

maps. In addition, the Committee receives reports from the U.S. Geological Survey on the status of mapping in Maryland; makes recommendations for map funding and revision; and considers computer mapping techniques and methods of developing Geographic Information Systems (GIS).

The Committee includes representatives from the Department of the Environment, Department of Natural Resources, Maryland Agricultural Land Preservation Foundation, State Department of Assessments and Taxation, State Highway Administration, Salisbury State University, Towson State University, Maryland-National Capital Park and Planning Commission, Baltimore Regional Council of Governments, Office of Planning, Washington Suburban Sanitary Commission, Harford County Government, Queen Anne's County Department of Planning and Zoning, Baltimore City Department of Public Works, Baltimore Gas and Electric Company, U.S. Department of Agriculture, and U.S. Geological Survey.

#### COMMISSION OF THE MARYLAND GEOLOGICAL SURVEY

Dr. M. Gordon Wolman, *Chairperson*

*Appointed by Secretary of Natural Resources:* John E. Carey, 1991; Dr. F. Pierce Linaweaver, 1993; Dr. Robert W. Ridky, 1994; Thomas O. Nuttle, 1995.

The Commission of the Maryland Geological Survey advises the Director on matters concerning the Survey. The Commission's five members are appointed by the Secretary of Natural Resources (Code Natural Resources Article, sec. 2-204).

#### HYDROGEOLOGY & HYDROLOGY PROGRAM

Dr. Harry J. Hansen, *Chief*  
554-5554

The Hydrogeology and Hydrology Program was formed in 1972. In cooperation with the U.S. Geological Survey, the Program maintains a statewide water data network and investigates the hydrologic and geologic characteristics of Maryland's resources.

The surface water data network provides information on minimum, maximum and average streamflows for the planning of water supply and sewage facilities, water power projects, dams and bridges. The ground water network measures water levels in aquifers and selected springs and relates changes in ground water levels to withdrawals and precipitation. The ground water network also monitors the hydrologic effects of long-term changes in pumpage, land use patterns, and rainfall.

Special studies undertaken with local and county governments include the extent of saltwater intrusion, aquifer and streamflow characteristics,

water quality and rates of replenishment, and water well sampling for basic chemistry, nutrients, radon and either industrial organic constituents, or agricultural herbicide or pesticide residues.

#### ENVIRONMENTAL GEOLOGY & MINERAL RESOURCES PROGRAM

Dr. James P. Reger, *Acting Chief*  
554-5523

The Environmental Geology and Mineral Resources Program makes geologic, environmental and topographic maps and investigates mineral and energy resources. Program studies provide an earth science framework for managing Maryland's mineral, energy and land resources. The Program was created in 1972 from the former Geologic Investigations Program and the Topographic Maps Program.

Topographic maps are used by the public for activities such as hiking and camping and by State and local governments for a myriad of technical and planning applications. Geologic maps provide data about the kinds of rocks and the location of minerals (predominantly sand, gravel, stone, and coal) and provide background for the intelligent planning and use of Maryland's geologic natural resources.

The Program has opened a new Geologic Exhibits and Visitors Center at Sideling Hill in western Maryland. Through the Survey's library and the Earth Science Information Center, aerial photos and large-scale maps are available to the public and private industry.

#### COASTAL & ESTUARINE GEOLOGY PROGRAM

Randall T. Kerhin, *Chief*  
554-5544

Created in 1971 from the Shore Erosion Investigation Program, the Coastal and Estuarine Geology Program investigates the geologic framework and resources of the State's coastal environments extending from the barrier island of the Atlantic Ocean to the wetlands and shorelines of Chesapeake Bay. Orthophoto quadrangle maps from aerial photography, combined with historical shoreline erosion maps, provide the basis to evaluate shoreline changes in the Bay region.

Using the Survey's research vessel, the geochemical components and physical features of the sediments are being monitored around the Hart-Miller Island Containment Facility.

In 1975, the Chesapeake Bay Earth Science Study was added to the Program. The Study was initiated to determine the distribution of sands, silts, and clays; identify the patterns of erosion and deposition of these sediments; and analyze the geochemistry of the pore waters in these sediments.