

Agricultural Preservation Priority Area Map (PPA Map) Model Methodology and LESA Ranking Criteria

Create the PPA Map - Identify Input Layers

The following five (5) data layers of the County were used in the model to perform an analysis to identify the Agricultural Preservation Priority Areas.

- **Soils** – The Relative Value (RV) of the soil determines productivity. The soils with an RV of 100, 86, or 75 were used in the analysis (*See: Appendix C-1*).
- **Adjacent Parcels** – This layer includes parcels within a 100 ft buffer of any permanent conservation easement. Parcels considered commercial, industrial, or residential were excluded. The wooded areas were also removed from the adjacent parcels.
- **Agricultural Zoning** – The municipal and county zoning districts were evaluated and classified into three categories which offer some level of protection to agriculture:
 - Effective Agricultural Zoning – These districts are typically referred to as “Agricultural Preservation” districts. This form of zoning encourages the continuation of agricultural land and uses by limiting the number of dwellings and non-farm uses which may be subdivided from farmland. A “sliding scale”, number of new lots/ uses allowed, corresponds to the size of the parent farm. The new lots are limited in size, location, and may not be further subdivided.
 - Land Conservation Zoning – Districts in this category use a density-based approach to conserving land. This form of zoning encourages the preservation of rural landscapes and character while still permitting agricultural activities. A maximum number of dwelling units per acre is permitted to be subdivided from the parent tract. A property may not be further subdivided when that density is reached or the land is re-zoned. A minimum percentage of open land conservation is included on any subdivision plan.
 - Alternative Forms of Agricultural Zoning – A few additional districts in the County employ other techniques which may offer some protection to agricultural lands and uses, but are not considered Effective Agriculture or Land Conservation. An example is a district which has a sliding scale for new lots/ units, but may allow re-subdivision of those lots after a certain period of time.
- **Agricultural Security Areas (ASAs)** – Parcels which are designated as an Agricultural Security Area. The ASA Program is a State Program intended to strengthen and protect agriculture in Pennsylvania. ASAs are created by municipalities in cooperation with landowners which meet certain criteria. Designation does not restrict the use of the property by the farmer, but prohibits municipalities from enacting ordinances which would restrict normal farming practices.
- **Comprehensive Plans** – The areas designated for agriculture in the Land Use Plan of municipal or multi-municipal comprehensive plans were identified. In the absence of a municipal plan, the County Comprehensive Plan was used. In a few cases, there were multiple areas specified for agriculture, but at different intensities. The areas were classified as “Primary” and “Secondary”.

- Primary - Those areas designated specifically for agriculture and without restriction to intensity.
- Secondary - Areas classified as secondary were those that are intended to be more rural or conservation areas. These areas may be those that use land conservation zoning or discourage intensive ag operations.

Input Layer Analysis

The input layers are converted to multiple cells (each cell is a 20 x 20 foot square).

1. Each cell is then given a score ranging from 1 through 5 for each of the five (5) input layers as outlined below;
2. Those scores are then multiplied by an assigned weight for each input layer (*see chart below*);

INPUT LAYERS		POSSIBLE SCORE	WEIGHT (%)
1	SOILS - RV		
	100	5	30%
	86	3	
	75	2	
	Soils less than 75 RV	1	
2	ADJOINING PARCELS		
	ADJACENT TO OTHER PRESERVED PARCELS	5	30%
	No preserved adjacent land	1	
3	AG ZONING		
	EFFECTIVE AG	5	15%
	LAND CONSERVATION	3	
	ALTERNATIVE FORM	3	
	No Ag Zoning	1	
4	AG SECURITY AREA		
	ASA	5	10%
	Parcel not an ASA	1	
5	COMP PLAN/AG DISTRICTS		
	PRIMARY	5	15%
	SECONDARY	3	
	No Ag Districts	1	
			100%

3. The result of this Input Layer Analysis is that every cell will have a combined value of these five (5) data layers. All of the cells throughout Adams County are analyzed with this method and a map is created showing the High, Standard and Low Priority cells.

