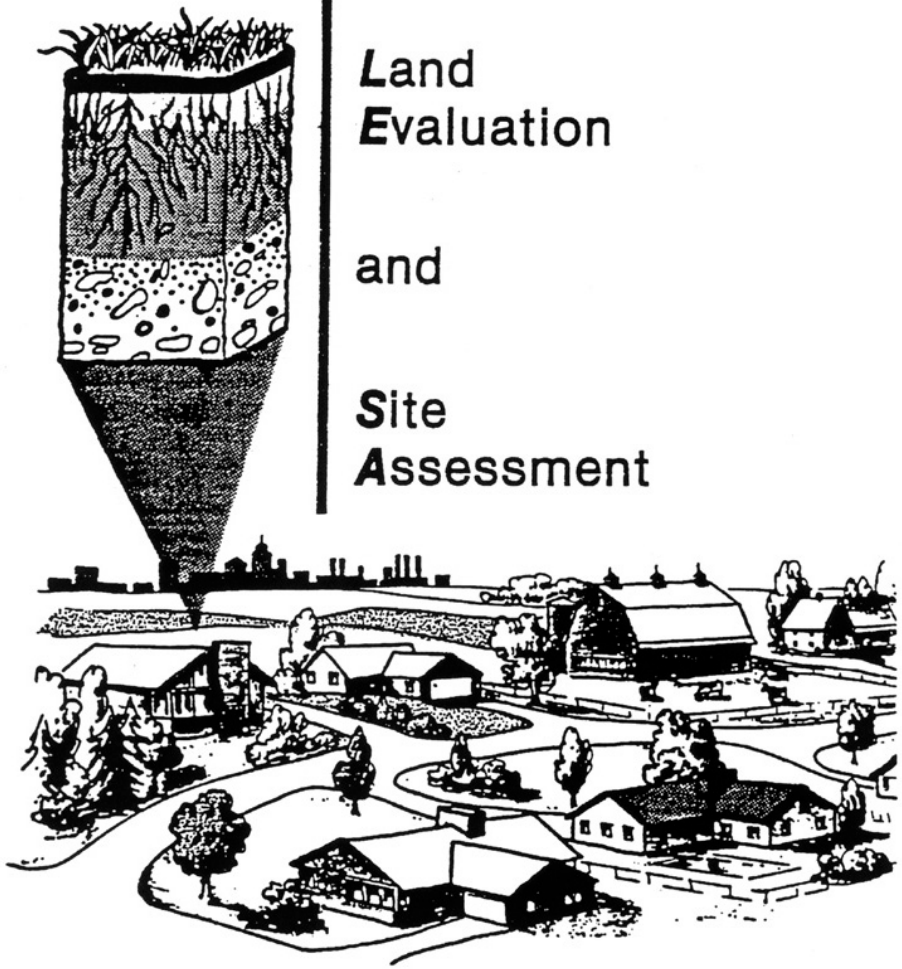
FARMLAND PROTECTION POLICTY ACT (FPPA)

LE Part of LESA

LESA



Land
Evaluation

and

Site
Assessment

United States
Department of
Agriculture

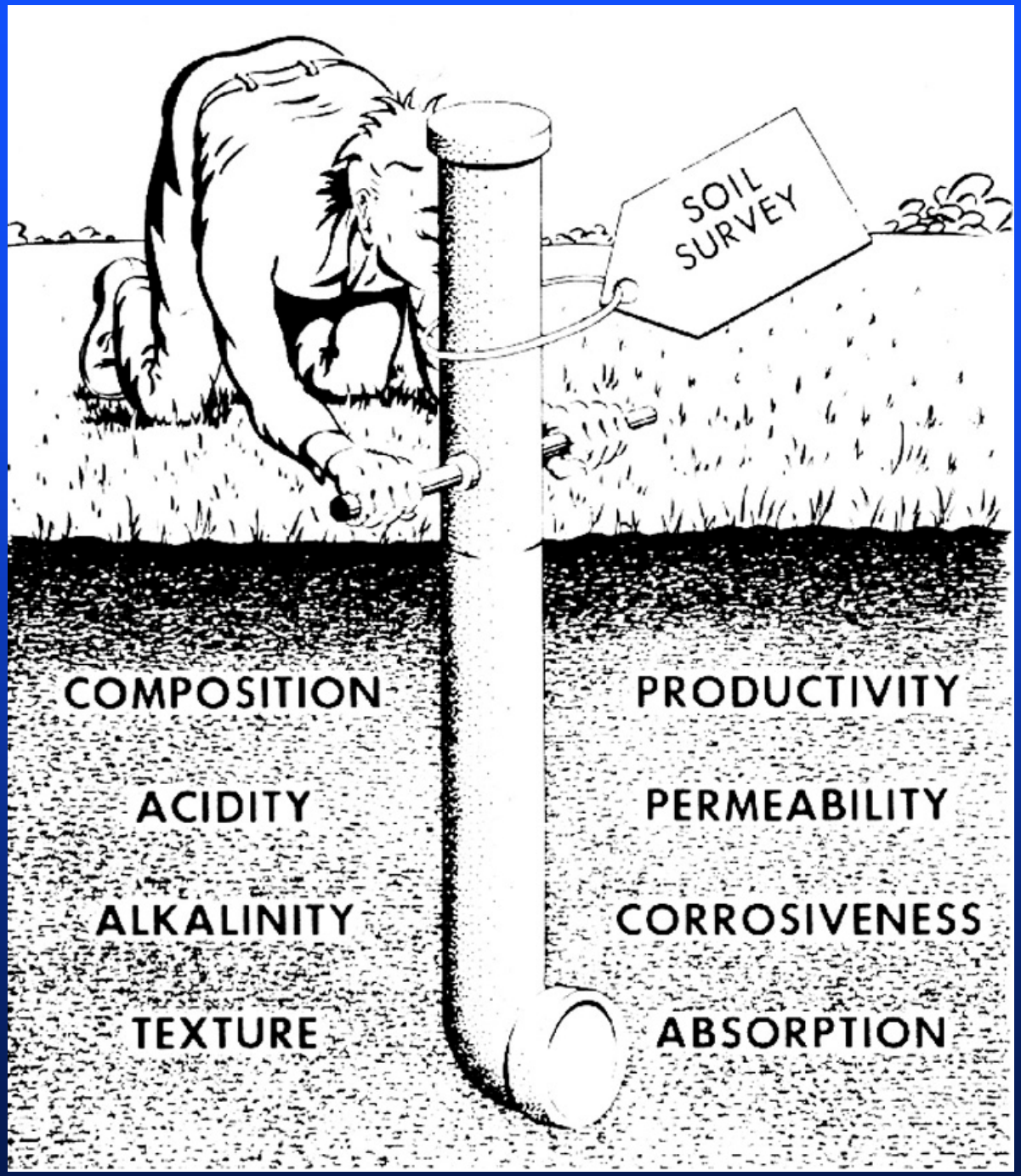
Natural Resources
Conservation
Service

Land Evaluation

LE Part of LESA (Land Evaluation and Site Assessment)

System Design

- Defensible
- Applied consistently from case to case
- Flexible to accommodate differences among states, areas, and counties
- Based on existing knowledge
- Protects the integrity of National Land Evaluation and Classification Systems


