CHAMPAIGN COUNTY LAND EVALUATION AND SITE ASSESSMENT SYSTEM



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Prepared by the Champaign County Regional Planning Commission

## ACKNOWLEDGEMENTS

LESA Update Committee Members

- Kevin Donoho
- Debra Griest, Committee Chair
- Elizabeth R. Jones
- Kyle Krapf
- W. Steven Moser
- Pattsi Petrie
- Steve Stierwalt
- Bruce Stikkers
- John Hall, Advisory Committee Member

#### Project Staff

Champaign County Regional Planning Commission (CCRPC) 1776 East Washington Street Urbana, IL 61802 Phone: 217.328.3313 Website: www.ccrpc.org

Susan Monte, CCRPC Planner and LESA Update Committee Facilitator

#### Consultant

Office of Farmland Protection Bureau of Land and Water Resources Illinois Department of Agriculture

Terry Savko, Agricultural Land/Water Resource Specialist

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### INTRODUCTION

The Champaign County Land Evaluation and Site Assessment System (LESA) is a tool designed to provide County officials with a systematic and objective means to numerically rate a site or a parcel in terms of its agricultural importance.

## Intended Use of LESA

The LESA is intended for the following applications within Champaign County:

- To assist County officials to evaluate the proposed conversion of farmland on a parcel or site in County rezoning cases that include farmland conversion to a non-agricultural land use.
- To assist in the review state and federal projects for compliance with the Illinois Farmland Preservation Act and the Federal Farmland Protection Policy Act in terms of their impact on important farmland.

Additionally, the Land Evaluation (LE) portion of LESA is intended as a means to determine the 'Best Prime Farmland' designation of a particular site or parcel.

The LESA is one of several tools intended to assist in making land use decisions; it should be used in conjunction with the *Champaign County Land Resource Management Plan* and county land use regulations such as the zoning ordinance, subdivision regulations, and stormwater management policy.

#### LESA Score Overview

The LESA system is a numerical rating system that consists of two separate components:

Land Evaluation (LE)

The LE portion of LESA is based on the soils properties of a subject site. Based on the soils properties of a subject site, a single LE score is calculated, with a maximum LE score of 100 points possible.

• Site Assessment (SA)

The SA portion of LESA is based on the 10 non-soil factors shown below. Each SA factor identifies a separate and measurable condition considered as important to the continued agricultural use of a subject site:

- 1) size of site
- 2) Best Prime Farmland designation of site
- 3) percentage of site perimeter adjacent to agricultural land use
- 4) whether site is within the CUGA\*
- 5) distance to nearest city limits
- 6) highest amount of site in agricultural land use over past 5 years
- 7) amount of land zoned rural within 1 mile
- 8) amount of agricultural land use within 1 mile
- 9) distance to nearest 10 non-farm dwellings
- 10) proximity to a livestock management facility
- \* 'CUGA' is an acronym for the 'Contiguous Urban Growth Area' referenced in the *Champaign County Land Resource Management Plan.*

The maximum SA score possible for a site is 200 points.

The total LESA score is the sum of the LE points and SA points for a particular site or parcel. The maximum total LESA score possible for a site is 300 points.

The higher the total LESA score, the more highly rated the site or parcel is to be protected for continued agricultural use. The total LESA score of a site signifies a rating for protection of a site or parcel as follows:

261 - 300	very high rating for protection
221 – 260	high rating for protection
181 – 220	moderate rating for protection
180 or below	low rating for protection

#### LAND EVALUATION

The Land Evaluation (LE) portion of LESA is based on the ranking of Champaign County soils according to the following three soils classification systems.

• Land Capability Classification

A system of grouping soils developed by the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS). Soils are grouped primarily on the basis of their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time. A detailed explanation of the Land Capability Classification system is provided in Part 622.02 of the USDA NRCS National Soil Survey Handbook.

#### • Farmland Classification

A soils classification system developed by the USDA NRCS to better manage and maintain the soils resource base of land most suitable for producing food, feed, fiber, forage, and oilseed crops. Farmland Classification identifies the soils series map units as: Prime Farmland; Farmland of Statewide Importance; or Farmland of Local Importance. A detailed explanation of the 'Farmland Classification' system, including the definition of Prime Farmland, is provided in Parts 622.03-622.04 of the USDA NRCS National Soil Survey Handbook.

## Productivity Index of Illinois Soils Under Optimum Management

The soils productivity index is based on data published in Table S2 of Bulletin 811, developed by the Office of Research, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign (UIUC). Bulletin 811 provides crop yields and productivity indices under an optimum level of management used by the top 16% of farmers in Illinois. The crop yields were updated in January, 2011 to reflect growing conditions from 2000 to 2009. Bulletin 811 Year 2011 crop yields and productivity indices for optimum management are maintained at the UIUC Department of Natural Resources and Environmental Sciences.

