Hobbs Silt Loam, 0 to 1 Percent Slopes	5	48	0.32			3	
HhB	Hobbs Silt Loam, Channeled, 0 to 2 Percent Slopes	5	48	0.32	3	3		
HkB	Holder Silt Loam, I to 3 Percent Slopes	5	48	0.32	3	3	3	
lvC	Inavale Loamy Sand, 2 to 6 Percent Slopes	5	134	0.17	3	3	3	
WC	Inavale-Boel Complex, 0 to 6 Percent Slopes	5	134	0.17	3	2	2	
luC 	Judson Silt Loam, 2 to 6 Percent Stopes	5	48	0.28	196504			
Kz	Kezan Silt Loam, 0 to 2 Percent Slopes	5	48	0.32	3	3	3	
La	Lamo Silty Clay Loam, 0 to 2 Percent Slopes	5	38	0.32	3	3	3 2	
LoC2	Longford Silty Clay Loam, 2 to 6 Percent Slopes, Eroded	5	48	0.32	3	2		
LoD2	Longford Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	48	0.32	3	2	2	
MnC	Monona Silt Loam, 2 to 6 Percent Slopes	5	48	0.32	3	2	2	
MinD2	Monona Silt Loam, 6 to 11 Percent Slopes, Eroded	5	48	0.32	3	2	2	
MnE	Monona Silt Loam, 11 to 17 Percent Slopes	5	48	0.32	3	1	1	
MnF	Monona Silt Loam, 17 to 30 Percent Slopes	5	48	0.32	3	1	1	
Mu	Muir Silt Loam, 0 to 1 Percent Siopes	5	48	0.32	3	3	3	
MuB	Muir Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
⊃b	Olbut-Butler Silt Loams, 0 to 1 Percent Slopes	5	48	0.37	3	. 3	3	
OvB	Ovina Loamy Fine Sand, 0 to 3 Percent Slopes	5	134	0.17	3	3	3	

\*T= tons per acre per year

### HIGHLY ERODIBLE LAND REPORT

Survey	urvey Area: Butler County, Nebraska		Frozen Factors Factor = 0.15 Factor = 150		HE	L Classi: l = HE 2 = PHi 3 = NH	L BL
Symbol	Soil Map Unit Name	T*	I	K	Wind	Water	Map Unit
OxC	Ovina-Thurman Complex, 0 to 6 Percent Slopes	5	134	0.17	3	3	3
PaC2	Pawnee Clay Loam, 3 to 6 Percent Slopes, Eroded	4	48	0.37	3	2	2
PaD2	Pawnee Clay Loam, 6 to 11 Percent Slopes, Eroded	4	48	0.37	3	1	1
Pg	Pits, Gravel	0	0	0	2	2	2
PoC2	Ponca Silty Clay Loam, 2 to 6 Percent Slopes, Eroded	5	48	0.32	3	2	2
PoD2	Ponca Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	48	0.32	3	2	2
PoE2	Ponca Silty Clay Loam, 11 to 17 Percent Slopes, Eroded	5	48	0.32	3	1	1
PsD2	Ponca-Crofton Complex, 6 to 11 Percent Slopes, Eroded	5	48	0.32	3	2	2
PsE2	Ponca-Crofton Complex, 11 to 17 Percent Slopes, Eroded	5	48	0.32	3	1	1
PsF2	Ponca-Crofton Complex, 17 to 30 Percent Slopes, Eroded	5	48	0.32	3	ì	1
Sa	Saltine-Gibbon Silt Loams, 0 to 1 Percent Slopes	5	56	0.32	3	3	3
Sc	Scott Silt Loam, 0 to 1 Percent Slopes	3	48	0.37	3	3	3
Sh	Sharpsburg Silty Clay Loam, 0 to 2 Percent Slopes	5	38	0.32	3	3	3
ShC	Sharpsburg Silty Clay Loam, 2 to 6 Percent Slopes	5	38	0.32	3	2	2
ShC2	Sharpsburg Silty Clay Loam, 2 to 6 Percent Slopes, Broded	5	38	0.32	3	2	2
ShD	Sharpsburg Silty Clay Loam, 6 to 11 Percent Slopes	5	38	0.32	3	2	2
ShD2	Sharpsburg Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	38	0.32	3	2	2
Sk	Silver Creek Complex, 0 to 2 Percent Slopes	3	48	0,32	3	3	3
SmB	Simeon Loamy Sand, 0 to 3 Percent Slopes	5	134	0.17	3	3	3
StD2	Steinauer Clay Loam, 6 to 11 Percent Slopes, Eroded	5	86	0.32	3	2	2
StF	Steinauer Clay Loam, 11 to 30 Percent Slopes	5	86	0.32	3	1	1
\$tG	Steinauer Clay Loam, 30 to 50 Percent Slopes	5	86	0.32	3	1	1
ThC	Thurman Loamy Fine Sand, 3 to 6 Percent Slopes	5	134	0.17	3	3	3
TkD	Thurman-Monona Complex, 6 to 11 Percent Slopes	5	134	0.17	3	2	2
UaF2	Uly Silt Loam, 11 to 15 Percent Slopes, Eroded	5	48	0.32	3	1	1
UbF	Uly-Coly Silt Loams, 15 to 30 Percent Slopes	5	48	0.32	3	1	1
UcF2	Uly-Coly Silt Loams, 15 to 25 Percent Slopes, Eroded	5	48	0.32	3	1	1
UhF2	Uly-Hobbs Silt Loams, 0 to 30 Percent Slopes, Eroded	5	48	0.32	3	2	2
UkC2	Uly Variant Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	5	38	0.37	3	2	2
w	Water	0	0	0	- 2	2	2
WoB	Wood River Silt Loam, 1 to 3 Percent Slopes	3	48	0.37	3	3	3
Zk	Zook Silt Loam, Overwash, 0 to 2 Percent Slopes	5	48	0.28	3	3	3
Zo	Zook Silty Clay Loam, 0 to 2 Percent Slopes	5	38	0.28	3	3	3
zwb	Water < 40 Acres	0	0	0	2	2	2

