**NCGC Integrated Geospatial Data and Imagery Web Services – Overview**

**Version 1.4**

**Backend Geospatial Data Management**
- ArcSDE Geospatial Databases
- ESRI Image Server Imagery Services
- Full-Res Multi-Versioned Raw Imagery

**Integrated Data and Web Service Layer**
- OGC Web Map Services
- GIS Server Web Services
- GIS Application Web Services
- Data Request Services (Gateway)

**Middle Tier Integrated Data Services**
- Geospatial Web Sites

**End User Access to Geospatial Data**
- Direct Access to Data (ArcMAP)
- Access Downloaded Data (ArcMAP)
- Running Data Models on Server (ArcMap / Tools)
- Access to Web Applications (Internet Browser)
- Data Checkin/Checkout (ArcMAP)

**NCGC Bus. Requirements**
- (Data Steward)
  - Acquisition
  - Management
  - Production
  - QC
NCGC Integrated Geospatial Data and Imagery Web Services - Usage

Image Services
- Alaska
- American Samoa
- CNMI Islands
- Guam
- Hawaii
- Katrina/New Orl.
- NAIP 1M
- DOQ
- Disaster Response

Vector Layers
- Admin Areas
- County Census
- Index Layers
- MLRA Boundaries
- TeleAtlas / Roads
- TIGER Data
- USDA Districts
- Hydrodraphy
- Water Areas
- Soils

Elevation Data
- Contours
- Hillshade
- IFSAR
- NED

Application Services
- GIS Server
- Models
GIS Server Addresses

Add GIS Server:
http://gis1.ftw.nrcs.usda.gov/arcgis/services
http://gis2.ftw.nrcs.usda.gov/arcgis/services

Accessing Integrated NCGC GIS Server Data and Web Services
Accessing NCGC Integrated Geospatial Image Services using Image Server Plug-in

Image Server using ArcMap Plug-in

Imageserver1.ftw.nrcs.usda.gov:10010

Note: Requires ArcMAP Image Server Plug-in (9.1 or 9.2)
Accessing NCGC Integrated Geospatial Web Services
Exporting Imagery using Image Server Plug-in

Imagery can be exporting from Image Server by right-clicking the imagery layer and selecting Export data...

Image Server will export a TIF with a world file for currently selected AOI.
Accessing NCGC Geospatial Integrated Data Service Portal

Web Browser Access

Web Portal / Browser Access:
http://wms.ftw.nrcs.usda.gov
Accessing NCGC Integrated ArcIMS
Data and Web Services

Add ArcIMS Server:
http://wms.ftw.nrcs.usda.gov
Accessing Integrated OGC WMS Data and Web Services for ArcMap 9.x

WMS URLs provided on Portal

Web Portal / Browser Access:
http://wms.ftw.nrcs.usda.gov

The Web Portal Lists URLs for all Geospatial Data OGC WMS Services from NCGC
Accessing Integrated OGC WMS
Data and Web Services for ArcMap 8.3

ArcMAP 8.3 user need to install a special plug-in in order to access OGC WMS Services. This plugin can be found at the following URL:

http://www.esri.com/software/standards/ogc-download.html

A list of WMS Service URLs can be found on the NCGC Geospatial Web Portal (http://wms.ftw.nrcs.usda.gov)

The following steps explain how to add an OGC WMS Service to ArcMAP 8.3 once the plug-in has been installed. The 1M NAIP data is used in this example:

1. In ArcGIS 8.3, Using the Add Data Button, Select the Add WMS Server Button and add the following URL:

http://gis1.ftw.nrcs.usda.gov/arcgis/services/NAIP/MapServer/WMSServer

2. Select the "Get Layers" button (this will load all UTM zones of NAIP) and hit "OK".

3. You should see a layer in your "Add Data" called "OGC_WMS on gis1". Select this layer and select "OGC:WMS" button. At this point, you should see the 1M NAIP for the US.
Accessing NCGC Integrated Geospatial Web Services

Accessing Soils Data

Soils Data can be added to ArcMAP using Web Services

On the tool bar, click **add data**
Go to GIS Servers (**Add ArcIMS Server**) In the URL window, enter
Select, Just the following services (s)
Click, Get List (multiple themes are listed)
**Check Soils** and related features
Click **OK**
Set scale to 1:40,000 or less to view polygons
Open the data frame and uncheck the Soil Survey Status box (enables the view of soil polygons without the brown background)