#### Agriculture Value Group

The LE portion of LESA places the soils of Champaign County into several 'Agriculture Value Groups' ranging from the best to the worst, based on the three soils classifications systems indicated above, which generally gauge a site's suitability for crop production based on soil properties. A relative LE value is determined for each Agriculture Value Group, with the best group assigned a relative value of 100 and all other groups assigned lower relative values.

Table 1, beginning on the next page, describes the composition of the Agriculture Value Groups.

21.08 40.60 7.79 6.77 1.73 5.33 1.97 Percentage of County Land 15.74 2.76 2.58 0.78 0.49 3.58 39.82 2.72 1.01 1.31 0.34 0.32 3.57 0.23 0.23 0.26 0.36 0.41 0.12 0.23 0.47 0.22 0.42 0.25 0.25 0.002 4.57 1.73 0.02 0.59 Countywide # Acres 4,985 3,105 22,903 100,553 16,465 17,385 6,422 8.391 2,153 2,014 22,838 17,641 1,454 1,269 2,327 2,908 29,196 11,080 136 254,484 15 2,641 761 1,441 3,744 3,011 1,423 2,669 1,623 14 152A Drummer silty clay loam 3107A Sawmill silty clay loam 330A Peotone silty clay loam 232A Ashkum silty clay loam 67A Harpster silty clay loam 623A Kishwaukee silt loam Map Unit Symbol 679B Blackberry silt loam 153A Pella silty clay loam and Soil Series 219A Millbrook silt loam 154A Flanagan silt loam 149A Brenton silt loam 148B2 Proctor silt loam 234A Sunbury silt loam 134A Camden silt loam 198A Elburn silt loam 242A Kendall silt loam 233B Birbeck silt loam 236A Sabina silt loam 171B Catlin silt loam 206A Thorp silt loam 102A La Hogue loam 481A Raub silt loam 490A Odell silt loam 235A Bryce silty clay 663B Clare silt loam 146A Elliot silt loam 56B2 Dana silt loam 687B Penfield loam 56B Dana silt loam 125A Selma loam Productivity Index<sup>2</sup> Adjusted Soil 98 - 100 98 - 100 93 - 95 90 - 92 87 - 89 83 - 86 87 Prime, Prime1 Prime, Prime1 Prime, Prime1 Prime, Prime1 Classification Prime, Prime1 Farmland Prime Prime2 Classification Capability 1, 2e, 2w 1, 2e, 2w 1, 2e, 2w 2e, 2w Land 2e, 2w ЗW H Relative LE <sup>1</sup> 100 100 91 94 88 85 87 Agriculture Group Value H 2 m 4 S Q ~

Table 1 Composition of Agriculture Value Groups

continued

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0.14 7.24 0.29 1.00 2.44 0.46 0.76 Percentage of County Land 0.01 0.13 4.46 1.14 0.19 0.26 0.01 0.23 0.76 0.18 0.11 0.04 1.00 0.03 1.26 0.44 0.05 0.49 0.08 0.08 0.30 0.16 0.13 0.06 0.44 0.13 Countywide # Acres 47 809 28,484 7,312 1,207 1,651 73 1,485 4,837 245 982 1,125 708 6,331 205 8,040 2,791 290 3,116 411 509 269 1,930 804 411 2,794 808 637A+ Muskego silty clay loam 3302A Ambraw silty clay loam 91B2 Swygert silty clay loam 91C2 Swygert silty clay loam 146B2 Elliott silty clay loam 146C2 Elliott silty clay loam 91A Swygert silty clay loam 131B Alvin fine sandy loam 387B Ockley silt loam 570B Martinsville silt loam 618B Senachwine silt loam Map Unit Symbol 3473A Rossburg silt loam 150B Onarga sandy loam and Soil Series 680B Campton silt loam 530C2 Ozaukee silt loam 134B Camdem silt loam 570C2 Martinsville loam 622C2 Wyanet silt loam 530B Ozaukee silt loam 622B Wyanet silt loam 322C2 Russell silt loam 223B2 Varna silt loam 223C2 Varna silt loam 23B2 Blount silt loam 687C2 Penfield loam 291B Xenia silt loam 448B Mona silt loam 23A Blount silt loam Productivity Index<sup>2</sup> Adjusted Soil 89 - 84 81 - 83 78 - 79 74 - 76 74 - 75 68 - 73 78 Statewide Importance Statewide Importance Prime, Prime1, Prime2 Prime, Prime3 Classification Not Prime Farmland Prime Prime Classification 2e, 2w, 3w Capability 2e, 2w, 3w 3e, 3w 2e, 3e Land 2e 3e Зe Relative LE <sup>1</sup> 83 84 79 76 78 75 71 Agriculture Value Group 12 10 11 14 00 თ 13

