Connecting to NAIP: 
2005 Imagery WMS

In the summer of 2005, aerial photography was flown for the entire state of California, as part of the National Agriculture Imagery Program (NAIP). This occurred for every U.S. state, but was managed differently on a state-by-state basis. For California, this effort was managed by the California Resources Agency, and funded by a consortium of governmental agencies. The data can be downloaded by county or by quarter-quadrangle from the following website URL: http://casil.ucdavis.edu/casil/remote_sensing/naip_2005/.

For your convenience, we have downloaded the data for the entire State and have created a Web Mapping Service (WMS), which allows you to connect to it for easy display in your ArcMap projects. Follow these simple instructions to add the NAIP 2005 imagery WMS to your project.

1. In ArcMap, go to File > Add Data…, or simply click the Add Data button:

2. In the Catalog, choose GIS Servers, or from another folder, go to the drop-down menu and choose GIS Servers from the list.

Go to File > Add Data…
Choose GIS Servers.
3. Choose to add a WMS Server, by double-click on Add WMS Server.

4. In the Add WMS Server dialog, enter the following WMS URL address in the URL location: http://gif.berkeley.edu/naip2005.wms. Click OK.
5. Highlight the `naip_2005_imagery` on `gif.berkeley.edu` icon, and click Add, then highlight `naip_2005_imagery` and click Add again.

The NAIP 2005 imagery service is now added to your map!
The NAIP 2005 imagery WMS service supports two coordinate systems:

- Latitude/Longitude Geographic Coordinate System, World Geodetic Survey 1984, or for short, **GCS WGS 84**
- Universal Transverse Mercator Zone 10, North American Datum 1983, or for short, **UTM Zone 10 NAD 83**

In order for your data to overlay properly over the image, your other data must also have a projection defined. It does not necessarily have to be in the same projection (UTM Zone 10 NAD 1983), but whatever projection it is in, it must be defined, and defined correctly. To do this, use the ArcToolbox tool: Data Management Tools > Projections and Transformations > Define Projection.

In the Define Projection dialog, enter your input data for the Input Dataset or Feature Class (this can be either vector or raster data. Under Coordinate System, click on the Properties button, and click Select... to select a predefined coordinate system, or Import... to import a coordinate system from another dataset you have.

http://gif.berkeley.edu
Browse for the predefined coordinate system that your data is projected in.

**Note!** This is **NOT** the same thing as re-projecting your data – this is **ONLY defining** the projection it is already in.

This WMS service connection will be saved as part of your ArcMap .mxd document, so when you re-open the .mxd, the WMS service should still be in your Table of Contents as part of your map.

To delete a WMS service, open **ArcCatalog**, go to **GIS Servers**, right-click on your WMS Server, and choose **Delete**.