SOIL SURVEY
COMPOSITION
ACIDITY
ALKALINITY
TEXTURE
PRODUCTIVITY
PERMEABILITY
CORROSIVENESS
ABSORPTION

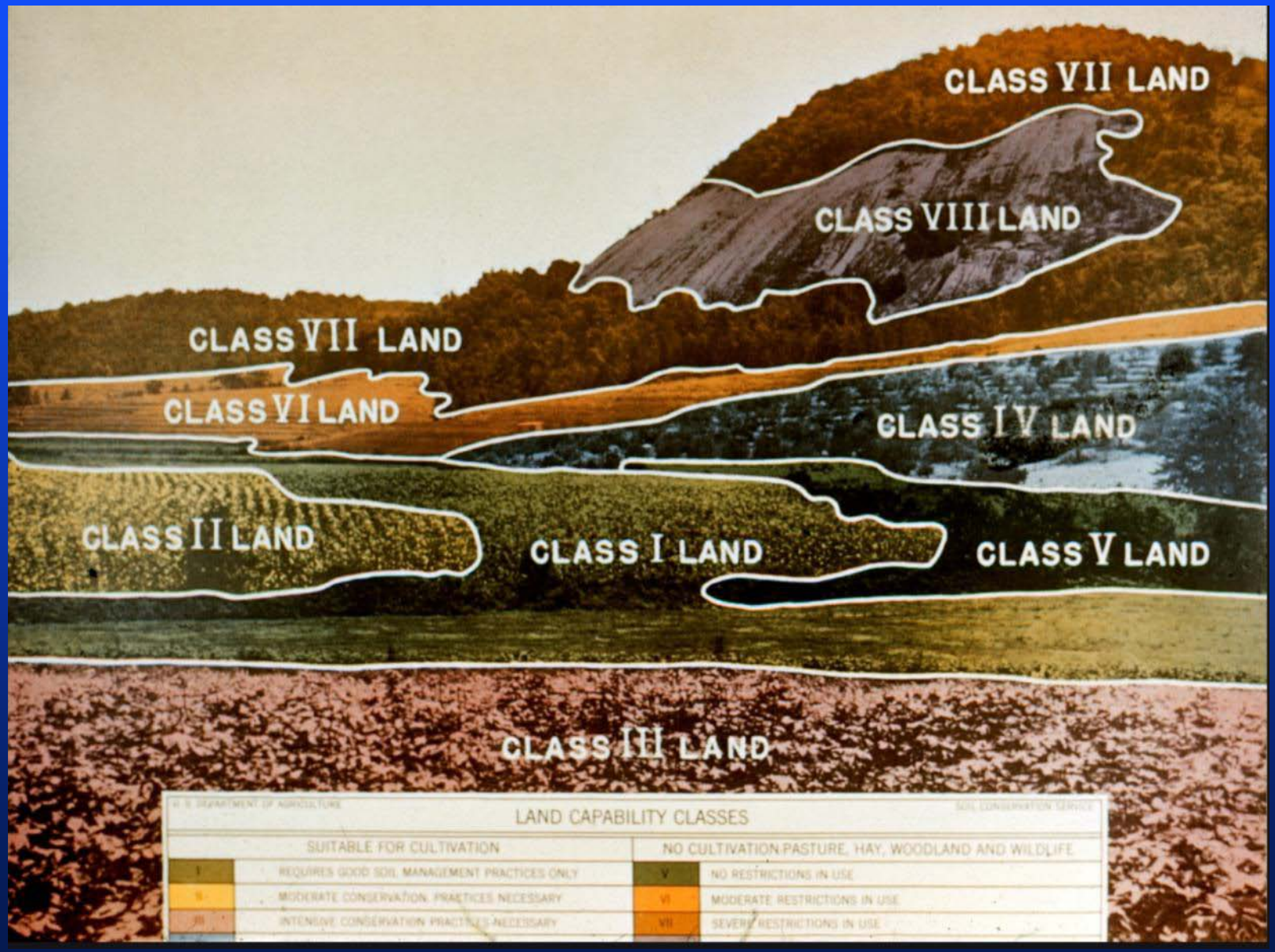
Agricultural Land Evaluation

- Definition: Agricultural Land Evaluation is the process of rating soils of a given area and placing them into groups ranging from the best suited to the poorest suited to agricultural purposes.
- Agricultural land consists of:
  - Cropland and Pastureland
  - Forestland
  - Rangeland

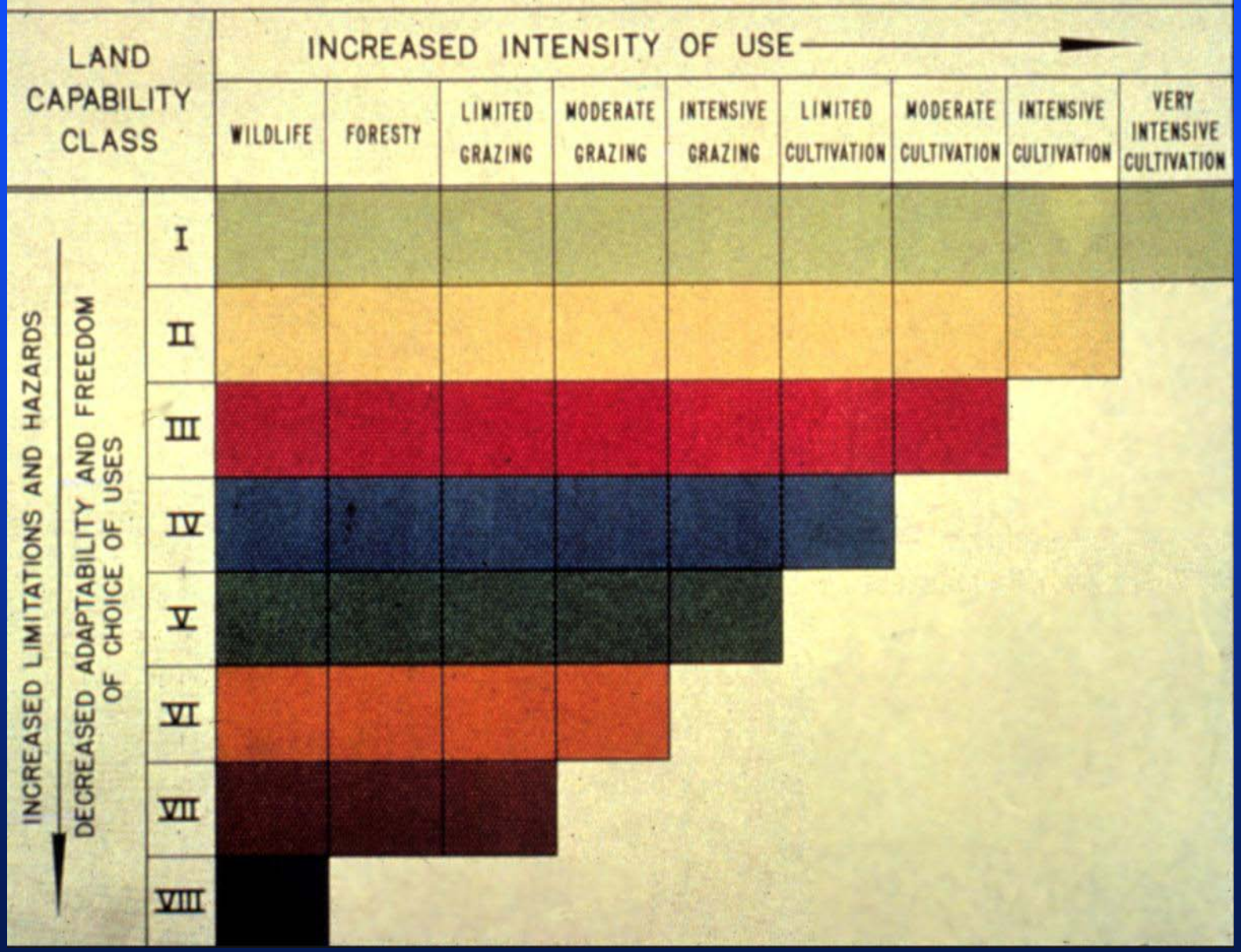
Land Evaluation Methods

- Land Capability Classification
- Soil Productivity
- Important Farmland Classification
- Soil Potentials

Land Capability Classes



USE OF LAND ACCORDING TO CAPABILITIES



U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request
Name of Project	Federal Agency Involved
Proposed Land Use	County and State

PART II *(To be completed by NRCS)*	Date Request Received By NRCS	Person Completing Form:

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☐ NO ☐	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %	
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site				
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide Important or Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)				

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)				
2. Perimeter In Non-urban Use	(10)				
3. Percent Of Site Being Farmed	(20)				
4. Protection Provided By State and Local Government	(20)				
5. Distance From Urban Built-up Area	(15)				
6. Distance To Urban Support Services	(15)				
7. Size Of Present Farm Unit Compared To Average	(10)				
8. Creation Of Non-farmable Farmland	(10)				
9. Availability Of Farm Support Services	(5)				
10. On-Farm Investments	(20)				
11. Effects Of Conversion On Farm Support Services	(10)				
12. Compatibility With Existing Agricultural Use	(10)				
TOTAL SITE ASSESSMENT POINTS	160				
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100				
Total Site Assessment *(From Part VI above or local site assessment)*	160				
TOTAL POINTS ***(Total of above 2 lines)***	260				

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☐

Reason For Selection:

Name of Federal agency representative completing this form:	Date:

(See Instructions on reverse side) **Form AD-1006 (03-02)**

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request	4. Sheet 1 of _____
1. Name of Project	5. Federal Agency Involved	
2. Type of Project	6. County and State	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS	2. Person Completing Form
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☐ NO ☐		4. Acres Irrigated | Average Farm Size
5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: %	7. Amount of Farmland As Defined in FPPA Acres: %
8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS

PART III *(To be completed by Federal Agency)*	Alternative Corridor For Segment _____			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor	0	0	0	0
PART IV *(To be completed by NRCS) Land Evaluation Information*				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*				

PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	Maximum Points				
1. Area in Nonurban Use	15				
2. Perimeter in Nonurban Use	10				
3. Percent Of Corridor Being Farmed	20				
4. Protection Provided By State And Local Government	20				
5. Size of Present Farm Unit Compared To Average	10				
6. Creation Of Nonfarmable Farmland	25				
7. Availability Of Farm Support Services	5				
8. On-Farm Investments	20				
9. Effects Of Conversion On Farm Support Services	25				
10. Compatibility With Existing Agricultural Use	10				
TOTAL CORRIDOR ASSESSMENT POINTS	160	0	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	100				
Total Corridor Assessment (From Part VI above or a local site assessment)	160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	0	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES ☐ NO ☐

5. Reason For Selection:

Signature of Person Completing this Part: | DATE

NOTE: Complete a form for each segment with more than one Alternate Corridor

Clear Form

Worksheet #1 - List (before conservation adjustments)

