

MICHIGAN MANURE APPLICATION RISK INDEX WORKSHEET						Fill in shaded areas only!		ctrl "c" to c		
Farm Number:	Sample Dairy					Date:	4/21/2003			
Township:						Tract No:	with setbacks			
Farm or Producer Name:										
Field No:	F S	F N	HM 1	HM 2	HM 3	HO 1	HO 2	CO N		
Acres:	35	37.2	39.1	39.1	20	57	51.8	36.4		
FIELD FEATURES "INPUT"										
I. SOIL MAP UNIT										
If drained, enter Y										
Insert Soil Series										
	Fox	fox	fox	fox	fox	fox	fox	oshtemo		
1. Soil Hydrologic Group	B	B	B	B	B	B	B	B		
2. Soil Management Group	3/5a	3/5a	3/5a	3/5a	3/5a	3/5a	3/5a	4a		
3. Percent Slope	1	1	1	1	1.9	1	1	1		
II. WATER QUALITY										
4. Soil Test Phosphorus Value	160	104	142	138	104	322	468	138		
5. Conc. Water/Surface Inlet	p	p	p	p	f	p	s	m		
6. Nitrogen leaching Index	m	m	m	m	m	m	m	m		
	prompt for cell above									
	m	m	m	m	m	m	m	m		
III. SURFACE COVER										
7. Residue/Cover Crops/Per. Cover	40	40	40	40	40	40	40	40		
8. Surface Water Setback	1	1	1	1	2	1	2	2		
9. Vegetative Buffer Width	na	na	na	na	15	na	25	na		
IV. MANURE										
10. Manure Phosphorus Application	90	90	90	90	90	45	45	90		
11. Manure Nitrogen Application	130	150	140	150	125	125	125	150		
12. Manure Application Method	s>3	s>3	s>3	s>3	s>3	s>3	s>3	s>3		
FIELD FEATURES "OUTPUT"										
I. SOIL SMG										
1. Soil Hydrologic Group	3/5a	3/5a	3/5a	3/5a	3/5a	3/5a	3/5a	4a		
2. Soil Management Group	2	2	2	2	2	2	2	2		
3. Percent Slope	1	1	1	1	1	1	1	1		
II. WATER QUALITY										
4. Soil Test Phosphorus Value	6	3	3	3	3	12	12	3		
5. Concentrated Water Flow or Surface Inlet Discharge	1.5	1.5	1.5	1.5	3	1.5	6	12		
6. Nitrogen Leaching Index for Soil Hydrologic Group	6	6	6	6	6	6	6	6		
III. SURFACE COVER										
7. Residue/Cover Crop/Per. Cover	1	1	1	1	1	1	1	1		
8. Surface Water Setback	1	1	1	1	2	1	2	2		
9. Vegetative Buffer Width	1.5	1.5	1.5	1.5	12	1.5	6	1.5		
IV. MANURE										
10. Manure "P" Application	4	4	4	4	4	2	2	4		
11. Manure "N" Application	2	4	4	4	2	2	2	4		
12. Manure Application Method	8	8	8	8	8	8	8	8		
FIELD FEATURES INDEX TOTALS										
	36	35	35	35	46	40	50	46.5		
	LOW	LOW	LOW	LOW	MEDIUM	HIGH	HIGH	HIGH		
TOTAL ACRES BY "MARI" RISK CATEGORY:										
	0	860.2	223.9	493.7	1577.8					
	V. LOW	LOW	MEDIUM	HIGH	TOTAL		860.2	Total Low		

RUSLE2 Erosion Calculation Record

Info: Field SH5

profiles\Sample Dairy SH5 Corn 2002

Inputs:

Location: USA\Michigan\Branch County

Soil: Sand Co., MI\7B HATMAKER LOAM, 1 TO 4 PERCENT SLOPES\Hatmaker loam 95%

Slope length (horiz): 150 ft

Avg. slope steepness: 3.0 %

Contouring: a. rows up-and-down hill

Strips/barriers: (none)

Diversion/terrace, sediment basin: (none)

Base management: corn grain, Sfc; soy, Sdisk, fc; corn grain, Sfc

<i>Date</i>	<i>Operation</i>	<i>Vegetation</i>	<i>Surf. res. cov. after op, %</i>
5/10/0	Cultivator, field 6-12 in sweeps		66
5/10/0	planter, double disk opnr	Corn, grain	66
10/20/0	Harvest, killing crop 50pct standing stubble		91
5/5/1	Disk, tandem secondary op.		55
5/15/1	Cultivator, field 6-12 in sweeps		42
5/15/1	Drill or airseeder, double disk	Soybean, mw 7in rows	42
10/10/1	Harvest, killing crop 50pct standing stubble		80
5/10/2	Cultivator, field 6-12 in sweeps		36
5/10/2	planter, double disk opnr	Corn, grain	36
10/20/2	Harvest, killing crop 50pct standing stubble		89

Outputs:

T value: 5.0 t/ac/yr

Soil loss for cons. plan: 1.9 t/ac/yr

Wind Erosion Worksheet -

Client:	SAMPLE DAIRY		Field #	SH-123E		Date:	3/2003		County:	SAND	
Step #1	Determine the Soil "I" Value - Refer to Section II of the FOTG										
	Soil Type #1		"I" Value #1		Soil Type #2		"I" Value #2				
	BRANCH LS (25B)		134		LOCKE FSL (15B)		86				
Step #2	Determine the Soil Roughness (Ridge) Value (Krd) - Refer to Tables 5*										
	Tillage Type used for Krd					Krd Value					
	Present					NO-TILL					
Planned											
Step #3	Determine the Climatic Factor (See Table 2)										
Climatic Factor = 7											
Step #4	Determine the "L" - Length of the Unsheltered Distance										
			Measured "L"		Or Calculated "L" (Table 4)						
					Angle of Deviation		Adj. Factor		Field Width		"L"
	Present		1320'		22.5		1.1		660'		1452
Planned											
Step #5	Determine the "V" Vegetative Factor (SGE) for each crop in the rotation										
	#	Present Crop(s)		Type of Residue		% Residue Cover		Lbs. Of Residue Table 1		SGe Figures a-1 through b-6 Table 1	
	1	SOY		CORN STUBBLE		45		1600		800	
	2	CORN		SOY. STUBBLE		45		1025		600	
	3										
	4										
	#	Planned Crop(s)		Type of Residue		% Residue Cover		Lbs. Of Residue Table 1		SGe Figures a1 through b6 Table 1	
	1										
	2										
	3										
4											
Step #6	Determine "E" Estimated Annual Soil Loss by Wind Refer to the appropriate Tables "E" Tables										
	#	Present Crop(s)		Present (E) Soil Loss		Planned Crop(s)		Planned (E) Soil Loss			
	1	SOY.		2.0							
	2	CORN		3.9				AVG = 2.95			
	3										
4											
Comments	SOIL LOSS IS WELL BELOW T OF 4										

(1320 x 1.1)