Table 1 Composition of Agriculture Value Groups (AVG) continued

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continued

0.21 0.77 0.19 1.22 Percentage of County Land 0.09 0.05 0.06 0.44 0.06 0.10 0.06 0.08 0.06 0.01 0.05 0.25 0.67 0.02 0.07 0.21 Countywide # Acres 543 850 301 360 2,826 357 632 632 382 511 398 36 285 1,607 4,290 115 460 1,319 802B Orthents loamy undulating 618D2 Senachwine silt loam 618C2 Senachwine silt loam 223D3 Varna silty clay loam 241D3 Chatsworth silty clay 618E2 Senachwine silt loam 241C3 Chatsworth silty clay 618F Senachwine silt loam Map Unit Symbol 622D3 Wyanet clay loam 530D2 Ozaukee silt loam and Soil Series 570D2 Martinsville loam 530E2 Ozaukee silt loam 387C3 Ockley clay loam 533 Urban Land 865 Gravel Pit 830 Landfill W Water Productivity Index<sup>2</sup> **Adjusted Soil** 37 - 57 62 - 69 n/a 69 Statewide Importance, Statewide Importance Classification Farmland Not Prime Not Prime Not Prime Classification Capability 6e, 7e Land n/a Зe 4e Relative LE <sup>1</sup> n/a 99 69 20 Agriculture Group Value 13 16 18 17

Table 1 Composition of Agriculture Value Groups (AVG) continued

Table 1 Notes

1. LE is the weighted, average designated Land Evaluation score assigned to each Agriculture Value Group.

provided in Table S2 are for 0% to 2% slopes and slightly eroded conditions. Productivity indices were adjusted for increasing slope and erosion 2. The "Adjusted Productivity Index" is derived from Productivity Index data published in Table S2 of Bulletin 811. The Productivity Indices in accordance with Table S3 of Bulletin 811: "Decimal Adjustments in Crop Yields and Productivity Indices Under an Optimum Level of Management for Various Slope Groups and Erosion Phases."

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#### Calculating a Land Evaluation Score

The Land Evaluation (LE) score is calculated separately from the calculations to determine the Site Assessment (SA) score.

The LE score of a subject site is calculated by the Champaign County Soil and Water Conservation District office. Typically the LE score is provided to the Champaign County Zoning Office as part of the Natural Resource Report for a subject site.

#### LE Worksheet

The steps below describe how to calculate an LE score:

1. Outline the subject site to be rezoned, and overlay with a Champaign County soils map unit layer. Soils data produced by the National Cooperative Soil Survey is available at the NRCS-operated 'Web Soil Survey.'

Soils data produced by the National Cooperative Soil Survey, and Champaign County parcel data, is available at the Champaign County GIS Consortium website 'GIS Web Map – Public Interface for Champaign County, Illinois.'

- 2. In Column 1, list both the 'soil map unit' and 'soil series' (e.g., '154A Flanagan') for each soil located on the subject site.
- 3. From Table 1, record the Agriculture Value Group for each soil in Column 2.
- 4. From Table 1, record the LE for each Agriculture Value Group in Column 3.
- 5. Calculate the acreage of each soil within the subject site. Record the number of acres for each soil in Column 4.
- 6. For each soil, multiply the LE indicated in Column 3 by the number of acres indicated in Column 4. Record the product in Column 5.
- 7. Add up the Column 4 acres and record the total. Add up the products shown in Column 5 and record the total.
- 8. Divide the Column 5 total by the Column 4 total. The result is the LE Score for the subject site.

The LE Worksheet provided on the following page can be used as a reference in calculating the LE score for a subject site. When calculating an LE score, a score ending in 0.49 or lower should be rounded down to the nearest whole number. A score ending in 0.5 or higher shall be rounded up to the next whole number.

The maximum number of LE points possible for any subject site is 100.

## LE WORKSHEET

	T			
COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Map Unit Symbol and Soil Series	Agriculture Value Group	Group Relative LE	Acres	Product of Column 3 and Column 4
		Totals:		
	Column 5 to	tal divided by C	olumn 4 total :	
			LE Score:	

## Example

A 5.3 acre parcel that has five soil types: 134B Camden, 152A Drummer, 242A Kendall, 3107A Sawmill, and 570C2 Martinsville. Based on the LE calculations described on previous Page 3, the LE score equals 88.