NOTE: The soil map units shown are for the selected area. Unless modified with the edit function, the land capability (lc) is the dominant land capability of the soil components. The yield values shown are a weighted average calculated from the soil components.

```
County: tipton, indiana (IN159), 11 mapunits

Indicator crop      : corn
Temperature Regime  : mesic
C factor            : 0.08
System irrigated?   : no
Minimum Component   : 15%
```

line no.	map symbl	soil name	slope	lc	nirr yield	prd ind	i f	acres number	acres pct
1	TuB2	tuscola	1- 6	2e	68	47	1	6,671	4.0
2	WkB	williamstown silt loam	1- 4	2e	110	76	1	5,228	3.1
3	Pn	patton silty clay loam	0- 2	2w	145	100	2	81,097	48.7
4	DeA	del rey	0- 2	2w	68	47	2	55,023	33.0
5	Ps	pella	0- 2	2w	90	62	2	15,290	9.2
6	SaC2	sisson-strawn complex	6-12	3e	66	46	0	344	0.2
7	Sh	sloan silt loam	0- 2	3w	130	90	2	2,171	1.3
8	Pa	palms muck	0- 2	3w	130	90	S	393	0.2
9	Pc	palms muck	0- 2	5w		0	0	175	0.1
10	Ud	udorthents	0- 0	8		0	0	245	0.1
11	W	water	0- 0	8		0	0	45	0.0
								166,682	

line no.	map symbl	soil name	slope	lc	nirr yield	prd ind	i f	acres number	pct
1	Pn	patton silty clay loam	0- 2	2w	145	100	2	81,097	48.7
2	Sh	sloan silt loam	0- 2	3w	130	90	2	2,171	1.3
3	Pa	palms muck	0- 2	3w	130	90	S	393	0.2
4	WkB	williamstown silt loam	1- 4	2e	110	76	1	5,228	3.1
5	Ps	pella	0- 2	2w	90	62	2	15,290	9.2
6	DeA	del rey	0- 2	2w	68	47	2	55,023	33.0
7	TuB2	tuscola	1- 6	2e	68	47	1	6,671	4.0
8	SaC2	sisson-strawn complex	6-12	3e	66	46	0	344	0.2
9	Pc	palms muck	0- 2	5w		0	0	175	0.1
10	Ud	udorthents	0- 0	8		0	0	245	0.1
11	W	water	0- 0	8		0	0	45	0.0
								166,682	

line no.	map symbl	soil name	slope	lc	nirr yield	prd ind	i f	acres number	pct
1	DeA	del rey	0- 2	2w	68	47	2	55,023	33.0
2	Pa	palms muck	0- 2	3w	130	90	S	393	0.2
3	Pc	palms muck	0- 2	5w		0	0	175	0.1
4	Pn	patton silty clay loam	0- 2	2w	145	100	2	81,097	48.7
5	Ps	pella	0- 2	2w	90	62	2	15,290	9.2
6	SaC2	sisson-strawn complex	6-12	3e	66	46	0	344	0.2
7	Sh	sloan silt loam	0- 2	3w	130	90	2	2,171	1.3
8	TuB2	tuscola	1- 6	2e	68	47	1	6,671	4.0
9	Ud	udorthents	0- 0	8		0	0	245	0.1
10	W	water	0- 0	8		0	0	45	0.0
11	WkB	williamstown silt loam	1- 4	2e	110	76	1	5,228	3.1
								166,682	

Conservation Adjustments

Conservation Yield Adjustment for subsurface drainage

type of limitations (e, w, s, c)	w
conservation measure code	606
amount of conservation measure / acre	396
installation cost of conservation measure ($)	1.5
life span (year(s))	20
annual maintainance cost ($)	0.02
land lost to installation (% of ave. yield (0-100))	0
interest rate (0-100)	6
price for unit of indicator crop ($)	2.80

Calculated yield reduction is 21.11. The breakdown for subsurface drainage is:

```
  7.92 maintenance
 51.18 amortized annual value
  0.00 land loss
------
 59.10 <----  divide this by price
```

Conservation Adjustments

Conservation Yield Adjustment Data for terraces

type of limitations (e, w, s, c)	e
conservation measure code	600
amount of conservation measure / acre	396
installation cost of conservation measure ($)	2.75
life span (year(s))	10
annual maintainance cost ($)	0.08
land lost to installation (% of ave. yield (0-100))	0
interest rate (0-100)	6
price for unit of indicator crop ($)	2.80

Calculated yield reduction is 63.45. The breakdown for terraces is:

```
 31.68 maintenance
145.97 amortized annual value
  0.00 land loss
------
177.65 <----  divide this by price
```

Worksheet #1 - List (after conservation adjustments)

NOTE: The soil map units shown are for the selected area. Unless modified with the edit function, the land capability (lc) is the dominant land capability of the soil components. The yield values shown are a weighted average calculated from the soil components.

```
County: tipton, indiana (IN159), 11 mapunits

Indicator crop      : corn
Temperature Regime  : mesic
C factor            : 0.08
System irrigated?   : no
Minimum Component   : 15%
```

line no.	map symbl	soil name	slope	lc	nirr yield	prd ind	i f	acres number	pct
1	TuB2	tuscola	1- 6	2e	68	55	1	6,671	4.0
2	WkB	williamstown silt loam	1- 4	2e	110	89	1	5,228	3.1
3	Pn	patton silty clay loam	0- 2	2w	124*	100	2	81,097	48.7
4	DeA	del rey	0- 2	2w	47*	38	2	55,023	33.0
5	Ps	pella	0- 2	2w	69*	56	2	15,290	9.2
6	SaC2	sisson-strawn complex	6-12	3e	3*	2	0	344	0.2
7	Sh	sloan silt loam	0- 2	3w	109*	88	2	2,171	1.3
8	Pa	palms muck	0- 2	3w	109*	88	S	393	0.2
9	Pc	palms muck	0- 2	5w		0	0	175	0.1
10	Ud	udorthents	0- 0	8		0	0	245	0.1
11	W	water	0- 0	8		0	0	45	0.0
								166,682	

The asterisk (*) following the yield values denotes adjusted yields.

line no.	map symbl	soil name	slope	lc	nirr yield	prd ind	i f	acres number	pct
1	Pn	patton silty clay loam	0- 2	2w	145	100	2	81,097	48.7
2	Sh	sloan silt loam	0- 2	3w	130	90	2	2,171	1.3
3	Pa	palms muck	0- 2	3w	130	90	0	393	0.2
4	WkB	williamstown silt loam	1- 4	2e	110	76	1	5,228	3.1
5	Ps	pella	0- 2	2w	90	62	2	15,290	9.2
6	DeA	del rey	0- 2	2w	68	47	2	55,023	33.0
7	TuB2	tuscola	1- 6	2e	68	47	1	6,671	4.0
8	SaC2	sisson-strawn complex	6-12	3e	66	46	0	344	0.2
9	Pc	palms muck	0- 2	5w		0	0	175	0.1
10	Ud	udorthents	-	0		0	0	245	0.1
11	W	water	-	0		0	0	45	0.0

line no.	map symbl	soil name	slope	lc	nirr yield	prd ind	i f	acres number	acres pct
1	Pn	patton silty clay loam	0- 2	2w	124*	100	2	81,097	48.7
2	WkB	williamstown silt loam	1- 4	2e	110	89	1	5,228	3.1
3	Pa	palms muck	0- 2	3w	109*	88	S	393	0.2
4	Sh	sloan silt loam	0- 2	3w	109*	88	2	2,171	1.3
5	Ps	pella	0- 2	2w	69*	56	2	15,290	9.2
6	TuB2	tuscola	1- 6	2e	68	55	1	6,671	4.0
7	DeA	del rey	0- 2	2w	47*	38	2	55,023	33.0
8	SaC2	sisson-strawn complex	6-12	3e	3*	2	0	344	0.2
9	Pc	palms muck	0- 2	5w		0	0	175	0.1
10	Ud	udorthents	0- 0	8		0	0	245	0.1
11	W	water	0- 0	8		0	0	45	0.0
								166,682	

line no.	map symbl	soil name	slope	lc	nirr yield	prd ind	i f	acres number	pct
1	DeA	del rey	0- 2	2w	47*	38	2	55,023	33.0
2	Pa	palms muck	0- 2	3w	109*	88	S	393	0.2
3	Pc	palms muck	0- 2	5w		0	0	175	0.1
4	Pn	patton silty clay loam	0- 2	2w	124*	100	2	81,097	48.7
5	Ps	pella	0- 2	2w	69*	56	2	15,290	9.2
6	SaC2	sisson-strawn complex	6-12	3e	3*	2	0	344	0.2
7	Sh	sloan silt loam	0- 2	3w	109*	88	2	2,171	1.3
8	TuB2	tuscola	1- 6	2e	68	55	1	6,671	4.0
9	Ud	udorthents	0- 0	8		0	0	245	0.1
10	W	water	0- 0	8		0	0	45	0.0
11	WkB	williamstown silt loam	1- 4	2e	110	89	1	5,228	3.1
								166,682	

Worksheet #1 - Grouping Data (IN159)

group number (1-15)	lcc (1-8)	Important Farmland (P,S,L, O,U)	low prod index (0-100)	high prod index (0-100)
1	2w	P	100	100
2	2e-3w	P	85	90
3	3w	S	85	90
4	2e-2w	P	50	60
5	2w	P	35	40
6	3e	O	1	5
7	5w	O	0	0
8	8	O	0	0

Worksheet #2 - Tipton, Indiana (IN159)

Group Number 1

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
Pn	2w	patton sil	0- 2	124	100	2	81,097	48.7	11,759,065	124	10,047,398
						TOTAL	81,097	48.7	11,759,065		10,047,398

Weighted Average Yield = 145.00 Adjusted Weighted Average Yield = 123.89

Group Number 2

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
WkB	2e	williamsto	1- 4	110	89	1	5,228	3.1	575,080	110	575,080
Sh	3w	sloan silt	0- 2	109	88	2	2,171	1.3	282,230	109	236,408
						TOTAL	7,399	4.4	857,310		811,488

Weighted Average Yield = 115.87 Adjusted Weighted Average Yield = 109.68

Group Number 3

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
Pa	3w	palms muck	0- 2	109	88	S	393	0.2	51,090	109	42,795
					TOTAL		393	0.2	51,090		42,795

Weighted Average Yield = 130.00 Adjusted Weighted Average Yield = 108.89

Group Number 4

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
Ps	2w	pella	0- 2	69	56	2	15,290	9.2	1,376,100	69	1,053,383
TuB2	2e	tuscola	1- 6	68	55	1	6,671	4.0	451,274	68	451,274
					TOTAL		21,961	13.2	1,827,374		1,504,656

