Procedure Log for Assignment 11 – Image Classification

Problem: Using image classification, determine locations of land cover classes within Black Water National Wildlife Refuge.

Procedure Log:

Data: Data was provided by NCSU GIS 520.

Y1326.tif: 4-band color/IR aerial orthophoto of part of Black Water National Wildlife Refuge (1 foot resolution; raster)

Projection: The raster is projected in NAD 1983 State Plane Maryland, FIPS 1900 (meters).

Change image visualization from true-color to color-infrared.
Target layer: Y1326
Layer properties > Symbology
Change: Red > Band_4, Green > Band_3, and Blue > Band_2
Result: raster image is now displayed in color-infrared

Perform a supervised classification for the six main land cover classes: Forest, Cultivated Field, Barren Area, Developed/Impervious, Wetland, and Water.
Target layer: Y1326
Tool: Draw polygon
Draw at least 2 training polygons for each of the land cover classes
Training sample polygons merged and named within the training sample manager.
Tool: Interactive Supervised Classification
Result: part_1_image_classfication.tif, part_1_sample_polygons.shp

Note areas that have been incorrectly classified and redefine/add training sample polygons.
Target layer: Y1326, part_1_sample_polygons
Tool: Draw polygon
Draw at least 2 training polygons for each of the land cover classes
Training sample polygons merged and named within the training sample manager.
Tool: Interactive Supervised Classification
Result: part_2_image_classfication.tif, part_2_sample_polygons.shp