

Digital Information Services

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The Digital Information Services staff includes Janette Vavra, a geologist/digital information services supervisor; Brian Fisher, a geologist/GIS specialist; and Susan Saunders, a word processor operator. This group is responsible for developing and maintaining the branch Geographic Information System and associated databases, the NovaScan bibliographic geoscience database, for supplying digital data and services to clients and staff, and for developing the branch Internet web site.

Digital Geoscience Data Products

A collection of digital geoscience datasets (in DXF® or ARC® export format and UTM/NAD27 datum) on Nova Scotia has been developed, and is now on sale through the Library. These datasets include digital geology maps, databases and images. The complete list of digital data products available can be seen in Appendix 2. A license agreement is issued with all digital datasets. This agreement allows unrestricted use of the data with the understanding that DNR remains the owner of the data and is not transferring copyright to the user.

Public Access GIS

A Public Access GIS has been developed for use by clients in the Halifax Library. This is a user-friendly query and display system which uses a customized version of ArcView® to access a variety of geographically referenced digital geoscience data. It can display and query datasets, overlay various themes of geoscience, topographic and land-use information, and output the resulting maps as coloured plots.

World Wide Web Site

The Minerals and Energy Branch has developed its own web site, which can be found at the following address: <http://www.gov.ns.ca/natr/meb>. In addition to providing information on branch staff and programs, the WWW site also provides the latest *Publication Release Notices*, *Publications and Digital Data for Sale Lists*, all the issues of the branch newsletter *Nova Scotia Minerals Update*, a *What's New* page, and a *Topics* page.

NovaScan

NovaScan is the bibliographic geoscience database on

Nova Scotia and its offshore regions. As of December 31, 1997, the database contained 14,111 NSDNR records, consisting of 6086 mineral exploration assessment reports, 3290 publications, 1197 journal literature references, 1318 open file maps, 1196 open file reports, 72 open file illustrations, 756 theses, 152 contribution series, 34 books, and 3 outside publications. Custom searches of Arc® database for clients will be done on request. Work will begin early in the next fiscal year to make NovaScan accessible to clients through the Public Access GIS.

GIS Development

The Digital Information Services staff have also been working cooperatively with branch staff on several projects. In conjunction with the Land-use staff, they have updated the *Land Designation and Ownership Map*, and have converted the Mineral Resources Land Use Maps for Nova Scotia into digital form. The new 1:500 000 *Geology Map of Nova Scotia* is nearing completion and has been integrated into the GIS. It is hoped that the new geology map will be available in early-to mid-1998. Work on integrating the Registry of Mineral and Petroleum Titles database into the GIS and the public access system has now been completed. Gayle Chapman, a casual employee, started in May 1997 to digitize point information from a variety of 1:50 000 geology maps into AutoCad® and FieldLog®. This information will constitute a new composite geology map. Work on the Integrated Resource Management (IRM) project has resulted in Water Supply Area Maps, an Overview Map and IRM Commitment Maps.

Internet Map Project

As a result of an initiative launched through the National Geological Surveys Committee, the Minerals and Energy Branch is working cooperatively with the Geological Survey of Canada and the other provincial minerals and energy departments across Canada, to create a graphical Geoscience Maps Index for Canada on the Internet. By accessing the map index, clients will be able to zoom in on areas of Canada and determine what published geoscience maps exist in their area of interest. The system is using AutoDesk's Map Guide® software and is planned to be operational by the spring of 1998.