Weighted Average Yield = 83.21 Adjusted Weighted Average Yield = 68.51

Group Number 5

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
DeA	2w	del rey	0- 2	47	38	2	55,023	33.0	3,738,327	47	2,576,989
					TOTAL		55,023	33.0	3,738,327		2,576,989

Weighted Average Yield = 67.94 Adjusted Weighted Average Yield = 46.83

Group Number 6

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
SaC2	3e	sisson-str	6-12	3	2	0	344	0.2	22,813	3	987
					TOTAL		344	0.2	22,813		987

Weighted Average Yield = 66.32 Adjusted Weighted Average Yield = 2.87

Group Number 7

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
Pc	5w	palms muck	0- 2		0		175	0.1	0		0
					TOTAL		175	0.1	0		0

Weighted Average Yield = 0.00 Adjusted Weighted Average Yield = 0.00

Group Number 8

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
Ud	8	udorthents	0- 0		0		245	0.1	0		0
W	8	water	0- 0		0		45	0.0	0		0
					TOTAL		290	0.2	0		0

Weighted Average Yield = 0.00 Adjusted Weighted Average Yield = 0.00

Data for Completing Form AD-1006

Worksheet 2

County Tipton, Indiana (IN159)

relative group	lcc	important farmland	potential or productivity	%	cum'ltv %	acres	cum'ltv acres	value
1	2w	prime	100-100	48.7	48.7	81,097	81,097	100
2	2e-3w	prime	88- 89	4.4	53.1	7,399	88,496	89
3	3w	state	88- 88	0.2	53.3	393	88,889	88
4	2e-2w	prime	55- 56	13.2	66.5	21,961	110,850	55
5	2w	prime	38- 38	33.0	99.5	55,023	165,873	38
6	3e	other	2- 2	0.2	99.7	344	166,217	2
7	5w	other	-	0.1	99.8	175	166,392	0
8	8	other	-	0.2	100.0	290	166,682	0

FPPA acres: 165,873 (99.5% of county)
Farmable acres: 166,217 (99.7% of county)
Grouped acres: 166,682
Total acres: 166,682

The Computer Aided Land Evaluation System (CALES) web site is for NRCS and others responsible for the Land Evaluation portion of a Land Evaluation and Site Assessment (LESA) system. The CALES program requires significant user input and results vary based upon user knowledge and emphasis. Official NRCS Land Evaluation results to be used for the Farmland Protection Policy Act (FPPA) are approved by the NRCS State Conservationist and placed in the Field Office Technical Guide (FOTG). For more information contact your local or state NRCS office.

Worksheet #1 - List

NOTE: The soil map units shown are for the selected area. Unless modified with the edit function, the land capability (lc) is the dominant land capability of the soil components. The yield values shown are a weighted average calculated from the soil components.

```
County: tipton, indiana (IN159), 11 mapunits

Indicator crop      : corn
Temperature Regime  : mesic
C factor            : 0.08
System irrigated?   : no
Minimum Component   : 15%
```

Before Conservation Adjustments

line no.	map symbl	soil name	slope	lc	nirr yield	prd ind	i f	acres number	acres pct
1	Pn	patton silty clay loam	0- 2	2w	145	100	2	81,097	48.7
2	Sh	sloan silt loam	0- 2	3w	130	90	2	2,171	1.3
3	Pa	palms muck	0- 2	3w	130	90	S	393	0.2
4	WkB	williamstown silt loam	1- 4	2e	110	76	1	5,228	3.1
5	Ps	pella	0- 2	2w	90	62	2	15,290	9.2

After Conservation Adjustments

line no.	map symbl	soil name	slope	lc	nirr yield	prd ind	i f	acres number	acres pct
1	Pn	patton silty clay loam	0- 2	2w	124*	100	2	81,097	48.7
2	WkB	williamstown silt loam	1- 4	2e	110	89	1	5,228	3.1
3	Pa	palms muck	0- 2	3w	109*	88	S	393	0.2
4	Sh	sloan silt loam	0- 2	3w	109*	88	2	2,171	1.3
5	Ps	pella	0- 2	2w	69*	56	2	15,290	9.2

Worksheet #1 - LE part of LESA for Mason County, Illinois with no conservation yield adjustment

NOTE: The soil map units shown are for the selected area. Unless modified with the edit function, the land capability (lc) is the dominant land capability of the soil components. The yield values shown are a weighted average calculated from the soil components.

County: Mason, Illinois (IL125)
85 map units

Indicator crop : corn
Temperature Regime : mesic
C factor : 0.07
System irrigated? : no
Minimum Component : 15%

line no.	map symbl	soil name	slope	lc	nirr yield	prd ind	i f	acres number	acres pct
1	43	ipava silt loam	0- 2	1	163	100	1	3,144	0.9
2	198	elburn silt loam	0- 2	1	161	99	1	4,964	1.4
3	683	lawndale silt loam	0- 2	1	156	96	1	2,551	0.7
4	68	sable silty clay loam	0- 2	2w	156	96	2	1,493	0.4
5	36A	tama silt loam	0- 2	1	155	95	1	3,018	0.8
6	152	drummer silty clay loam	0- 2	2w	154	94	2	5,095	1.4
7	36B	tama silt loam	2- 5	2e	153	94	1	6,660	1.8
8	199A	plano silt loam	0- 2	1	151	93	1	2,898	0.8
9	37	worthen silt loam	0- 2	1	151	93	1	375	0.1
10	199B	plano silt loam	2- 5	2e	150	92	1	561	0.2
11	430B	raddle silt loam	2- 5	2e	148	91	1	373	0.1
12	36C2	tama silt loam	5-10	3e	146	90	0	1,959	0.5
13	684A	broadwell silt loam	0- 2	1	145	89	1	2,818	0.8
14	244	hartsburg silty clay loam	0- 2	2w	145	89	2	619	0.2
15	374	proctor silt loam	0- 2	1	144	88	1	809	0.2
16	684B	broadwell silt loam	2- 5	2e	144	88	1	6,771	1.9
17	153	pella silty clay loam	0- 2	2w	140	86	2	1,286	0.4
18	8070	beaucoup silty clay loam	0- 2	2w	138	85	2	4,443	1.2
19	125	selma clay loam	0- 2	2w	136	83	2	8,040	2.2
20	67	harpster silty clay loam	0- 2	2w	136	83	2	7,170	2.0
21	684C2	broadwell silt loam	5-10	3e	136	83	0	2,142	0.6
22	447	canisteo loam	0- 2	2w	132	81	2	4,563	1.3
23	8284	tice silty clay loam	0- 2	2w	130	80	1	1,303	0.4
24	8400	calco silt loam	0- 2	2w	130	80	2	380	0.1
25	3284	tice silty clay loam	0- 2	3w	130	80	3	1,477	0.4
26	103	houghton muck	0- 2	3w	129	79	0	301	0.1
27	280B	fayette silt loam	1- 5	2e	128	79	1	970	0.3
28	206	thorp silt loam	0- 2	2w	126	77	2	3,626	1.0
29	8107	sawmill silty clay loam	0- 2	2w	125	77	2	4,061	1.1
30	8107+	sawmill silt loam	0- 2	2w	125	77	2	693	0.2
31	272	edgington silt loam	0- 2	2w	122	75	2	7,890	2.2
32	8452	riley silt loam	0- 2	2w	122	75	3	1,032	0.3
33	280C2	fayette silt loam	5-10	3e	121	74	0	1,264	0.4
34	8078	arenzville silt loam	0- 2	2w	120	74	1	859	0.2
35	280D2	fayette silt loam	10-18	4e	116	71	0	835	0.2
36	151	ridgeville sandy loam	0- 2	2s	115	71	1	12,425	3.4
37	100	palms muck	0- 2	3w	115	71	0	745	0.2

