

The Survey researches and investigates coastal and estuarine geology related to erosion and sedimentation in the Chesapeake Bay and along the ocean shoreline. As part of its applied earth science research on the Bay, the Survey was one of the principal investigators on the Chesapeake Bay Program of the U.S. Environmental Protection Agency. The Survey's work is carried out by three projects: Coastal and Estuarine Geology; Environmental Geology and Mineral Resources; and Hydrogeology and Hydrology.

The Director is appointed by the Governor upon recommendation of the Secretary of Natural Resources (Code Natural Resources Article, secs. 2-201 through 2-203).

**COMMISSION OF THE MARYLAND
GEOLOGICAL SURVEY**

M. Gordon Wolman, Ph.D., *Chair*, 1997
(410) 516-7090

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 to five-year terms (Code Natural Resources Article, sec. 2-204).

GEOLOGIC MAPPING ADVISORY COMMITTEE

M. Gordon Wolman, Ph.D., *Chair*
(410) 554-5504

Created in 1992, the Geologic Mapping Advisory Committee advises the Director of the Maryland Geological Survey on the development of geologic maps of areas important to the economic, social and scientific welfare of the State and nation. The Committee is concerned with the State geologic mapping component (called STATEMAP) of the National Cooperative Geologic Mapping Program. The Program was established in 1992 within the U.S. Geological Survey (P.L. 102-285, National Geologic Mapping Act of 1992).

COASTAL & ESTUARINE GEOLOGY PROJECT

Randall T. Kerhin, *Chief*
(410) 554-5544

Created in 1971 from the Shore Erosion Investigation Program, the Coastal and Estuarine Geology Project 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.

The Project monitors the geochemical components and physical features of sediments around the Hart-Miller Island Containment Facility.

In 1975, the Chesapeake Bay Earth Science Study was added to the Project. This work deter-

mines the distribution of sands, silts, and clays; identifies the patterns of erosion and deposition of these sediments; and analyzes the geochemistry of the pore waters in these sediments.

**ENVIRONMENTAL GEOLOGY & MINERAL
RESOURCES PROJECT**

James P. Reger, Ph.D., *Chief*
(410) 554-5523

The Environmental Geology and Mineral Resources Project makes geologic, environmental and topographic maps and investigates mineral and energy resources. Project studies provide an earth science framework for managing Maryland's mineral, energy and land resources. The Project 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 Project provides technical advice and assistance for the 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.

HYDROGEOLOGY & HYDROLOGY PROJECT

Harry J. Hansen, Ph.D., *Chief*
(410) 554-5554

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