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Map Unit Symbol and Soil Series	Agriculture Value Group	Group Relative LE	Acres	Product of Column 3 and Column 4
242A Kendall	5	88	0.20	17.60
152A Drummer	2	100	0.83	83
570C2 Martinsville	13	75	0.01	0.75
134B Camden	9	83	1.64	136.12
3107A Sawmill	6	87	2.63	228.81
		Totals:	5.31	466.28
	Column 5 total divided by Column 4 total:			87.81
			LE Score:	88

#### SITE ASSESSMENT

The Site Assessment (SA) process provides a system for identifying important factors, other than soils, that affect the economic viability of a site for agricultural uses.

#### SA Factors

The primary criteria used to identify SA factors are that each factor: 1) be relevant to continued agricultural use of a subject site within the rural areas of Champaign County; and 2) be measurable.

There are 10 SA Factors. Table 2 lists the point values assigned to each of the 10 SA Factors.

SA Factors 1 through 4 are applied to all subject sites, and SA Factors 5 through 10 are applied only to those subject sites located outside the Contiguous Urbana Growth Area (CUGA). CUGA is identified in the 'Land Use Management Areas Map' of the *Champaign County Land Resource Management Plan* as land designated for non-agricultural land use. The CUGA is updated annually to reflect accurate municipal boundaries and to reflect any adjustments to areas served by public sanitary sewer.

The CUGA consists of:

- land designated for urban land use on the future land use map of an adopted municipal comprehensive land use plan, intergovernmental plan or special area plan, and located within the service area of a public sanitary sewer system with existing sewer service or sewer service planned to be available in the near-to mid-term (within approximately five years);
- land to be annexed by a municipality and located within the service area of a public sanitary sewer system with existing sewer service or sewer service planned to be available in the near-to mid-term (within approximately five years); or
- land surrounded by incorporated land or other urban land within the County.

#### Calculating the SA Score

The SA score of a subject site is calculated by planning staff of the Champaign County Planning and Zoning Department. The SA scoring is based on review of several sources of information which may typically include:

- Champaign County GIS Consortium data regarding parcels, corporate limits, zoning districts, digital ortho photo, etc.
- 'Land Use Management Map' of Champaign County Land Resource Management Plan
- field site inspection or windshield survey of site
- landowner interview

Each of the SA factors has point values, ranked on a 'best-to-worst' scale. The point values for each SA Factor are proportionately represented and no interpolation to an intermediate value should occur to obtain an SA Factor score.

The maximum number of possible SA score for a subject site or parcel is 200.

The SA Worksheet provided on pages 10-14 contains a description of each SA Factor and scoring instructions for each SA Factor.

The process of calculating the SA score of a subject site involves: selecting the appropriate point value response for each SA Factor, and then adding the SA Factor points to obtain a total SA score.

Table 2. Overview of Champaign County SA Factors and Potential SA Points

SA Fa	ctors that apply in all areas:	Maximum Potential Points	Maximum Potential Points Subtotal	Maximum Potential Points Total
1	size of site	10		
2a	Best Prime Farmland designation of site	30		
2b	if Best Prime Farmland, site configuration as of January 1, 2004			
2c	if not Best Prime Farmland, whether site is Prime Farmland and 25 acres or larger	- 10		
3	percentage of site perimeter adjacent to agricultural land use	20		
4	whether site is within the CUGA*	40	110	
SA Fa	ctors that apply only outside CUGA:			
5	distance to nearest city limits	15		
6	highest amount of site in agricultural land use over past 5 years	15		
	amount of land zoned rural within 1 mile	10		
7				
7 8	amount of agricultural land use within 1 mile	20		
		20 20		
8	amount of agricultural land use within 1 mile		90	

\* 'CUGA' is an acronym for the 'Contiguous Urban Growth Area' referenced in the *Champaign County Land Resource Management Plan.* 

# SA WORKSHEET

1 What size is the subject site?	More than 25 acres 20.1 to 25 acres 15.1 to 20 acres 10.1 to 15 acres 5.01 to 10 acres Less than 5 acres	10 points 8 points 6 points 4 points 2 points 0 points	
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**Description:** This factor considers that the size of the subject site has an impact on its long-term viability for agricultural purposes. The factor recognizes that the predominant row crop form of agriculture is generally more efficiently farmed on larger sites.

**Scoring:** Determine the area of the subject site.

2a	Is the subject site Best Prime Farmland ?	Yes No	30 points 0 points		
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**Description:** "Best Prime Farmland" is a subset of Prime Farmland soils which Champaign County has identified in order to differentiate among Prime Farmland soils that comprise most of the County. This factor assigns a high value to a subject site if it is designated as Best Prime Farmland, consistent with the *Champaign County Land Resource Management Plan* goals, objectives and policies.