\*T= tons per acre per year

#### HIGHLY ERODIBLE LAND REPORT 1990 Frozen Factors HEL Classification Survey Area: Clay County, Nebraska C Factor = 0.252=PHEL 150 R Factor = 3 = NHELWater Map Unit Soil Map Unit Name T\* Wind Symbol K T Bu Butler Silt Loam, 0 to 1 Percent Slopes 4 48 0.37 3 3 Ca Cass Fine Sandy Loam, Overwash, 0 to 2 Percent Slopes 86 0.2 3 3 5 3 Cd Cass Silt Loam, 0 to 1 Percent Slopes 5 56 0.28 3 3 3 Ce Crete Sift Loam, 0 to 1 Percent Slopes 48 0.37 3 4 CeB Crete Silt Loam, 1 to 3 Percent Slopes 48 0.37 3 4 3 3 Crete Silt Loam, Thick Solum, 0 to 1 Percent Slopes 4 48 0.37 3 Cg 3 3 Fillmore Silt Loam, 0 to 1 Percent Slopes Fm 4 48 0.37 3 3 3 Fo Fillmore Silt Loam, Drained, 0 to 1 Percent Slopes 4 48 0.37 3 3 3 GaC Geary Silt Loam, 3 to 6 Percent Slopes 5 48 0.32 3 2 2 GaD 5 0.32 Geary Silt Loam, 6 to 11 Percent Slopes 48 3 2 GaF Geary-Hobbs Silt Loams, 0 to 30 Percent Slopes 5 48 0.32 3 2 2 5 48 0.32 GeC2 Geary Silty Clay Loam, 3 to 6 Percent Slopes, Eroded 3 2 5 48 0.32 GeD2 Geary Silty Clay Loam, 6 to 11 Percent Stopes, Eroded 3 2 2 48 GeE2 Geary Silty Clay Loam, 11 to 17 Percent Slopes, Eroded 5 0.32 3 1 1 Hall Silt Loam, 0 to 1 Percent Slopes 5 48 0.32 3 Ha 3 3 He Hastings Silt Loam, 0 to 1 Percent Slopes 5 48 0.32 3 3 3 5 48 0.32 HeB Hastings Silt Loam, 1 to 3 Percent Slopes 3 3 3 5 48 0.32 2 HcC Hastings Silt Loam, 3 to 6 Percent Slopes 3 2 HdC2 5 38 0.32 Hastings Silty Clay Loam, 3 to 6 Percent Slopes, Eroded 2 2 HdD2 5 38 0.32 Hastings Silty Clay Loam, 6 to 11 Percent Slopes, Eroded 3 2 2 He Hobbs Silt Loam, 0 to 2 Percent Slopes 5 48 0.32 3 3 Hf 48 Hobbs Sift Loam, Channeled 5 0.32 3 3 3 HgC Holder Silt Loam, 3 to 6 Percent Slopes 5 48 0.32 3 2 2 5 HgD Holder Silt Loam, 6 to 11 Percent Slopes 48 0.32 3 2 2 2 HhC2 Holder Silty Clay Loam, 3 to 6 Percent Slopes, Eroded 5 38 0.32 3 2 HhD2 Holder Silty Clay Loam, 6 to 11 Percent Slopes, Eroded 5 38 0.32 3 2 2 H Hord Silt Loam, 0 to 1 Percent Slopes 5 48 0.32 3 3 3 5 3 HrB Hord Silt Loam, 1 to 3 Percent Slopes 48 0.32 3 3 Ma Massie Silty Clay Loam, 0 to 1 Percent Slopes 3 0 0.37 3 3 3 MdF Meadin Sandy Loam, 3 to 30 Percent Slopes 3 86 0.2 3 2 2 Pt Pits, Gravel 0 0 0 2 2 2 Sc Scott Sift Loam, 0 to 1 Percent Slopes 3 48 0.37 3 3 3 UyE2 Uly Silt Loam, 11 to 17 Percent Slopes, Eroded 5 48 0.32 3 1 UyF Uly-Hobbs Silt Loams, 0 to 30 Percent Slopes 5 48 0.32 3 2 2