38	159A	pillot silt loam	0- 2	2s	112	69	1	1,134	0.3
39	3682	medway silty clay loam	0- 2	2w	112	69	3	3,038	0.8
40	200	orio loam	0- 2	2w	112	69	2	2,035	0.6
41	3302	ambraw clay loam	0- 2	4w	112	69	5	979	0.3
42	159B	pillot silt loam	2- 5	2e	111	68	1	3,045	0.8
43	150A	onarga sandy loam	0- 2	2s	110	67	1	15,717	4.4
44	770	udolpho fine sandy loam	0- 2	2w	110	67	2	13,744	3.8
45	201	gilford sandy loam	0- 2	2w	110	67	2	6,939	1.9
46	8302	ambraw clay loam	0- 2	2w	110	67	2	1,915	0.5
47	685C2	middletown silt loam	5-10	3e	110	67	0	456	0.1
48	772	marshan loam	0- 2	2w	109	67	2	13,892	3.9
49	150B	onarga sandy loam	2- 5	2e	108	66	1	7,528	2.1
50	280D3	fayette silty clay loam	7-15	4e	107	66	0	343	0.1
51	379B	dakota fine sandy loam	2- 5	2e	105	64	1	1,434	0.4
52	379A	dakota fine sandy loam	0- 2	2s	105	64	1	11,033	3.1
53	150C2	onarga fine sandy loam	5-10	3e	103	63	1	2,579	0.7
54	266	disco sandy loam	0- 2	3s	103	63	1	9,811	2.7
55	3107	sawmill silty clay loam	0- 2	3w	103	63	5	3,331	0.9
56	89	maumee loamy sand	0- 2	3w	103	63	0	1,064	0.3
57	3107+	sawmill silt loam	0- 2	3w	103	63	5	521	0.1
58	280F	fayette silt loam	18-30	6e	103	63	0	886	0.2
59	159C2	pillot silt loam	5-10	3e	102	63	0	1,912	0.5
60	131A	alvin fine sandy loam	0- 2	2s	98	60	1	2,485	0.7
61	131B	alvin fine sandy loam	2- 5	2e	97	60	1	1,924	0.5
62	131C2	alvin fine sandy loam	5-10	3e	93	57	1	1,754	0.5
63	271D2	timula silt loam	10-18	3e	93	57	0	401	0.1
64	49	watseka loamy sand	0- 2	3s	92	56	0	3,250	0.9
65	131D2	alvin fine sandy loam	10-18	3e	90	55	0	1,062	0.3
66	98B	ade loamy fine sand	1- 7	3s	90	55	0	11,830	3.3
67	965D2	tallula-bold complex	7-15	3e	86	53	0	943	0.3
68	8304	landes fine sandy loam	0- 2	2w	84	52	1	290	0.1
69	3304	landes sandy loam	0- 2	3w	84	52	3	832	0.2
70	88B	sparta loamy sand	1- 7	4s	84	52	0	19,559	5.4
71	53B	bloomfield sand	1- 7	3s	79	48	0	18,586	5.2
72	53D	bloomfield sand	7-15	4e	73	45	0	2,836	0.8
73	8088B	sparta loamy fine sand	1- 5	3s	71	44	0	255	0.1
74	54B	plainfield sand	1- 7	6s	56	34	0	27,715	7.7
75	3088B	sparta loamy sand	1- 5	3s	55	34	0	403	0.1
76	54D	plainfield sand	7-15	6s	53	33	0	13,272	3.7
77	54E	plainfield sand	15-30	7s	50	31	0	1,956	0.5
78	3115	dockery silty clay loam	0- 2	4w		0	0	8,724	2.4
79	1070	beaucoup silty clay loam	0- 2	5w		0	0	5,059	1.4
80	1166	cohoctah loam	0- 2	5w		0	0	2,787	0.8
81	1201	gilford sandy loam	0- 2	5w		0	0	404	0.1
82	131F	alvin fine sandy loam	18-30	6e		0	0	470	0.1
83	88D	sparta loamy sand	7-15	6s		0	0	1,743	0.5
84	30G	hamburg silt loam	20-60	7e		0	0	708	0.2
85	W	water	0- 0	8		0	0	18,313	5.1
								360,510	

Worksheet #2 LE part of LESA Grouped a Relative Values for Mason County, Illinois with no conservation yield adjustment

County: Mason, Illinois (IL125)

Group Number 1

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
43	1	ipava silt	0- 2	163	100	1	3,144	0.9	512,472	163	512,472
198	1	elburn sil	0- 2	161	99	1	4,964	1.4	799,204	161	799,204
683	1	lawndale s	0- 2	156	96	1	2,551	0.7	397,956	156	397,956
68	2w	sable silt	0- 2	156	96	2	1,493	0.4	232,908	156	232,908
36A	1	tama silt	0- 2	155	95	1	3,018	0.8	467,790	155	467,790
152	2w	drummer si	0- 2	154	94	2	5,095	1.4	784,630	154	784,630
36B	2e	tama silt	2- 5	153	94	1	6,660	1.8	1,018,980	153	1,018,980
						TOTAL	26,925	7.5	4,213,940		4,213,940

Weighted Average Yield = 156.51 Adjusted Weighted Average Yield = 156.51

Group Number 2

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
199A	1	plano silt	0- 2	151	93	1	2,898	0.8	437,598	151	437,598
37	1	worthen si	0- 2	151	93	1	375	0.1	56,625	151	56,625
199B	2e	plano silt	2- 5	150	92	1	561	0.2	84,150	150	84,150
430B	2e	raddle sil	2- 5	148	91	1	373	0.1	55,204	148	55,204
684A	1	broadwell	0- 2	145	89	1	2,818	0.8	408,610	145	408,610
244	2w	hartsburg	0- 2	145	89	2	619	0.2	89,755	145	89,755
374	1	proctor si	0- 2	144	88	1	809	0.2	116,496	144	116,496
684B	2e	broadwell	2- 5	144	88	1	6,771	1.9	975,024	144	975,024
153	2w	pella silt	0- 2	140	86	2	1,286	0.4	180,040	140	180,040
						TOTAL	16,510	4.6	2,403,502		2,403,502

Weighted Average Yield = 145.58 Adjusted Weighted Average Yield = 145.58

Group Number 3

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
36C2	3e	tama silt	5-10	146	90	0	1,959	0.5	286,014	146	286,014
684C2	3e	broadwell	5-10	136	83	0	2,142	0.6	291,312	136	291,312
						TOTAL	4,101	1.1	577,326		577,326

Weighted Average Yield = 140.78 Adjusted Weighted Average Yield = 140.78

Group Number 4

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
8070	2w	beaucoup s	0- 2	138	85	2	4,443	1.2	613,134	138	613,134
125	2w	selma clay	0- 2	136	83	2	8,040	2.2	1,093,440	136	1,093,440
67	2w	harpster s	0- 2	136	83	2	7,170	2.0	975,120	136	975,120
447	2w	canisteo l	0- 2	132	81	2	4,563	1.3	602,316	132	602,316
						TOTAL	24,216	6.7	3,284,010		3,284,010

Weighted Average Yield = 135.61 Adjusted Weighted Average Yield = 135.61

Group Number 5

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
8284	2w	tice silty	0- 2	130	80	1	1,303	0.4	169,390	130	169,390
8400	2w	calco silt	0- 2	130	80	2	380	0.1	49,400	130	49,400
3284	3w	tice silty	0- 2	130	80	3	1,477	0.4	192,010	130	192,010
280B	2e	fayette si	1- 5	128	79	1	970	0.3	124,160	128	124,160
206	2w	thorp silt	0- 2	126	77	2	3,626	1.0	456,876	126	456,876
8107	2w	sawmill si	0- 2	125	77	2	4,061	1.1	507,625	125	507,625
8107+	2w	sawmill si	0- 2	125	77	2	693	0.2	86,625	125	86,625
272	2w	edgington	0- 2	122	75	2	7,890	2.2	962,580	122	962,580
8452	2w	riley silt	0- 2	122	75	3	1,032	0.3	125,904	122	125,904
						TOTAL	21,432	5.9	2,674,570		2,674,570

Weighted Average Yield = 124.79 Adjusted Weighted Average Yield = 124.79

Group Number 6

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
103	3w	houghton m	0- 2	129	79	0	301	0.1	38,829	129	38,829
280C2	3e	fayette si	5-10	121	74	0	1,264	0.4	152,944	121	152,944
280D2	4e	fayette si	10-18	116	71	0	835	0.2	96,860	116	96,860
100	3w	palms muck	0- 2	115	71	0	745	0.2	85,675	115	85,675
						TOTAL	3,145	0.9	374,308		374,308

Weighted Average Yield = 119.02 Adjusted Weighted Average Yield = 119.02

Group Number 7

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
8078	2w	arenzville	0- 2	120	74	1	859	0.2	103,080	120	103,080
151	2s	ridgeville	0- 2	115	71	1	12,425	3.4	1,428,875	115	1,428,875
						TOTAL	13,284	3.7	1,531,955		1,531,955

Weighted Average Yield = 115.32 Adjusted Weighted Average Yield = 115.32

Group Number 8

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
159A	2s	pillot sil	0- 2	112	69	1	1,134	0.3	127,008	112	127,008
3682	2w	medway sil	0- 2	112	69	3	3,038	0.8	340,256	112	340,256
200	2w	orio loam	0- 2	112	69	2	2,035	0.6	227,920	112	227,920
3302	4w	ambraw cla	0- 2	112	69	5	979	0.3	109,648	112	109,648
159B	2e	pillot sil	2- 5	111	68	1	3,045	0.8	337,995	111	337,995
150A	2s	onarga san	0- 2	110	67	1	15,717	4.4	1,728,870	110	1,728,870
770	2w	udolpho fi	0- 2	110	67	2	13,744	3.8	1,511,840	110	1,511,840
201	2w	gilford sa	0- 2	110	67	2	6,939	1.9	763,290	110	763,290
8302	2w	ambraw cla	0- 2	110	67	2	1,915	0.5	210,650	110	210,650
772	2w	marshan lo	0- 2	109	67	2	13,892	3.9	1,514,228	109	1,514,228
150B	2e	onarga san	2- 5	108	66	1	7,528	2.1	813,024	108	813,024
379B	2e	dakota fin	2- 5	105	64	1	1,434	0.4	150,570	105	150,570
379A	2s	dakota fin	0- 2	105	64	1	11,033	3.1	1,158,465	105	1,158,465
150C2	3e	onarga fin	5-10	103	63	1	2,579	0.7	265,637	103	265,637
266	3s	disco sand	0- 2	103	63	1	9,811	2.7	1,010,533	103	1,010,533
3107	3w	sawmill si	0- 2	103	63	5	3,331	0.9	343,093	103	343,093
3107+	3w	sawmill si	0- 2	103	63	5	521	0.1	53,663	103	53,663
						TOTAL	98,675	27.4	10,666,690		10,666,690

Weighted Average Yield = 108.10 Adjusted Weighted Average Yield = 108.10

Group Number 9

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
685C2	3e	middletown	5-10	110	67	0	456	0.1	50,160	110	50,160
280D3	4e	fayette si	7-15	107	66	0	343	0.1	36,701	107	36,701
89	3w	maumee loa	0- 2	103	63	0	1,064	0.3	109,592	103	109,592
280F	6e	fayette si	18-30	103	63	0	886	0.2	91,258	103	91,258
159C2	3e	pillot sil	5-10	102	63	0	1,912	0.5	195,024	102	195,024
						TOTAL	4,661	1.3	482,735		482,735

