

WeiSTROM Coastal Metadata

DPH (DHD) Databases Layers -

- **Facilities** – geocoded points using “address_full_facility” field from the Facilities table in the DHD database and symbolized based on data in the “facilitytype” field. Updated nightly.
- **Septic** – geocoded points using “address_full_facility” field from the Properties tables in the DHD database. Septic Permits table is joined to Properties through the propertyID field and using a definition query of permitID <> 0. The Septic Inspection table is related to Septic Permits through the permitID field. Updated nightly.
- **Well Sites** – geocoded points using “address_full_facility” field from the Properties tables in the DHD database. Water Well Site table is joined to Properties using the propertyID field and Water Well Evaluation and Sample report is related to Property using the propertyID field. Updated nightly.
- **Tables in Legend (Source DHD Database):** updated nightly.
 - **Water Well Evaluation and Sample Report**
 - **Water Well Site Table**
 - **Water Sample and Tracking Report**
 - **Well – Water Sample and Tracking Report Samples**
 - **Septic Permit**
 - **Septic Inspection**

Georgia Parcels - Parcel layers for the State of Georgia. The data is provided 'as is' by the various counties of the State of Georgia and made available by ITOS (University of Georgia). Although these data have been processed successfully on a computer system at ITOS, no warranty expressed or implied is made by ITOS regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty.

Elevation Contours – contour lines (elevation in Feet) for the South District, Coastal District, Southeast District, and Brantley County.

Conservation Areas – 2011 Georgia Conservation Lands.

Pollution Susceptibility Index (PSI) – was updated in 2016 and is the sum of weighted values of the following risk factor layers: FEMA floodplain class, proximity to NWI wetlands, pollution susceptibility (DRASTIC) class, proximity to ground water recharge zone, proximity to shellfish beds, proximity to impaired streams/lakes/sounds, proximity to surface waterbodies, onsite disposal system density, TMLD watershed. All risk factors were weighted valued between 0 and 100. The minimum possible index value is 0; the maximum possible index value is 750.

The septic pollution susceptibility profile/index is one way of assessing an area’s potential for ground and surface water contamination from onsite septic disposal systems. One index was created for the eight-county region encompassing Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long, and McIntosh counties. Risk values for the entire eight count region were classified using the Standard Deviation classification (1 Stnd. Dev.) method, which finds the mean risk value (“Mean”), then places class breaks above (“High” risk) and below (“Low” risk) the mean at intervals of 1 standard deviation until all the data values are contained within the classes. Values that are beyond three standard deviations from the mean are aggregated into two classes, greater than three standard deviations above the man and less than three standard deviations below the mean.

PSI Risk Layers – Layers used to create the Pollution Susceptibility Index

- **High OSDS Density Area** - created using 11,744 OSDS points available from five sources: Phase I study GPSed points; Phase II study GPSed points; Camden County septic inventory points geocoded by address or X, Y coordinates; McIntosh County septic inventory points geocoded by address or X, Y coordinates; and Garrison points geocoded by address or X, Y coordinates, January 2000 to July 11, 2012. (See SOURCES for more information on OSDS point data sources.) OSDS point density was created using the Spatial Analyst extension

kernel density method with a search radius of 3960 feet and a 100 ft. cell size; a vector layer of the eight-county boundary was used for the processing extent.

- Buffer of Impaired Waters – Georgia 305(b)/303(d) Impaired Streams and Sounds, Georgia Environmental Protection Division, 2010. Impaired stream data is represented in stream centerline format. In many, but not all, coastal areas, a 500 ft buffer of stream centerlines may not be wide enough to encompass shoreline land areas. As a result, a 1000 ft buffer was included.
- Flood Zones – Federal Emergency Management Agency, 1:24,000, 1995. <https://msc.fea.gov/webapp/wcs/stores/servlet/FemaWelsomeView?storeId=10001&catalogId=-1>
- Recharge Areas – Groundwater recharge zones, Georgia Department of Natural Resources, Environmental Protection Division, 1:500,000. 1996
- NWI Wetlands 100' buffer – a 100 ft buffer created around NWI wetlands. U.S. Fish and Wildlife Service, 1:24,000, 2010. <https://www.fws.gov/wetlands/Data/Data-Download.html>
- Shellfish Areas – Commercial shellfish beds, permit year 2012, courtesy of the Georgia Department of Natural Resources, Coastal Resource Division, 2012. Growing area boundaries delineate approved water classification for all delineated shellfish lease areas within the polygons and prohibited outside of the areas. Growing area boundaries do change from year to year based on water quality data and sanitary surveys.
- Impaired Watersheds 2012 – HUC12, Georgia Environmental Protection Division. Impaired watershed map methodology: The fecal coliform impaired 305(b)/303(d) streams were intersected with the Georgia HUC 12s. These are the fecal coliform impaired HUC 12s in Georgia.
- DRASTIC – the term DRASTIC is an acronym derived from the seven hydrogeologic parameters deemed most influential to pollution susceptibility. They are depth to water (D), net recharge (R), aquifer media (A), soil media (S), topology (T), impact of vadose zone (I), and hydraulic conductivity (C), of the aquifer. Each factor is incorporated into a relative rating scheme that uses a combination of weights and ratings to produce a numerical value called the DRASTIC Index. The higher an area scores on the index, the more vulnerable or more susceptible the area is believed to be to ground-water pollution. For more information see metadata for DRASTIC (Pollution Susceptibility). Georgia Geologic Survey, 1:500,000, 1996. http://health.state.ga.us/programs/ohip/includes/Metadata/Physical_Geography/sde_drastic_1992.htm
- Geology – U.S. Geological Survey. 1:100,000, 2005. <https://mrdata.usgs.gov/geology/state/state.php?state=GA>
- STATSGO Soils – General Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053629.

Waste Water Treatment Plants (WWTPS) – locations of Waste Water Treatment Plants in Screven, Effingham, Chatham, Bryan, Liberty, McIntosh, Glynn, Camden that accept septage.

Drive Time to WWTPS Accepting Septage – drive time in minutes to Waste Water Treatment Plants accepting septage.

High-Risk PSI Proximity to WWTPS – High Risk PSI proximity to Waste Water Treatment Plants accepting septage in minutes.

Soil Types & Associations

- Generalized Soils – STATSGO soils: General Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053629.
- Detailed Soils Layer – SSURGO soils: Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at <https://websoilsurvey.nrcs.usda.gov/>

Soil Permeability – the term DRASTIC is an acronym derived from the seven hydrogeologic parameters deemed most influential to pollution susceptibility. They are depth to water (D), net recharge (R), aquifer media (A), soil media (S), topology (T), impact of vadose zone (I), and hydraulic conductivity (C), of the aquifer. Each factor is incorporated into a relative rating scheme that uses a combination of weights and ratings to produce a numerical value called the DRASTIC

Index. The higher an area scores on the index, the more vulnerable or more susceptible the area is believed to be to ground-water pollution. For more information see metadata for DRASTIC (Pollution Susceptibility). Georgia Geologic Survey, 1:500,000, 1996.

http://health.state.ga.us/programs/ohip/includes/Metadata/Physical_Geography/sde_drastic_1992.htm

2010 Census Data – 2010 U.S. Census data for Tracts, Blockgroups, and Blocks.

Georgia Counties – Georgia County boundaries

GA Health Districts – Georgia Health Districts

Elevation Model – Digital Elevation Models (DEMs) of South, Coastal, and Brantley Counties.