

For: State and County Offices except Puerto Rico and Virgin Islands

Phase 2 of the Food, Feed, Seed, and Fertilizer (FFSF) Facilities Geospatial Point Layer

Approved by: Acting Deputy Administrator, Farm Programs



1 Overview

A Background

The Food, Feed, and Seed Facility Listing and Fertilizer Facility Listing are records of these facilities that are essential to the United States in responding to a national emergency.

FFSF facility listing records are currently:

- stored by ITSD
- updated though State and County Office requests
- accessible only in text file format
- not compatible with geospatial software allowing for quick graphic display and analysis.

Notice DP-212 provided policy and procedure for the initial phase of the project to develop a FFSF geospatial point layer based off on the November 2006 FFSF facility listing records. These FFSF geospatial point layers currently reside on State Office and Service Center servers.

This notice provides for the second phase of the project to maintain a geospatial point layer, represented by point features that will indicate the location of each FFSF facility listing on Earth. The existing geospatial facility point layer, combined with updated September 2007 FFSF facility listing records, received in April 2008, will be used for any future emergency program needs.

Disposal Date	Distribution
December 1, 2008	State Offices except Puerto Rico and Virgin Islands; State Offices relay to County Offices

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1 Overview (Continued)

A Background (Continued)

State and County Offices will:

- assist in the second phase of the project by providing the National Office geospatial point locations of FFSF facility sites, using Geographic Information Systems (GIS) and in-house, heads-up, point-mode digitizing
- update the FFSF facility point layer on an annual basis, based on annual FFSF facility listings provided by Kansas City.

B Purpose

This notice informs State and County Offices to:

- use ArcMap CLU Maintenance Tool v 4.2.5 to update, maintain, and transfer a geospatial point shapefile (.shp) as defined
- update, maintain, and perform additional tasks for the new geospatial datasets, such as geodata and metadata management on an annual basis
- complete tasks in this notice to ensure delivery of the geospatial point layer to the National Office by **COB September 1, 2008**
- use the 2007 Food, Feed, and Seed Facility Listing and Fertilizer Facility Listing received from ITSD for this project
- continue updating FFSF facility listings by submitting FSA-249's and FSA-250's according to 1-DP, paragraphs 123 and 140
- continue to update the FFSF facility point layer on an annual basis or until further notice.

2 County Office Action

A Updating FFSF Facility Listings

Using 1-DP, paragraphs 123 and 140, all discrepancies in the 2007 FFSF facility listings shall be verified and updated immediately when identified through this project.

Discrepancies include, but are not limited to, the following:

- adding new facilities
- deleting old facilities
- verifying addresses.

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2 County Office Action (Continued)

B Determining Geospatial Facility Point Locations

County Offices shall determine point locations for each FFSF facility located within the county and contained on the 2007 FFSF facility listing printouts received from ITSD. The Inventory Tool, contained in Maintenance Tool v 4.2.5 and used with most recent digital imagery, will enable users to visually locate and digitize this dataset from their computer. This point feature dataset will be saved as an updated shapefile along with an updated metadata text file associated to it. Step-by-step instructions for determining point locations and attribute content correction for each FFSF facility located within the county are contained in Exhibit 1. When determining point locations, County Offices shall use the most recent NAIP 1 or 2 meter or base replacement ORTHO imagery file available.

Note: County Offices shall **not** perform a separate on-site inspection to verify facility site operations, status, or location for this project. However, County Offices shall take advantage of site verification while on other official field duties.

C Populating the Facility Point Layer Attribute Table

See Exhibit 1 for instructions on creating and updating point attribute data for digitized facilities.

County Offices will update 2 point attribute fields where applicable after any point placement. The following describes the 2 field headings County Offices shall create and the information to be entered into those fields.

Field Name	Data Description
FacSerNo	Enter the unique 9-digit facility serial number (FacSerNo) from April 2007 facility listings. Facility serial numbers are issued by State Offices and represents a 4-digit ID number following the State and county code.
FacType	Enter either facility type (FacType), as applicable: <ul style="list-style-type: none">• “1”, if on Food, Feed, and Seed Facility Listing• “2”, if on Fertilizer Facility Listing.

Note: ArcMap will automatically populate 3 additional attribute fields (FID, Shape, and ID) that shall **not** be edited by County Offices.

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2 County Office Action (Continued)

D Processing New Facility Sites

County Offices shall:

- determine point coordinates for new FFSF facility sites that are **not** on the 2007 facility listings and submit FSA-249's and/or FSA-250's, as applicable, to Kansas City through their State Office, to update facility listing records
- continue to populate the FacType and FacSerNo fields after contacting the State Office to obtain the next available sequential facility serial number

Note: The county level geospatial point file is stored on the shared server (F:\geodata\project_data\fsa\ffsf) of the administering Service Center. All updates are maintained on this file that will be transferred periodically to the State Office for further data management.

