

**UNITED STATES DEPARTMENT OF AGRICULTURE**

Farm Service Agency  
Washington, DC 20250

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**Geospatial Information Systems**  
**1-GIS**

**Amendment 3**

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**Approved by:** Acting Deputy Administrator, Farm Programs



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**Amendment Transmittal**

**A Reasons for Amendment**

Paragraph 30 has been amended to:

- reflect the correct document number for DR 3465-001, Enterprise Geospatial Data Management
- update the definition of Geospatial Authoritative Data to align with DR 3465-001
- update terminology from “authoritative data sources” to “Geospatial Authoritative Data”.

Paragraph 31 has been amended to change references from ADS to GAD.

Paragraph 61 has been amended to:

- update the reference to DM 3465-001
- update terminology from ADS to GAD
- change formatting of metadata to FGDC standard
- update links to ESRI metadata information.

Paragraph 62 has been amended to:

- update the reference to DR 3465-001
- update links to ESRI metadata information.

Paragraph 63 has been amended to update file names for metadata templates.

Paragraph 105 has been amended to:

- direct requests for CLU from federal agencies to the FPAC FOIA Office
- correct formatting of metadata to FGDC-endorsed metadata
- correct paragraph reference for metadata

Subparagraph 106 B has been amended to provide clarification on archiving TERRA files.

## **Amendment Transmittal (Continued)**

### **A Reasons for Amendment (Continued)**

Subparagraph 116 C has been amended to correct formatting of metadata to FGDC-endorsed metadata.

Paragraph 125 has been amended to:

- clarify that CRP polygons are a derivative of CLU data
- correct formatting of metadata to FGDC-endorsed metadata.

Subparagraph 140 B has been amended to correct formatting of metadata to FGDC-endorsed metadata.

Paragraph 159 has been amended to change APFO to FPAC-GEO.

Paragraph 160 has been amended to provide contact information for FPAC-GEO.

Paragraph 176 has been amended to correct formatting of metadata to FGDC-endorsed metadata.

Paragraph 251 has been amended to remove references to obsolete GPS equipment.

Paragraph 281 has been amended to:

- remove references to outdated equipment
- update purchase, replacement and disposal guidelines
- update references to OCIO-CEC.

Paragraph 308 has been withdrawn because the National DGPS network has been decommissioned.

Subparagraph 309 C has been removed because the Garmin GPSMap 76 has been removed from inventory.

Subparagraph 309 D has been removed because the Trimble Juno 5B has been removed from inventory.

Paragraphs 310 through 313 have been withdrawn because the Garmin GPSMap 76 has been removed from inventory.

Paragraphs 324 through 330 have been withdrawn because the Trimble Juno 5B has been removed from inventory.

Exhibit 2 has been amended to correct the number for DR 3465-001 and to remove Trimble GPS Pathfinder Office.

Exhibit 11 has been amended to provide metadata instructions in ArcGIS Pro.

Exhibit 12 has been amended to provide instructions for customizing metadata templates in ArcGIS Pro.

Exhibit 15 has been amended to provide metadata import instructions for subsets.

## Amendment Transmittal (Continued)

### A Reasons for Amendment (Continued)

Exhibits 45 through 48 have been withdrawn.

Exhibits 50 through 71 have been withdrawn.

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## 2 Sources of Authority

### A Executive Orders

The following Executive Orders relate to the geospatial activity for FSA:

- **Executive Order 12906** (Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure)
- **Executive Order 13231** (Critical Infrastructure Protection in the Information Age)
- **Executive Order 12472** (Information Technology Management Reform Act).

### B Statutory Authority

The following Statutory Authorities relate to the geospatial activity for FSA:

- 7 CFR 2.42 provides authority to disclose geospatial information about agricultural land or operations pursuant to the consent of the agricultural producer or owner of agricultural land
- 7 CFR Part 718 provides authority to establish procedures for acreage determinations, compliance activities, Farm Records maintenance, and Reconstitutions

## 2 Sources of Authority (Continued)

### B Statutory Authority (Continued)

- authority for the development of the CLU data (theme) was provided by the National Food and Agricultural Council. The USDA Service Center GIS Strategy, as approved by the National Food and Agricultural Council on August 18, 1998:
  - designated FSA as the Data Steward for the CLU dataset
  - provided the initial funding and production schedule for CLU digitizing.

### C Regulatory Authority

The following Regulatory Authorities relate to the geospatial business for FSA:

- **OMB Circular A-16** – This Circular provides direction for federal agencies that produce, maintain or use spatial data either directly or indirectly in the fulfillment of their mission
- **OMB Circular A-130 Revised** – This Circular establishes general policy for the management of Federal information resources, IT resources, and supporting infrastructure. The CLU dataset follows the FGDC guidance that includes the Geospatial Data Lifecycle, which outlines 7 stages agencies should use when developing, managing, and reporting on nationally significant datasets under the guidance of OMB Circular A-16. The stages associated with the management of the data lifecycle allow stakeholders to assess whether A-16 data production activities meet business requirements and use best practices that enable shared or common services.

### D Other Authoritative Sources

The following other authorities relate to the geospatial business for FSA:

- **OMB M-13-13 (Open Data Policy – Managing Information as an Asset)** – This Memorandum “requires agencies to collect or create information in a way that supports downstream information processing and dissemination activities”
- **--DR 3465-001, Enterprise Geospatial Data Management** defines the strategic--\* direction necessary to optimize the management of the USDA geospatial data as departmental enterprise assets. The USDA Enterprise Geospatial Data Management policy presents elements of an enterprise geospatial data management framework and internal geospatial data sharing process.

## 3-6 (Reserved)

## Part 3 Geospatial Data Management

### Section 1 Roles and Responsibilities

#### 26 Managing Geospatial Data

##### A Overview

USDA uses a team approach to managing geospatial data to ensure data availability and to reduce duplication of efforts between agencies.

##### B FSA National GIS Program Coordinator

\*--Following the scope of Executive Order 12906, OMB Circular A-16, and DR 3465-001--\* (Enterprise Geospatial Data Management), the FSA National GIS Program Coordinator participates as steering committee lead for the following groups:

- USDA GDMT
- USDA Remote Sensing Coordination Council
- FGDC Imagery theme lead (co-leadership with USGS)
- National Digital Ortho-Imagery Program.

The participation and representation of FSA within these cooperative data partnerships with Federal, State, local, tribal and international governments, where feasible, is important to reduce geospatial data investment costs.

##### C National Geospatial Data Management Team

The GDMT is a self-directed cross agency team organized as follows.

- GDMT Steering Committee - Composed of senior representatives from the Forest Service, FSA, NRCS, RD, and RMA.
- GDMT Coordination Group – Composed of senior GIS technical staff from the field-based agencies. The Group rotates technical leadership of the GDMT on a calendar year basis and supports the GDMT and Steering Committee as needed.
- GDMT Members – Composed of field, State, regional, and center and NHQ staff as appropriate and charged with exploring technical geodata-related issues, documenting key points and offering options for resolution.
- GDMT Technical Sub-Groups – composed of GDMT members and others as needed to adequately address the topic at hand. Sub-groups will form and disband as appropriate to address technical issues.

**26 Managing Geospatial Data (Continued)****D State GDMT**

The State GDMT consists of the SGA from each SCA and 1 or more representatives from CTS. The team meets at least quarterly to discuss geodata coordination activities as outlined in the Manual for Managing Geospatial Datasets in Service Centers.

The State GDMT:

- identifies needs for new geospatial data and establishes naming conventions for new folders and datasets
- provides supplemental guidance to address local geodata issues
- communicates geodata management issues to the National GDMT
- develops policy for geodata that is consistent with the National Geodata Manual
- addresses geospatial data licensing issues
- works with CTS to resolve permission issues
- works with CTS to ensure that geospatial data is adequately backed up
- sets timeframes for updates to geodata in Service Centers

## 27 Geospatial Data Responsibilities

### A Overview

Managing geospatial data and other digital information is essential for effective use of GIS. Geospatial data management requires collaboration between business owners and GIS specialists.

### B National Office Responsibilities

The National Office is responsible for:

- \*--following guidance in DR 3465-001, Enterprise Geospatial Data Management at <https://www.usda.gov/directives/dr-3465-001>.--\*
- providing guidance in the collection, maintenance and use of geospatial data
- supporting FSA Program and Administrative areas
- coordinating with other divisions within FSA to ensure that geospatial investments are used effectively
- coordinating with partner Agencies and the Department to reduce data duplication
- creating and managing lifecycle data management plans for FSA authoritative datasets
- creating and managing geospatial metadata for national datasets.

