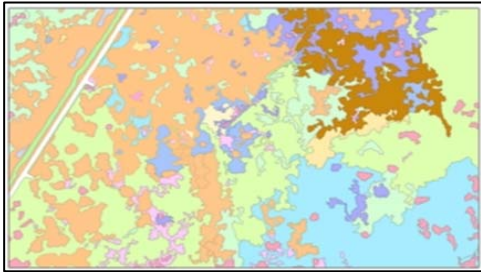
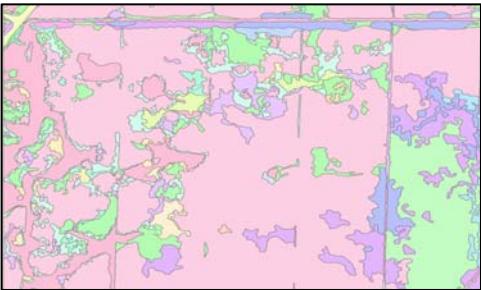


STORMWATER TREATMENT AREAS VEGETATIVE MAPPING 2004-06 Everglades Agricultural Area, Florida

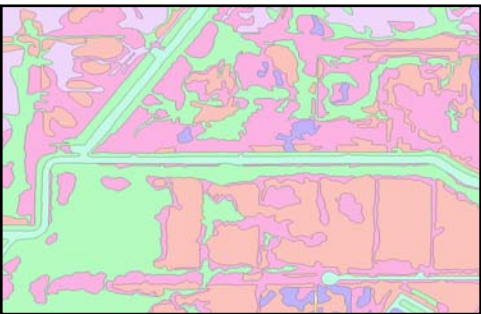
2004



2005



2006



DESCRIPTION OF PROJECT

For three consecutive years, Scheda completed projects for South Florida Water Management District that involved the mapping of the Stormwater Treatment Areas (STA) vegetation from large-scale (1:6,000) color infrared aerial photography (CIR) for the years 2004 and 2005, and 1:12,000 CIR for the year 2006. Scheda scientists performed the mapping by photointerpreting CIR aerial photography for the different vegetation and water regime photographic signatures. The 2004 mapping project included photographic interpretation of STAs 2, 5, and 6. Three additional STA impoundments, STAs 3/4, 1 West, and 1 East, were mapped for the 2005 and 2006 iterations.

To properly identify the various CIR signatures on the photography, groundtruthing field studies were conducted to gather information on the vegetative species present in each STA. During these field studies, spatial and non-spatial data was collected including: GPS coordinate locations of the various signatures, the vegetation species present, and condition of the vegetation. For the 2004 and 2005 mapping efforts, Scheda developed a project specific photointerpretation key for 39 different classifications. This key aided the scientist's in their interpretation of the CIR signatures during the photointerpretation process. For the 2006 mapping effort, the previous classification key was greatly simplified to better suit the client's end need for trend analysis.

The resulting data provided the SFWMD with a georeferenced data layer for each STA that can be displayed and queried in a Geographic Information System (GIS) while overlaid onto the project 1:12,000 CIR aerial photography. In addition, general changes in vegetation can be evaluated by comparing the differences between 2004, 2005 and 2006.

Scheda is currently assisting the SFWMD scientists in re-evaluating the mapping protocols and specifications to streamline and improve future vegetative mapping efforts for all of their STAs.