\*T= tons per acre per year

Water

Water < 40 Acres

zwb

NE - T.G. Notice 599 Section II NRCS-November 2008

0

0

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0

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2

#### HIGHLY ERODIBLE LAND REPORT

Survey	Area: Fillmore County, Nebraska	0.000	Frozen : actor =	Pactors 0.25	HEL Classification 1 = HEL 2 - PHEL			
		RF	actor=	150		3 = NH		
Symbol	Soil Map Unit Name	T*	1	K	Wind	Water	Map Unit	
Ви	Butler Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
Ву	Butler Silty Clay Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
Ce	Crete Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
СеВ	Crete Silt Loam, 1 to 3 Percent Slopes	4	48	0.37	3	3	3	
CeC	Crete Silt Loam, 3 to 6 Percent Slopes	4	48	0.37	3	2	2	
Cr	Crete Silty Clay Loam, 0 to 1 Percent Slopes	4	38	0.37	3	3	3	
CrB	Crete Silty Clay Loam, 1 to 3 Percent Slopes	4	38	0.37	3	3	3	
CrC2	Crete Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	4	38	0.37	3	2	2	
Ct	Crete Silt Loam, Thick Solum, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
Fan	Fillmore Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
Fo	Fillmore Silt Loam, Drained, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
GeC2	Geary Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	5	48	0.32	3	2	2	
GeD2	Geary Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	48	0.32	3	2	2	
GeE2	Geary Silty Clay Loam, 11 to 17 Percent Slopes, Eroded	5	48	0.32	3	1	1	
GhF	Geary-Hobbs Silt Loams, 0 to 30 Percent Slopes	5	48	0.32	3	2	2	
Ho	Hastings Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
НсВ	Hastings Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
HcC	Hastings Silt Loam, 3 to 6 Percent Slopes	5	48	0.32	3	2	2	
HcD	Hastings Silt Loam, 6 to 11 Percent Slopes	5	48	0.32	3	2	2	
HdC2	Hastings Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	5	38	0.32	3	2	2	
HdC3	Hastings Silty Clay Loam, 3 to 6 Percent Slopes, Severely Eroded	5	38	0.32	3	2	2	
HdD2	Hastings Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	38	0.32	3	2	2	
He	Hobbs Silt Loam, 0 to 2 Percent Slopes	5	48	0.32	3	3	3	
HE	Hobbs Sitt Loam, Channeled	5	48	0.32	3	3	3	
HhD2	Holder Silty Clay Loam, 6 to 11 Percent Stopes, Eroded	5	38	0.32	3	2	2	
Ke	Kezan Silt Loam, Channeled	5	48	0.32	3	3	3	
Ma	Massie Silty Clay Loam, 0 to 1 Percent Slopes	3	0	0.37	3	3	3	
Мu	Muir Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
MuB	Muir Silt Loam, I to 3 Percent Slopes	5	48	0.32	3	3	3	
MuC	Muir Silt Loam, 3 to 6 Percent Slopes	5	48	0.32	3	2	2	
Db	Olbui-Butler Silt Loams, 0 to 1 Percent Stopes	5	48	0.37	3	3	3	
Pt	Pits, Gravel	0	0	0	2	2	2	
Se	Scott Silt Loam, 0 to I Percent Slopes	3	48	0.37	3	3	3	
Sd	Scott Silty Clay Loam, Drained, 0 to 1 Percent Slopes	3	38	0.37	3	3	3	
JyE2	Uly Silt Loam, 11 to 17 Percent Slopes, Broded	5	48	0.32	3	1	1	
ЈуF	Uly-Hobbs Silt Loams, 0 to 30 Percent Slopes	5	48	0.32	3	2	2	
V.	Water	0	0	0	2	2	2	
awb	Water < 40 Acres	0	0	0	2	2	2	