- **not** determine point coordinates for FFSF facility sites that are no longer operational but still shown on FFSF facility listings

Note: Submit FSA-249's and/or FSA-250's to Kansas City, through their State Office, to remove old FFSF facility listings from the database.

E Directory Structure

This notice does **not** follow the Manual for Managing Geospatial Datasets in Service Centers for the following:

- directory structure
- file location
- naming convention
- number of files to create.

Note: Permissions and global group assignments to users, as defined in the manual, create various conflicts that prevent this notice from following the Manual for Managing Geospatial Datasets in Service Centers.

2 County Office Action (Continued)

E Directory Structure (Continued)

County Offices shall have **only** 1 FFSF point feature shapefile per county containing:

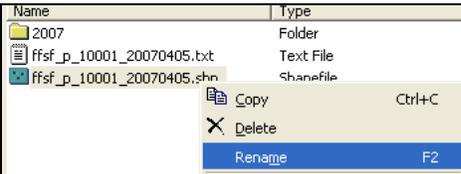
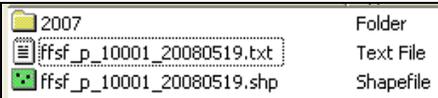
- both food, feed, and seed facility and fertilizer facility locations, saved on the Service Center shared server
- all point features initially digitized for each FFSF facility listing, reflecting all updates in the 2007 FFSF facility listings.

The FFSF point layer dataset created in phase 1 resides in “f:\geodata\project_data\fsa\ffsf”.

F Updating and Managing the FFSF Point Layer File Naming Convention

County Offices will continue to use the unique naming convention created in phase 1 of FFSF project, however, the date and year needs to be changed to reflect the updated file version. Complete this action on an annual basis.

A quick way to rename the 2007 FFSF file created in phase 1 is to use ArcCatalog. When renaming the shapefile in ArcCatalog, ancillary files associated with the item are also renamed. Update the contents and rename the metadata file (Word, WordPad, or NotePad) separately so as to reflect 2007 FFSF listings information.

Step	Action
1	Open ArcCatalog  and navigate to “f:\geodata\project_data\fsa\ffsf”.
2	Select shapefile, right click, and select “Rename” to enter current date to reflect the new 2007 FFSF listings. 
3	Rename the ffsf shapefile. 
<p>Example: The Kent County, Delaware FFSF shapefile was updated May 19, 2008 and would be renamed “ffsf_p_10001_20080519.shp”.</p>	

2 County Office Action (Continued)

G Saving the FFSF Facilities ArcGIS Project

ArcGIS (.mxd) project files are created when opening the software to create, update, and save geospatial datasets. These ArcGIS files:

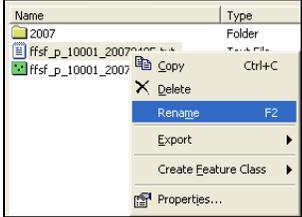
- do **not** store geospatial data or layers
- store property information about the project.

Users assigned to manage this FFSF layer will create a new ArcGIS project file. Complete this action on an annual basis. Contact the State GIS Specialist if help is needed.

Step	Action	
1	Navigate to “f:\geodata\project_data\fsa\ffsf”.	
2	Name the new ArcGIS project file as follows.	
	Portion	Definition
	ffsf	Always the first letter from each of the 4 facility types.
	<ssccc>	Insert State and county code.
	.mxd	Always computer-generated file extension
Example: The Kent County, Delaware, ArcGIS project file would be named “ffsf_10001.mxd”.		

H Metadata File

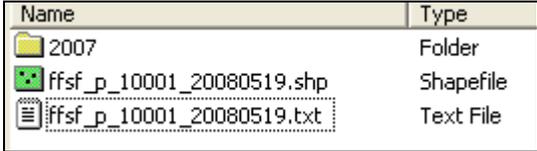
The metadata file created for Notice DP-212 shall be updated to reflect the 2007 FFSF listing information. The metadata file (Word, WordPad, or NotePad) shall also reflect the same file naming convention as the ffsf point later shapefile. Complete this action on an annual basis.

Step	Action
1	Open ArcCatalog  and navigate to “f:\geodata\project_data\fsa\ffsf”.
2	Select metadata file, right click, and select “Rename” to enter current date to reflect the new 2007 FFSF listings.
	

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2 County Office Action (Continued)

H Metadata File (Continued)

Step	Action
3	Rename the metadata file to reflect the new 2007 FFSF listing. 
4	Open the metadata file (double-click file) and revise contents to reflect the new 2007 FFSF listing information.