Scoring: Refer to the LE score of the subject site.

"Best Prime Farmland" is defined as a specified range of Agriculture Value Groups of soils which have the highest ranking LE scores, based on the Champaign County Land Evaluation and Site Assessment (LESA) System.

2b	If the subject site is Best Prime Farmland, which one of the following statements is correct:		
	(1) The subject site is no more than 15% of a larger real estate tax parcel (or multiple parcels) that existed on January 1, 2004? (Yes 0 points)		
	(2) The subject site is larger than 15% of a larger real estate tax parcel (or multiple parcels) that existed on January 1, 2004? (Yes 10 points)		
	<ul> <li>(3) The subject site was not part of a larger tax parcel or parcels on January 1, 2004, and is not larger than 25 acres. (Yes 0 points )</li> </ul>	10 points	
	<ul> <li>(4) The subject site was not part of a larger tax parcel or parcels on January 1, 2004, and is larger than 25 acres. (Yes 10 points)</li> </ul>		
2c	If the subject site is not Best Prime Farmland but is Prime Farmland, is it larger than 25 acres? (Yes 10 points/ No 0 points)		

		91 to 100% of perimeter	20 points	
		81 to 90% of perimeter	18 points	
	71 to 80% of perimeter	16 points		
		61 to 70% of perimeter	14 points	
	Amount of the perimeter of the subject	51 to 60% of perimeter	12 points	
3	site adjacent to agricultural land use.	41 to 50% of perimeter	10 points	
	site adjacent to agriculturariana use.	31 to 40% of perimeter	8 points	
	21 to 30% of perimeter	6 points	8F	
	11 to 20% of perimeter	4 points		
		1 to 10% of perimeter	2 points	
		none	0 points	

**Description:** This factor assesses existing land uses which are adjacent to the subject site. More points are assigned to a subject that is surrounded by other agricultural land uses.

**Scoring:** Measure the perimeter of the subject site adjacent to agricultural land use. Defined terms relevant to the scoring of this factor include:

- AGRICULTURE: The growing, harvesting and storing of crops including legumes, hay, grain, fruit and truck or vegetable crops, floriculture, horticulture., mushroom growing, orchards, forestry and the keeping, raising and feeding of livestock or poultry, including dairying, poultry, swine, sheep, beef cattle., pony and horse production, fur farms, and fish and wildlife farms; farm buildings used for growing, harvesting and preparing crop products for market, or for use on the farm; roadside stands, farm buildings for storing and protecting farm machinery and equipment from the elements, for housing livestock or poultry and for preparing livestock or poultry products for market; farm dwellings occupied by farm owners, operators, tenants or seasonal or year-round hired farm workers. It is intended by this definition to include within the definition of agriculture all types of agricultural operations, but to exclude therefrom industrial operations such as a grain elevator, canning or slaughterhouse, wherein agricultural products produced primarily by others are stored or processed.
- AGRICULTURAL LAND USE: All agricultural and related uses that can be considered to be part of a farm operation, including: farmland (cropland), pasture lands, raising livestock, timberlands whether or not in current production, land enrolled in a conservation program, barns, outbuildings, and farm dwellings.
- FARM DWELLING: A farm dwelling is a dwelling located on a lot 35 acres or larger in area. An exception to this standard would be when information is provided as part of the public record to the Zoning Board of Appeals to indicate that such a dwelling is not occupied by a farm owner, operator, tenant farm worker, or seasonal or year-round hired farm worker.

Adjacent property is property that touches or that is directly across a street, highway or interstate right-of-way or a rail road right-of-way from a subject site.

4	Is the subject site located within the Contiguous Urban Growth Area?	no	40 points	
		yes	0 points	

**Description:** This factor is a general measure of development pressures which tend to support the conversion of agricultural sites to urban uses.

The 'Land Use Management Areas Map' of the *Champaign County Land Resource Management Plan* specifies the location of the 'Contiguous Urban Growth Area' (CUGA). CUGA is land designated for non-agricultural land use, and consists of:

- land designated for urban land use on the future land use map of an adopted municipal comprehensive land use plan, intergovernmental plan or special area plan, and located within the service area of a public sanitary sewer system with existing sewer service or sewer service planned to be available in the near-to mid-term (within approximately five years);
- land to be annexed by a municipality and located within the service area of a public sanitary sewer system with existing sewer service or sewer service planned to be available in the near-to mid-term (within approximately five years); or
- land surrounded by incorporated land or other urban land within the County.

