USDA BOONE SERVICE CENTER
1602 SNEDDEN DRIVE
BOONE, IA 50036-5421
(515) 432-2316

KEVIN KORDICK
DISTRICT CONSERVATIONIST

Conservation Plan

[redacted] MACKEY
[redacted]

[redacted]

OBJECTIVE(S)

Update conservation plan

Crop

Tract: 2614

Conservation Crop Rotation

A crop rotation of CORN SOYBEANS will be used on this field. (328) Ephemeral gullies must be controlled to meet USDA program eligibility requirements. Ephemeral gullies can be controlled by either managment or structural practices.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	8.3 ac	12	2015	8.3 ac	12/21/2015
Total:	8.3 ac			8.3 ac	

Conservation Crop Rotation

Growing crops in combination with needed cultural and management measures. Cropping systems include rotations that contain grasses and legumes as well as rotations in which the desired benefits are achieved without the use of such crops. To improve or maintain good physical condition of the soil; protect the soil during periods when erosion usually occurs; help control weeds, insects, and diseases; and meet the need and desire of farmers for an economic return.

Field	Planned Amount	Month	Year	Applied Amount	Date
2	122.8 ac	12	2015	122.8 ac	12/21/2015
Total:	122.8 ac			122.8 ac	

Residue and Tillage Management, No-Till

Manage organic residue so maximum amounts are left on the soil surface on a year-round basis. Plant crops in narrow slots or narrow tilled strips in previously untilled soil. Review the attached Iowa RUSLE2 Compliance Plan and choose one of the "D" slope options in order to remain elegable for Farm Program bennefits. Please sign and return with Conservation Plan.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	8.3 ac	12	2015	8.3 ac	12/21/2015
Total:	8.3 ac			8.3 ac	

Residue and Tillage Management, Reduced Till

Manage amount, orientation and distribution of organic residue so maximum amounts are left on the soil surface by using mulch tillage techniques and implements such as chisels, sweeps and harrows.

Field	Planned Amount	Month	Year	Applied Amount	Date
2	122.8 ac	12	2015	122.8 ac	12/21/2015
Total:	122.8 ac			122.8 ac	

CERTIFICATION OF PARTICIPANTS

[redacted] MACKEY DATE

[redacted]

CERTIFICATION OF:

DISTRICT CONSERVATIONIST

KEVIN KORDICK DATE

CONSERVATION DISTRICT

BOONE SOIL & WATER CONSER DATE

PUBLIC BURDEN STATEMENT

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collections is 0578-0013. The time required to complete this information collection is estimated to average 45/0.75 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information.

PRIVACY ACT

The above statements are made in accordance with the Privacy Act of 1974 (5 U.S.C 522a). Furnishing this information is voluntary; however failure to furnish correct, complete information will result in the withholding or withdrawal of such technical or financial assistance. The information may be furnished to other USDA agencies, the Internal Revenue Service, the Department of Justice, or other state or federal law enforcement agencies, or in response to orders of a court, magistrate, or administrative tribunal.

USDA NON-DISCRIMINATION STATEMENT

The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers. If you believe you experienced discrimination when obtaining services from USDA, participating in a USDA program, or participating in a program that receives financial assistance from USDA, you may file a complaint with USDA. Information about how to file a discrimination complaint is available from the Office of the Assistant Secretary for Civil Rights. USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex (including gender identity and expression), marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) To file a complaint of discrimination, complete, sign, and mail a program discrimination complaint form, available at any USDA office location or online at www.ascr.usda.gov, or write to:

USDA Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW.
Washington, DC 20250-9410

Or call toll free at (866) 632-9992 (voice) to obtain additional information, the appropriate office or to request documents. Individuals who are deaf, hard of hearing, or have speech disabilities may contact USDA through the Federal Relay service at (800) 877-8339 or (800) 845-6136 (in Spanish). USDA is an equal opportunity provider, employer, and lender. Persons with disabilities who require alternative means for communication of program information (e.g., Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

USDA NRCS Natural Resources Conservation Service

IOWA RUSLE2 COMPLIANCE PLAN

RUSLE2 SOFTWARE DETAILS

- Program version: Aug 18 2014
- Database name: Area 2 Feb 2015 moses

File: plans\Boone County Compliance Options

Inputs:

Owner name	*Location*	*Tract #*
[redacted] Mackey	**USA\Iowa\Boone County**	T2614

Operator: Dale K Anderson Farms Inc. Choose any one of the "D" Compliance options. Sign and return with conservation plan.