**27 Geospatial Data Responsibilities (Continued)****C SGA Responsibilities**

Each State will designate the State GIS Specialist as SGA for their respective State and represents FSA on the multi-agency State GDMT.

The SGA is responsible for coordinating with the State GDMT and CTS to manage data and new employees' access within the geodata directory of each Service Center server. This includes but is not limited to:

- ensuring that appropriate geodata folder permissions are assigned to FSA employees
- updating and coordinating development of geodata for FSA as needed
- ensuring that geodata standards are followed in all County Offices
- ensuring that State and National geospatial datasets and metadata are available for State and County Office use
- ensuring that data and metadata in State and local offices adheres to established standards and policies
- training State and county staff on management and usage of geospatial datasets
- maintaining an inventory of all geospatial data used for FSA purposes
- ensuring that FSA geospatial data is archived appropriately

For more information, see the Manual for Managing Geospatial Datasets in Service Centers located at <https://inside.fsa.usda.gov/program-areas/dafp/common-processes/gis/gis-library/index>.



## \*--Section 2 Geospatial Authoritative Data Resources

### 30 Geospatial Authoritative Data--\*

#### A Overview

\*--FSA is responsible for defining and managing the GAD that FSA uses for business--\* purposes. These authoritative datasets are both national and statewide datasets. This handbook defines FSA's authoritative datasets.

#### \*--B Definition of GAD

DR 3465-001, Enterprise Geospatial Data Management identifies GAD as any geospatial data that meets one or more of the following:

- is required by statute
- is authored, maintained, and considered authoritative by USDA Mission Areas, agencies and staff offices
- is used to support policy
- is used to manage programs
- is used to inform the public.

**Note:** Datasets created by joining or relating a table are not considered GAD.--\*

#### C Core Management Principles

\*--GAD's carry particular expectations of how data is to be managed within an Agency. Following the guidelines in DR 3465-001:

- GAD's will be made available to anyone with access authority
- the creation and/or management of GAD's can encompass various platform sources including desktop, portals, mobile, cloud, web applications, and legacy where appropriate
- FSA's SGA will be the data steward of statewide GAD's specific to their State
- FSA GAD's will have lifecycle data management plans
- FSA GAD's and subsets (or clips) of those datasets will have metadata
- metadata XML templates designed by the National Office will be used for supplying metadata to GAD's and subsets of those datasets.--\*

**\*--30 Geospatial Authoritative Data (Continued)**

**D FSA GAD's**

The following geospatial datasets have been identified as FSA GAD's and have national--\* standards established:

- CLU
- Wetland Points.

\*--Future FSA GAD's may include:--\*

- FSA County Boundaries
- Service Center Points
- State Office Points
- District Boundaries
- Local Administrative Areas
- FSA Administrative Regions.

**31 Data Lifecycle Management**

**A Overview**

\*--DR 3465-001 requires agencies to identify a geospatial data lifecycle for all GAD's. The GAD geospatial data lifecycle stages allow stakeholders to assess whether USDA data production activities meet business requirements. The National Office is responsible for managing lifecycle data management plans of all FSA national GAD's.--\*

**B Geospatial Data Lifecycle Plan**

\*--Geospatial data lifecycle management plans for FSA GAD's will be based on the document at <https://www.fgdc.gov/policyandplanning/a-16/stages-of-geospatial-data-lifecycle-a16.pdf>.--\*

Geospatial data lifecycle management also includes planning for archiving and records disposition.

**32-35 (Reserved)**

## Section 5 Metadata Management

### 61 Metadata Standards

#### A Overview

\*--This section follows the guidance of DM 3465-001, Geospatial Metadata Standards, to establish consistent metadata management practices with currently identified FSA GAD's. The observed metadata management standard is the FGDC-Endorsed Metadata Standard.--\*

#### B Metadata Requirements

\*--Machine readable metadata is required for:--\*

- all FSA national authoritative datasets
- Statewide FSA authoritative datasets
- all geospatial clips (or subsets) that are distributed to a customer (approved Agency, authorized user, producer and/or third party).

#### C Metadata Style Type

\*--Metadata can be easily edited using ESRI ArcGIS Pro. Metadata will be formatted using the **FGDC CSDGM** standard. To set ArcGIS Pro to use the correct metadata style, see **Exhibit 11**.

For more information about metadata style and standards, see

<https://pro.arcgis.com/en/pro-app/latest/help/metadata/view-and-edit-metadata.htm>.--\*

## 62 Working With Metadata

### A Definition of Metadata

Metadata is information that describes a dataset, such that a dataset can be understood, re-used, and integrated with other datasets.

Metadata for spatial data may describe and document the files such as:

- subject matter
- how, when, where, and by whom the data was collected
- availability
- distribution information.

\*--DR 3465-001 mandates that metadata be provided in all FSA authoritative datasets and--\*  
derived products such as subsets (clips). To ensure consistency and validity of content, metadata templates will be used to help with the management of metadata.

\* \* \*

### B Viewing Metadata

Metadata is important when sharing and archiving tools, data, and maps. The information made available for viewing and editing is determined by the metadata style selected in ArcGIS.

\*--Metadata can be viewed using desktop GIS applications such as ArcGIS Pro. Metadata for online resources is viewable through ArcGIS Online or online hubs such as <https://www.geoplatform.gov>.--\*

## 63 National Metadata Templates

### A Overview

Agency-wide metadata templates help streamline the task of managing metadata. Similar to a map document template or Word document template, a metadata template contains information that will be used again and again. ArcGIS automatically updates properties of an item and metadata templates in place, requiring less effort to complete an item's metadata.

### B National Metadata Templates

Predefined metadata XML templates have been created for the purpose of fulfilling the metadata obligation for FSA's authoritative datasets. The use of metadata XML templates incorporates standardization of information and eases the task of metadata management.

The following list describes all the metadata templates available.

\*--

<b>Authoritative Data Type</b>	<b>Template Name</b>	<b>Template Location</b>
CLU	CLU_FGDC_Metadata.xml	I:\Geodata\Templates\Metadata
Wetlands	WET_FGDC_Metadata.xml	I:\Geodata\Templates\Metadata
Service Center	Service_Center_FGDC.xml	I:\Geodata\Templates\Metadata
FSA County	FSA_County_FGDC.xml	I:\Geodata\Templates\Metadata

--\*

## 63 National Metadata Templates (Continued)

### C Customizing the National Metadata Templates

All statewide authoritative datasets must have metadata that identifies local information for the respective State. All subset (clips) created for the purpose of fulfilling producer or third-party requests will also have metadata associated with each subset.

The State GIS Specialist must customize the national metadata template for the respective States. The State Office address information will be added to all areas within the metadata listing contact information.

The following table describes the layer and metadata update frequency.

<b>Data Layer Type</b>	<b>Update Metadata Timeframe</b>
CLU statewide layer	Update metadata when statewide layer is refreshed.
Wetland statewide layer	Update metadata when statewide layer is refreshed.
CLU (clip) layer	Upon request for clips; metadata date should reflect the date the clip was created.
Wetland (clip) layer	Upon request for clips; metadata date should reflect the date the clip was created.
Service Center statewide layer	Update metadata when statewide layer is refreshed.
FSA County statewide layer	Update metadata to reflect State Office point of contact information upon creation of statewide layer.

The State GIS Specialist will use the State Office location information for all metadata templates.

The prepared metadata template files for CLU and Wetlands will be used for all export tools.

Before editing or customizing metadata, the national template must be copied from its original location. **See Exhibit 12.**

## 105 Rules for Release of Data (Continued)

**C Handling Requests**

2-INFO provides procedures for all FSA offices to follow when determining the cost of making records available to the public, other Federal agencies, and Congress. 2-INFO, Part 4 provides procedures for determining the cost of search services, review services, computer services and related services.