<sup>\*</sup>T= tons per acre per year

### HIGHLY ERODIBLE LAND REPORT

Survey	Survey Area: Hamilton County, Nebraska		Frozen actor =	Factors 0.25 150	HEL Classification 1 - HEL 2 = PHEL 3 = NHEL			
Symbol	Soil Map Unit Name	T*	1	K	Wind	Water	Map Unit	
Ag	Alda Loam, 0 to 2 Percent Slopes	4	48	0.28	3	3	3	
Bu	Butter Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
CoD2	Coly Silt Loam, 6 to 11 Percent Slopes, Eroded	5	86	0.43	3	1	1	
CoF	Coly Silt Loam, 11 to 30 Percent Slopes	5	86	0.43	3	1	1	
CoG	Coly Silt Loam, 30 to 60 Percent Slopes	5	86	0.43	3	1	1	
Cw	Cozad Silt Loam, 0 to f Percent Slopes	5	48	0.32	3	3	3	
CwB	Cozad Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
Cx	Cozad Silt Loam, Wet Substratum, 0 to 1 Percent Slopes	5	56	0.32	3	3	3	
Су	Crete Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
De	Detroit Sift Loam, 0 to I Percent Slopes	5	48	0.37	3	3	3	
Dt	Detroit Silt Loam, Terrace, 0 to 1 Percent Stopes	5	48	0.37	3	3	3	
DtB	Detroit Silt Loam, Terrace, I to 3 Percent Slopes	5	48	0.37	3	3	3	
Fm	Fillmore Silt Loam, 0 to 1 Percent Stopes	4	48	0.37	3	3	3	
Fo	Fillmore Silt Loam, Drained, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
Fv	Former Variant Loamy Sand, 0 to 2 Percent Slopes	2	134	0.17	1	3	1	
GeF	Geary Silt Loam, 11 to 30 Percent Slopes	5	48	0.32	3	1	1	
GhD2	Geary Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	48	0.32	3	2	2	
GhE2	Geary Silty Clay Loam, 11 to 17 Percent Slopes, Eroded	5	48	0.32	3	1	1	
Gt	Gothenburg Sandy Loam, 0 to 2 Percent Slopes	2	86	0.24	1	3	1	
Нс	Hastings Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
НсВ	Hastings Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
HdC2	Hastings Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	5	38	0.32	3	2	2	
HdD2	Hastings Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	38	0.32	3	2	2	
He	Hobbs Silt Loam, 0 to 2 Percent Slopes	5	48	0.32	3	3	3	
Hf	Hobbs Sitt Loam, Channeled	5	48	0.32	3	3	3	
Hg	Holder Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
HgB	Holder Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
HgC	Holder Silt Loam, 3 to 6 Percent Slopes	5	48	0.32	3	2	2	
HgD	Holder Silt Loam, 6 to 11 Percent Slopes	5	48	0.32	3	2	2	
HhC2	Holder Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	5	38	0.32	3	2	2	
HhD2	Holder Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	38	0.32	3	2	2	
Hk	Holder Silt Loam, Thick Surface, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
Hr	Hord Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
HrB	Hord Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
HrC	Hord Silt Loam, 3 to 6 Percent Slopes	5	48	0.32	3	2	2	
InB	Inavale Loamy Sand, 0 to 3 Percent Slopes	5	134	0.17	3	3	3	
Ма	Massie Silt Loam, 0 to 1 Percent Slopes	3	0	0.37	3	3	3	
Or	Ortello Fine Sandy Loam, 0 to 1 Percent Slopes	5	86	0.2	3	3	3	
ОпВ	Ortello Fine Sandy Loam, 1 to 3 Percent Slopes	5	86	0.2	3	3	3	
Ov	Ortello Loam, Loamy Substratum, 0 to 1 Percent Stopes	5	56	0.28	3	3	3	
ОуВ	Ortello Loam, Loamy Substratum, 1 to 3 Percent Slopes	5	56	0.28	3	3	3	
Pb	Pits and Dumps	0	0	0	2	2	2	
Pt	Platte Loam, 0 to 1 Percent Slopes	3	86	0.28	3	3	3	
Ru	Rusco SiftLoam, 0 to 1 Percent Slopes	5	56	0.32	3	3	3	
Sc	Scott Silt Loam, 0 to 1 Percent Slopes	3	48	0.37	3	3	3	
Sd	Scott Silty Clay Loam, Drained, 0 to 1 Percent Slopes	3	38	0.37	3	3	3	

<sup>\*</sup>T= tons per acre per year

#### HIGHLY ERODIBLE LAND REPORT

Survey Area: Hamilton County, Nebraska		1990 Frozen Factors  C Factor = 0.25  R Factor = 150			HEL Classification 1 = HEL 2 = PHEL 3 = NHEL			
Symbol	Soil Map Unit Name	Т*	I	K	Wind	Water	Map Unit	
ThD	Thurman Fine Sandy Loam, 3 to 11 Percent Slopes	5	86	0.2	3	2	2	
ThF	Thurman Fine Sandy Loam, 11 to 30 Percent Slopes	5	86	0.2	3	1	1	
Úу	Uly Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
UуВ	Uly Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
UyC	Uly Sift Loam, 3 to 6 Percent Slopes	5	48	0.32	3	2	2	
UyE2	Uly Silt Loam, 11 to 17 Percent Slopes, Eroded	5	48	0.32	3	1	1	
UyF	Uly Siit Loam, 11 to 30 Percent Slopes	5	48	0.32	3	1	1	
W	Water	0	0	0	2	2	2	
zwa	Water > 40 Acres	0	0	0	2	2	2	