Cells with a total score of 4 through 5 = High Priority
 Cells with a total score of 3 = Standard Priority
 Cells with a total score of 2 = Low Priority
 Cells with a total score of 1 will not be prioritized

EXAMPLE - INPUT LAYER ANALYSIS				
	INPUT LAYER	SCORE	WEIGHT (%)	SCORE
1	SOILS	5	30%	1.5
2	ADJOINING PARCELS	1	30%	3
3	ZONING	3	15%	.45
4	AG SECURITY AREA	5	10%	.5
5	COMP PLAN	3	15%	.45
TOTAL PPA MAP SCORE				3.2 = Standard Priority

4. The growth areas from the municipal or multi-municipal comprehensive plans are then 'clipped out', or excluded, so that only those areas designated for agriculture remain.

The result of this process is the **Agricultural Preservation Priority Area Map** which will be used in the LESA evaluation system as outlined below.

Using the PPA Map in the Land Evaluation / Site Assessment (LESA) System:

The PPA Map is used to evaluate an application within the **Clustering Potential** category of the LESA system. The application is evaluated based on two components: the applicant parcel and the areas surrounding the applicant parcel.

- 1) **Applicant Parcel Score** - The specific applicant parcel will be scored based on the amount of high, standard and low priority area within that parcel.

EXAMPLE - EVALUATION OF A 130 ACRE APPLICANT PARCEL				
	PRIORITY	ACRES	WEIGHTED FACTOR	WEIGHTED ACREAGE
	HIGH	40	1.0	40
	STANDARD	60	.8	48
	LOW	20	.5	10
	NONE	10	0	0
TOTAL WEIGHTED ACREAGE				98
TOTAL WEIGHTED ACREAGE / TOTAL APPLICANT ACRES = X 98 / 130 = .75 Applicant Parcel Score				

- 2) **Surrounding Area Score** – A one mile buffer (2,010 acres) using the center point of the applicant parcel will be evaluated and scored based on the amount of high, standard and low priority.

EXAMPLE - EVALUATION OF A ONE MILE BUFFER SURROUNDING THE APPLICANT PARCEL (2,010 acres)				
	PRIORITY	ACRES	WEIGHTED FACTOR	WEIGHTED ACREAGE
	HIGH	700	1.0	700
	STANDARD	760	.8	608
	LOW	400	.5	200
	NONE	150	0	0
TOTAL WEIGHTED ACREAGE				1508
TOTAL WEIGHTED ACREAGE / TOTAL SURROUNDING ACRES = X 1508 / 2010 = .75 Surrounding Parcel Score				

These two factors (Applicant Parcel Score and Surrounding Area Score) are then combined for a total out of a possible 58 points (39 points for the Applicant Parcel Score and 19 points for the Surrounding Area Score):

Compatibility with Adams County Agricultural Preservation Priority Area Map
*Applicant Parcel Score Maximum 39 points + Surrounding Area Score Maximum 19 points
 = Total Maximum Score 58 points*

Applicant Parcel Score	
.95 or Higher	39
.80 to .94	31
.60 to .79	23
.40 to .59	15
.20 to .39	7
.00 to .19	0

Surrounding Area Score	
.75 or Higher	19
.65 to .74	15
.50 to .64	10
.25 to .49	5
.00 to .24	0

Example - Compatibility with Adams County Agricultural Preservation Priority Area Map			
Applicant Parcel Score		Surrounding Area Score	
.95 or Higher	39	.75 or Higher	19
.80 to .94	31	.65 to .74	15
.60 to .79	23	.50 to .64	10
.40 to .15	15	.25 to .49	5
.20 to .39	7	.00 to .24	0
.00 to .19	0		
23 + 19 = 42 <i>(this application would receive a total of 42 out of 58 points for the PPA Map criteria)</i>			