<b>IF the request for CLU data covers...</b>	<b>THEN the request is filled at the...</b>
an individual owner, operator or producer	<p>*--County Office. The County Office must ensure that the requestor is the producer or owner linked to the data, or that written consent has been provided by an associate producer or owner. See:--*</p> <ul style="list-style-type: none"> <li>• <b>Exhibit 19</b> to create the subset</li> <li>• <b>Exhibit 20</b> to encrypt and deliver subsets.</li> </ul>
an entire county, multiple counties, or whole State	<p>*--State Office. The State GIS Specialist will work--* with the State FOIA Officer to ensure that a current MOU with the requestor is in effect.</p> <p>*--<b>Note:</b> Requests from other Federal Agencies will be routed through the FPAC FOIA Office.--*</p>
multiple States	*--FPAC FOIA Office.--*

\*--**Note:** Producers will not be charged for CLU data for farms in which they have an--\* interest. A producer is considered to have an interest in CLU if the producer is an operator, owner, or other producer on CLU.

**D Memorandum of Understanding**

A person or Federal, State, local, or tribal agencies working in cooperation with USDA must have an established MOU to receive CLU data.

\*--To pursue an MOU, the State GIS Specialist will contact the State FOIA/PA Coordinator.--\* If the data sharing agreement is determined to be beneficial to FSA, the MOU must identify:

- the information that is being requested by the cooperating party
- the frequency the information will be exchanged between FSA and the requesting agency
- security requirements of the information.

\*--All MOU's will be approved by the FPAC FOIA Office.--\*

**105 Rules for Release of Data (Continued)****E Creating Compliant Metadata**

\*--FGDC-endorsed machine-readable metadata will be provided with all CLU data. See **paragraph 61.**--\*

**F Providing Photocopies to Producers**

Photocopies of 24"x24" aerial photography used as the original source material for CLU \*--digitizing will be provided to any producer on the farm upon producer's request. Before photocopying historic imagery, all PII must be removed from the map area to be copied.--\* Any maps that are copied or scanned via a photocopier machine or scanner must have the text, "NOT TO SCALE" applied to the map.

**Note:** See **paragraph 655** for providing maps to producers.

**106 Archiving Data****A Archiving CLU and Wetlands**

The county CLU data must be extracted weekly to county servers. A statewide CLU layer must be created and archived monthly by the State GIS Specialist. A final statewide CLU data layer must be created and archived by the State GIS Specialist at rollover. See **Exhibit 5.**

**B Archiving TERRA Files**

\*--TERRA files will be copied from the Citrix environment to the local F:\ Drive for use in COLS. TERRA files that become CRP contracts are to be saved to a subfolder noting the signup number. See 4-CRP.

On an annual basis, National Office staff will archive the XML file for all TERRA scenarios without regard to acceptance status. TERRA scenario folders for the current signup and immediately preceding signup will not be removed. All other TERRA scenario folders will be removed and the XML files for the respective scenarios will be archived in a central location.--\*

**107-110 (Reserved)**



**115 Relationships to Other Data****A Relationship to CLU**

The wetland point feature dataset is used in conjunction with the CLU feature dataset. Mapping and viewing producer GIS data in any application should include the wetland point feature dataset as identified in the NRCS wetland determinations made for producer's farming interest.

**B CRM Farm Records**

The wetlands identified for each tract in the CLU feature dataset should correspond with the tract level wetland determination loaded in CRM Farm Records according to 10-CM. See **paragraph 114**.

**116 Rules for Release of Data****A Overview**

It is FSA policy to safeguard individual privacy from the misuse of Federal records while granting individuals access to records concerning themselves.

Information that is released to agencies of USDA should only be provided when they have an official use for the information. Release of this information to other Government agencies or a third party is allowable only if there has been a routine use established in the FSA Privacy Act system of records granting use of the information.

2-INFO provides procedures for all FSA offices to follow when making records available to the public, other Federal agencies, and Congress. 3-INFO provides procedures to be followed by all offices when collecting, maintaining, or disclosing data or information concerning an individual.

**B Releasing Wetland Data**

Wetland data is considered PII and generally cannot be released to third parties.

**C Creating Compliant Metadata**

\*--FGDC-endorsed machine-readable metadata will be provided with all wetland data. See **paragraph 61.**--\*

**D Archiving Wetland Point Data**

The county wetland data must be extracted weekly to county servers. A statewide wetland layer must be created and archived monthly by the State GIS Specialist. A final statewide wetland layer must be created and archived by the State GIS Specialist at rollover. See **Exhibit 5.**

**117-119 (Reserved)**

**125 Rules for Release of Data****A Basic Policy**

It is FSA policy to safeguard individual privacy from the misuse of Federal records while granting individuals access to records concerning themselves.

Information that is released to agencies of USDA should only be provided when they have an official use for the information. Release of this information to other Government agencies or a third party is allowable only if there has been a routine use established in the FSA Privacy Act system of records granting use of the information.

2-INFO provides procedures for all FSA offices to follow when making records available to the public, other Federal agencies, and Congress. 3-INFO provides procedures to be followed by all offices when collecting, maintaining, or disclosing data or information concerning an individual.

**125 Rules for Release of Data (Continued)****B Releasing CRP Feature Dataset Data**

Section 1619 of the 2008 Farm Bill (7 U.S.C. § 8791) classifies CLU Data as geospatial information provided by an agricultural producer or owner of agricultural land. CLU Data is \*--considered PII and generally cannot be released to third parties. CRP features are a derivative product of CLU that contain producer-provided information and are also covered by Section 1619.--\*

CLU and derived products may only be released to a person, Federal, State, local, or tribal agency:

- when working in cooperation with FSA to provide technical or financial assistance with respect to the agricultural operation, agricultural land, or farming or conservation practices
- when responding to a disease or pest threat to agricultural operations
- if the information has been transformed into a statistical or aggregate form that does not identify an individual owner, operator or producer or specific data gathering site
- if written consent is provided by the agricultural producer or owner of the agricultural land.

**C Creating Compliant Metadata**

\*-- FGDC-endorsed machine-readable metadata will be provided with all CRP data. See **paragraph 61**.--\*

**126-133 (Reserved)**

**138 Analysis and Use of Crop Data****A Coordination With the State Compliance Specialist**

The detailed crop data can be used for many purposes to assist with program implementation and assessment at both the county, State, and national level.

At the State level, the GIS Specialist should review the data with the State acreage reporting/compliance specialist to verify the accuracy of the acreage report data and how County Offices are loading crop data in CARS. Maps can be created to identify crops at the county and State level. The crop data attributes can also be sorted and reviewed to summarize acreage for all or specific crops or crop data as needed for the State.

**B Other Uses**

The following are additional potential uses for the State or county crop data. Uses are not limited to the following:

- COC assessment of prevented planting and failed acreage claims by identifying crops and planting dates for neighboring farms
- outreach for program eligibility

**Example:** Identifying all NAP eligible crops in a county, or identifying farms eligible for LDP or LFP based on reported crops.

- disaster assessment and assistance with STORM reports to identify farms and crops impacted by a disaster event
- creation of the State and County Summary Report.

**139 Relationships to Other Data****A CLU**

The detailed crop data dataset is derived from the CLU layer. Reported crop attributes are matched to the associated CLU boundary. Sub-fields are not delineated in the crop layer, but rather sub-fields are associated to the entire parent CLU.

**Important:** Because there may be changes to farm, tract, and field numbers between the time crop data is exported and when the CLU is exported, not all crop records may join to the CLU. Analysis or summary of the detailed crop data should be completed on the All Crop data table and not the geospatial crop data boundary dataset.

**B State and County Summary Report**

The State-detailed crop data report is needed as an input to create the State and County Summary Reports. See **paragraph 518** for running the summary reports.

**140 Rules for Release of Data****A Basic Policy**

The Detailed Crop Data feature dataset is considered PII unless aggregated to a State or county level. Release of the data is the same as the CLU. Users are cautioned about creating maps with the detailed crop data that are shared outside of the agency to ensure that data is sufficiently aggregated to avoid disclosing personal information.

**Important:** Maps, reports or other information derived from the Detailed Crop Data for  
\*--the current crop year, regardless of aggregation, will not be shared outside--\*  
of the agency before the final crop reporting date of the crop year.

**B Creating Compliant Metadata**

\*--FGDC-endorsed machine-readable metadata will be provided with all crop data. See **paragraph 61**.--\*

**141-145 (Reserved)**

## Section 6 National Agricultural Imagery Program

### 159 General Information

#### A Definition of National Agricultural Imagery Program (NAIP)

NAIP is an aerial photography program that acquires ortho-rectified imagery during the \*--“leaf on” peak growing season. Imagery is provided to FPAC-GEO within 30 days after the state has been completely collected. Service Centers will use this imagery as a base layer--\* for GIS and to maintain CLU boundaries and complete compliance spot checks.

