

DIGITAL MAP COMPILATION OF THE FT. DEFIANCE SOIL SURVEY ON THE NAVAJO NATION

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The Ft. Defiance Soil Survey is a 3.2 million acre survey of the Ft. Defiance Agency on the Navajo Nation. The survey was started in the mid eighties. In 2004 the survey was near completion, but the maps had not been compiled. The decision was made to compile the maps digitally to save time in the compilation and certification process. The maps were scanned and rectified, and the map unit lines were extracted to a raster RLC file. This process eliminated the need to digitize each field sheet. The maps were then sent to the NRCS Digitizing Unit in Temple Texas where they were converted to vector shape files and sent back to the soil survey office. Analysis of landforms was done by draping the DEM over a hillshade. The shape files were checked for accuracy and any discrepancies between the field sheets and the shape files were corrected. The polygons were mapped to the DOQQ. Since the maps were already in digital format they could be checked by the State GIS Specialist immediately.