Field name	*Soil*	*Slope T Value*	*Slope length, ft*	*Slope steepness, %*
C slopes	soils\Boone County, Iowa\138C2 Clarion loam, 5 to 9 percent slopes, moderately eroded\Clarion Loam moderately eroded 95%	5.0	98	7.0
D slopes	soils\Boone County, Iowa\138D2 Clarion loam, 9 to 14 percent slopes, moderately eroded\Clarion Loam moderately eroded 95%	5.0	97	12

Results:

Field name	*Description*	*Management*	*Contouring system*	*Support practices*	*Terrace/diversion system*	*Cons. plan. soil loss, t/ac/yr*
C slopes	Rotation: Corn-Soybean - Tillage: Corn will be no-tilled leaving at least 40% of the ground covered by residue after planting. Soybeans will be no-tilled leaving at least 60% of the ground covered by residue after planting. - Contouring: required - Anhydrous may be applied in the fall.	managements\CMZ 04\c.Other Local Mgt Records\cornHY grain;NT,anhyd, Soybean;wr, NT z4	contour-systems\b. absolute row grade 2 percent	-- none --	-- none --	0.90
C slopes	Rotation: Corn-Soybean - Tillage: Bean residue may be spring field cultivated leaving at least 35% of the ground covered by residue after planting corn. Corn stalks are fall subsoil disk ripped, spring disked and field cultivated leaving at least 25% of the ground covered by residue after planting soybeans. Anhydrous may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\boone c-slope system 1	contour-systems\a. rows up-and-down hill	-- none --	-- none --	4.9

C slopes	Rotation: Continuous Corn - Tillage: Corn stalks are fall subsoil disk ripped, spring disked and field cultivated leaving at least 15% of the ground covered by residue after planting. Anhydrous may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\corn grain;Anhyd, FC, ssdr, disk, fcult, z4	contour-systems\a. rows up-and-down hill	-- none --	-- none --	4.0
C slopes	Rotation: Continuous Corn - Tillage: Corn stalks are fall chisel tilled, spring disked and field cultivated leaving at least 20% of the ground covered by residue after planting. Anhydrous may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\corn grainHY,Anhyd, FC, twist, disk, fcult, z4	contour-systems\a. rows up-and-down hill	-- none --	-- none --	3.7
C slopes	Rotation: Corn-Soybean - Tillage: Soybean residue is no-tilled leaving at least 45% of the ground covered by residue after planting Corn. Corn stalks are no-tilled leaving at least 75% of the ground covered by residue after planting soybeans. Anhydrous may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\corn grainHY;NT, anhyd - Soybeans NT Dbl Disk Opener	contour-systems\a. rows up-and-down hill	-- none --	-- none --	1.2
C slopes	Rotation: Corn-Soybean - Tillage: Corn is strip-tilled into soybean residue leaving at least 40% residue after planting. Soybeans are no-tilled leaving at least 80% corn residue after planting. Anhydrous strips may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\CornHY Fall strip till- Soybeans, nr, NT z4	contour-systems\a rows up-and-down hill	-- none --	-- none --	1.5
C slopes	Rotation: Corn-Soybean - Tillage: Soybean residue may be spring field cultivated leaving at least 30% of the ground covered by residue after planting corn. Corn stalks may be fall chisel tilled, spring disked and field cultivated leaving at least 25% of the ground covered by residue after planting soybeans. Anhydrous may be applied in spring or fall	managements\CMZ 04\c.Other Local Mgt Records\corn grainHY; Sfcult, soybean, wr, fany,FC, twist, disk, fcult z4	contour-systems\a. rows up-and-down hill	-- none --	-- none --	4.8
C slopes	Rotation: Corn-Soybean - Tillage: Soybean residue may be spring disked and field cultivated leaving at least 20% of the ground covered by residue after planting corn. Corn stalks may be fall chisel tilled and disked and spring field cultivated leaving at least 35% of the ground covered by residue after planting soybeans. Anhydrous may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\corn grainHY;Fanhyd, Sdisk, fcult, soybean, wr, FC, twist, disk, fcult z4	contour-systems\a. rows up-and-down hill	-- none --	-- none --	5.0