#### B Additional Information

See 1-AP for additional information on NAIP.

### 160 Data Management and Responsibilities

#### A Agency Responsibilities

\*--FPAC-GEO is the USDA Data Steward for ortho-imagery.--\*

#### B Requests for Large Areas

\*--Requests for ortho-imagery for the entire county or large areas will be directed to FPAC-GEO at [geo.sales@usda.gov](mailto:geo.sales@usda.gov).--\*

#### C Requests for Small Areas

Requests from an individual producer for imagery covering their land can be filled at the Service Center.

#### D Charges

\*--Producers will not be charged for digital or paper copies of farms in which they have an interest. Refer other requestors to FPAC-GEO at [geo.sales@usda.gov](mailto:geo.sales@usda.gov).--\*

### 161-171 (Reserved)





**174 Rules for Delineating (Continued)****H Air Quality Zones (Continued)**

Air quality zone polygons shall be attributed with the following.

<b>Attribute</b>	<b>Value</b>
Name	"State Air Quality Priority Zone"
Type	"State AQ"
Code	"AQ"
State	The 2-letter postal abbreviation for the State

**I State CPA Attributes**

State CPA's shall be attributed with the following.

<b>Attribute</b>	<b>Value</b>
Name	<name of state> "State CPA"
Type	"CPA"
Code	"CPA"
State	The 2-letter postal abbreviation for the State

**175 Relationships to Other Data****A TIGER County Boundary Dataset**

CPA's based on county boundaries will use TIGER Geodatabase County as the source geometry for these CPA's.

**B WBD**

CPA's based on HUC boundaries will use USGS WBD as the source geometry. CPA's may be defined by an aggregation of:

- entire 8-digit HUC
- entire 10-digit HUC
- entire 12-digit HUC.

**C CLU**

Statewide CLU data is used to determine the number of cropland acres within CPA.

**176 Rules for Release of CPA Data**

**A Basic Policy**

CPA data does not contain PII and may be released. See 2-INFO to determine cost.

**B Creating Compliant Metadata**

\*--FGDC-endorsed machine-readable metadata will be provided with all CPA data. See -  
**paragraph 61.--\***

ISO-compliant metadata shall be provided with CPA feature datasets.

**177-187 (Reserved)**

**251 Staking and Referencing Procedure (Continued)****D Procedure for Staking and Referencing When GPS Is Not Available**

Use the steps in this table for staking and referencing in the field when use of a GPS unit is not available or does not obtain the accuracy needed for official measurement service. The use of a chain or wheel is still authorized.

<b>Step</b>	<b>Action</b>
1	Identify a minimum of 2 permanent points. One point must be on a permanent boundary.
2	Physically mark or place stakes on or near identified permanent points.
3	Mark these permanent points on the sketch or photocopy. If a photocopy is used in the field, a second photocopy may be needed for official files.
4	<ul style="list-style-type: none"> <li>• Measure the distance between these points.</li> <li>• Record the distance and mark the stake reference on the sketch or photocopy.</li> </ul>
5	Place a stake at a point along the boundary of the area to be measured. Each stake must be referenced to either of the following: <ul style="list-style-type: none"> <li>• 2 fixed, recognizable points or objects, which are not necessarily visible on the photograph</li> <li>• a stake placed along a permanent boundary.</li> </ul>
6	Mark the point in step 5 on the sketch or photocopy.
7	<ul style="list-style-type: none"> <li>• Measure and record distance.</li> <li>• Mark the stake reference on the sketch.</li> </ul>
8	Continue to place stakes at permanent and temporary points, marking and recording on the sketch or photocopy until the area to be measured is covered.
9	In Office, delineate measurements and staked locations using the Acreage Toolbar within the CLU Maintenance Tool in Citrix.
10	Create and print a map of the measurements. Include the following: <ul style="list-style-type: none"> <li>• field number</li> <li>• acreage in the measured field.</li> </ul>
11	Attach a copy of the map and any field notes to FSA-409 and file in FSA-409 folder.
12	If needed for documentation for reported acreage on FSA-578, include the map with the acreage report.

## 251 Staking and Referencing Procedure (Continued)

### E Procedure for Staking and Referencing Using GPS

Use the steps in this table for staking and referencing using GPS.

For this example, the “F:\geodata\measurement\_services\navigation” directory will contain the files for a measurement service field visit.

**Note:** Archive files by program year.

**Example:** F:\geodata\measurement\_services\navigation\2017

The geodata folder and file naming convention identified can be used for all measurement services.

Step	Action
1	Identify the CLU field polygon or polygons by farm, tract, and CLU field number and notify the State GIS Specialist by e-mail of the needed polygons.  <b>Note:</b> Other polygons or points can also be used. Work with the State GIS Specialist, to identify those.
2	The State GIS Specialist will use the GPS Automation Tool to convert the CLU field polygons into points at each vertex and at a specified interval. The State GIS Specialist will e-mail a map and the point shapefiles back to the County Office for upload to the GPS unit. See <b>Exhibit 44</b> .
3	After receiving the CLU field points’ shapefile or shapefiles from the State GIS Specialist they can be uploaded to the GPS unit for navigation. Save the files to the “F:\geodata\measurement_services\navigation” directory. Prepared point shapefiles shall be uploaded to the GPS unit before leaving the office.
4	Shapefiles uploaded or transferred to the GPS unit can then be used to navigate to the points.
5	Physically mark or place stakes on or near identified permanent points.
6	Mark these points on the sketch or digital hard-copy map to be used for field notes.
7	Continue to place stakes at permanent and temporary points, marking and recording on the digital map until the area to be measured is covered.

**279 Accepting GPS Data From Outside Sources****A Overview**

Other USDA Agencies or entities may collect geospatial data with mobile devices that may be used by FSA for program purposes. FSA must ensure that outside data meets minimum accuracy standards before use.

**B Accepting GPS Data From Outside Sources**

Data collected by an outside agency or entity for FSA program use must include:

- Metadata
- all GPS field data files.

Data should be provided to FSA in a compressed .ZIP format and be organized into a logical directory structure when received by e-mail.

Acceptance of outside data will be according to agency security guidelines.

**280 Mobile Device Training for County Offices****A Overview**

The State GIS Specialist will provide training to FSA employees, including field reporters and contract loss adjusters, in the following areas:

- familiarity with the GPS unit assembly, power sources, menus, and functions
- record and save points, tracks, or areas for acreage or distance measurements
- properly determine GPS unit settings, such as mode, map datum, time zone, units of measure, and orientation
- initiate a differential correction method
- download data from the GPS unit to the office workstation
- use the downloaded data in CRM Farm Records or Citrix applications to determine acreage or distance
- upload points to the GPS Unit and navigate to them in the field.

## 280 Mobile Device Training for County Offices (Continued)

### B Trained Employee List

\*--The State Office will maintain a listing of employees who have successfully completed--\*  
GPS training including the dates and times of the training.

## 281 Equipment Management

### A New Units and Configurations

Research and purchase of new location enabled mobile devices including GPS units and GPS-enabled cameras will be coordinated by the National Office. State Offices and County

\*--Service Centers are not authorized to purchase new GPS unit product lines or other mobile devices for the purpose of collecting location data. However, State Offices and County Service Centers may supplement equipment supplies using the same manufacturer and model types purchased by the National Office.

**Example:** Through a National Office coordinated purchase, a State Office received 5 Garmin Montana 750i GPS units. The State Office may purchase an additional Montana 750i. The State Office would **not** be authorized to purchase a Garmin Oregon 700 because it does not match the product line coordinated by the National Office.--\*

### B Inventory and Registration

The GIS Specialist will maintain an inventory of all GPS location-enabled mobile devices including GPS units and location enabled digital cameras. The inventory must include the following:

- make/model
- serial number
- location
- device point of contact
- functional/operational status.

Location-enabled digital cameras must be inventoried on the FSA GIS SharePoint site. This will not only provide an inventory of FSA resources, but will also serve as a resource for purchasing new devices.