**Scoring:** Based on the current *Champaign County Land Resource Management Plan* "Land Use Management Map".

If the subject site is located within the CUGA, skip the remaining SA Factor questions and indicate a total SA score for only SA Factors 1 through 4 at the end of the SA Worksheet.

Continue to answer the following SA Factor questions only if the subject site is located <u>outside the</u> <u>CUGA</u> ....

	Distance from the subject site to the	more than 3 miles		
5	nearest city or village limits.	1.51 to 3 miles within 1.5 miles	10 points 5 points	
		adjacent	0 points	

**Description:** A general assumption is that the further the subject site is from a municipality, the less chance there is of a nearby land use or development that would conflict with the agricultural land use of that subject site.

**Scoring:** Measure outward from the property lines of the subject site to the nearest municipal boundary.

6	The highest percentage of the subject site in agricultural land use in any of the last 5 years.	80 to 100% 60 to 79% 40 to 59% 20 to 39% less than 20%	15 points 11 points 7 points 3 points 0 points	
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**Description:** As a general indicator of the agricultural viability of a subject site, this factor assesses the highest percentage of agricultural land use of the subject site over the past five years.

**Scoring:** Based on the most recent five years of annual digital ortho photography from the USDA FSA - Aerial Photography Field Office, estimate the highest percentage of area of the subject site in agricultural land use.

Generally, unless information is available to indicate otherwise, if the subject site is less than 35 acres in area and includes a dwelling, consider one acre inclusive of the dwelling as a non-agricultural land use. (The one acre will be assumed to contain the well, septic system, and any non-agricultural outbuildings.)

Defined terms relevant to the scoring of this factor include:

AGRICULTURE: The growing, harvesting and storing of crops including legumes, hay, grain, fruit and truck or vegetable crops, floriculture, horticulture., mushroom growing, orchards, forestry and the keeping, raising and feeding of livestock or poultry, including dairying, poultry, swine, sheep, beef cattle., pony and horse production, fur farms, and fish and wildlife farms; farm buildings used for growing, harvesting and preparing crop products for market, or for use on the farm; roadside stands, farm buildings for storing and protecting farm machinery and equipment from the elements, for housing livestock or poultry and for preparing livestock or poultry products for market; farm dwellings occupied by farm owners, operators, tenants or seasonal or year-round hired farm workers. It is intended by this definition to include within the definition of agriculture all types of agricultural operations,

but to exclude therefrom industrial operations such as a grain elevator, canning or slaughterhouse, wherein agricultural products produced primarily by others are stored or processed.

- AGRICULTURAL LAND USE: All agricultural and related uses that can be considered to be part of a farm operation, including: farmland (cropland), pasture lands, raising livestock, timberlands whether or not in current production, land enrolled in a conservation program, barns, outbuildings, and farm dwellings.
- FARM DWELLING: A farm dwelling is a dwelling located on a lot 35 acres or larger in area. An exception to this standard would be when information is provided as part of the public record to the Zoning Board of Appeals to indicate that such a dwelling is not occupied by a farm owner, operator, tenant farm worker, or seasonal or year-round hired farm worker.

none 0 points
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**Description:** This factor measures the amount of land in the one-mile area surrounding the subject site which are zoned AG-1, AG-2, or CR, also referred to as 'rural zoning districts.' More points are assigned to a higher percentage of land zoned AG-1, AG-2, or CR within one mile of the subject site because the rural zoning districts are intended for agricultural land uses and because land within these districts is subject to use restrictions and limits on the density and location of non-agricultural land uses.

**Scoring:** Based on current CCGIS Consortium County zoning data, measure the area zoned AG-1, AG-2, and CR outward one mile from the property lines of the subject site.

21 to 30%6 points11 to 20%4 points1 to 10%2 pointsnone0 points		Percentage of area in agricultural land use within 1 mile of subject site.	1 to 10%	2 points	
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**Description:** This factor is considered a major indicator of the agricultural character of the general area, based on the assumption that areas in the County that are dominated by agricultural land use are generally more viable for farm purpose.

**Scoring:** Based on current CCGIS Consortium data, select the area of land within a one-mile distance outward from the property lines of the subject site.

