

IOWA RUSLE2 COMPLIANCE PLAN

RUSLE2 SOFTWARE DETAILS

- Program version: Aug 18 2014
- Database name: Area 2 Mar 14 updates moses

File: plans\Area 2 North Iowa Compliance Options

Inputs:

<i>Owner name</i>	<i>Location</i>	<i>Tract #</i>
John Doe	USA\Iowa\Humboldt County	

<i>Field name</i>	<i>Soil</i>	<i>Slope T Value</i>	<i>Slope length, ft</i>	<i>Slope steepness, %</i>
C slopes	soils\Humboldt County, Iowa\138C2 Clarion loam, 5 to 9 percent slopes, moderately eroded\Clarion Loam moderately eroded 88%	5.0	98	7.0
D slopes	soils\Humboldt County, Iowa\835D2 Storden-Omsrud complex, 9 to 14 percent slopes, moderately eroded\Omsrud Loam moderately eroded 35%	5.0	97	12
E slopes	soils\Humboldt County, Iowa\835E2 Storden-Omsrud complex, 14 to 18 percent slopes, moderately eroded\Omsrud Loam moderately eroded 35%	5.0	97	16

Results:

<i>Field name</i>	<i>Description</i>	<i>Management</i>	<i>Contouring system</i>	<i>Support practices</i>	<i>Terrace/diversion system</i>	<i>Cons. plan. soil loss, t/ac/yr</i>
C slopes	Grandfathered system 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\corn grain;High Yield NT,anhyd, Soybean;wr, NT z4	contour-systems\b. absolute row grade 2 percent	-- none --	-- none --	0.84
C slopes	Rotation: Corn-Corn-Soybean - Tillage: In the fall after both corn harvests the corn stalks are shredded followed by subsoil disk ripper and field cultivated in the spring before planting and maintains a 40% residue level. Bean stubble is chiseled in the fall and spring field cultivated before planting and maintains 30% residue level. - Anhydrous: may be done in the fall	managements\CMZ 04\c.Other Local Mgt Records\corn; high yield, Fchisel, Fall NH3, Sfcult, plant; Corn Fshred, Fdiskrip, Fall NH3, Sfcult, plant; Soybeans Fshred, Fdiskrip, Sfcult, plant	contour-systems\a. rows up-and-down hill	-- none --	-- none --	4.0
C slopes	Rotation: Corn-Soybean - Tillage: Corn stalks may be shredded and tilled with a subsoil disk ripper in the fall and then spring field cultivated to leave at least 40% of the ground covered by residue after planting Soybeans. Bean stubble is spring field cultivated before planting corn leaving 40% residue after planting - Anhydrous may be applied in the fall.	managements\CMZ 04\c.Other Local Mgt Records\corn grain; High yield Fanhyd, Sfcult, plant; Soybeans Fshred, Fdiskrip, Sfcult, plant	contour-systems\a. rows up-and-down hill	-- none --	-- none --	4.0
C slopes	Rotation: Corn-Soybean - Tillage: Corn is strip-tilled into bean residue leaving at least 40% of the ground covered by residue after planting. Soybeans are no-tilled leaving at least 80% of the ground covered by residue. - Anhydrous may be applied in the fall.	managements\CMZ 04\c.Other Local Mgt Records\Corn FStrip till-Soybeans wr NT	contour-systems\a. rows up-and-down hill	-- none --	-- none --	1.2

