

VERMONT GEOLOGICAL SOCIETY

POSITION PAPER

VERMONT GEOLOGICAL SURVEY

NOVEMBER 11, 1975

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A Position Paper of the Vermont Geological Society
November 11, 1975

Introduction

The Vermont Geological Survey, created in 1884, has had a long and useful history of service to the State. In the years since 1947, when Dr. Charles G. Doll became State Geologist, the Survey has published reports and maps that summarize the fundamental aspects of bedrock and surficial geology of the state. In recent years, more detailed studies of selected areas have been published on the surficial geology, environmental geology, and mineral resources. These reports are used daily in development of earth resources, in teaching, and in research.

In 1975, legislative and administrative actions threatened to diminish the Survey to a token existence. Members of the Vermont Geological Society gave special attention to this problem at their annual meeting on October 18, 1975. This position paper is based on that open discussion and on later discussions by the Ad Hoc Committee on the Vermont Geological Survey and by the Executive Committee. It summarizes thoughts on the functions and future of the Survey.

The Problem

There is urgent need to reduce state expenditures, and the mood in Montpelier is to eliminate all but the most essential programs. A common opinion in Montpelier is that the Vermont Geological Survey of recent years has not been sufficiently productive. The January session of the legislature may result in

termination of the Survey. The Survey has been successful in conducting and publishing geologic studies on a low budget, but has not effectively apprised legislators and the public of the nature and value of the program.

Vermont Geological Society

The Vermont Geological Society was founded in February 1974. Our membership of about seventy persons includes geologists working for governmental agencies, faculty of institutions of higher education and secondary schools, geologists in mineral industries, and consultants. Although the members represent diverse aspects of geology, there is widespread and strong agreement on the need for an active Vermont Geological Survey; we rely on the information generated by the Survey. This position paper reflects our views as to priorities and the future of the Survey.

PRIORITIES

The Vermont Geological Survey and the State Geologist have several functions important to development and use of the state's earth resources. The order of priorities reflects the Society's discussion in October.

Coordination

The highest priority for the office of State Geologist is to act as a clearing house concerning investigations related to the geology and water resources of the state. This role includes the following:

to identify the major geologic and hydrologic problems;

to encourage a focused attack by appropriate agencies and individuals;

to prevent duplication of effort;

to disseminate information.

The need for coordination is suggested by the many agencies and individuals studying earth resources in Vermont:

- U.S. Geological Survey - water resources, stream-gaging stations, topographic mapping
- U.S. Corps of Engineers - flood control, ERTS
- U.S. Soil Conservation Service - mapping and characteristics of soils
- Agency of Environmental Conservation - site evaluation for possible pollution of surface and ground water (sanitary landfill; disposal of septic tank waste and municipal sludge; oil spills and hazardous materials; municipal water supplies), file of water well logs
- State Department of Health - analyses of water supplies
- State Highway Department - gravel deposits, alluvial fill under bridges
- Lake Champlain Basin Commission
- Vermont Water Resources Research Council - at UVM, funded by U.S. Department of the Interior
- Attorney General - monitoring Lake Champlain near IPC
- Academic institutions - research by faculty and students (graduate and undergraduate--in-state and out-of-state)
- Mineral industries - granite, marble, slate, talc, asbestos, limestone, gravel
- Municipalities - geologic and engineering studies for water systems and landfills
- Utilities - geologic and engineering studies for generating sites
- Consultants for developments
- Water well drillers
- New England Intercollegiate Geologic Conference - annual field conference--in Vermont 1959, 1961, 1972

Public Information

The Vermont Geological Survey must serve as a central office for storing and retrieving data on earth resources. Tourists, industries, developers, governmental agencies, school teachers, planners, recreation groups, conservation groups, and individuals regularly seek information on local geology and water resources.

State Consultant

The State needs a geologist to serve as a resource person for the occasional legislation that pertains to earth resources and who can monitor the quality of geologic reports demanded by environmental legislation.

Publications

Publications of the Vermont Geological Survey are an established and honored set of library references on the geology of the state. These publications are fundamental to all geologic investigations. Future publications on earth resources should be continued through the Survey rather than through a newly created source.

Contracting Authority

According to 10 V.S.A. 103, the Vermont Geological Survey is the state agency that contracts with the U.S. Geological Survey for topographic mapping and earth resource studies. Though the topography of the state is already represented on old maps at the scale of one mile per inch, the U.S. Geological Survey has a program for remapping at 2,000 feet per inch; about forty percent of the state is now remapped at that scale. Such maps are important to community planning and to tourists, hunters, and others.

Research

As money becomes available, the Survey should resume basic and applied research. This research is needed for exploration of energy sources, mineral deposits, construction materials, and water resources. Vermont's earth resources influence every aspect of our daily lives.

THE FUTURE

Members of the Vermont Geological Society have discussed the future of the Vermont Geological Survey. Three aspects have unanimous support:

- 1) The head of the Survey should remain a functioning geologist, even though many of the duties involve administration;
- 2) the Survey should remain independent of other governmental agencies, in order to serve each impartially;
- 3) there should be a Board to whom the State Geologist is directly responsible.

These aspects bear on the choice of "administrative home" and on the proper fulfillment of the State Geologist's duties. They also bear on whether the State Geologist should have an office at the University of Vermont or in Montpelier.

Administrative Home and Location

Members of the Society strongly support locating the office of the Vermont Geological Survey at the University of Vermont, as an independent agency. The physical location will ensure that the State Geologist has ready access to the wide-ranging talents of the UVM geology faculty, and to the considerable geology library, facilities, and equipment. Cognate disciplines are found in other departments of the University. In this setting, the State Geologist will be able to keep up with the techniques, concepts, and information that are continually evolving in the field of geology. A physical location in Montpelier would make the State Geologist more readily available for consultation on State matters, but the range of talents among the geologists at Montpelier is focused around water resources and there is real

danger that the State Geologist would lose contact with advances in other kinds of geology in this location. As mentioned earlier, the State Geologist must work with many different agencies and individuals, and impartiality would be difficult if the main responsibility is to one of these agencies.

Board of Review

Independence is important, but so also is responsibility. The Society recommends that a Board be appointed by the Governor to ensure that the Survey works in the best interests of the state. The Board should include geologists. It can help in liason with the legislature. It would review the State Geologist's program and fulfillment of the duties of the office. It would review manuscripts and maps prior to publication by the Survey. The Board would monitor the quality of work submitted under environmental regulations of the state.

Program

The priorities listed on the first few pages give a broad structure to the office of State Geologist. Particular programs within this structure will evolve as a result of the coordination of what is now being done.

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