Background

Each of the 50 states and the federal government have recognized the need to study and protect their geological resources. They have provided for investigations of geologic resources by units called geological surveys. A geologic survey of Delaware was originally authorized in 1837 for a period of four years, under the direction of James C. Booth, State Geologist. In 1951, the Delaware General Assembly established a permanent Delaware Geological Survey (DGS) for the State of Delaware. Because of its strong research function, the DGS was organized as a unit of the University of Delaware and located on the Newark Campus.

Objectives of the Delaware Geological Survey are to investigate the geology of Delaware including its structure, rocks, water, and other mineral resources; prepare maps and reports of results of studies and their application to the state’s needs; consider scientific matters in the field of geology that are of value to the people of the State; and recommend laws or other measures to assure optimum and equitable utilization of geologic resources (Delaware Code Title 7, Chapter 55, plus amendments).

Programs

The work of the DGS can be summarized as research, exploration, and service. To this end the following programs have been established.

(1) Geology. Research on the distribution of Delaware’s rocks, structure, and history provides a framework that is useful in planning for wise use of all earth resources.

(2) Hydrology. Water is our most important mineral resource. Understanding its occurrence, quality, and quantity is essential to our society.

(3) Cartographic Information. The DGS can supply information on maps, benchmarks, and aerial and satellite imagery that are available for Delaware. The State Boundary Commission is based at the DGS.

(4) Geologic Hazards. The study of floods, erosion, formation of sinkholes, and other geologic processes enables our society to be warned and make prudent plans for land use to avoid natural disasters.
(5) Seismograph Network. The DGS is part of a regional earthquake network. Our seismographs provide information useful in plotting locations and calculating the strength of earthquakes in this area and throughout the world.

(6) Outer Continental Shelf. An understanding of the geology of the lands under the ocean adjacent to our State provides the basis for planning decisions involving potential offshore deposits of oil and gas, sand and gravel, and other mineral resources. The DGS participates in federal decision-making processes as Delaware’s authorized contact with the Minerals Management Service (MMS) of the U. S. Department of Interior.

(7) Mineral Resources. An agreement is in effect with the U. S. Bureau of Mines (USBM) to collect mineral production data. Sand and gravel extraction is annually an over $6 million business. The DGS is Delaware’s authorized contact with the USBM.

(8) Joint-funded Programs. State dollars are stretched by federal matching funds of the U. S. Geological Survey (USGS) to study surface water (stream gages), groundwater, and revise topographic maps. The DGS is Delaware’s authorized contact with the USGS.

(9) Well Records and Sample Library. Geologic and hydrologic data are kept on file for use by investigators. Over 30,000 samples are located in the sample library and over 50,000 well records are available for research. DGS also houses the Atlantic OCS Core and Sample Repository.


The programs listed above are a generalized outline of DGS activities. There are many other topics related to the earth that cannot be discussed in the scope of this folder.

For More Information

Questions about the activities and services of the Delaware Geological Survey may be obtained from: Delaware Geological Survey, Delaware Geological Survey Building, University of Delaware, Newark, Delaware 19716-7501, Telephone 302-831-2833.