The defined terms shown below generally form the basis on which this factor is scored:

- AGRICULTURE: The growing, harvesting and storing of crops including legumes, hay, grain, fruit and truck or vegetable crops, floriculture, horticulture., mushroom growing, orchards, forestry and the keeping, raising and feeding of livestock or poultry, including dairying, poultry, swine, sheep, beef cattle., pony and horse production, fur farms, and fish and wildlife farms; farm buildings used for growing, harvesting and preparing crop products for market, or for use on the farm; roadside stands, farm buildings for storing and protecting farm machinery and equipment from the elements, for housing livestock or poultry and for preparing livestock or poultry products for market; farm dwellings occupied by farm owners, operators, tenants or seasonal or year-round hired farm workers. It is intended by this definition to include within the definition of agriculture all types of agricultural operations, but to exclude therefrom industrial operations such as a grain elevator, canning or slaughterhouse, wherein agricultural products produced primarily by others are stored or processed.
- AGRICULTURAL LAND USE: All agricultural and related uses that can be considered to be part of a farm operation, including: farmland (cropland), pasture lands, raising livestock, timberlands whether or not in current production, land enrolled in a conservation program, barns, outbuildings, and farm dwellings.
- FARM DWELLING: A farm dwelling is a dwelling located on a lot 35 acres or larger in area. An exception to this standard would be when information is provided as part of the public record to the Zoning Board of Appeals to indicate that such a dwelling is not occupied by a farm owner, operator, tenant farm worker, or seasonal or year-round hired farm worker.

**SA Factor 8 Scoring Guidelines:** For purposes of responding to SA Factor 8, use the following procedural guidelines to assist in quantifying the amount of agricultural land use within one mile of the subject site:

1. Review the CCGIS Consortium GIS 'Land Use Code' data from the Champaign County Assessor's Office in order to identify parcels designated as a non-residential land use or non-agricultural land use within the one-mile distance from the subject site.

continued

#### SA Factor 8 Scoring Guidelines (continued)

- 2. Excluding parcels identified as non-agricultural or as non-residential, identify parcels within the one-mile distance from the subject site which are 35 acres or larger, with or without a dwelling. County the area of these parcels as agricultural land use, unless information is available to indicate otherwise.
- 3. Excluding parcels identified in Items 1 and 2 above, and unless information is available to indicate otherwise, consider parcels larger than 2 acres and less than 35 acres and with a dwelling, as follows:
  - a) if the parcel appears as wooded or in row crop production, then count one acre for the building footprint as non-agricultural land use and count the remaining portion of the parcel as agricultural land use; or
  - b) if sub-item 3a above does not apply, then at a minimum, count one acre for the building footprint as non-agricultural land use, and conduct a field inspection to assess what proportion of the parcel is in agricultural land use.

9	What is the distance from the subject site to the nearest 10 non-farm dwellings?	more than 1 mile 0.76 to 1 mile 0.51 to 0.75 mile 0.26 to 0.50 mile 0.01 to 0.25 mile adjacent	20 points 18 points 16 points 14 points 12 points 0 points	
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**Description:** The proximity of the nearest ten non-farm dwellings is a factor considered as a general indicator regarding development trend counter to continued agricultural use of the subject site.

A non-farm dwelling is defined as a dwelling located on a lot less than 35 acres. An exception to this standard would be when information is provided to the Zoning Board of Appeals to indicate that a dwelling is part of on-site agricultural operations or otherwise qualifying as a farm dwelling.

**Scoring:** Measure the linear distance outward from the closest point on the property line of the subject site to the façade of the tenth nearest non-farm dwelling.

	<ul> <li>a) How close is the subject site to a known livestock management facility of 400 or more animal units?</li> <li>Answer Parts b or c) <u>only</u> if the subject site is more than 1 mile from a known livestock management facility of 400 or more animal units.</li> </ul>	adjacent to 0.25 mile 0.26 to 0.5 mile 0.51 to 0.75 mile 0.76 to 1 mile more than 1 mile	10 points 9 points 8 points 7 points <i>n/a</i>	
10	<ul> <li>b) How close is the subject site to a known livestock management facility of 200 - 399 animal units?</li> <li>Answer Part c) <u>only</u> if the subject site is more than 1 mile from a known livestock management facility of 200-399 animal units.</li> </ul>	adjacent to 0.25 mile 0.26 to 0.5 mile 0.51 to 0.75 mile 0.76 to 1 mile more than 1 mile	7 points 6 points 5 points 4 points <i>n/a</i>	
	c) How close is the subject site to a known livestock management facility of 50 – 199 animal units?	adjacent to 0.25 mile 0.26 to 0.5 mile 0.51 to 0.75 mile 0.76 to 1 mile more than 1 mile	4 points 3 points 2 points 1 point 0 points	

**Description:** This factor is a measure of the compatibility of a site for continued agricultural use based on its proximity to an existing nearby livestock management facility. More points are assigned to a subject site in closer proximity to a known livestock management facility.

**Scoring:** The maximum points possible for this factor is 10 points. A response may be based on data available from the Livestock Management Facilities Program, Illinois Department of Agriculture, site inspection, and/or landowner interview.