\*T= tons per acre per year

	HIGHLY ERODIBLE LANI	REPORT					
		1990	Frozen :	Factors	HE	EL Classi	fication
Survey	Area: Polk County, Nebraska	C F	actor =	0.2	000000	l = HE	
		RF	actor =	150		2 = PH $3 = NH$	
Symbol	Soil Map Unit Name	T*	I	K	Wind		Map Uni
2Coz	Cozad Silt Loam, Terrace, 0 to 1 Percent Slopes	5	48	0.32	3	3	3
2CozA	Cozad Silt Loam, Terrace, 1 to 3 Percent Slopes	5	48	0.32	3	3	3
2CozB	Cozad Silt Loam, Terrace, 3 to 7 Percent Slopes	5	48	0.32	3	2	2
2Hb	Hobbs Silt Loam, Occasionally Flooded	5	48	0.32	3	3	3
2f.b	Lamo Silty Clay Loam, Sandy Substratum	5	38	0.32	3	3	3
2Le	Leshara Silt Loam, Drained	5	48	0.32	3	3	3
Ax	Alda Fine Sandy Loam	4	86	0.2	3	3	3
Ay	Alda Loam	4	48	0.28	3	3	3
8dn	Blendon Fine Sandy Loam, 0 to 1 Percent Slopes	5	86	0.2	3	3	3
BdnA	Blendon Fine Sandy Loam, 1 to 3 Percent Slopes	5	86	0.2	3	3	3
Bu	Butler Silt Loam	4	48	0.37	3	3	3
Ca	Cass Fine Sandy Loam	5	86	0.2	3	3	3
СБО	Coly Silt Loam, 11 to 31 Percent Slopes	5	86	0.43	3	1	1
CosB3	Cozad Soils, 3 to 7 Percent Slopes, Severely Eroded	5	48	0.32	3	2	2
CosC3	Cozad Soils, 7 to 11 Percent Slopes, Severely Eroded	5	48	0.32	3	2	2
CozB	Cozad Silt Loam, 3 to 7 Percent Slopes	5	48	0.32	3	2	2
CozC	Cozad Silt Loam, 7 to 11 Percent Slopes	5	48	0.32	3	2	2
CS	Cozad-Slickspots Complex, Terrace	5	48	0.32	3	3	3
Da	Darr Fine Sandy Loam	4	86	0.2	3	3	3
Fto	Fillmore Silt Loam	4	48	0.37	3	3	3
G <b>P</b>	Gravel Pits	0	0	0	2	2	2
Ha	Hall Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3
HbA	Hobbs Silt Loam, 0 to 3 Percent Slopes	5	48	0.32	3	3	3
ньв	Hobbs Silt Loam, 3 to 7 Percent Slopes	5	48	0.32	3	2	2
Hd	Hord Sift Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3
Hg	Holder Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3
Hg/L	Holder Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3
HnB3	Hastings Soils, 3 to 7 Percent Slopes, Severely Eroded	5	38	0.32	3	2	2
HnC3	Hastings Soils, 7 to 11 Percent Slopes, Severely Eroded	5	38	0.32	3	2	2
Hs	Hastings Silt Loam, 0 to I Percent Slopes	5	48	0.32	3	3	3
HsA	Hastings Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3
HsB	Hastings Silt Loam, 3 to 7 Percent Slopes	5	48	0.32	3	2	2
ίβВ	Inavale Loamy Sand, 3 to 7 Percent Slopes	5	134	0.17	3	3	3
lg	Inavale Loamy Fine Sand, 0 to 3 Percent Slopes	5	134	0.17	3	3	3
r IP	Inavale-Platte Complex	5	134	0.17	3	3	3
Le	Leshara Silt Loam	5	48	0.32	3	3	3
VidB	Meadin Loarny Sand, 0 to 5 Percent Slopes	3	134	0.17	1	3	1
On .	O'Neill Fine Sandy Loam, 0 to 1 Percent Slopes	4	86	0.2	3	3	3
OrC	Ortello Complex, 7 to 11 Percent Slopes	5	86	0.2	3	2	2
OrC2	Ortello Complex, 7 to 11 Percent Stopes, Eroded	5	86	0.2	3	2	2
OxD	Ortello-Coly Complex, 11 to 31 Percent Stopes	5	86	0.2	3	1	1
Pf	Platte Fine Sandy Loam	3	86	0.2	3	3	3
PL	Platte-Alda Complex	3	86	0.2	3	3	3
RB	Rough Broken Land, Locss	5	86	0.43	3	1	1
		2	210	0.15	1	3	1
Sx Sy	Sandy Atluvial Land Silty Alluvial Land	5	48	0.32	3	3	3

<sup>\*</sup>T= tons per acre per year

### HIGHLY ERODIBLE LAND REPORT

Survey	Area: Polk County, Nebraska	CF	Frozen actor = actor -	HEL Classification  1 = HEL 2 = PHEL 3 = NHEL			
Symbol	Soil Map Unit Name	T*	I	K	Wind	Water	Map Unit
ТеВ	Thurman Loamy Sand, 0 to 5 Percent Stopes	5	134	0.17	3	3	3
TeC	Thurman Loamy Sand, 5 to 11 Percent Slopes	5	134	0.17	3	2	2
W	Water	0	0	0	2	2	2
Wb	Wann Fine Sandy Loam	5	86	0.2	3	3	3
Wx	Wet Alluvial Land-Alda Complex	2	86	0.28	1	3	1