Weighted Average Yield = 103.57 Adjusted Weighted Average Yield = 103.57

Group Number 10

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
131A	2s	alvin fine	0- 2	98	60	1	2,485	0.7	243,530	98	243,530
131B	2e	alvin fine	2- 5	97	60	1	1,924	0.5	186,628	97	186,628
131C2	3e	alvin fine	5-10	93	57	1	1,754	0.5	163,122	93	163,122
8304	2w	landes fin	0- 2	84	52	1	290	0.1	24,360	84	24,360
3304	3w	landes san	0- 2	84	52	3	832	0.2	69,888	84	69,888
				TOTAL			7,285	2.0	687,528		687,528

Weighted Average Yield = 94.38 Adjusted Weighted Average Yield = 94.38

Group Number 11

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
271D2	3e	timula sil	10-18	93	57	0	401	0.1	37,293	93	37,293
49	3s	watseka lo	0- 2	92	56	0	3,250	0.9	299,000	92	299,000
131D2	3e	alvin fine	10-18	90	55	0	1,062	0.3	95,580	90	95,580
98B	3s	ade loamy	1- 7	90	55	0	11,830	3.3	1,064,700	90	1,064,700
965D2	3e	tallula-bo	7-15	86	53	0	943	0.3	80,815	86	80,815
				TOTAL			17,486	4.9	1,577,388		1,577,388

Weighted Average Yield = 90.21 Adjusted Weighted Average Yield = 90.21

Group Number 12

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
88B	4s	sparta loa	1- 7	84	52	0	19,559	5.4	1,642,956	84	1,642,956
53B	3s	bloomfield	1- 7	79	48	0	18,586	5.2	1,468,294	79	1,468,294
53D	4e	bloomfield	7-15	73	45	0	2,836	0.8	207,028	73	207,028
8088B	3s	sparta loa	1- 5	71	44	0	255	0.1	18,105	71	18,105
				TOTAL			41,236	11.4	3,336,383		3,336,383

Weighted Average Yield = 80.91 Adjusted Weighted Average Yield = 80.91

Group Number 13

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
54B	6s	plainfield	1- 7	56	34	0	27,715	7.7	1,552,040	56	1,552,040
3088B	3s	sparta loa	1- 5	55	34	0	403	0.1	22,165	55	22,165
54D	6s	plainfield	7-15	53	33	0	13,272	3.7	703,416	53	703,416
54E	7s	plainfield	15-30	50	31	0	1,956	0.5	97,800	50	97,800
						TOTAL	43,346	12.0	2,375,421		2,375,421

Weighted Average Yield = 54.80 Adjusted Weighted Average Yield = 54.80

Group Number 14

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
3115	4w	dockery si	0- 2			0	8,724	2.4	0		0
1070	5w	beaucoup s	0- 2			0	5,059	1.4	0		0
1166	5w	cohoctah l	0- 2			0	2,787	0.8	0		0
1201	5w	gilford sa	0- 2			0	404	0.1	0		0
131F	6e	alvin fine	18-30			0	470	0.1	0		0
88D	6s	sparta loa	7-15			0	1,743	0.5	0		0
30G	7e	hamburg si	20-60			0	708	0.2	0		0
						TOTAL	19,895	5.5	0		0

Weighted Average Yield = 0.00 Adjusted Weighted Average Yield = 0.00

Group Number 15

map symbl	lc	soil name	slope	nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
W	8	water	0- 0			0	18,313	5.1	0		0
						TOTAL	18,313	5.1	0		0

Weighted Average Yield = 0.00 Adjusted Weighted Average Yield = 0.00

Worksheet 2. Relative Values for Mason County, Illinois with no conservation yield adjustment

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County: Mason, Illinois (IL125)

group	lcc	important farmland	potential or productivity	%	cum'ltv %	acres	cum'ltv acres	relative value
1	1-2w	prime	94-100	7.5	7.5	26,925	26,925	100
2	1-2w	prime	86- 93	4.6	12.0	16,510	43,435	93
3	3e	other	83- 90	1.1	13.2	4,101	47,536	90
4	2w	prime	81- 85	6.7	19.9	24,216	71,752	87
5	2e-3w	prime	75- 80	5.9	25.8	21,432	93,184	80
6	3e-4e	other	71- 79	0.9	26.7	3,145	96,329	76
7	2w-3w	prime	71- 74	3.7	30.4	13,284	109,613	74
8	2e-6e	prime	63- 69	27.4	57.8	98,675	208,288	69
9	3e-6e	other	63- 67	1.3	59.1	4,661	212,949	66
10	2e-3w	prime	52- 60	2.0	61.1	7,285	220,234	60
11	3e-3s	other	53- 57	4.9	65.9	17,486	237,720	58
12	3s-4s	other	44- 52	11.4	77.4	41,236	278,956	52
13	3s-7s	other	31- 34	12.0	89.4	43,346	322,302	35
14	4w-7e	other	-	5.5	94.9	19,895	342,197	0
15	8	other	-	5.1	100.0	18,313	360,510	0

FPPA acres: 208,327 (57.8% of county)
Farmable acres: 322,302 (89.4% of county)
Grouped acres: 360,510
Total acres: 360,510

The Computer Aided Land Evaluation System (CALES) web site is for NRCS and others responsible for the Land Evaluation portion of a Land Evaluation and Site Assessment (LESA) system. The CALES program requires significant user input and results vary based upon user knowledge and emphasis. Official NRCS Land Evaluation results to be used for the Farmland Protection Policy Act (FPPA) are approved by the NRCS State Conservationist and placed in the Field Office Technical Guide (FOTG). For more information contact your local or state NRCS office.

Conservation Yield Adjustment Data for drainage for soils with sandy subsoils.

Contents of adjust yield saved file. Mason County, IL (IL125):
---

type of limitations (e, w, s, c)	w
conservation measure code	606
amount of conservation measure / acre	209
installation cost of conservation measure ($)	1.41
life span (year(s))	20
annual maintainance cost ($)	0.02
land lost to installation (% of ave. yield (0-100))	0
interest rate (0-100)	6
price for unit of indicator crop ($)	3

Calculated yield reduction is 9.86. The breakdown is:

4.18	maintenance
25.39	amortized annual value
0.00	land loss

29.57	<---- divide this by price

Conservation Yield Adjustment Data for drainage for soils with loamy subsoils.

Contents of adjust yield saved file. Mason county, IL (IL125):
---

type of limitations (e, w, s, c)	w
conservation measure code	606
amount of conservation measure / acre	209
installation cost of conservation measure ($)	1.36
life span (year(s))	20
annual maintainance cost ($)	0.02
land lost to installation (% of ave. yield (0-100))	0
interest rate (0-100)	6
price for unit of indicator crop ($)	3

Calculated yield reduction is 9.56. The breakdown is :

4.18	maintenance
24.49	amortized annual value
0.00	land loss

28.67	<---- divide this by price

Conservation Yield Adjustment Data for terraces

Contents of adjust yield file for Mason County, IL (IL125)

type of limitations (e, w, s, c)	e
conservation measure code	600
amount of conservation measure / acre	209
installation cost of conservation measure ($)	2.04
life span (year(s))	10
annual maintainance cost ($)	0.08
land lost to installation (% of ave. yield (0-100))	0
interest rate (0-100)	6
price for unit of indicator crop ($)	3

Calculated yield reduction is 24.62. The breakdown is :

16.72	maintenance
57.15	amortized annual value
0.00	land loss

73.87	<---- divide this by price

Worksheet #1 - LE part of LESA for Mason County, Illinois with conservation yield adjustment

NOTE: The soil map units shown are for the selected area. Unless modified with the edit function, the land capability (lc) is the dominant land capability of the soil components. The yield values shown are a weighted average calculated from the soil components.

County: Mason, Illinois (IL125)
85 map units

Indicator crop : corn
Temperature Regime : mesic
C factor : 0.07
System irrigated? : no
Minimum Component : 15%

line no.	map symbl	soil name	slope	lc	adj nirr yield	prd ind	i f	acres number	acres pct
1	43	ipava silt loam	0- 2	1	163	100	1	3,144	0.9
2	198	elburn silt loam	0- 2	1	161	99	1	4,964	1.4
3	683	lawndale silt loam	0- 2	1	156	96	1	2,551	0.7
4	36A	tama silt loam	0- 2	1	155	95	1	3,018	0.8
5	36B	tama silt loam	2- 5	2e	153	94	1	6,660	1.8
6	199A	plano silt loam	0- 2	1	151	93	1	2,898	0.8
7	37	worthen silt loam	0- 2	1	151	93	1	375	0.1
8	199B	plano silt loam	2- 5	2e	150	92	1	561	0.2
9	430B	raddle silt loam	2- 5	2e	148	91	1	373	0.1
10	68	sable silty clay loam	0- 2	2w	146*	90	2	1,493	0.4
11	684A	broadwell silt loam	0- 2	1	145	89	1	2,818	0.8
12	152	drummer silty clay loam	0- 2	2w	144*	89	2	5,095	1.4
13	374	proctor silt loam	0- 2	1	144	88	1	809	0.2
14	684B	broadwell silt loam	2- 5	2e	144	88	1	6,771	1.9
15	244	hartsburg silty clay loam	0- 2	2w	135*	83	2	619	0.2
16	153	pella silty clay loam	0- 2	2w	130*	80	2	1,286	0.4
17	8284	tice silty clay loam	0- 2	2w	130	80	1	1,303	0.4
18	3284	tice silty clay loam	0- 2	3w	130	80	3	1,477	0.4
19	8070	beaucoup silty clay loam	0- 2	2w	128*	79	2	4,443	1.2
20	280B	fayette silt loam	1- 5	2e	128	79	1	970	0.3
21	67	harpster silty clay loam	0- 2	2w	126*	78	2	7,170	2.0
22	125	selma clay loam	0- 2	2w	126*	77	2	8,040	2.2
23	447	canisteo loam	0- 2	2w	122*	75	2	4,563	1.3
24	8452	riley silt loam	0- 2	2w	122	75	3	1,032	0.3
25	36C2	tama silt loam	5-10	3e	121*	74	0	1,959	0.5
26	8400	calco silt loam	0- 2	2w	120*	74	2	380	0.1
27	8078	arenzville silt loam	0- 2	2w	120	74	1	859	0.2
28	103	houghton muck	0- 2	3w	119*	73	0	301	0.1
29	206	thorp silt loam	0- 2	2w	116*	71	2	3,626	1.0
30	8107	sawmill silty clay loam	0- 2	2w	115*	71	2	4,061	1.1
31	8107+	sawmill silt loam	0- 2	2w	115*	71	2	693	0.2
32	151	ridgeville sandy loam	0- 2	2s	115	71	1	12,425	3.4
33	272	edgington silt loam	0- 2	2w	112*	69	2	7,890	2.2
34	159A	pillot silt loam	0- 2	2s	112	69	1	1,134	0.3