This is a 3-part factor. Part a) measures proximity of a subject site to a livestock management facility of 400 or more animal units. If the subject site is located more than 1 mile from such facility, then respond to Part b). Part b) measures proximity of a subject site to a livestock management facility of 200 - 399 animal units. If the subject site is located more than 1 mile from such facility, then respond to Part c).

**SA Total Score** 

# CALCULATING THE TOTAL LESA SCORE

The total LESA score is the sum of the LE points and SA points for a particular site or parcel. The maximum total LESA score possible for a site is 300 points.\*

LE Total	
SA Total	
Total LESA Score	

The higher the total LESA score, the more highly rated the subject site or parcel is to be protected for continued agricultural use. The total LESA score of a site signifies a rating for protection of the subject site or parcel as follows:

261 - 300	very high rating for protection	
221 – 260 high rating for protection		
181 – 220 moderate rating for protectio		
180 or below	low rating for protection	

\* The maximum LE score possible for a site is 100 points. The maximum SA score possible for a site is 200 points.

#### **DEFINED TERMS**

- AGRICULTURE: The growing, harvesting and storing of crops including legumes, hay, grain, fruit and truck or vegetable crops, floriculture, horticulture., mushroom growing, orchards, forestry and the keeping, raising and feeding of livestock or poultry, including dairying, poultry, swine, sheep, beef cattle., pony and horse production, fur farms, and fish and wildlife farms; farm buildings used for growing, harvesting and preparing crop products for market, or for use on the farm; roadside stands, farm buildings for storing and protecting farm machinery and equipment from the elements, for housing livestock or poultry and for preparing livestock or poultry products for market; farm dwellings occupied by farm owners, operators, tenants or seasonal or year-round hired farm workers. It is intended by this definition to include within the definition of agriculture all types of agricultural operations, but to exclude therefrom industrial operations such as a grain elevator, canning or slaughterhouse, wherein agricultural products produced primarily by others are stored or processed. Source: *Champaign County Zoning Ordinance*.
- AGRICULTURAL LAND USE: All agricultural and related uses that can be considered to be part of a farm operation, including: farmland (cropland), pasture lands, raising livestock, timberlands whether or not in current production, land enrolled in a conservation program, barns, outbuildings, and farm dwellings.
- ANIMAL UNITS: A measure that is based on the number, species and size of an animal. The following table lists for selected species, the size and number of animals multiplied by a specified conversion factor equivalent to 50 animal units:

Species/Size	Conversion Factor	50 Animal Units
Swine over 55 lbs.	0.4	125
Swine under 55 lbs.	0.03	1,667
Dairy	1.4	35
Young dairy stock	0.6	84
Cattle	1.0	50
Sheep, lamb, goals	0.1	500
Horses	2.	25
Turkeys	0.02	2,500
Laying hens or broilers	0.01 - 0.03 *	1,667 -5,000 *
Ducks	0.02	2,500

Source: Livestock Management Facilities Program, Illinois Department of Agriculture Table Note: \* depends on type of livestock waste handling facility provided

- BEST PRIME FARMLAND: A subset of Prime Farmland soils which Champaign County has identified in order to differentiate among Prime Farmland soils that comprise most of the County.
- FARM DWELLING: A farm dwelling is a dwelling located on a lot 35 acres or larger in area. An exception to this standard would be when information is provided as part of the public record to the Zoning Board of Appeals to indicate that such a dwelling is not occupied by a farm owner, operator, tenant farm worker, or seasonal or year-round hired farm worker.

- LIVESTOCK MANAGEMENT FACILITY: A 'livestock management facility' is any animal feeding operation, livestock shelter, or on-farm milking and accompanying milk-handling area. A 'livestock waste handling facility' is an immovable structure or device (except sewers) used for collecting, pumping, treating, or disposing of livestock waste or for the recovery of byproducts from the livestock waste. Two or more livestock management facilities under common ownership, within ¼ mile of each other, and that share a common livestock waste handling facility are considered a single livestock management facility. (Illinois Livestock Management Facilities Act (510 ILCS 77/et seq.)
- NON-FARM DWELLING: A non-farm dwelling is a dwelling located on a lot less than 35 acres. An exception to this standard would be when information is provided as part of the public record to the Zoning Board of Appeals to indicate that such a dwelling is occupied by a farm owner, operator, tenant farm worker, or seasonal or year-round hired farm worker.

#### SUBJECT SITE: The area of a parcel that is proposed for development. As an example, for a zoning case to request a rezoning, the subject site will be

As an example, for a zoning case to request a rezoning, the subject site will be the area of the parcel or parcels that is proposed to be rezoned.