I Verifying FFSF Listings and Point Layer Accuracy

County Offices shall verify and update all mismatched records in both the geospatial point feature shapefile and ArcGIS project file to ensure complete and accurate datasets.

Examples: Mismatched record examples include, but are not limited to the following:

- geospatial point feature shapefile was created for a new FFSF facility, but FSA-249/FSA-250 has **not** been processed by Kansas City
- geospatial point feature shapefile was **not** created for an existing FFSF facility because the site/facility exists but ceased operations, but FSA-249/FSA-250 to delete the existing FFSF facility has **not** been processed by Kansas City
- FSA-249/FSA-250 to add a new or delete an existing FFSF facility was processed, but the geospatial point feature shapefile was **not** created in or was removed from the geospatial point file.

J Transferring the Geospatial Point Feature Dataset

County Offices shall send an e-mail to the State Office GIS specialist or coordinator stating that the FFSF facility geospatial point feature shapefile has been completed and saved in “f:\geodata\project_data\fsa\ffsf” for State Office retrieval. This shall be completed on an annual basis.

Any questions for assistance or questions about this notice shall be directed to State Office GIS coordinator or specialists.

3 State Office Action

A Retrieving, Managing, and Exporting County Shapefiles

State Office GIS specialists or coordinators shall:

- archive **all** 2007 county FFSF shapefiles equivalent to the Service Centers “F:\geodata\project_data\fsa\ffsf\2007”, as received
- archive the 2007 merged state FFSF shapefiles in directory “F:\geodata\project_data\fsa\ffsf\2007”
- continue to archive by **year** all county FFSF shapefiles equivalent to the Service Centers as received and merged State FFSF shapefiles
- copy the FFSF facility listings geospatial point feature shapefile from each County Office server by remote access through the State Office server

Note: The file extensions .shp, .shx, .dbf, and .prj are required when the FFSF facility listings geospatial point feature shapefiles are copied, to ensure that the shapefile will open with the ArcGIS software.

- use the ArcGIS (ArcToolbox) merge function to combine all Service Center geospatial point feature shapefiles into 1 State FFSF facility geospatial point feature shapefile, using the predominant UTM zone for the State

Note: Name the shapefile “ffsf_p_<ss>yyyymmdd.shp”

Portion	Definition
ffsf	Always the first letter from each of the 4 facility types.
p	Always “p” for point feature type.
<ss>	Insert State (numeric) code.
yyyymmdd	Insert date as 4-digit year, 2-digit month, and 2-digit day.
.shp	Always computer generated file extension.
Example: The merged shapefile for Delaware, created on May 19, 2008, would be “ffsf_p_10_20080519”.	

- ensure all County Office shapefiles were retrieved correctly, named correctly, and no data was lost when files were retrieved and merged
- create and store the merged shapefile in a directory structure equivalent to the Service Centers “F:\geodata\project_data\fsa\ffsf” directory structure

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3 State Office Action (Continued)

A Retrieving, Managing, and Exporting County Shapefiles (Continued)

- e-mail the Winzipped and encrypted file to Alison Lenz, PECD at **alison.lenz@wdc.usda.gov**

Notes: See Notice IRM-372 for instructions to Winzip and encrypt the file.

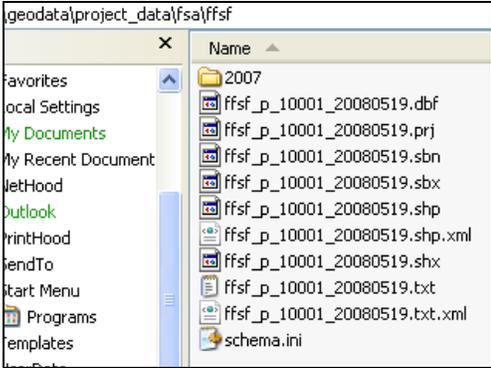
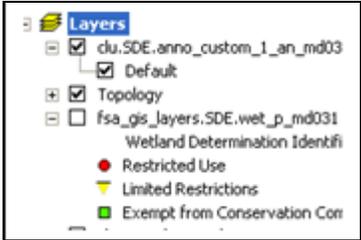
State Office GIS specialist or coordinators shall contact Alison Lenz, PECD at 202-720-6194 with the encrypted password.

- complete on an annual basis.

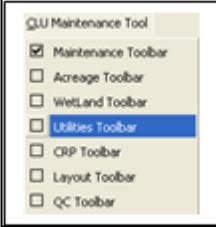
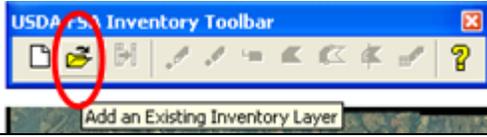
Note: Due date shall be no later than **September 1** of each year or until further notice.

Updating the Facility Point Layer

County Offices shall update the FFSF point layer according to the following.