**Note:** Digital cameras without GPS capability do not need to be inventoried on the FSA GIS SharePoint Site.

\* \* \*

**281 Equipment Management (Continued)**

\* \* \*

**C Equipment Repair and Replacement**

The State GIS Specialist will coordinate repairs or replacement of GPS units with the \*--National Office. Repairs and replacements will be handled on a case-by-case basis. If a GPS unit is not repairable, a replacement device should be coordinated by reallocating inventory within a State. If no replacement is available within the State, contact the National Office before purchasing additional equipment.--\*

\* \* \*

**D Equipment Disposal**

Broken or nonfunctioning GPS equipment should be inspected by the State GIS Specialist to determine whether any parts can be salvaged for use with other GPS units. Parts that cannot be reused should be properly disposed of according to State and local laws. Many States prohibit the disposal of electronic equipment. If not disposed of properly, these components can threaten the environment because of their hazardous ingredients.

\*--Electronics recycling facilities can be found at  
<https://www.epa.gov/recycle/electronics-donation-and-recycling>.

After equipment is properly disposed of, remove the item from all inventory lists. Follow FPAC, MSD's Personal Property Management Program Policy for guidance on equipment disposal.--\*

**E Software Updates**

Mobile devices often require software installation on the workstation and the devices to use the location enabled features. The State GIS Specialist will coordinate with the National \*--Office and local OCIO-CEC staff:

- ensure that only approved software is installed
- download and install software as directed by the National Office and OCIO-CEC--\*
- ensure that devices and workstations are updated when software version updates are available.

**282-295 (Reserved)**





## Section 3 GPS Configurations

308 (Withdrawn--Amend. 3)

309 WAAS

**A WAAS Overview**

WAAS is a system of satellites and ground stations that provide real time GPS signal corrections, improving position accuracy. FAA and DOT operate the WAAS program for use in precision flight approaches. WAAS corrects for GPS signal errors caused by ionospheric disturbances, timing and satellite orbit errors, and provides vital integrity information regarding the health of each GPS satellite.

**B WAAS Availability**

WAAS works well only if the sky is unobstructed. In the northern United States, an obstruction to the south elevation of more than 15 degrees above the horizon can degrade the WAAS signal reception. WAAS specifications require a positional accuracy of 7.6 meters (25 ft) or better at least 95 percent of the time. WAAS accuracy can and will vary based on location, day, and time.

WAAS signal reception is ideal for open land and marine applications. WAAS provides extended coverage both inland and offshore compared to the land-based DGPS. WAAS does not require additional receiving equipment, while DGPS does.

\* \* \*

\* \* \*

310-313 (Withdrawn--Amend. 3)

314-323 (Reserved)

324-330 (Withdrawn--Amend. 3)

331-499 (Reserved)



## Reports, Forms, Abbreviations, and Delegations of Authority

### Reports

None.

### Forms

This table lists all forms referenced in this handbook.

Number	Title	Display Reference	Reference
AD-700	Procurement Request		296
AD-2017	Service Center Information Management System (SCIMS) Access Form		Ex. 9, 10
CCC-505	Voluntary Permanent Base Acres Reduction		506, Ex. 130
CCC-517	Tract Redistribution Form		506
FSA-13-A	System Access Request Form		51, Ex. 9, 10
FSA-156EZ	Abbreviated 156 Farm Record		Ex. 98
FSA-159	Request for Supplies, Forms, and/or Publications		310
FSA-409	Measurement Service Record		249
FSA-409A	Measurement Service Request Register		249
FSA-578	Report of Acreage		50, 134, 136, 146, 251
FSA-858	Determining if a Wetland May Be Present		872
NRCS-CPA-026	Highly Erodible Land and Wetland Conservation Determination		71, Ex. 14, 23
NRCS-CPA-026E	Highly Erodible Land and Wetland Conservation Determination		Ex. 21

### Abbreviations Not Listed in 1-CM

The following abbreviations are not listed in 1-CM.

Approved Abbreviation	Term	Reference
AD	Active Directory	46, 48, 102, Ex. 5, 8
ADUC	Active Directory Users and Computers	48, Ex. 8
AGOL	ArcGIS Online	Text and Exhibits

## Reports, Forms, Abbreviations, and Redelegations of Authority (Continued)

## Abbreviations Not Listed in 1-CM (Continued)

Approved Abbreviation	Term	Reference
AHPS	Advanced Hydrologic Prediction Service	954, 957, 958, Ex. 211
AMT	Access Management	Ex. 9, 10
APLN	Administrator Physical Loss Notification	602, 927, 954, 956, 957, 960
ARCPLC	Agriculture Risk Coverage and Price Loss Coverage	506, 515, 517, 762, Ex. 5, 16, 124, 128
BWEP	Boll Weevil Eradication Program	146-149
CARS	Crop Acreage Reporting System	Text, Ex. 21, 27
CCMS	Conservation Contract Maintenance System	104, 121-123, 513, 517, 518, Ex. 5, 6, 16, 25, 128, 130
CEB	County Emergency Board	762, 925-927, 953, 954, 956-960
CEC	Client Experience Center	281
COLS	Conservation On-Line System	504, Ex. 2
CPC	Climate Prediction Center	958
CRM	Customer Relationship Management	Text and Exhibits
CSDGM	Content Standard for Digital Geospatial Metadata	Ex. 11
CSV	comma-separated values	48, 515, 956, Exhibits
CTS	Client Technology Services	Text and Exhibits
DFS	Distributed File System	49
DGPS	Differential Global Positioning System	278, 308-311, Ex. 2
DNRGPS	Department of Natural Resources (MN) GPS Application	312, Ex. 2
DOQ	Digital Ortho-Photography	Ex. 2, 13, 14
DRT	Data Remediation Tool	102, 505, Ex. 2, 9, 98
EAD	Enterprise Active Directory	46
EAS	Extensible Authorization System	48
EDW	Enterprise Data Warehouse	71, 513-515, 872, Exhibits
EHEL	exempt from highly erodible land	102, 655
ELA	Enterprise License Agreement	816, 817, 927
EROS	Earth Resources Observation and Science	872
ERSR	Electronic Repository for Security Request	48

## Reports, Forms, Abbreviations, and Redelegations of Authority (Continued)

## Abbreviations Not Listed in 1-CM (Continued)

Approved Abbreviation	Term	Reference
ESRI	Environmental Systems Research Institute	61, 278, 313, 762, 816, 927, Exhibits
EXIF	exchangeable image file format	296
FIRM	flood information rate map	872, Ex. 203
FGDC	Federal Geographic Data Committee	2, 26, 150, 872, Ex. 2, 12-14, 204, 205
FPAC	Farm Production and Conservation	105, 159, 160, 281
FRS	Farm Records System	505, 506, Ex. 2, 120, 121, 129
GAD	Geospatial Authoritative Dataset	8, Ex. 8
GCS	Geographic Coordinate System	39, 174, 629, Ex. 165, 212
GDG	Geospatial Data Gateway	872
GDMT	Geodata Management Team	7, 26, 27, 38, Ex. 5
GEO	Geospatial Enterprise Operations Branch	159, 160
GET	GIS Environment Tool	39, 502-504, Ex. 2, 19, 87, 89, 98
GloVis	Global Vision	954-957, 959, 960
GNSS	Global Navigation Satellite System	324, 326-328, Ex. 2
GPS	Global Positioning System	7, 8, 37, 39, 46, Exhibits
HDDS	Hazards Data Distribution System	872, 954-957, 959, 960, Ex. 204
HUC	hydrologic unit code	37, 39, 172, 174, 175, Ex. 31
IDP	Individual Development Plan	927
ISO	International Organization for Standardization	61, 63, 105, 116, 125, 140, 176, Ex. 2, 11-15
LAR	Loss Assessment Report	926, 953, 954, 956, 957, 960
LCC	land classification code	Ex. 18, 166
MESH	maximum estimated size of hail	Ex. 210
NAD83	North American Datum of 1983	37, 100, Ex. 13, 165, 212
NAIP	National Agricultural Imagery Program	Text, Ex. 5, 89
NCDC	National Climatic Data Center	Ex. 210

