



Suggested List of GIS layers for South Carolina Counties When Preparing for Truck or Aerial Adulticiding Against Mosquitoes

Standard GIS files available from state, federal, or county sources:

- **State boundaries** – Census Bureau (<https://www.census.gov/geographies/mapping-files/time-series/geo/cartoboundary-file.html>)
- **County boundaries** – Census Bureau (<https://www.census.gov/geographies/mapping-files/time-series/geo/cartoboundary-file.html>)
- **Municipal boundaries** – Census Bureau (<https://www.census.gov/geographies/mapping-files/time-series/geo/cartoboundary-file.html>)
- **State Park boundaries** – SC Parks, Recreation and Tourism [Data can be requested – Resource Management Biologist, Stacy J. Scherman (803-734-0576; sscherman@scprt.com)]
- **Federally managed areas** – National Map (https://nationalmap.gov/small_scale/atlasftp.html#fedlanp)
- **USFWS endangered and threatened species boundaries** – SCDNR (<https://natural-heritage-program-scdnr.hub.arcgis.com/>)
- **Military bases** – SC DPH GIS created layer titled Military Bases. Data was acquired by contacting individual bases for boundary layers and merging into a statewide dataset.
- **Streets** (all primary and secondary for truck ULV; only main thoroughfares for aerial ULV) – SC Dept. of Transportation (<https://scdot.maps.arcgis.com/home/index.html>)
- **Water bodies (all ponds, lakes)** – National Hydrography Dataset (<https://www.usgs.gov/national-hydrography/national-hydrography-dataset>)
- **Major and minor hydrography (rivers, streams - spray must be shut off near some of them)** – National Hydrography Dataset (<https://www.usgs.gov/national-hydrography/national-hydrography-dataset>)
- **Schools** – SC DPH GIS created a layer titled Schools from geocoding tabular information from the SC Department of Education
- **Agricultural land (some chemicals adulticides cannot drift over particular food crops)** – National Land Use (<https://www.usgs.gov/centers/eros/science/national-land-cover-database>)
- **Beehives** – SC State Beekeepers Association (<https://scstatebeekeepers.com/contact/>)
- **Organic Farms**
 - **Organic Farms** – Clemson University Regulatory Services Organic Certification Program (<https://www.clemson.edu/public/regulatory/organic/index.html>); organic@clemson.edu; 803-646-2140
 - **National Land Cover Dataset** – USDA National Resources Conservation Service (NRCS) (<https://datagateway.nrcs.usda.gov/>). Land is classified into several different categories, including Cultivated Crops and Hay/Pasture, which are two land types associated with farms.
 - **Cropland Data Layer** – USDA National Agricultural Statistics Service (NASS) (<https://nassgeodata.gmu.edu/CropScape/>). Data can be download by defining an area of interest by using this interactive mapping site.

Custom-created for Mosquito ULV spraying events

- Truck Spray routes
 - Areas that can be covered in 1 hour when the spray truck is driving 10 miles per hour (10 linear miles of street surface per route)
 - Truck spray routes are created individually by county, city, or town GIS staff, or their mosquito control contractors
- Aerial Spray blocks
 - Areas created by aerial contractors or USAF, based on the geographic areas provided to them by county, state, mosquito district, or CDC officials.
- Mosquito surveillance locations (latitude and longitude data for traps or landing rate counts)
- Medically sensitive individuals
- Spray exclusions areas due to the presence of endangered or threatened or critical habitat.
 - Source: FEMA EHP Point of Contact