

Downloading the Soil Survey Geographic (SSURGO) Database

The USDA Natural Resources Conservation Service (NRCS, formerly Soil Conservation Service) provides downloads of the SSURGO database by various geographies, including by county or statewide. The downloads include vector and raster spatial data, database tables and their relationship classes.

To access SSURGO, go to the USDA NRCS Geospatial Data Gateway at <https://gdg.sc.egov.usda.gov/>. To download data, it's easiest to use the links under **I Want To...** below the GET DATA button. To download county datasets, click on **Order by County/Counties**. To download the seamless statewide dataset, click on **Order by State**. There are also options to download by other geographies.

After selecting a geography, scroll down to the **Soils** section and check the box for **Gridded Soil Survey Geographic**. Then click **CONTINUE** at the bottom of the page and follow the remaining instructions. It's simple and quick.

SSURGO spatial data are delivered in the Albers equal area conic projection. Re-project into NJ State Plane, Web Mercator, or other projection or coordinate system if needed.

General Information about SSURGO

SSURGO consists of spatial data and a comprehensive relational database with tables that describe soil properties, interpretations and productivity values. The spatial data include multiple vector datasets and a raster dataset.

MUPOLYGON is the vector dataset that provides broad utilization. It consists of polygons representing "map units." Each map unit may contain one to three major component soils and some minor component soils that are consistently grouped together throughout the landscape. Additionally, each component soil contains soil horizons (ranges of depth from the soil surface). The spatial data are linked in the database to tables with attribute information about the properties and characteristics of the map units, their component soils and soil horizons.

To avoid the complexity of information regarding component soils and soil horizons, the Mapunit Aggregated Attribute table provides a wide range of soil attributes and interpretations that have been aggregated from the component level to a single value at the map unit level. This generalized level of soils information is suitable for many uses related to agriculture, ecology and engineering.

Detailed metadata and documentation about SSURGO spatial data, database table structure and attributes are available at https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053631.

For more information about SSURGO and other soils data, please contact Edwin Muniz, NJ State Soil Scientist at edwin.muniz@usda.gov.