\*T= tons per acre per year

Chruau	Area: Saline County, Nebraska	1990	Frozen)	Factors	HE	L Classi: 1 = HEI	
Sui vey	Area. Saime County, Neoraska	CF	actor =	0.2	Ι.	$2 \sim PHI$	
		RF	actor =	150		3 = NH	
Symbol	Soil Map Unit Name	T*	1	K	Wind	Water	Map Unit
BdD	Burchard Clay Loam, 6 to 11 Percent Slopes	5	48	0.28	3	2	2
BdD2	Burchard Clay Loam, 6 to 11 Percent Slopes, Eroded	5	48	0.28	3	2	2
BdE	Burchard Clay Loam, 11 to 15 Percent Slopes	5	48	0.28	3	1	1
3dE2	Burchard Clay Loam, 11 to 15 Percent Slopes, Eroded	5	48	0.28	3	1	1
3sF	Burchard-Steinauer Clay Loams, 11 to 30 Percent Slopes	5	48	0.28	3	1	1
3t	Butler Silt Loam, Terrace, 0 to 1 Percent Slopes	4	48	0.37	3	3	3
3u	Butler Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3
Зх	Butler-Gayville Silt Loams, 0 to 1 Percent Stopes	4	48	0.37	3	3	3
Or .	Crete Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3
CrB	Crete Silt Loam, I to 3 Percent Slopes	4	48	0.37	3	3	3
CsC2	Crete Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	4	38	0.37	3	2	2
2t	Crete Silt Loam, Terrace, 0 to 1 Percent Slopes	4	48	0.37	3	3	3
CtB	Crete Silt Loam, Terrace, 1 to 3 Percent Slopes	4	48	0.37	3	3	3
m	Fillmore Silt Loam, 0 to 1 Percent Slopes	3	48	0.37	3	3	3
3sD	Geary Silty Clay Loam, 6 to 11 Percent Slopes	5	38	0.32	3	2	2
GsD2	Geary Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	38	0.32	3	2	2
3sF	Geary Silty Clay Loam, 11 to 30 Percent Slopes	5	38	0.32	3	1	1
1s	Hastings Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3
isB	Hastings Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3
IsC	Hastings Silt Loam, 3 to 6 Percent Slopes	5	48	0.32	3	2	2
ĭtC2	Hastings Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	5	38	0.32	3	2	2
ItD2	Hastings Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	38	0.32	3	2	2
Ιv	Hobbs Sitt Loam, O to 2 Percent Slopes	5	48	0.32	3	3	3
łw	Hobbs Sitt Loam, 0 to 2 Percent Slopes, Frequently Flooded	5	48	0.32	3	3	3
łx	Hobbs Silt Loam, Channeled	5	48	0.32	3	3	3
Ce	Kezan Silt Loam, O to 2 Percent Stopes	5	48	0.32	3	3	3
.oC	Longford Silty Clay Loam, 3 to 6 Percent Slopes	5	48	0.32	3	2	2
oC2	Longford Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	5	48	0.32	3	2	2
oD2	Longford Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	48	0.32	3	2	2
MaC	Mayberry Silty Clay Loam, 3 to 6 Percent Slopes	4	48	0.37	3	2	2
MaC2	Mayberry Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	4	48	0.37	3	2	2
MaD2	Mayberry Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	4	48	0.37	3	1	1
ArD	Morrill Clay Loam, 6 to 11 Percent Slopes	5	48	0.28	3	2	2
ArD2	Morrill Clay Loam, 6 to 11 Percent Slopes, Eroded	5	48	0.28	3	2	2
ArF	Morrill Clay Loam, 11 to 30 Percent Stopes	5	48	0.28	3	1	1
Au Lu	Muir Silt Loam, 0 to I Percent Slopes	5	48	0.32	3	3	3
AuB	Muir Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3
AnC		5	48	0.32	3	2	2
	Muir Silt Loam, 3 to 6 Percent Slopes	4	48	0.37	3	2	2
aC2	Pawnee Clay Loam, 3 to 6 Percent Slopes, Eroded	0	0	0.37	2	2	2
b 'a	Pits and Dumps Scott Silt Loam, 0 to 1 Percent Slopes	3	48	0.37	3	3	3
ic Note		5		050000	3	1	1
lyF o	Uly Silt Loam, 11 to 30 Percent Slopes	11 20	48	0.32			
V V	Water	0	0	0	2	2	2
VIC	Wymore Silty Clay Loam, 3 to 6 Percent Slopes	4	38	0.37	3	2	2
VtC2	Wymore Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	4	38	0.37	3	2	2

\*T= tons per acre per year

#### HIGHLY ERODIBLE LAND REPORT

Survey	Area: Saline County, Nebraska	1990 CF:	HEL Classification  1 = HEL  2 = PHEL  3 = NHEL				
Symbol	Soil Map Unit Name	T*	I	ĸ	Wind	Water	Map Unit
Zk	Zook Silt Loam, 0 to 1 Percent Slopes	5	48	0.28	3	3	3
zwa	Water > 40 Acres	0	0	0	2	2	2