35	3682	medway silty clay loam	0- 2	2w	112	69	3	3,038	0.8
36	684C2	broadwell silt loam	5-10	3e	111*	68	0	2,142	0.6
37	159B	pillot silt loam	2- 5	2e	111	68	1	3,045	0.8
38	150A	onarga sandy loam	0- 2	2s	110	67	1	15,717	4.4
39	150B	onarga sandy loam	2- 5	2e	108	66	1	7,528	2.1
40	100	palms muck	0- 2	3w	105*	65	0	745	0.2
41	379B	dakota fine sandy loam	2- 5	2e	105	64	1	1,434	0.4
42	379A	dakota fine sandy loam	0- 2	2s	105	64	1	11,033	3.1
43	150C2	onarga fine sandy loam	5-10	3e	103	63	1	2,579	0.7
44	266	disco sandy loam	0- 2	3s	103	63	1	9,811	2.7
45	3302	ambraw clay loam	0- 2	4w	102*	63	5	979	0.3
46	200	orio loam	0- 2	2w	102*	63	2	2,035	0.6
47	8302	ambraw clay loam	0- 2	2w	100*	62	2	1,915	0.5
48	770	udolpho fine sandy loam	0- 2	2w	100*	61	2	13,744	3.8
49	201	gilford sandy loam	0- 2	2w	100*	61	2	6,939	1.9
50	772	marshan loam	0- 2	2w	99*	61	2	13,892	3.9
51	131A	alvin fine sandy loam	0- 2	2s	98	60	1	2,485	0.7
52	131B	alvin fine sandy loam	2- 5	2e	97	60	1	1,924	0.5
53	280C2	fayette silt loam	5-10	3e	96*	59	0	1,264	0.4
54	3107	sawmill silty clay loam	0- 2	3w	93*	57	5	3,331	0.9
55	3107+	sawmill silt loam	0- 2	3w	93*	57	5	521	0.1
56	89	maumee loamy sand	0- 2	3w	93*	57	0	1,064	0.3
57	131C2	alvin fine sandy loam	5-10	3e	93	57	1	1,754	0.5
58	49	watseka loamy sand	0- 2	3s	92	56	0	3,250	0.9
59	280D2	fayette silt loam	10-18	4e	91*	56	0	835	0.2
60	131D2	alvin fine sandy loam	10-18	3e	90	55	0	1,062	0.3
61	98B	ade loamy fine sand	1- 7	3s	90	55	0	11,830	3.3
62	965D2	tallula-bold complex	7-15	3e	86	53	0	943	0.3
63	685C2	middletown silt loam	5-10	3e	85*	52	0	456	0.1
64	8304	landes fine sandy loam	0- 2	2w	84	52	1	290	0.1
65	3304	landes sandy loam	0- 2	3w	84	52	3	832	0.2
66	88B	sparta loamy sand	1- 7	4s	84	52	0	19,559	5.4
67	280D3	fayette silty clay loam	7-15	4e	82*	51	0	343	0.1
68	53B	bloomfield sand	1- 7	3s	79	48	0	18,586	5.2
69	280F	fayette silt loam	18-30	6e	78*	48	0	886	0.2
70	159C2	pillot silt loam	5-10	3e	77*	47	0	1,912	0.5
71	53D	bloomfield sand	7-15	4e	73	45	0	2,836	0.8
72	8088B	sparta loamy fine sand	1- 5	3s	71	44	0	255	0.1
73	271D2	timula silt loam	10-18	3e	68*	42	0	401	0.1
74	54B	plainfield sand	1- 7	6s	56	34	0	27,715	7.7
75	3088B	sparta loamy sand	1- 5	3s	55	34	0	403	0.1
76	54D	plainfield sand	7-15	6s	53	33	0	13,272	3.7
77	54E	plainfield sand	15-30	7s	50	31	0	1,956	0.5
78	3115	dockery silty clay loam	0- 2	4w		0	0	8,724	2.4
79	1070	beaucoup silty clay loam	0- 2	5w		0	0	5,059	1.4
80	1166	cohoctah loam	0- 2	5w		0	0	2,787	0.8
81	1201	gilford sandy loam	0- 2	5w		0	0	404	0.1
82	131F	alvin fine sandy loam	18-30	6e		0	0	470	0.1
83	88D	sparta loamy sand	7-15	6s		0	0	1,743	0.5
84	30G	hamburg silt loam	20-60	7e		0	0	708	0.2
85	W	water	0- 0	8		0	0	18,313	5.1
								360,510	

The asterisk, "*", following the yield values denotes adjusted yields.

Worksheet #2. LE part of LESA Grouped a Relative Values for Mason County, Illinois with conservation yield adjustment - Soil Potentials

County: Mason, Illinois (IL125)

Group Number 1

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
43	1	ipava silt	0- 2	163	100	1	3,144	0.9	512,472	163	512,472
198	1	elburn sil	0- 2	161	99	1	4,964	1.4	799,204	161	799,204
683	1	lawndale s	0- 2	156	96	1	2,551	0.7	397,956	156	397,956
36A	1	tama silt	0- 2	155	95	1	3,018	0.8	467,790	155	467,790
				TOTAL			13,677	3.8	2,177,422		2,177,422

Weighted Average Yield = 159.20 Adjusted Weighted Average Yield = 159.20

Group Number 2

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
36B	2e	tama silt	2- 5	153	94	1	6,660	1.8	1,018,980	153	1,018,980
199A	1	plano silt	0- 2	151	93	1	2,898	0.8	437,598	151	437,598
37	1	worthen si	0- 2	151	93	1	375	0.1	56,625	151	56,625
199B	2e	plano silt	2- 5	150	92	1	561	0.2	84,150	150	84,150
430B	2e	raddle sil	2- 5	148	91	1	373	0.1	55,204	148	55,204
68	2w	sable silt	0- 2	146	90	2	1,493	0.4	232,908	146	218,640
684A	1	broadwell	0- 2	145	89	1	2,818	0.8	408,610	145	408,610
152	2w	drummer si	0- 2	144	89	2	5,095	1.4	784,630	144	735,939
374	1	proctor si	0- 2	144	88	1	809	0.2	116,496	144	116,496
684B	2e	broadwell	2- 5	144	88	1	6,771	1.9	975,024	144	975,024
				TOTAL			27,853	7.7	4,170,225		4,107,267

Weighted Average Yield = 149.72 Adjusted Weighted Average Yield = 147.46

Group Number 3

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
244	2w	hartsburg	0- 2	135	83	2	619	0.2	89,755	135	83,840
153	2w	pella silt	0- 2	130	80	2	1,286	0.4	180,040	130	167,750
8284	2w	tice silty	0- 2	130	80	1	1,303	0.4	169,390	130	169,390

3284	3w	tice silty	0- 2	130	80	3	1,477	0.4	192,010	130	192,010
8070	2w	beaucoup s	0- 2	128	79	2	4,443	1.2	613,134	128	570,674
280B	2e	fayette si	1- 5	128	79	1	970	0.3	124,160	128	124,160
				TOTAL			10,098	2.8	1,368,489		1,307,824

Weighted Average Yield = 135.52 Adjusted Weighted Average Yield = 129.51

Group Number 4

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	pct	yield x acres	adj yld	adjust product
67	2w	harpster s	0- 2	126	78	2	7,170	2.0	975,120	126	906,600
125	2w	selma clay	0- 2	126	77	2	8,040	2.2	1,093,440	126	1,014,193
447	2w	canisteo l	0- 2	122	75	2	4,563	1.3	602,316	122	558,710
8452	2w	riley silt	0- 2	122	75	3	1,032	0.3	125,904	122	125,904
8400	2w	calco silt	0- 2	120	74	2	380	0.1	49,400	120	45,769
8078	2w	arenzville	0- 2	120	74	1	859	0.2	103,080	120	103,080
				TOTAL			22,044	6.1	2,949,260		2,754,254

Weighted Average Yield = 133.79 Adjusted Weighted Average Yield = 124.94

Group Number 5

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	pct	yield x acres	adj yld	adjust product
36C2	3e	tama silt	5-10	121	74	0	1,959	0.5	286,014	121	237,777
103	3w	houghton m	0- 2	119	73	0	301	0.1	38,829	119	35,862
684C2	3e	broadwell	5-10	111	68	0	2,142	0.6	291,312	111	238,569
100	3w	palms muck	0- 2	105	65	0	745	0.2	85,675	105	78,332
				TOTAL			5,147	1.4	701,830		590,539