C slopes	Rotation: Corn-Soybean - Tillage: Bean residue may be spring field tilled using a vertical tillage implement leaving at least 15% of the ground covered by residue after planting corn. Corn stalks are fall and spring vertical tilled leaving at least 25% of the ground covered by residue after planting soybeans. Anhydrous may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\CB vertical system	contour-systems\a. rows up-and-down hill	-- none --	-- none --	4.9
C slopes	Rotation: Corn-Corn-Soybean - Tillage: Soybean residue may be field cultivated leaving at least 15% of the ground covered by residue after planting corn. Corn stalks may be fall chisel tilled and disked and field cultivated in the spring leaving at least 20% of the ground covered by residue after planting soybeans. Anhydrous may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\CornHYFall NH3, Spgfcult- CornHY Fall NH3, DiskChisel twisted, spgfcult - Soybeans DiskChisel twisted, spgfcult	contour-systems\a. rows up-and-down hill	-- none --	-- none --	5.0
C slopes	Rotation: Continuous Corn with liquid manure - Tillage: Corn stalks may be injected with liquid manure, fall sub soil disk ripped and disked and field cultivated in spring to leave at least 15% of the ground covered by residue after planting.	managements\CMZ 04\c.Other Local Mgt Records\corn grainHY;NT Fall Manure, liquid Injection LD 15 in,fsubdiskrip,spcult, 2500 gal/10 ton z4	contour-systems\a. rows up-and-down hill	-- none --	-- none --	4.1
C slopes	Rotation: CRP conversion to soybean - Warm season grass coming out of CRP may be fall moldboard plowed, spring disked and field cultivated leaving at least 5% of the ground covered after planting soybeans.	managements\CMZ 04\c.Other Local Mgt Records\Sod-WL, Soybean; wrflpow, Sdisk z4	contour-systems\a. rows up-and-down hill	-- none --	-- none --	1.2
D slopes	Rotation: Corn-Soybean - Tillage: Corn will be no-tilled leaving at least 40% of the ground covered by residue after planting. Soybeans will be no-tilled leaving at least 60% of the ground covered by residue after planting. - Contouring. required - Anhydrous may be applied in the fall.	managements\CMZ 04\c.Other Local Mgt Records\cornHY grain;NT,anhyd, Soybean;wr, NT z4	contour-systems\b. absolute row grade 2 percent	-- none --	-- none --	1.6
D slopes	Rotation: Continuous Corn - Tillage: Corn stalks are fall chisel tilled and spring field cultivated leaving at least 50% of the ground covered by residue after planting. Anhydrous may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\d2 cont corn fall chisel, spcult	contour-systems\a. rows up-and-down hill	-- none --	-- none --	4.9
D slopes	Rotation: Continuous Corn - Tillage: Corn stalks are spring disked and field cultivated leaving at least 45% of the ground covered by residue after planting. Anhydrous may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\d2 cont corn spr disk, sp f cult	contour-systems\a. rows up-and-down hill	-- none --	-- none --	5.0

D slopes	Rotation: Corn-Soybean - Tillage: Soybean residue is no-tilled leaving at least 45% of the ground covered by residue after planting Corn. Corn stalks are no-tilled leaving at least 75% of the ground covered by residue after planting soybeans. Anhydrous may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\corn grainHY;NT, anhyd - Soybeans NT Dbl Disk Opener	contour-systems\a. rows up-and-down hill	-- none --	-- none --	2.4
D slopes	Rotation: Corn-Soybean - Tillage: Corn is strip-tilled into soybean residue leaving at least 40% residue after planting. Soybeans are no-tilled leaving at least 80% corn residue after planting. Anhydrous strips may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\CornHY Fall strip till- Soybeans, nr, NT z4	contour-systems\a. rows up-and-down hill	-- none --	-- none --	3.0
D slopes	Rotation: Corn-Corn-Soybean - Tillage: Soybean residue is no-tilled leaving at least 70% of the ground covered by residue after planting corn. Corn stalks following soybeans is no-tilled leaving at least 90% of the ground covered by residue after planting. Corn stalks following corn may be spring field cultivated leaving at least 70% of the ground covered by residue after planting soybeans. Anhydrous may be applied in spring or fall.	managements\CMZ 04\c.Other Local Mgt Records\d2 ccb	contour-systems\a. rows up-and-down hill	-- none --	-- none --	5.0
D slopes	Rotation: Continuous Corn with liquid manure - Tillage: Corn stalks may be injected with liquid manure, fall disked and spring field cultivated leaving at least 40% of the ground covered by residue after planting.	managements\CMZ 04\c.Other Local Mgt Records\d2 cont c manure	contour-systems\a. rows up-and-down hill	-- none --	-- none --	4.9
D slopes	Rotation: CRP conversion to soybean - Warm season grass coming out of CRP may be fall moldboard plowed, spring disked and field cultivated leaving at least 5% of the ground covered after planting soybeans.	managements\CMZ 04\c.Other Local Mgt Records\Sod-WL, Soybean; wrflpow, Sdisk z4	contour-systems\a. rows up-and-down hill	-- none --	-- none --	2.4

Ephemeral gullies are concentrated flow channels formed when rills converge to form shallow channels. They are alternately filled with soil by tillage operations and re-formed in the same general location by subsequent runoff events. Ephemeral gully erosion **must be controlled** in all fields in order to remain eligible for Farm Program benefits.

The following practices can control ephemeral erosion when established and maintained in the proper location:
Your local NRCS staff will provide assistance with layout and design of these practices upon request.