Step	Action
1	<p>Open a Windows Explorer window and verify the existence of the updated 2008 ffsf point layer file located in the directory structure “F:\geodata\project_data\fsa\ffsf”.</p> <p>Example: “ffsf_p_<ssccc>_2008mmdd.shp”</p> 
2	Minimize or close Windows Explorer.
3	<p>Open a CLU Maintenance Tool Map Document. Navigate to ArcMap (Start, All Programs, ArcGIS, ArcMap). CLICK “CLU Maintenance Tool” and “Start Using ArcMap”.</p> <p>Note: Steps 4 through 21 are for the ArcGIS 9.1 environment, using the CLU Maintenance Tool v 4.2.5 application.</p>
4	<p>CLICK “CLU Control Panel” .</p>
5	<p>Add the most recent NAIP 1-meter or certified ORTHO 1-meter base replacement imagery. In the “Imagery” section of the Control Panel, CLICK “Image” and navigate to the location of the imagery file. CLICK “Add”.</p> 
6	<p>Uncheck the wetland point layer in the Table of Contents.</p> 

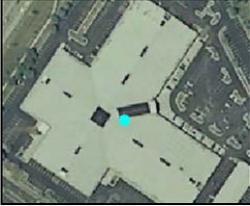
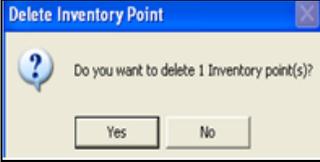
Updating the Facility Point Layer (Continued)

Step	Action
7	<p>If needed, use the “CLU Control Panel” to remove any inventory layers from the project since only 1 layer can be loaded at a time.</p> 
8	<p>In the “CLU Maintenance Tool” drop-down menu, CLICK “Utilities Toolbar”.</p> 
9	<p>On the “USDA Utility Toolbar”, CLICK “FSA Inventory Tools”.</p> 
10	<p>On the “FSA Inventory Tools” toolbar, CLICK “Add an Existing Inventory Layer”.</p> 
11	<p>In the “Inventory Layer” dialog box:</p> <ul style="list-style-type: none"> • select “point” from the drop-down menu  <ul style="list-style-type: none"> • navigate to directory structure “F:\geodata\project_data\fsa\ffsf”.

Updating the Facility Point Layer (Continued)

Step	Action
12	<p>Highlight file “ffsf_p_<ssccc>_2008mmdd.shp” and CLICK “Add”.</p>  <p>Note: If managing more than 1 county, select the file based on county FIPS code.</p>
13	<p>The FFSF point layer will now display in the table of contents. With the layer loaded, the inventory toolbar editing buttons now become active.</p> 
14	<p>Zoom in to a scale of 1:4800 or less to ensure that the FFSF point feature layer is visible in the Arc Map workspace.</p>
15	<p>Navigate to the FFSF facility to be edited, captured, or deleted by using the Pan tool, Query by Selection by Attributes, or the FFSF attribute table and select an individual record.</p> <p>Contact State GIS specialist if help is needed.</p>
16	<p>Use the following editing buttons on the Inventory Toolbar:</p> <ul style="list-style-type: none"> • Attribute Feature Tool “” which updates current information • Add Inventory Point “” which is for a new facility. <p>Click the location where the point is to be placed, directly on top of the FFSF facility structure, as seen on the imagery. An “Identify/Edit Results” dialog box will pop up. Enter the following attribute data:</p> <ul style="list-style-type: none"> • “FacSerNo” field, enter the corresponding facility serial number, as listed in the facility listings provided by ITSD or the State Office • “FacType” field, ENTER: <ul style="list-style-type: none"> • “1”, if facility is on Food, Feed, and Seed Facility Listing and CLICK “Apply” • “2”, if facility is on Fertilizer Facility Listing and CLICK “Apply”. <p>The question, “Do you want to save your edits?”, will be displayed. CLICK “Yes”.</p> <p>Note: The FID, Shape, and ID fields will automatically be generated and do not require user input.</p>

Updating the Facility Point Layer (Continued)

Step	Action
17	<p>For obsolete facilities that are no longer in business or at that location and need to be deleted, CLICK “ <p>A “Delete Inventory Point” dialog box will be displayed. CLICK:</p> <ul style="list-style-type: none"> • “Yes” to delete FFSF point • “No” to cancel action.  </p>
18	Navigate to next FFSF facility that requires editing or a new point and repeat step 15 until all county facilities have been edited or added to the FFSF point layer shapefile.
19	Save the ArcMap project as “ffsf_<ssccc>.mxd”, in the directory “F:geodata\project_data\fsa\ffsf”.
20	Ensure metadata file has been renamed, updated, and stored along with the FFSF point layer shapefile.
21	Close the project and ArcMap.