#### HIGHLY ERODIBLE LAND REPORT

Survey Area: Seward County, Nebraska		1990	Frozen 1	Factors	HEL Classification			
		C Factor =		0.2	1 = HEL 2 = PHEL			
		R Factor =		150	3=NHEL			
Symbol	Soil Map Unit Name	T*	I	K	Wind	Water	Map Uni	
2Bu	Butler Silt Loam, Terrace	4	48	0.37	3	3	3	
2CeA	Crete Silt Loam, Terrace, 1 to 3 Percent Slopes	4	48	0.37	3	3	3	
2Hb	Hobbs Silt Loam, Occasionally Flooded	5	48	0.32	3	3	3	
2HtB2	Hastings Silty Clay Loam, Terrace, 3 to 7 Percent Slopes, Eroded	5	38	0.32	3	2	2	
AED	Arents, Earthen Dam	0	0	0	2	2	.2	
BdC	Burchard Clay Loam, 7 to 12 Percent Slopes	5	48	0.28	3	2	2	
BdC2	Burchard Clay Loam, 7 to 12 Percent Slopes, Eroded	5	48	0.28	3	2	2	
BRD	Burchard-Steinauer Clay Loams, 12 to 17 Percent Slopes	5	48	0.28	3	1	1	
BRD2	Burchard-Steinauer Clay Loams, 12 to 17 Percent Slopes, Eroded	5	48	0.28	3	1	1	
вт	Butter-Slickspots Complex	4	48	0.37	3	3	3	
Bu	Butler Silt Loam	4	48	0.37	3	3	3	
Ву	Breaks-Alluvial Land Complex	5	86	0.43	3	2	2	
Ce	Crete Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
CeA	Crete Silt Loam, 1 to 3 Percent Slopes	4	48	0.37	3	3	3	
Fm	Fillmore Silt Loam	4	48	0.37	3	3	3	
GeB2	Geary Silty Clay Loam, 3 to 7 Percent Slopes, Eroded	5	48	0.32	3	2	2	
GeC2	Geary Silty Clay Loam, 7 to 12 Percent Slopes, Eroded	5	48	0.32	3	2	2	
GeC3	Geary Silty Clay Loam, 7 to 12 Percent Slopes, Severely Eroded	5	48	0.32	3	2	2	
GeE3	Geary Silty Clay Loam, 12 to 31 Percent Slopes, Severely Eroded	5	48	0.32	3	1	1	
GP	Gravel Pit	0	0	0	2	2	2	
На	Hall Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
HaA	Half Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
Нb	Hobbs Silt Loam, 0 to I Percent Slopes	5	48	0.32	3	3	3	
HbA	Hobbs Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
ньв	Hobbs Silt Loam, 3 to 7 Percent Slopes	5	48	0.32	3	2	2	
He	Hobbs Silty Clay Loam, 0 to I Percent Slopes	5	48	0.32	3	3	3	
Hd	Hord Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
HnA3	Hastings Soils, I to 3 Percent Stopes, Severely Eroded	5	38	0.32	3	3	3	
Hs	Hastings Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
HsA	Hastings Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
HSz	Half-Slickspots Complex, 1 to 3 Percent Slopes	5	38	0.32	3	3	3	
HtA2	Hastings Silty Clay Loam, 1 to 3 Percent Slopes, Eroded	5	38	0.32	3	3	3	
HtB2	Hastings Silty Clay Loam, 3 to 7 Percent Slopes, Eroded	5	38	0.32	3	2	2	
HtB3	Hastings Silty Clay Loam, 3 to 7 Percent Slopes, Severely Eroded	5	38	0.32	3	2	2	
HtC2	Hastings Silty Clay Loam, 7 to 12 Percent Slopes, Eroded	5	38	0.32	3	2	2	
HtC3	Hastings Silty Clay Loam, 7 to 12 Percent Slopes, Severely Eroded	5	38	0.32	3	2	2	
HtD3	Hastings Silty Clay Loam, 12 to 17 Percent Slopes, Severely Eroded	5	38	0.32	3	1	1	
Lb	Lamo Silty Clay Loam	5	38	0.32	3	3	3	
LD	Sanitary Landfill	0	0	0	2	2	2	
LonC2	Longford Silty Clay Loam, 5 to 12 Percent Slopes, Eroded	5	48	0.32	3	2	2	
M	Marsh	2	0	0.37	3	3	3	
MID2	Meadin Soils, 7 to 31 Percent Slopes, Eroded	3	56	0.28	3	1	1	
MrC2	Morrill Clay Loam, 7 to 12 Percent Slopes, Eroded	5	48	0.28	3	2	2	
M-W	Miscellaneous Water (Sewage Lagoons)	0	0	0	2	2	2	
PaB3	Pawnee Soils, 3 to 7 Percent Slopes, Severely Eroded	4	48	0.37	3	2	2	
PaC3	Pawnee Soils, 7 to 12 Percent Slopes, Severely Eroded	4	48	0.37	3	1	1	