## Reports, Forms, Abbreviations, and Redelegations of Authority (Continued)

## Abbreviations Not Listed in 1-CM (Continued)

Approved Abbreviation	Term	Reference
NGA	National Geospatial-Intelligence Agency	872, 960
NHEL	nonhighly erodible land	102, 655, Ex. 130
NW	nonwetlands	113, 114, Ex. 14, 21
NWS	National Weather Service	872, 953, 954, 956-958, Ex. 201, 211, 213
OS	operating system	48, Ex. 2
PDD	Program Delivery Division	8, 101, 189, Ex. 16
PDOP	position of dilution of precision	278
PLSS	Public Land Survey System	7, 39, 503, 505, 655, Ex. 89, 98, 131, 134, 166, 209
QC	quality control	Text, Ex. 2, 5, 13, 21, 22, 24, 26, 126
SAAR	System Authorization Access Request	48, Ex. 9, 10
SAFE	State Acres for Wildlife Enhancement	39, Ex. 186
SAP	systems, applications, and products	102, 104, 123, 124, 505, 506, Ex. 2, 5, 26
SBAS	Satellite-Based Augmentation System	309, 328, Ex. 2
SEB	State Emergency Board	925-927, 954, 956-960
SGA	State Geodata Administrator	26, 27, 30, 38, 46, 47, 49, Ex. 2
SLR	Security Liaison Representative	7, 51, Ex. 9, 10
SNR	signal to noise ratio	308, Ex. 2
SPC	Storm Prediction Center	872, 927, 953-956, Ex. 201, 210
SSURGO	Soil Survey Geographic	37, 39, Ex. 2
STORM	Systematic Tracking for Optimal Risk Management	1, 71, 138, 956
TERRA	Tool for Environmental Resource Results Assessment	Text, Ex. 2, 87, 212
TIGER	topologically integrated geographic encoding and referencing	39, 174, 175, Ex. 31
TSD	Technical Services Division	296

## Reports, Forms, Abbreviations, and Redelegations of Authority (Continued)

## Abbreviations Not Listed in 1-CM (Continued)

Approved Abbreviation	Term	Reference
UHEL	undetermined highly erodible land	102, 655, 762, Ex. 18
URL	uniform resource locator	501, Ex. 184, 206, 210, 213
USB	universal serial bus	312, 325
USGS	United States Geological Survey	Text, Ex. 202, 204, 205
UTM	Universal Transverse Mercator	37, 39, 100, 325, 602, 629, Exhibits
WAAS	Wide Area Augmentation System	278, 308-311, Ex. 2
WBD	Watershed Boundary Dataset	174, 175, Ex. 31, 32
WFS	Web Feature Services	959
WMAS	Web Mercator Auxiliary Sphere	278, 313, 602, 818, 819, 890, Ex. 49, 183, 186
WMS	Web Map Services	959, Ex. 184
WGS	World Geodetic System	190, 818, Ex. 49, 183, 186, 201, 210, 212

## Redelegations of Authority

None





**Definitions of Terms Used in This Handbook (Continued)****Data Stewardship**

Data stewardship is the process of taking responsibility for a set of data for the well-being of the larger organization, and operating in service to, rather than in control of, those around us.

**Database**

A database is a logical collection of interrelated information, managed and stored as a unit, usually on some form of mass-storage system such as a magnetic tape or disk. A GIS database includes data about the spatial location and shape of geographic features recorded as points, lines, areas, pixels, grid cells, or tins as well as their attributes.

**Delineate**

Delineate is to indicate the exact position of a border or boundary.

**Department of Natural Resources GPS Application (DNRGPS)**

DNRGPS software was built to transfer data between the Garmin handheld GPS receivers and GIS software.

**Detailed Crop Data Feature Dataset**

The Detailed Crop Data feature dataset is a geospatial representation of all reported crop acreages linked to the corresponding CLU as reported in the CARS application. A detailed crop feature dataset and crop data tables are created by the State GIS Specialist that relates the crop data obtained from CARS to CLU using a unique attribute comprised of the administrative State, administrative county, farm number, tract number, and field number.

**Differential GPS (DGPS)**

DGPS is an enhancement to GPS that provides improved location accuracy. It uses a network of fixed, ground-based reference stations to broadcast the difference between the positions indicated by the GPS satellite systems and the known fixed positions.

**Digital Ortho-Photography (DOQ)**

DOQ is a digital representation (map) of an aerial photograph. Ground and land features are accurately located in their true map positions on DOQ. Distortions caused by differences in terrain relief and aerial camera tilt have been removed. Service Centers will use DOQ's as the base map in their GIS.

## Definitions of Terms Used in This Handbook (Continued)

### Digital Photographs

Digital photographs are digital representations of an aerial photograph.

### Digitizing

Digitizing is encoding map features, such as points, lines and polygons, as coordinates in a digital form, that is, using the computer to draw lines and points on a digital map. Field Service Agencies will be digitizing tract/CLU boundaries on top of the digital aerial photography.

### \*--DR 3465-001, Enterprise Geospatial Data Management

DR 3465-001, Enterprise Geospatial Data Management identifies ADS as production data that--\* USDA agencies produce, or have statutory responsibility for and curate for the purpose of the Agencies' mission.

### Farm Records

Farm Records is all tabular data and spatial data associated with a specific FSA farm.

### Feature Class

A feature class in ArcGIS is a collection of geographic features with the same geometry type (point, line, or polygon), the same attributes, and the same spatial reference. Feature classes allow homogeneous features to be grouped into a single unit for data storage purposes, and can also store annotation and dimensions.

### Field

A field is a part of a farm that is separated from the balance of the farm by a permanent boundary, such as; fences, permanent waterways, woodlands, croplines in cases where farming practices make it probable that this cropline is not subject to change, and other similar features.

### File Format

File format is the specific organization of information in a digital computer file.

### File Geodatabase

A file geodatabase is a collection of files that can be stored, queried, and managed both spatial and nonspatial data. These are created in ArcGIS.

**Definitions of Terms Used in This Handbook (Continued)****State Geodata Administrator (SGA)**

SGA will have access to all geospatial data for the State on the network servers at the Service Centers and State Office, excluding any “sensitive” data identified in the Permissions Matrix. This group will have permissions to read, write, change, and delete folders, subfolders, or individual files by making global changes or changes to individual elements within them. SGA’s can create folders and subfolders as necessary.

**Symbology**

Symbology, in the context of cartography, is the use of graphical techniques used to represent geographic information on a map.

**Systems, Applications, and Products (SAP)**

SAP is a software product designed to manage business data, applications and agreements, and streamline business processes.

**Tabular Data**

Tabular data is descriptive information that is stored in rows and columns in a database and can be linked to spatial data.

**Temporary Boundary**

A temporary boundary is a boundary that is easy to identify and easily moved, such as a crop line or turn area between fields.

**Temporary Fixed Point**

A temporary fixed point is a point that is easy to identify and easily movable.

**Note:** A stake referenced to a permanent point or a permanent point on a permanent boundary is a fixed point.

**Definitions of Terms Used in This Handbook (Continued)****Tool for Environmental Resource Results Assessment (TERRA)**

TERRA enables FSA employees to create CRP scenarios to assess wildlife and environmental needs specific to land offered into CRP.

**TerraSync**

TerraSync is software designed for efficient field GIS data collection and maintenance when using the Trimble Juno 5b Enhanced unit.

**TerraSync Data Dictionary File**

A TerraSync Data Dictionary file is a description of the objects to be collected for a particular project or job. It is used by FSA field staff to control the collection of spatial information. Elements of the data dictionary could include point, line and area features, along with their associated attributes.

**Theme**

A theme consists of a collection of geographic features (such as roads, rivers, parcels, wildlife sightings, schools, or parks) and the attributes for those features.

**3D Differential Location**

When GPS units are used for FSA compliance purposes (measurement service), 3D differential location is when the receiver is using at least 4 satellites and a form of differential correction to calculate horizontal position and altitude.

**Tile Package**

A tile package allows a user to create a set of tiles (images) from a map, then use the set of tiles as a base map in ArcGIS applications.

\* \* \*

## Setting the Metadata Environment

### A Background

\*--Following DR-3465-001, FSA will use FGDC-endorsed metadata standards per the Geospatial Data Act. To properly work with metadata in ArcGIS, the FGDC CSDGM must be set before using the metadata tools.--\*

### B Requirements

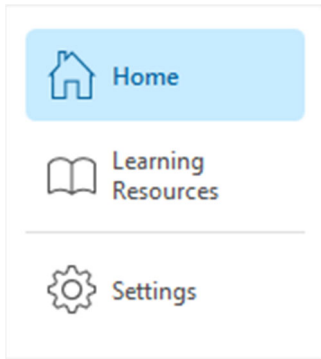
\*--These steps must be completed in ArcGIS Pro.--\*

\* \* \*

### C Instructions

The following instructions are required to set up the Metadata Environment before using the metadata tools.

