# Land Evaluation and Site Assessment (LESA)

#### NACD Webinar

April 18, 2013 Robert R. Dobos National Soil Survey Center Lincoln, NE

## Overview

- Historical context
- What the system does
- What is prime farmland?
- When is LESA used?

- Making a LESA System:Key players
- Making a LESA System:LE and SA Criteria



## Historical Context

- In the late 1970s, farmland loss became recognized as a serious National problem.
- 1978 National Agricultural Lands Study (NALS) commissioned by the Secretary of Agriculture
- 1981 Congress enacts Farmland Protection Policy Act (FPPA) to reduce unnecessary conversion of farm, forest, and range lands due to federal projects
- 1981 Initial Land Evaluation and Site Assessment (LESA) system developed in Orange County, New York

# What the system does

- LESA provides a consistent, flexible, defensible, science-based method for evaluating the relative agricultural importance of parcels
- LESA is analytical tool, not a farmland protection program



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## What is "Prime Farmland"?

- Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these land uses
- Prime farmland has the soil quality, growing season, and moisture supply needed for the agricultural productivity to sustainably produce high yields of crops when treated and managed according to acceptable farming methods
- Prime farmland keeps the growers options open, since the land is not limited, in terms of what can be planted, by slope, wetness, droughtiness, acidity, alkalinity, or excessive erodibility
- Generally is Land Capability Class 1 or Class 2
- Also have "Farmland of Statewide Importance", "Farmland of Local Importance" and "Farmland of Unique Importance"

## What is "Prime Timberland"?

• Prime timberland is land that has soil capable of growing wood at the rate of 85 cubic feet or more/acre/year (at culmination of mean annual increment) in natural stands and is not urban or built-up land uses or water (Note the growth rate is independent of species)

 Typically, this is land currently in forest, but does not exclude qualifying lands that could realistically be returned to forest



# What is "Prime Rangeland"?

• Prime rangeland is rangeland which, because of its soil, climate topography, vegetation, and location, has the highest quality or value for grazing animals. The (potential) natural vegetation is palatable, nutritious, and available to the kinds of herbivores common to the

area



# When is a LESA system used?

#### Federal agencies use a LESA:

\*Whenever federal money is to be used on a project that will convert farmland to non-farm uses, as mandated by FPPA

#### State and Local governments use a LESA to:

- \* Assess the impact of projects on agricultural lands
- \* Assess property taxes on agricultural lands
- \* Evaluate farms for purchase of development rights
- \* Plan public works projects

# Making a LESA System: Key players

\* Contact the NRCS State Soil Scientist first.

http://soils.usda.gov/contact/

- They can best help with Land Evaluation
  - Provide prime and important farmland lists and maps
  - Many soil surveys in Web Soil Survey do not report crop yields
  - Tools exist, like the National Commodity Crop Productivity Index, to assist in arraying the soils of a county for their agricultural productivity
  - Some states have an index of their own (IA, MN, MT, for example)

# Making a LESA System: Key players

- Community members are needed for the Site Assessment component
  - Farmers and ranchers
  - State and/or local planners
  - State and/or local elected officials
  - Extension service
  - Citizens
  - NRCS staff
  - Conservation District staff



## Making a LESA System: LE Criteria

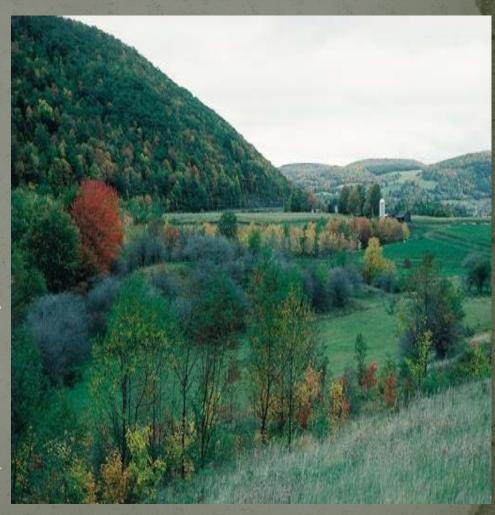
- Land Evaluation Criteria and Points
  - Soils are evaluated basis of their relative productivity for crops grown locally, land capability classifications, and important farmland status
  - Soils within the local government jurisdiction are examined and given a relative value score from 1 to 100 points
  - This is the Relative Value Rating of the Form AD 1006