C slopes	Rotation: Continuous Corn - Tillage: Corn stalks may be shredded and fall tilled with a subsoil disk ripper and spring field cultivated to leave at least 50% of the ground covered by residue after planting corn. Anhydrous may be applied in the fall.	managements\CMZ 04\c.Other Local Mgt Records\continuous corn; High yield Fanhyd, Fshred, Fdiskrip, Sfcult, plant	contour-systems\ a. rows up-and-down hill	-- none --	-- none --	2.9
C slopes	Rotation: Continuous Corn with liquid manure - Tillage: Corn stalks may be shredded followed by fall injection of manure and then fall tilled with a subsoil disk ripper and spring field cultivated to leave at least 50% of the ground covered by residue after planting corn.	managements\CMZ 04\c.Other Local Mgt Records\continuous corn; High yield Fshred, Fmanure injected, Fdiskrip, Sfcult, plant	contour-systems\ a. rows up-and-down hill	-- none --	-- none --	3.1
C slopes	Rotation: Corn-Soybean - Tillage: For Corn the bean residue is spring tilled using a vertical tillage implement leaving at least 30% of the ground covered by residue after planting. For Soybeans, the corn stalks are vertical tilled in the fall and also vertical tilled in the spring leaving at least 50% of the ground covered by residue after planting. - Anhydrous may be applied in the fall.	managements\CMZ 04\c.Other Local Mgt Records\corn grain; Fall NH3, Svertical tillage, plant; Soybean, Fvertical till, Svertical till, plant	contour-systems\ a. rows up-and-down hill	-- none --	-- none --	3.2
C slopes	Rotation: Corn-rye cover-Soybean - Tillage: For Corn the bean residue is spring tilled with field cultivator and then planted maintaining at least 50% of the ground covered by residue after planting. Following harvest a rye cover crop is no-till drilled in the corn residue in mid October. For Beans the rye cover crop is terminated with herbicide in the spring and then the ground is disked and field cultivated before planting and it leaves at least 40% of the ground covered by residue after planting. - Anhydrous may be done in the fall.	managements\CMZ 04\c.Other Local Mgt Records\corn grain; High yield Fall NH3, Sfcult, plant; rye cover; Soybean, Sdisk, Sfcult, plant	contour-systems\ a. rows up-and-down hill	-- none --	-- none --	3.4

C slopes	Rotation: Corn -Soybean - Tillage: For Corn the bean residue is spring tilled with field cultivator and then planted maintaining at least 40% of the ground covered by residue after planting. The soybeans are planted into the standing corn stalks and it leaves at least 70% of the ground covered by residue after planting. - Anhydrous may be done in the fall.	managements\CMZ 04\c.Other Local Mgt Records\Corn Fall NH3, Spg fcult- Soybeans, wr, NT z4	contour-systems\a. rows up-and-down hill	-- none --	-- none --	3.0
C slopes	Rotation: Corn - Corn - Soybean - Tillage: For the first year of Corn manure in fall injected on the bean residue and is then spring tilled with field cultivator and planted maintaining at least 40% of the ground covered by residue after planting. For the second year of Corn manure is injected into the standing corn stalks and then disk ripped all in the fall and then field cultivated in the spring before planting, leaving 40% residue cover on the ground. For the Soybeans the corn stalks are disk ripped in the fall and then field cultivated in the spring before planting and it leaves 40% of the ground covered by residue after planting.	managements\CMZ 04\c.Other Local Mgt Records\Corn Fmanure, Spgfcult- Corn Fmanure, Fsubsoil diskrip, spgfcult - Soybeans Fsubsoil diskrip, spgfcult	contour-systems\a. rows up-and-down hill	-- none --	-- none --	3.7
D slopes	Grandfathered system 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\corn grain;High Yield NT,anhyd, Soybean;wr, NT z4	contour-systems\b. absolute row grade 2 percent	-- none --	-- none --	2.1

