Supplemental Map Information (User Report)

Project ID: R05Y13P03_R5_Refuge_Addon_Presquile_NWR

Project Title or Area: Presquile National Wildlife Refuge

Photo-interpretation: Conservation Management Institute (Contractor)

Personnel: Daniel Cross, Brian Diggs, Nicole Fuhrman, Jason Herman, Scott Klopfer, Kevin McGuckin, David Orndorff – Conservation Management Institute at Virginia Tech in Blacksburg, VA

Source Imagery (type, scale and date):
True Color, 1 meter, 2009 National Agriculture Imagery Program (NAIP)

Collected from the United States Department of Agriculture (USDA):
http://datagateway.nrcs.usda.gov/

Date Started: 06/15/2009
Date Completed: 06/18/2012
Number of 24k quads: 6 (Charles City, Disputanta North, Dutch Gap, Hopewell, Roxbury, Westover)

Collateral Data (include any digital data used as collateral): NRCS Digital Raster Graphic (DRG), USGS National Elevation Dataset (NED) 10 meter, and 1994 Color-Infrared DOQ.

All collateral data, except DOQ, from the USDA: http://datagateway.nrcs.usda.gov/

DOQ from GIS Spatial Data Server at Radford University:
http://geoserve.asp.radford.edu/

Inventory Method (original mapping, map update, techniques used): The NWI update for Presquile was created with the 2009 NAIP imagery. Polygons were created using heads-up digitization. Wetlands were identified at a maximum zoom scale of 1:12,000 and delineated at approximately 1:8,000. Older NWI datasets were used to identify additional wetland locations. We used the ancillary datasets SSURGO hydric soils, NED (10m) and DRG contours. Special modifiers were added to describe disturbed and altered wetlands and deepwater habitats: ditching, impoundment, spoil deposition, excavation, artificial water control.

Classification (Cowardin wetlands, riparian, uplands, hydrogeomorphic, etc.): We used the Cowardin *et al.* (1979) system for wetlands and deepwater habitats.

Data Limitations: None

General description of the Project Area: Atlantic and Gulf Coastal Plains, Florida, 173,800 mi2 (450,100 km2)

Land-surface form.--This province comprises the flat and irregular Atlantic and Gulf Coastal Plains down to the sea. Well over 50 percent of the area is gently sloping. Local relief is less than 300 ft (90 m), although some areas are gently rolling. Most of the region's numerous streams are sluggish; marshes, swamps, and lakes are numerous.

Climate.--The climate regime is equable, with a small to moderate annual temperature range. Average annual temperature is 60 to 70F (16 to 21C). Rainfall is abundant and well distributed throughout the year; precipitation ranges from 40 to 60 in (1,020 to 1,530 mm) per year.

Vegetation.--Temperate rainforest, also called temperate evergreen forest or laurel forest, is typical in this province. Temperate rainforest has fewer species of trees than its equatorial or tropical counterparts, and hence larger populations of individual species. Trees are not as tall here as in low-latitude rainforests; leaves are usually smaller and more leathery, and the leaf canopy less dense. Common species include evergreen oaks and members of the laurel and magnolia families. There is usually a well-developed lower stratum of vegetation that may variously include tree ferns, small palms, shrubs, and herbaceous plants. Lianas and epiphytes are abundant. At higher elevations, where fog and clouds persist, the trunks and branches of trees are often sheathed in moss. A striking example of epiphyte accumulation at lower elevations is the Spanish "moss" that festoons the Evangeline oak, baldcypress, and other trees of the eastern Gulf coast.

Along the Atlantic coast, the extensive coastal marshes and interior swamps are dominated by gum and cypress. Most upland areas are covered by subclimax pine forest, which has an understory of grasses and sedges called savannas. Undrained shallow depressions in savannas form upland bogs or pocosins, in which evergreen shrubs predominate.

A word about the vegetation of the coastal Southeastern United States may prevent some misunderstanding. On forest maps of the United States and on numerous maps of world vegetation, this coastal zone is shown as having needleleaf evergreen or coniferous forest. It is true that sandy uplands have forests of loblolly and slash pine, and that baldcypress is a dominant tree in swamps; but such vegetation represents either xerophytic and hydrophytic forms in excessively dry or wet habitats, or second-growth forest following fire and deforestation. The climax vegetation of mesophytic habitats is the evergreen-oak and magnolia forest.

Soils.--Soils are mainly Ultisols, Spodosols, and Entisols. Temperate rainforest grows on a wide variety of upland soils, but most tend to be wet, acidic, and low in major plant nutrients. The soils are derived mainly from coastal plain sediments ranging from heavy clay to gravel, with sandy materials predominant. Silty soils occur mainly on level expanses. Sands are prevalent in hilly areas, but they also cover broad flats in central Florida.

Fauna.--This region provides habitat for a wide variety of animals. Except for a few isolated areas where black bear or the endangered Florida panther are found in small numbers, the whitetail deer is the only large indigenous mammal. Common small mammals include raccoons, opossums, flying squirrels, rabbits, and numerous species of ground-dwelling rodents.

Bobwhite and wild turkey are the principal game birds. Migratory nongame bird species are numerous, as are migratory waterfowl. Winter birds are are diverse and numerous. The red-cockaded woodpecker is an endangered species.

Of the numerous species of reptiles found in this province, the American alligator is the largest.

Description of wetland habitats:

Organize by Cowardin classification type:
Wetland classification codes and corresponding community type(s):

Description of other habitats:

Riparian:
Uplands:

List of wetland plant species with indicator status:

Regional specialized conventions:

Comments:

Other discussion of mapping issues (image quality, water conditions, etc.):

References:

Cowardin, L.M., V. Carter, F.C. Goulet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31. Office of Biological Services, Fish and Wildlife Service, US Department of the Interior, Washington D.C.

US Forest Service Website, Ecosystem Provinces - http://www.fs.fed.us/land/ecosysmgmt/colorimagemap/ecoreg1_provinces.html (viewed 06/18/12)

Regional QC: NWI Data Quality Evaluation/Assessment

Project: **R05Y13P03_R5_Refuge_Addon_Presquile_NWR**

Type: "**Update"**

Imagery needed (date/type/location): **True Color, 1 meter, 2009 National Agriculture Imagery Program (NAIP)**

Region of Origin: **5** (interpretation by VA Tech)

Regional QC by: **2**

Date Rec'd: **07/09/12**

Completion Date: **07/10/12**

QC Interpreter: **J. Dick**

Has project passed interp. verification (should have QC summary tables)?

Y/N **YES**

Has project passed reg. QC verification ?

Y/N **YES**

If no, explain:

QC Sampling

- Number of Total Polygons: **4535**
- Number/percent selected for review : **100% review**

QC Review

Review Scale, 1:5K

1. Attribute: Legal*	**Pass**/Fail
2. Attribute: Ecologically Accurate	**Pass**/Fail
3. Spatial Accuracy	**Pass**/Fail

Review Scale, 1:15K

4. Landscape Position Accurate	**Pass**/Fail
5. Missed Wetlands (surrounding view)*	**Pass**/Fail
6. Misinterpreted/mislabeled Wetlands (surrounding view)*	**Pass**/Fail

**Only needed checks for digitizing conversion. Does vector data match original raster data?*

Project Grade:

Project: Pass/Fail

Comments:
Project size: 6 quads.
Number of polygons corrected during Regional QC: 37 (0.8%)
Types of corrections:
- Reshape/Align poly: 12
- Broke for road (>10m): 2
- Changed label (or part of label): 8
- Added poly: 15

Note to National QC: All corrected polys have correction data in "HGM_CODE" field.