- Field Border: a strip of permanent vegetation established at the edge or around the perimeter of a field
- Grassed Waterway: a natural or constructed channel that is shaped or graded to required dimensions and established in suitable vegetation for the stable conveyance of runoff
- Terrace: an earth embankment, or a combination ridge and channel constructed across the field slope
- Water and Sediment Control Basin: an earth embankment or a combination ridge and channel generally constructed across the slope and minor watercourses to form sediment trap and water detention basin

[redacted] 1-15-16

Participant Signature Date

Designated Conservationist Date

SWCD Commissioner Date

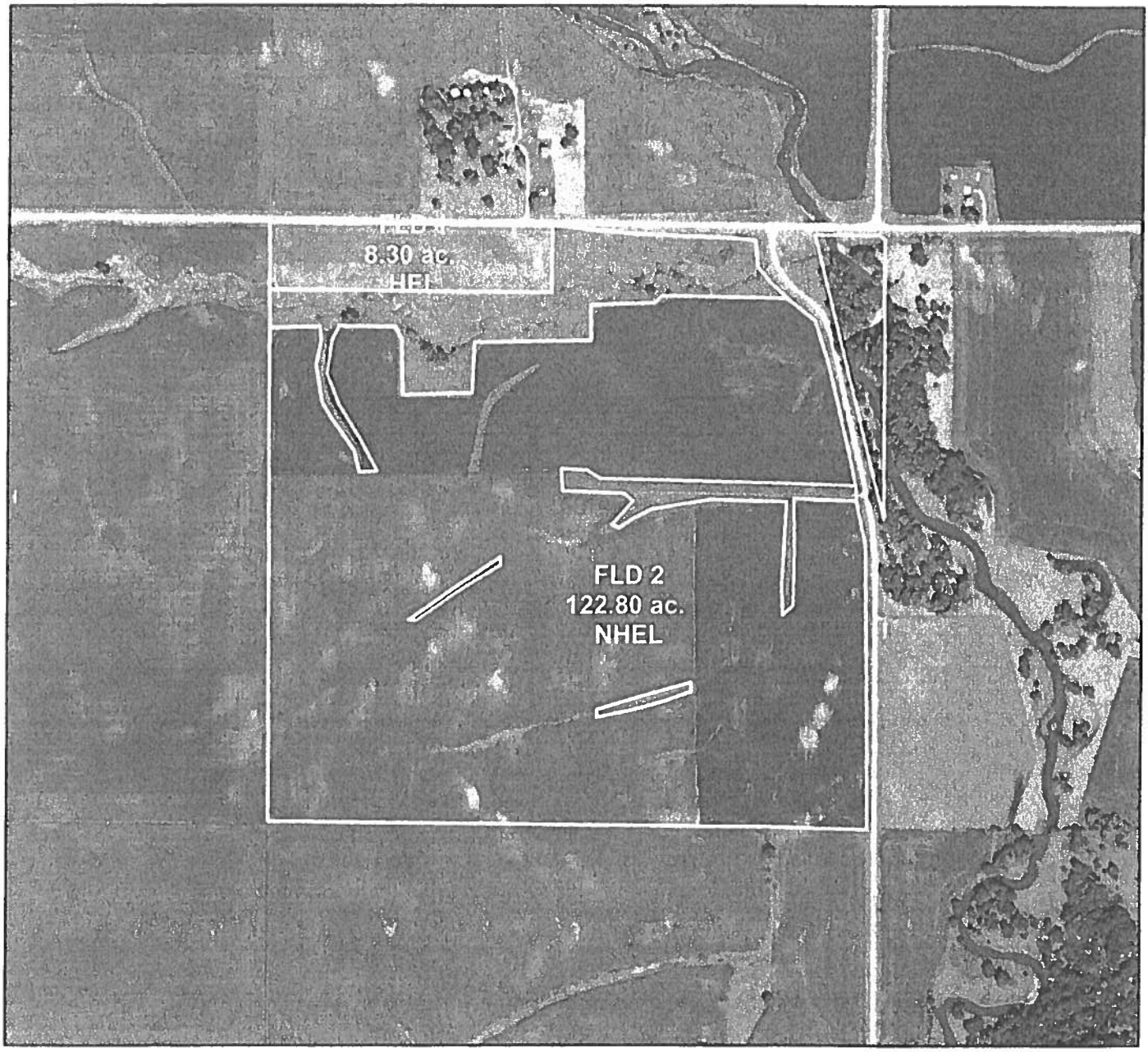
CONSERVATION PLAN

Date: 12/21/2015

Customer(s) [redacted] MACKEY
District: BOONE SOIL & WATER CONSERVATION DISTRICT

Legal Description: Section 16 Harrison Twp

Field Office: BOONE SERVICE CENTER
Agency: USDA/NRCS
Assisted By: SG
State and County: IA, Boone County, Iowa
Land Units: Tract: 2614 Field: 1,2



USDA

Legend

Consplan-T2614

330 0 330 660 990 1,320
Feet

N