



## Common Land Unit (CLU) INFORMATION SHEET June 2008

### What is a Common Land Unit (CLU)?

A CLU is an individual contiguous farming parcel which is the smallest unit of land that has:

1. A permanent, contiguous boundary
2. Common land cover and land management
3. Common owner, and/or
4. A common producer association.

### Isn't that just a farmer's field?

A CLU is closely related to a farm field by definition. The Farm Service Agency (FSA) Handbook for Acreage Compliance Determinations Revision 15 (2-CP) states a field is a tract separated by permanent boundaries such as:

1. Fences
2. Permanent waterways
3. Woodlands
4. Croplines not subject to change because of farming practices, or
5. Other similar features.

### What is a CLU used for?

USDA FSA digitizes CLU into Geographic Information System (GIS) shapefiles and populates associated attribute data.

There are many uses for CLUs, including but not limited to:

1. Providing a link between tabular farm records and a map or image of the land
2. Using GIS for acreage calculations
3. Replacing paper maps with digital images that can be easily updated and can produce high quality prints whenever necessary
4. Drawing crop boundaries to better define or use with other data, such as:
  - a. Crop patterns
  - b. Subdivisions
  - c. Conservation Plans
5. Creating a central database for land unit boundaries and linking it to customers, and
6. Speeding up the process for implementing disaster payment and other specialized systems.

### Yes, but what are the benefits?

CLUs:

1. Improve communication and data flow between Service Center Agencies, and with farmers and other customers
2. Improve communication between software applications by providing:
  - a. Common set of data elements to describe every CLU
  - b. Establish common identifiers for each unit of land, and
  - c. Provide common framework for locating data in relation to the ground.
3. Facilitate the creation of shared data warehouses for land related data
4. Provide for the incorporation of data from outside sources, including
  - a. Demographic data
  - b. Satellite imagery
  - c. GPS data
  - d. Elevation data
5. Provide for more consistent and more accurate land measurements, such as
  - a. Field acreage
  - b. Riparian buffers
  - c. Wetland areas
6. Provide for data summarizing to county, region, State, congressional district, or national level
7. Encourage the establishment of agreements with Federal, State, local and private agencies to
  - a. Facilitate data exchange, to
  - b. Reduce resource and acquisition costs
8. Provide more timely and efficient program-specific data.

### How were CLUs developed?

Originally, CLUs were digitized in GIS by 13 digitizing centers established at field offices in 7 states, and via contracts with private data conversion companies. CLUs were digitized on 1980s and 1990s National Digital Orthophoto Program (NDOP) imagery, using legacy photo-maps as source documents.

## Who maintains the CLU data?

There are national, State, and local data managers. Generally speaking, the local County Service Center employees are the maintainers of the CLU data for their area.

## How often is CLU data maintained?

The idea is to maintain CLU data continuously in USDA county-based Field Service Centers through interaction with producers and with submissions of new imagery via the National Agriculture Imagery Program (NAIP).

## NAIP?

NAIP is a program to:

1. Acquire peak growing season “leaf on” imagery, and
2. Deliver this imagery to USDA county Service Centers in order to
  - a. Maintain the common land unit (CLU) boundaries and
  - b. Assist with a multitude of other farm programs.

More information on NAIP can be obtained from the APFO website at <http://www.apfo.usda.gov/>.

## What format are CLUs in?

CLUs are in GIS shapefile format, NAD 83, in the assigned UTM coordinate system. Presently, CLU shapefiles are going through preparatory work so that they may be pushed to an ArcSDE geodatabase format.

## Why GIS for CLUs?

In GIS, there is a plethora of other information that can be associated with CLUs. By utilizing GIS, high quality analysis of CLUs can be accomplished; thus better tracking and decision making can be made. Some associated layers could include but are not limited to:

1. High Risk Lands
2. Wetlands
3. Land Cover
4. Conservation Practices
5. Soils
6. Roads
7. Hydrography, and of course
8. Orthophotography

## What attribute data is associated with CLUs?

Attribute data includes:

1. Shape
2. Area
3. Perimeter
4. Field ID
5. State FIPS
6. County FIPS
7. Tract
8. Farm
9. CLU Number
10. Calculated Acres
11. Highly Erodible Land Code
12. CLUID
13. CLU Land Classification Code
14. Comments

Note: Due to language in the recently passed Food, Conservation, and Energy Act of 2008 (Farm Bill), CLU are currently not releasable to the general public or most other government agencies.

## Do I need special software to view the CLU data?

Most GIS software can view CLU shapefiles. Some GIS viewing software is free for download at <http://www.apfo.usda.gov/>. This list is provided for convenience; USDA-FSA-APFO does not support or endorse these products or services.

## Who do I contact for more information?

1. For APFO sales and product information, contact USDA-FSA-APFO at 2222 W 2300 S, Salt Lake City UT, 84119-2020, call (801)844-2922, or visit <http://www.apfo.usda.gov/>.
2. For further information contact GIS Specialist, Zack Adkins, at (801)844-2925.