\*--

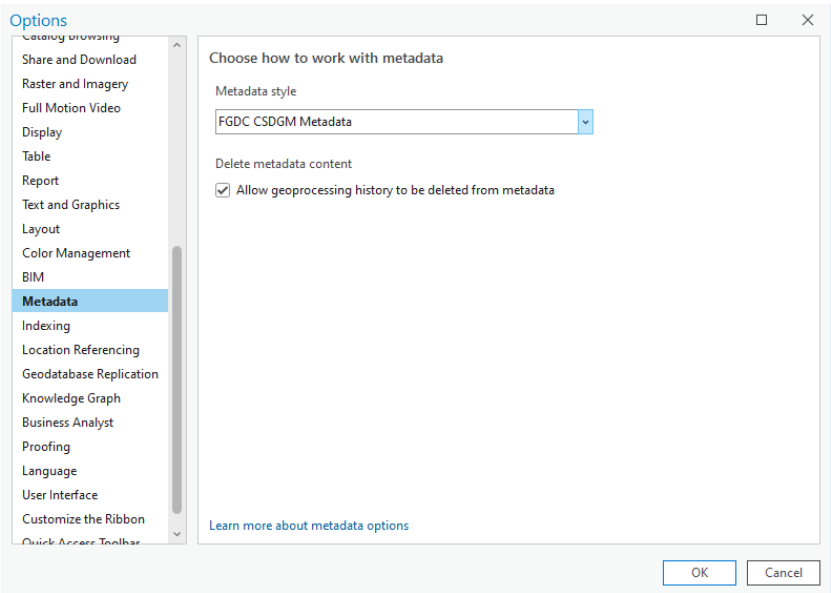
Step	Instructions
1	Open ArcGIS Pro.
2	<p>Before opening or creating a project, CLICK “<b>Settings</b>”.</p>  <p><b>Note:</b> If a project is already open, CLICK “<b>Project</b>” to access the “Options” menu.</p>
3	CLICK “ <b>Options</b> ”.
4	In the “Options” window, CLICK “ <b>Metadata</b> ”.

--\*

Setting the Metadata Environment (Continued)

C Instructions (Continued)

\*--

Step	Instructions
5	<p>In the “Metadata style” drop-down menu, SELECT “FGDC CSDGM Metadata”.</p> 
6	<p>CLICK “OK” to close the Options dialog box.</p>

--\*

## Customizing Metadata Templates

### A Background

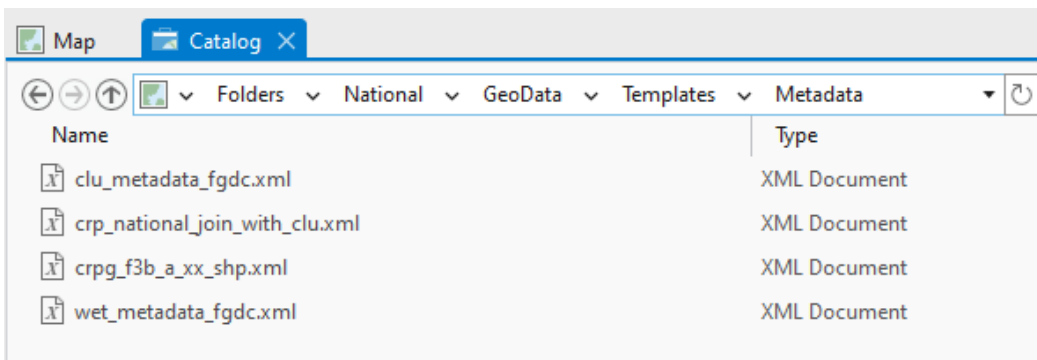
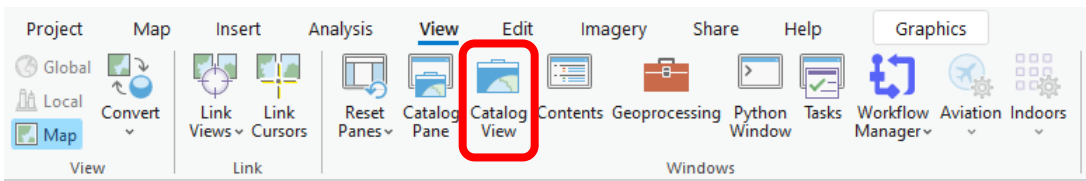
State GIS Specialist must customize information within metadata templates including dates, location, and point of contact information before distributing geographic data. All templates use \*--FGDC CSDGM style metadata.--\*

**Note:** Screen prints in this exhibit show the metadata template example for Wetlands data. The same instructions are used for all FSA datasets. Use the appropriate metadata template for each dataset, as data descriptions and definitions are different for each type of data.

### B Importing a National Template

The following instructions display how to import a national template.

\*--

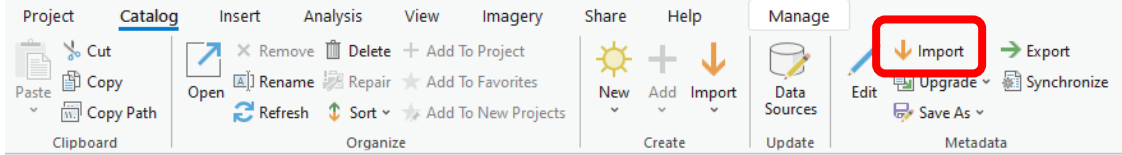
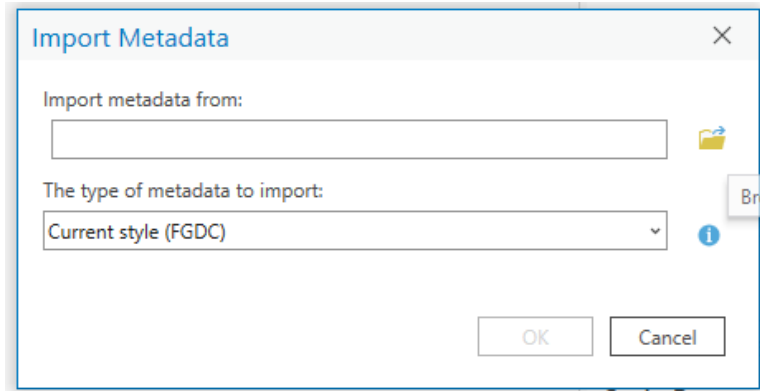
Step	Instructions
1	<p>Copy the prepared metadata template files from Citrix: <b>I:\Templates\Metadata</b></p> 
2	<p>Paste the prepared metadata template files to the following locations:</p> <ul style="list-style-type: none"> <li>• K:&lt;ST&gt;\Geodata\Project_Data\metadata</li> <li>• F:\geodata\project_data\fsa\metadata</li> <li>• C:\geodata\metadata</li> </ul> <p>Remove any previous metadata template files that were created in the FGDC CDGSM format.</p>
3	Open ArcGIS Pro.
4	<p>Open the ArcCatalog View. CLICK “<b>View</b>” then CLICK “<b>Catalog View</b>”.</p> 

--\*

## Customizing Metadata Templates (Continued)

### B Importing a National Template (Continued)

\*--

Step	Instructions
5	Navigate to the location where the dataset is saved.
6	Click once on the item within the Catalog window to select it.
7	From the <b>Metadata</b> section on the Catalog ribbon, CLICK “ <b>Import</b> ”.
	
8	In the “Import Metadata” window, CLICK the “Browse” button next to “Import metadata from”.
	
9	Navigate to the location of the copied national metadata template.  <b>Example:</b> “C:\geodata\metadata\”
10	Select the appropriate metadata XML file and CLICK “ <b>OK</b> ”.
11	Ensure “The type of metadata to import” is set to “ <b>Current Style (FGDC)</b> ”.
12	CLICK “ <b>OK</b> ”.
13	Review the metadata and update information as necessary.