## Making a LESA System: SA Criteria

- Site Assessment Criteria and Points Example
  - Percentage nonurban land use within a mile of proposed project (15 points max)
  - Percentage of the site perimeter that borders nonurban land use (10 points max)
  - Percentage of the site that has been managed for a crop in 5
     of the past ten years (15 points max)
  - Is the site subject to local farmland protection (20 points)
  - How close is the site to a built-up area (15 points max)
  - How close is the site to urban infrastructure (15 points)
  - Is the site an average size for the area (10 points)
  - How much land will be made non-farmable (10 points)

## Making a LESA System: SA Criteria

- Amount of on-farm investment (barns, etc.) (20 points max)
- Are there farm support and markets (5 points max)
- Would removing this farm from production adversely affect other farms and businesses (10 points max)
- Is the proposed land use incompatible with the surrounding agriculture (10 points max)
- \* Summation is the Site Assessment Points of the 1006
- \* Actual point values are set by the team that makes the LESA



#### 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 |                                       |                                      |        |  |  |  |
| Does the site contain prime, unique, statewide or<br>(If no, the FPPA does not apply do not complete                                |                       |                                 |                               | ed Average Fa                         |                                      |        |  |  |  |
| Major Crop(s)   | Farmable Land In Gov  | t. Jurisdiction                 |                               | Amount Of F                           | mount Of Farmland As Defined in FPPA |        |  |  |  |
|   | Acres:                |                                 | %                             | Acres:                                |                                      | %      |  |  |  |
| Name Of Land Evaluation System Used   | Name Of Local Site As | sessment Sy                     | /stem                         | 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  |                       |                                 | 0.0                           | 0.0                                   | 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 Criterion<br>Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points) |                       |                                 | 0                             | 0                                     | 0                                    | 0      |  |  |  |

| PART VI (To be completed by Federal Agency) Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b) |                   | Maximum<br>Points |   |  |      |                   |
|--|-------------------|-------------------|---|--|------|-------------------|
| Area In Nonurban Use   |                   |                   |   |  |      |                   |
| Perimeter In Nonurban Use  |                   |                   |   |  |      |                   |
| Percent Of Site Being Farmed   |                   |                   |   |  |      |                   |
| Protection Provided By State And Local Government  |                   |                   |   |  |      |                   |
| Distance From Urban Builtup Area   |                   |                   |   |  |      |                   |
| Distance To Urban Support Services   |                   |                   |   |  |      |                   |
| <ol><li>Size Of Present Farm Unit Compared To Average</li></ol>  |                   |                   |   |  |      |                   |
| Creation Of Nonfarmable Farmland   |                   |                   |   |  |      |                   |
| Availability Of Farm Support Services  |                   |                   |   |  |      |                   |
| 10. On-Farm Investments  |                   |                   |   |  |      |                   |
| 11. Effects Of Conversion On Farm Support Services   |                   |                   |   |  |      |                   |
| 12. Compatibility With Existing Agricultural Use   |                   |                   |   |  |      |                   |
| TOTAL SITE ASSESSMENT POINTS   |                   | 160               | 0 | 0  | 0    | 0                 |
| PART VII (To be completed by Federal Agency)   |                   |                   |   |  |      |                   |
| Relative Value Of Farmland (From Part V)   |                   | 100               | 0 | 0  | 0    | 0                 |
| Total Site Assessment (From Part VI above or a local<br>site assessment)   |                   | 160               | 0 | 0  | 0    | 0                 |
| TOTAL POINTS (Total of above 2 lines)  |                   | 260               | 0 | 0  | 0    | 0                 |
| Site Selected:   | Date Of Selection |                   |   | Was A Local Site Assessment Used? Yes ■ No ■ |      |                   |
| Reason For Selection:  |                   |                   |   |  |      |                   |
|  |                   |                   |   |  |      |                   |
|  |                   |                   |   |  |      |                   |
|  |                   |                   |   |  |      |                   |
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|  |                   |                   |   |  |      |                   |
|  |                   |                   |   |  |      |                   |
|  |                   |                   |   |  |      |                   |
| (See Instructions on reverse side)   |                   | _                 |   |  | Form | 1 AD-1006 (10-83) |

## Documents and Resources

- Web Soil Survey
- American Farmland Trust Farmland Information Center
- Farmland Protection Policy Act Manual
- LESA Handbook
- LESA Guidebook
- Form AD 1006