Weighted Average Yield = 136.36 Adjusted Weighted Average Yield = 114.73

Group Number 6

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	pct	yield x acres	adj yld	adjust product
206	2w	thorp silt	0- 2	116	71	2	3,626	1.0	456,876	116	422,224
8107	2w	sawmill si	0- 2	115	71	2	4,061	1.1	507,625	115	468,816
8107+	2w	sawmill si	0- 2	115	71	2	693	0.2	86,625	115	80,002
151	2s	ridgeville	0- 2	115	71	1	12,425	3.4	1,428,875	115	1,428,875
272	2w	edgington	0- 2	112	69	2	7,890	2.2	962,580	112	887,179

159A	2s	pillot sil	0- 2	112	69	1	1,134	0.3	127,008	112	127,008
3682	2w	medway sil	0- 2	112	69	3	3,038	0.8	340,256	112	340,256
159B	2e	pillot sil	2- 5	111	68	1	3,045	0.8	337,995	111	337,995
150A	2s	onarga san	0- 2	110	67	1	15,717	4.4	1,728,870	110	1,728,870
150B	2e	onarga san	2- 5	108	66	1	7,528	2.1	813,024	108	813,024
				TOTAL			59,157	16.4	6,789,734		6,634,249

Weighted Average Yield = 114.77 Adjusted Weighted Average Yield = 112.15

Group Number 7

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
379B	2e	dakota fin	2- 5	105	64	1	1,434	0.4	150,570	105	150,570
379A	2s	dakota fin	0- 2	105	64	1	11,033	3.1	1,158,465	105	1,158,465
150C2	3e	onarga fin	5-10	103	63	1	2,579	0.7	265,637	103	265,637
266	3s	disco sand	0- 2	103	63	1	9,811	2.7	1,010,533	103	1,010,533
3302	4w	ambraw cla	0- 2	102	63	5	979	0.3	109,648	102	100,292
200	2w	orio loam	0- 2	102	63	2	2,035	0.6	227,920	102	207,862
8302	2w	ambraw cla	0- 2	100	62	2	1,915	0.5	210,650	100	192,349
770	2w	udolpho fi	0- 2	100	61	2	13,744	3.8	1,511,840	100	1,376,370
201	2w	gilford sa	0- 2	100	61	2	6,939	1.9	763,290	100	694,895
772	2w	marshan lo	0- 2	99	61	2	13,892	3.9	1,514,228	99	1,377,299
				TOTAL			64,361	17.9	6,922,781		6,534,272

Weighted Average Yield = 107.56 Adjusted Weighted Average Yield = 101.53

Group Number 8

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	acres pct	yield x acres	adj yld	adjust product
131A	2s	alvin fine	0- 2	98	60	1	2,485	0.7	243,530	98	243,530
131B	2e	alvin fine	2- 5	97	60	1	1,924	0.5	186,628	97	186,628
3107	3w	sawmill si	0- 2	93	57	5	3,331	0.9	343,093	93	311,260
3107+	3w	sawmill si	0- 2	93	57	5	521	0.1	53,663	93	48,684
131C2	3e	alvin fine	5-10	93	57	1	1,754	0.5	163,122	93	163,122
				TOTAL			10,015	2.8	990,036		953,224

Weighted Average Yield = 98.86 Adjusted Weighted Average Yield = 95.18

Group Number 9

map	adj nir	prd	I	acres	yield x	adj	adjust

symbl	lc	soil name	slope	yld	ind	F	number	pct	acres	yld	product
280C2	3e	fayette si	5-10	96	59	0	1,264	0.4	152,944	96	121,820
89	3w	maumee loa	0- 2	93	57	0	1,064	0.3	109,592	93	99,105
49	3s	watseka lo	0- 2	92	56	0	3,250	0.9	299,000	92	299,000
280D2	4e	fayette si	10-18	91	56	0	835	0.2	96,860	91	76,299
131D2	3e	alvin fine	10-18	90	55	0	1,062	0.3	95,580	90	95,580
98B	3s	ade loamy	1- 7	90	55	0	11,830	3.3	1,064,700	90	1,064,700
965D2	3e	tallula-bo	7-15	86	53	0	943	0.3	80,815	86	80,815
685C2	3e	middletown	5-10	85	52	0	456	0.1	50,160	85	38,932
88B	4s	sparta loa	1- 7	84	52	0	19,559	5.4	1,642,956	84	1,642,956
280D3	4e	fayette si	7-15	82	51	0	343	0.1	36,701	82	28,255
				TOTAL			40,606	11.3	3,629,308		3,547,462

Weighted Average Yield = 89.38 Adjusted Weighted Average Yield = 87.36

Group Number 10

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	pct	yield x acres	adj yld	adjust product
8304	2w	landes fin	0- 2	84	52	1	290	0.1	24,360	84	24,360
3304	3w	landes san	0- 2	84	52	3	832	0.2	69,888	84	69,888
				TOTAL			1,122	0.3	94,248		94,248

Weighted Average Yield = 84.00 Adjusted Weighted Average Yield = 84.00

Group Number 11

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	pct	yield x acres	adj yld	adjust product
53B	3s	bloomfield	1- 7	79	48	0	18,586	5.2	1,468,294	79	1,468,294
280F	6e	fayette si	18-30	78	48	0	886	0.2	91,258	78	69,442
159C2	3e	pillot sil	5-10	77	47	0	1,912	0.5	195,024	77	147,944
53D	4e	bloomfield	7-15	73	45	0	2,836	0.8	207,028	73	207,028
8088B	3s	sparta loa	1- 5	71	44	0	255	0.1	18,105	71	18,105
271D2	3e	timula sil	10-18	68	42	0	401	0.1	37,293	68	27,419
				TOTAL			24,876	6.9	2,017,002		1,938,232

Weighted Average Yield = 81.08 Adjusted Weighted Average Yield = 77.92

Group Number 12

map	adj nir	prd	I	acres	yield x	adj	adjust

symbl	lc	soil name	slope	yld	ind	F	number	pct	acres	yld	product
54B	6s	plainfield	1- 7	56	34	0	27,715	7.7	1,552,040	56	1,552,040
3088B	3s	sparta loa	1- 5	55	34	0	403	0.1	22,165	55	22,165
54D	6s	plainfield	7-15	53	33	0	13,272	3.7	703,416	53	703,416
54E	7s	plainfield	15-30	50	31	0	1,956	0.5	97,800	50	97,800
				TOTAL			43,346	12.0	2,375,421		2,375,421

Weighted Average Yield = 54.80 Adjusted Weighted Average Yield = 54.80

Group Number 13

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	pct	yield x acres	adj yld	adjust product
3115	4w	dockery si	0- 2			0	8,724	2.4	0		0
1070	5w	beaucoup s	0- 2			0	5,059	1.4	0		0
1166	5w	cohoctah l	0- 2			0	2,787	0.8	0		0
1201	5w	gilford sa	0- 2			0	404	0.1	0		0
131F	6e	alvin fine	18-30			0	470	0.1	0		0
88D	6s	sparta loa	7-15			0	1,743	0.5	0		0
30G	7e	hamburg si	20-60			0	708	0.2	0		0
				TOTAL			19,895	5.5	0		0

Weighted Average Yield = 0.00 Adjusted Weighted Average Yield = 0.00

Group Number 14

map symbl	lc	soil name	slope	adj nir yld	prd ind	I F	acres number	pct	yield x acres	adj yld	adjust product
W	8	water	0- 0			0	18,313	5.1	0		0
				TOTAL			18,313	5.1	0		0

Weighted Average Yield = 0.00 Adjusted Weighted Average Yield = 0.00

Worksheet 2. Relative Values for Mason County, Illinois with conservation yield adjustment - Soil Potentials

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County: Mason, Illinois (IL125)

group	lcc	important farmland	potential or productivity	%	cum'ltv %	acres	cum'ltv acres	relative value
1	1	prime	95-100	3.8	3.8	13,677	13,677	100
2	1-2w	prime	88- 94	7.7	11.5	27,853	41,530	93
3	2e-3w	prime	79- 83	2.8	14.3	10,098	51,628	81
4	2w-3w	prime	74- 78	6.1	20.4	22,044	73,672	78
5	3e-3w	other	65- 74	1.4	21.9	5,147	78,819	72
6	2e-2s	prime	66- 71	16.4	38.3	59,157	137,976	70
7	2e-4w	prime	61- 64	17.9	56.1	64,361	202,337	64
8	2e-3w	prime	57- 60	2.8	58.9	10,015	212,352	60
9	3e-4s	other	51- 59	11.3	70.2	40,606	252,958	55
10	2w-3w	prime	52- 52	0.3	70.5	1,122	254,080	53
11	3e-6e	other	42- 48	6.9	77.4	24,876	278,956	49
12	3s-7s	other	31- 34	12.0	89.4	43,346	322,302	34
13	4w-7e	other	-	5.5	94.9	19,895	342,197	0
14	8	other	-	5.1	100.0	18,313	360,510	0

FPPA acres: 208,327 (57.8% of county)

Farmable acres: 322,302 (89.4% of county)

Grouped acres: 360,510

Total acres: 360,510

The Computer Aided Land Evaluation System (CALES) web site is for NRCS and others responsible for the Land Evaluation portion of a Land Evaluation and Site Assessment (LESA) system. The CALES program requires significant user input and results vary based upon user knowledge and emphasis. Official NRCS Land Evaluation results to be used for the Farmland Protection Policy Act (FPPA) are approved by the NRCS State Conservationist and placed in the Field Office Technical Guide (FOTG). For more information contact your local or state NRCS office.