# Usage Guide for the NAIP Status Web Service

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Version 2.0

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## **Revision History**

Version	Date	Summary of Changes	Author
1	06/05/2009	Initial Revision	Kevin Clarke
2	01/05/2010	Update for 2010	Louise Mathews

## **Table of Contents**

Introduction	1
Accessing the NAIP Status Web Service	1
Using the NAIP Status Web Service	1
Planned Coverage2	
DOQQ Status	
NAIP Inspection4	
-	

## Introduction

The acquisition and subsequent inspection of the NAIP dataset occur over many months during the prime agricultural growing seasons each year. An ongoing requirement has been providing FSA users with timely information on the NAIP dataset. This web service allows FSA state and county personnel to easily attain information on the status of overall NAIP acquisition and inspection for their state. This NAIP Status web service was new for the 2009 NAIP acquisition year.

The NAIP Status web service can be added directly into any ArcMap project file for use with other in-hand data sources, such as imagery backdrops and CLU boundary data, to assist FSA state and county personnel in making decisions relating to the administration of the various Farm Programs they support.

## Accessing the NAIP Status Web Service

The 2010 NAIP Status web service can be accessed via ArcMap 9.1 and above by adding the APFO ArcGIS Server http://gis.apfo.usda.gov to the list of ArcMap GIS Servers. Details of this process will change in upcoming years, but the basic example from NAIP 2010 will be the same.

Adding the service can be done by:

- 1) Clicking Add Data, and selecting Add ArcGIS Server
- 2) In the wizard, select Use GIS Services, and then click Next.
- 3) Select *Internet* as Server connection type, and add the URL http://gis.apfo.usda.gov/arcgis/services. Click *Finish*.
- 4) The service should be added to the list, and can be selected.

Once the GIS Server has been added, navigate to the Maps folder and select the NAIP\_Status\_2010 web service.

### **Using the NAIP Status Web Service**



When the NAIP Status web service is added to an ArcMap project, a new group layer, MAPS/NAIP\_Status\_2010, will be added to the ArcMap Table of Contents. This group layer is comprised of five subordinate group layers denoted as Boundary, NAIP Planned Coverage, DOQQ Status, NAIP Inspection Status, and Water. The Boundary layer provides State and County boundary line segments, and the Water layer provides graduated polygons for the Great Lakes. These two layers can be set to inactive if other similar and preferred datasets are available for inclusion in the project by the user.

The remaining three group layers will be discussed individually. The general usage of the other three group layers is such that only one of the layers should be active at any one time.

Only one of the three group layers - NAIP Planned Coverage, DOQQ Status, and NAIP Inspection Status - should be active at a time, to improve response time and to ensure that correct interpretation of the status information occurs.



#### **Planned Coverage**

The NAIP Planned Coverage group layer displays contractual based award details by state. This group layer will not change in status over time for the current season, since contractual award data remains static.

The layer can be used as reference for each state that is part of the 2010 NAIP cycle. In 2010, all imagery was acquired at a 1 meter resolution, in four bands (red, green, blue and near infrared.) Displays for those characteristics – for Resolution and Band Type – are either 1 meter, or four band, respectively, or else Not Contracted. The layer will also identify the contractor and camera type used for acquisition.

The NAIP Planned Coverage group layer displays information by county, and does not display at zoom levels of 1:500,000 or larger. The polygons are attributed with the data used for display (Resolution, Band Type, Contractors, and Camera Type) as well as county names and FIPS codes.



#### **DOQQ** Status

The DOQQ Status group layer displays the acquisition status of DOQQs, independent of a particular state, for the 2010 NAIP cycle. This group layer is updated several times a day based on progress reports sent to APFO daily by the flight contractors.

The layer displays at scales of 1:6,000,000 and larger.

The Acquisition Status may be viewed in two ways: The Acquisition Status (Fill) layer displays the area as a solid color, while Acquisition Status (Grid) displays the DOQQ borders without a fill.

Attributes for the DOQQ polygons include the acquisition date and the DOQQ names (ex. Straylor Lake NE and 402115NE), as well as the Acquisition Status and code to indicate that the DOQQ was contracted.

The Acquisition Status (Grid) fromat displays the DOQQ gridlines for acquired (red), received (orange) and archived (green) DOQQs. Since the layer renders as gridlines, other data such as imagery and CLU can be utilized within the same ArcMap project. Other data

can display the land areas which have actually been acquired, within a specific context, to assist with making farm program support decisions.

The same colors are used for the Acquisition Status (Fill) layer as the Acquisition Status (Grid) display, and the attributes are identical.

The third layer, Flight Seasons, displays the dates for which imagery in a given area was scheduled to be acquired according to the contract. The dates appear as labels at a scale of 1:9,000,000 and larger; the data displays at all zoom levels. An optional flying season extension date is also include as an attribute. The flying season dates can be compared to the actual acquisition date, which is included in the Acquisition Status layer.

#### **NAIP Inspection**



The NAIP Inspection Status group layer displays county based inspection status information. This group layer is updated several times a day based on data collected from internal APFO NAIP inspection applications.

The Phase 1 and Phase 2 inspection processes look at the Compressed County Mosaic (CCM) for the specific county. The Random Phase indicates that inspection is occurring on a random selection of DOQQs for the particular county. Status for individual counties within a state will cycle through Phase 1, then Phase 2, for the CCMs, and then Phase 3 (i.e. Random) inspection of the DOQQs begins.

Over time, all counties within a state will move to Completed status. When all counties for a state are identified as Completed, the inspection for all CCMs and randomly generated DOQQs for the state has been completed by APFO Inspection staff.

Once all counties for a state are completed, the APFO Contracting Office then begins the Acceptance process for the state, which involves finalizing payments and other contract details with the flight contractor for that particular project area. When final payment to the contractor has been issued by APFO, the state is considered Accepted and all counties move to Accepted status simultaneously.

When a state is identified as Accepted, it implies that APFO has initiated the process of delivering the DOQQs for that state to the various state partners.

The NAIP Inspection Status group layer shows information for a state, aggregated by county, and as such is set to be active only at scales smaller than 1:500,000. At scales of 1:500,000 or larger the entire group layer will automatically turn off.

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