D slopes	Rotation: Corn-Soybean - Tillage: Corn is strip-tilled into bean residue leaving at least 40% of the ground covered by residue after planting. Soybeans are no-tilled leaving at least 80% of the ground covered by residue. - Contouring: required - Strip-till: may be done in the fall	managements\CMZ 04\c.Other Local Mgt Records\Corn FStrip till-Soybeans wr NT	contour-systems\b. absolute row grade 2 percent	-- none --	-- none --	2.5
D slopes	Rotation: Corn-Corn - Tillage: Corn stalks may be fall tilled with a disk and field cultivate to leave at least 35% of the ground covered by residue after planting. - Contouring: required - Anhydrous may be applied in the fall. - Contour Grass Buffer Strip: one contour grass buffer strip of perennial vegetation at least 30 ft. wide will be established in the middle of the slope.	managements\CMZ 04\c.Other Local Mgt Records\corn grain; High yieldFanhyd, Fdisk, fcult, z4	contour-systems\b. absolute row grade 2 percent	strip-barrier-systems\Contour Buffer Strips\Actual Width 30 ft\1-Cool season grass buffer midslope 30 feet wide	-- none --	1.8
D slopes	Rotation:Cont Corn - Tillage: Corn is vertical tilled in the spring leaving at least 45% of the ground covered by residue after planting. . - Contouring: required - Anhydrous may be done in the fall.	managements\CMZ 04\c.Other Local Mgt Records\corn grain;NT ,FStrip till, Soybean, wr, Sdisk, fcult z4	contour-systems\b. absolute row grade 2 percent	-- none --	-- none --	4.1
D slopes	Rotation: Corn-rye cover-Soybean - Tillage: Corn is Phoenix harrowed in spring leaving at least 35% of the ground covered by residue after planting. Rye Cover is aerial applied into standing Corn at Black layer. Beans are No-tilled into living rye cover crop leaving at least 80% of the ground covered by residue after planting. Rye cover crop is sprayed to kill the cover crop before crop emerges - Anhydrous may be done in the fall - Contouring required.	managements\CMZ 04\c.Other Local Mgt Records\corn grain;High yield Pheonix Harrow w rye cover interseeded Soybean, wr, NT z4	contour-systems\b. absolute row grade 2 percent	-- none --	-- none --	2.8

E slopes	Grandfathered system 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\corn grain;High Yield NT,anhyd, Soybean;wr, NT z4	contour-systems\b. absolute row grade 2 percent	-- none --	-- none --	3.3
E slopes	Rotation: Corn-Corn-Soybean - Tillage: Corn is strip-tilled into bean residue leaving at least 40% of the ground covered by residue after planting. Corn is strip-tilled into corn residue leaving 65% ground covered by residue after planting. Soybeans are no-tilled leaving at least 80% of the ground covered by residue. - Strip-till: may be done in the fall	managements\CMZ 04\c.Other Local Mgt Records\Corn Fall Strip till-Corn Fall Strip till - Soybeans NT drill	contour-systems\b. absolute row grade 2 percent	-- none --	-- none --	3.4
E slopes	Rotation: Corn-Corn - Tillage: Corn stalks may be fall tilled with a disk and field cultivate to leave at least 30% of the ground covered by residue after planting. - Contouring: required - Anhydrous may be applied in the fall. - Contour Grass Buffer Strip: one contour grass buffer strip of perennial vegetation at least 30 ft. wide will be established in the middle of the slope.	managements\CMZ 04\c.Other Local Mgt Records\corn grain; High yieldFanhyd, Fdisk, fcult, z4	contour-systems\b. absolute row grade 2 percent	strip-barrier-systems\Contour Buffer Strips\Actual Width 30 ft\1-Cool season grass buffer midslope 30 feet wide	-- none --	2.6
E slopes	Rotation: Corn, Soybean, Alfalfa 3 years - Tillage: Alfalfa is fall plowed before planting corn leaving at least 10% of the ground covered by residue after planting after planting Corn. Beans are NT into corn stalk leaving at least 80% of the ground covered by residue after planting. Alfalfa is planted NT into the bean stubble leaving at least 60% of the ground covered by residue. Contouring: required - Contour is required during the row crop years	managements\CMZ 04\c.Other Local Mgt Records\Corn SP high yield - Soybeans NT- Oats alfalfa seeding NT Alfalfa Hay 2yr, 3 cut, 6 tons/acre	contour-systems\b. absolute row grade 2 percent	-- none --	-- none --	3.6

E slopes	Rotation: Corn-rye cover-Soybean - Tillage: Corn is Phoenix harrowed in spring leaving at least 60% of the ground covered by residue after planting. Rye Cover is aerial applied into standing Corn at Black layer. Beans are No-tilled into living rye cover crop leaving at least 80% of the ground covered by residue after planting. Rye cover crop is sprayed to kill the cover crop before crop emerges - Anhydrous may be done in the fall - Contouring required.	managements\CMZ 04\c.Other Local Mgt Records\corn grain;High yield Pheonix Harrow w rye cover interseeded Soybean, wr, NT z4	contour-systems\b. absolute row grade 2 percent	-- none --	-- none --	3.7
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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

Participant Signature

Date

Designated Conservationist

Date

SWCD Commissioner

Date