--\*

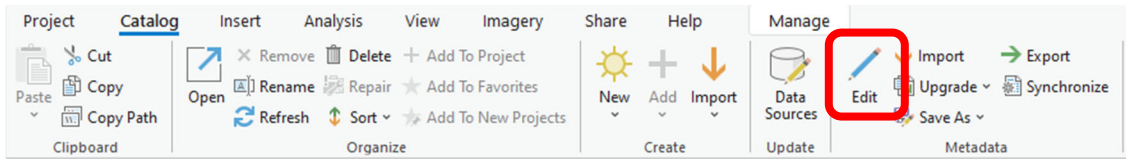
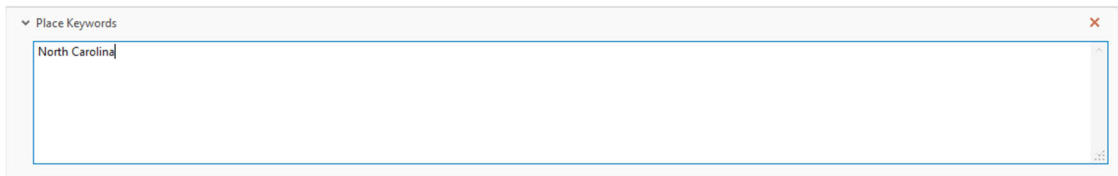



## Customizing Metadata Templates (Continued)

### C Editing the Metadata Template

The following instructions display how to edit an ArcGIS item's metadata from an imported template.

\*--

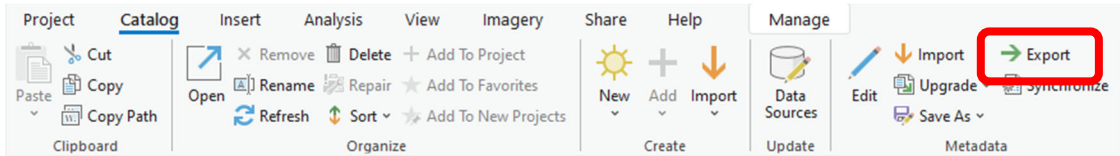
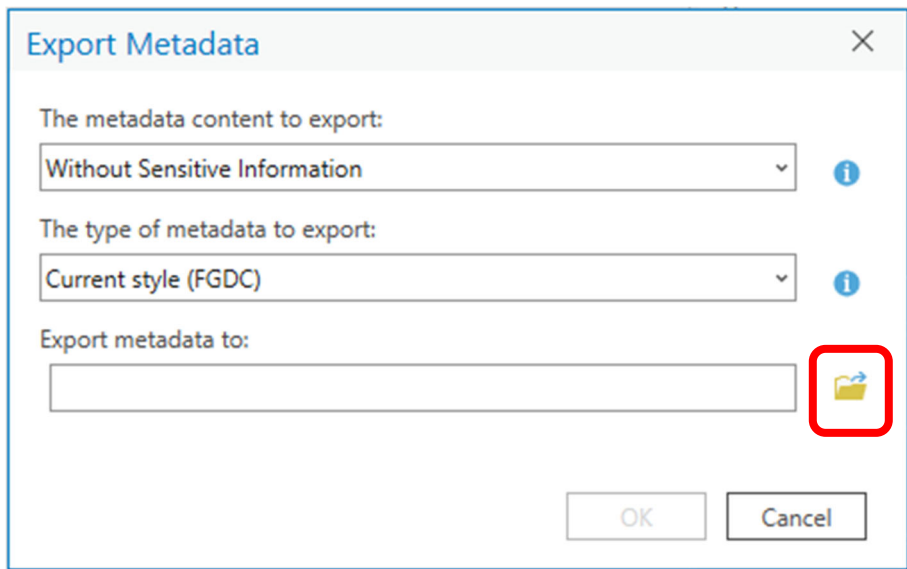
Step	Instructions
1	In the Catalog window, navigate to the item. This item is the item that was recently updated using this subparagraph.
2	<p>From the Metadata section on the Catalog ribbon, CLICK “Edit”.</p> 
3	<p>Example, begin the metadata editing process with the Topics and Keywords element:</p> <ul style="list-style-type: none"> <li>CLICK “Topics and Keywords”</li> <li>CLICK “New Place Keywords”</li> <li>in the Place Keywords text box, type a comma separated list of place descriptors as applicable. For State-level datasets, include the name of the State. For county-level datasets, include both the state and county names.</li> </ul> 
4	<p>Save edits as changes are made. On the “Metadata” ribbon, CLICK “Save”.</p> 

--\*

## Customizing Metadata Templates (Continued)

### D Exporting a Customized Metadata Template

\*--The following instructions display how to export an item's customized metadata to a standard XML format file (template).

Step	Instructions
1	Open ArcGIS Pro.
2	From the Metadata section on the Catalog ribbon, CLICK <b>“Export”</b> . 
3	Click the <b>“Browse”</b> button to set the browse destination and file name. 
4	After setting the folder location and file name, CLICK <b>“Save”</b> .
5	CLICK <b>“OK”</b> to export the metadata file.

--\*

## Importing Metadata From a Customized State Metadata Template

### A Background

Customized State metadata templates for CLU and Wetlands will be used when providing metadata for all producer and third-party requests for data. All statewide authoritative datasets also require metadata. The import tool allows a user to quickly populate an ArcGIS item (or file) with standard metadata content such as the description of the data, legal restrictions and point of contact information.

### B Requirements

\*--Ensure the metadata settings have been modified to FGDC CSDGM Metadata.--\*

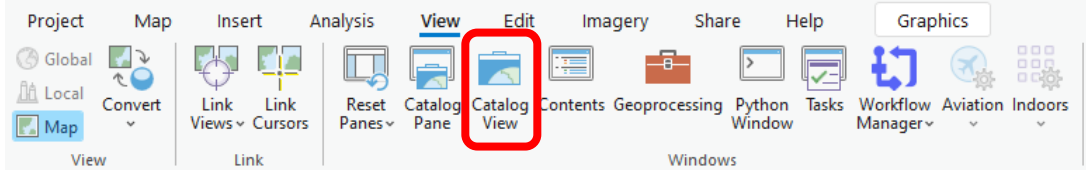
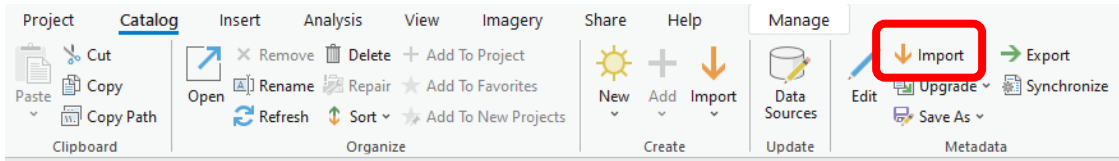
The State GIS Specialist must have created the customized State metadata templates. The State metadata templates are found in:

- F:\geodata\project\_data\fsa\metadata
- K:\<ST>\GeoData\templates\metadata

### C Instructions

The following instructions import Metadata from a customized State Metadata template.

\*--

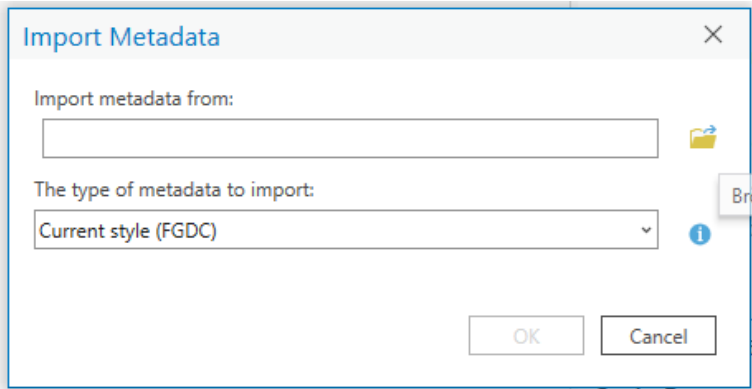
Step	Instructions
1	Open ArcGIS Pro.
2	Open the ArcCatalog View. CLICK “View” then CLICK “Catalog View”.
	
3	Navigate to the location where the dataset that needs metadata is saved.
4	Click once on the item within the Catalog window to select it.
5	From the Metadata section on the Catalog ribbon, CLICK “Import”.
	

--\*

## Importing Metadata From a Customized State Metadata Template (Continued)

### C Instructions (Continued)

\*--

Step	Instructions
6	<p>In the “Import Metadata” window, Click the “Browse” button next to “<b>Import metadata from</b>”.</p> 
7	Navigate to the location where the State metadata template is stored.
8	Select the metadata template that matches the data request.
9	Ensure “The type of metadata to import” is set to “Current Style (FGDC)”.
10	CLICK “ <b>OK</b> ”.
11	Review the metadata and update information as necessary.

--\*