<sup>\*</sup>T= tons per acre per year

#### HIGHLY ERODIBLE LAND REPORT

Survey Area: Seward County, Nebraska		1990 Frozen Factors C Factor = 0.2			HEL Classification  J = HEL  2 = PHEL			
Symbol	Soil Map Unit Name			150 K	Wind	3 = NHEL Wind Water Map Unit		
PwB	Pawnee Clay Loam, 3 to 7 Percent Slopes	4	48	0.37	3	2	2	
PwB2	Pawnee Clay Loam, 3 to 7 Percent Slopes, Eroded	4	48	0.37	3	2	2	
PwD	Pawnee Clay Loam, 7 to 12 Percent Slopes	4	48	0.37	3	1	1	
PwD2	Pawnee Clay Loam, 7 to 12 Percent Slopes, Eroded	4	48	0.37	3	1	1	
RB	Rough Broken Land, Loess	5	86	0.43	3	1	1	
RBg	Rough Broken Land, Till	5	86	0.43	3	1	1	
Sc	Scott Silt Loam	3	48	0.37	3	3	3	
ShB2	Sharpsburg Silty Clay Loam, 3 to 7 Percent Slopes, Eroded	5	38	0.32	3	2	2	
ShB3	Sharpsburg Silty Clay Loam, 3 to 7 Percent Slopes, Severely Eroded	5	38	0.32	3	2	2	
ShD2	Sharpsburg Silty Clay Loam, 7 to 12 Percent Slopes, Eroded	5	38	0.32	3	2	2	
ShD3	Sharpsburg Silty Clay Loam, 7 to 12 Percent Slopes, Severely Eroded	5	38	0.32	3	2	2	
ShE3	Sharpsburg Silty Clay Loam, 12 to 17 Percent Slopes, Severely Eroded	5	38	0.32	3	1	1	
SkC	Shelby Clay Loam, 7 to 12 Percent Slopes	5	48	0.28	3	2	2	
SkC2	Shelby Clay Loam, 5 to 12 Percent Slopes, Eroded	5	48	0.28	3	2	2	
StC2	Steinauer Clay Loam, 7 to 12 Percent Slopes, Eroded	5	86	0.32	3	2	2	
StE	Steinauer Clay Loam, 12 to 31 Percent Slopes	5	86	0.32	3	1	1	
StE2	Steinauer Clay Loam, 12 to 31 Percent Slopes, Eroded	5	86	0.32	3	1	1	
Sy	Silty Alluvial Land	5	48	0.32	3	3	3	
w	Water	0	0	0	2	2	2	
Wι	Wymore Silty Clay Loam, 0 to 1 Percent Slopes	4	38	0.37	3	3	3	
WtA	Wymore Silty Clay Loam, 1 to 3 Percent Slopes	4	38	0.37	3	3	3	
WtB2	Wymore Silty Clay Loam, 3 to 7 Percent Slopes, Eroded	4	38	0.37	3	2	2	
Wx	Wet Alluvial Land	5	86	0.32	3	3	3	
WyC2	Wymore Soils, 7 to 9 Percent Slopes, Eroded	4	38	0.37	3	1	1	

<sup>\*</sup>T= tons per acre per year

#### HIGHLY ERODIBLE LAND REPORT

Survey Area: York County, Nebraska		1990 Frozen Factors  C Factor = 0.2  R Factor = 150			HEL Classification $I = \text{HEL}$ $2 = \text{PHEL}$ $3 = \text{NHEL}$			
Symbol	Soil Map Unit Name	Т*	I	K	Wind		Map Unit	
Bu	Butler Silt Loam, 0 to I Percent Slopes	4	48	0.37	3	3	3	
Ce	Crete Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
СеВ	Crete Silt Loam, 1 to 3 Percent Slopes	4	48	0.37	3	3	3	
Fm	Fillmore Silt Loam, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
Fo	Fillmore Silt Loam, Drained, 0 to 1 Percent Slopes	4	48	0.37	3	3	3	
GeC2	Geary Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	5	48	0.32	3	2	2	
GeD2	Geary Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	48	0.32	3	2	2	
GhG	Geary-Hobbs Sift Loams, 11 to 30 Percent Slopes	5	48	0.32	3	1	1	
На	Hall Silt Loam, Terrace, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
Hs	Hastings Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
HsB	Hastings Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
H <sub>5</sub> C	Hastings Silt Loam, 3 to 6 Percent Slopes	5	48	0.32	3	2	2	
HsD	Hastings Silt Loam, 6 to 11 Percent Slopes	5	48	0.32	3	2	2	
HuC2	Hastings Silty Clay Loam, 3 to 6 Percent Slopes, Eroded	5	38	0.32	3	2	2	
HuD2	Hastings Silty Clay Loam, 6 to 11 Percent Slopes, Eroded	5	38	0.32	3	2	2	
Hv	Hobbs Silt Loam, 0 to 2 Percent Slopes	5	48	0.32	3	3	3	
Hw	Holder Silt Loam, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
HwB	Holder Silt Loam, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
HwC	Holder Silt Loam, 3 to 6 Percent Slopes	5	48	0.32	3	2	2	
Hx	Hord Silt Loam, Terrace, 0 to 1 Percent Slopes	5	48	0.32	3	3	3	
НхВ	Hord Silt Loam, Terrace, 1 to 3 Percent Slopes	5	48	0.32	3	3	3	
HyC	Hord Complex, 3 to 6 Percent Slopes	5	48	0.32	3	2	2	
Ma	Marsh	2	0	0.37	3	3	3	
Sc	Scott Silt Loam, 0 to 1 Percent Slopes	3	48	0.37	3	3	3	
Sy	Silty Alluvial Land	5	48	0.32	3	3	3	
UhG	Uty-Hobbs Silt Loams, 11 to 30 Percent Slopes	5	48	0.32	3	1	1	
W	Water	0	0	0	2	2	2	
<b>г</b> р	Gravel Pits	0	0	0	2	2	2	
zwb	Water < 40 Acres	0	0	0	2	2	2	

<sup>\*</sup>T= tons per acre per year

### 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.

 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
Area Planting

Diversions

Field Borders

Field Windbreaks

Gabions

**Grade Stabilization Structures** 

**Grassed Waterways or Outlets** 

Pasture and Hayland Planting

Sediment Retention Basins

**Terraces** 

**Tree Plantings** 

**Underground Outlets** 

Water and Sediment Control Structures

2. <u>Temporary Soil and Water Conservation Practices for Controlling Erosion and Sedimentation on Agricultural Lands</u>

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 Hayland Management

Contour Strip Cropping

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

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

### **Appendix C**

