

The Canadian Geoscience Knowledge Network

An Update on the Collaborative Effort for Unified Access to Geoscience Data

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Introduction

The rapid evolution and revolution of information technology and subsequent management of digital information have opened new avenues for capturing, managing and disseminating geoscience information. Geological surveys now routinely capture field data using digital technology, laboratory results are recorded automatically in digital form and the conventional geological map, which was formerly presented in paper form, is now a digital representation within databases and geographical information systems. This fundamental change in how geoscience data are managed has impacted all geological surveys. As Canadian geological surveys adapt to the management of digital data, it is reasonable to expect that they will benefit by sharing their experiences and knowledge. Making geoscience information available over the Internet; adopting common standards and data management tools, and making data more accessible to all is a key tool by which Canada can maintain its global competitiveness in attracting resource exploration.

The Canadian Geoscience Knowledge Network (CGKN) is designed to create a seamless network of digital information from government geoscience agencies in Canada. The CGKN initiative is predicated on the understanding that:

- ✓ the value of the data sets that are built today will be maximized for use in the future, only if they can be easily integrated with other geospatial data, using on-line services; and,
- ✓ the interoperability of participating agencies' respective data holdings is a key objective (*i.e.*, clients should be able to search each agency's data, which is managed locally, and view or retrieve the information using standard tools and protocols).

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Since 1998, a series of Workshops, organized by the National Geological Surveys Committee (NGSC), have brought together representatives of the 13 government surveys to explore and guide the development of the discovery and access to their geoscience information holdings. The latest of these meetings was held at Toronto, in March 2003, immediately prior to the annual Prospectors and Developers Association of Canada Convention

CGKN Workshop, March 2003

The 3rd national CGKN Workshop was held from Friday - Sunday, March 7-9, in Toronto. Workshop format included presentations and demonstrations of CGKN activities being undertaken by various agencies, followed by discussions of pertinent CGKN technical and implementation details. The primary objectives of the Workshop were to identify priorities for future CGKN development and to design a 2-year plan for each participating agency.

All provinces and territories participated in the CGKN development discussions that focused on jurisdictional data building projects and how well these integrate with the national/international standards and software tools being used by mutual clients. The 3rd CGKN Workshop resulted in the following key outcomes:

- ✓ It provided a forum that enabled participants to gain a clear understanding of what each agency has accomplished and what tools and service they have developed.
- ✓ It validated the fact that the CGKN Online Data Catalogue represents CGKN's flagship project and that all agencies support it and are committed to its continuous improvement;
- ✓ Recognition amongst participants that there is an need to define a clear future path for CGKN development. To this end, the CGKN secretariat has committed to preparing a set of questions that will be sent to NGSC agencies with the

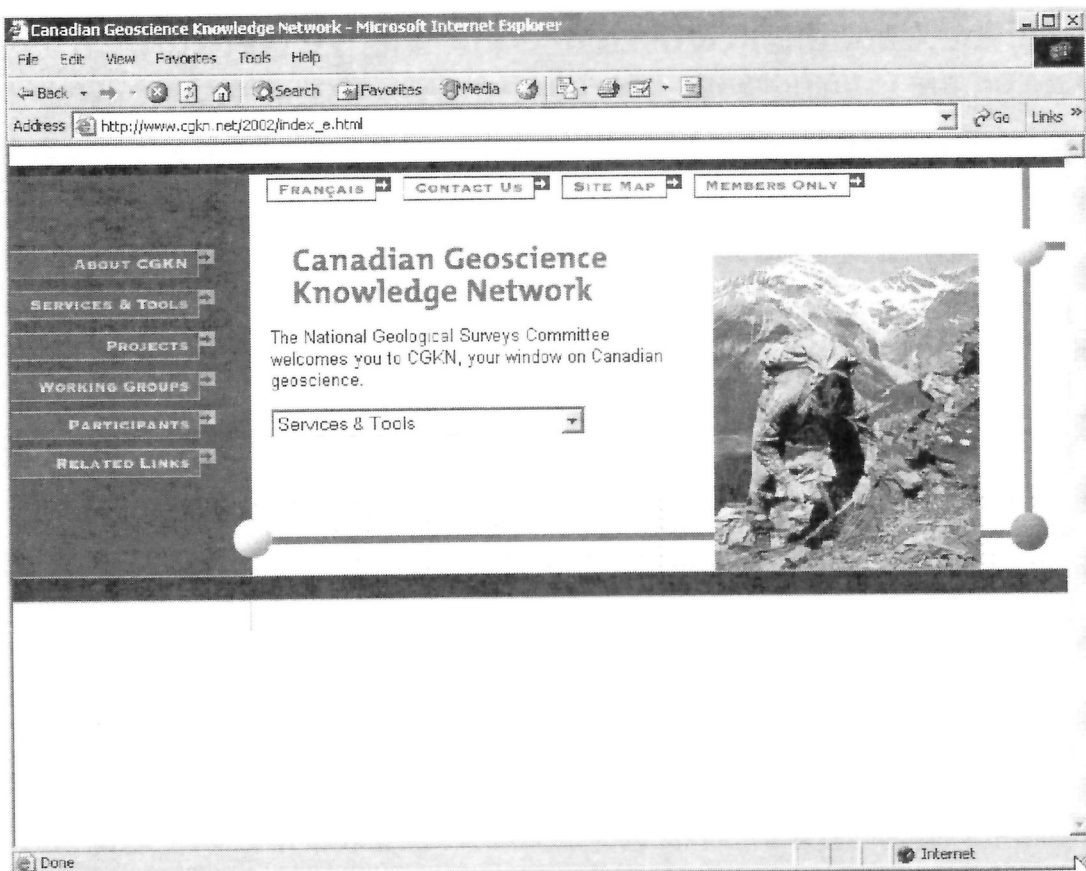


Figure 1. The new CGKN Homepage is the on-line portal to CGKN services, tools and activities. <http://cgkn.net>

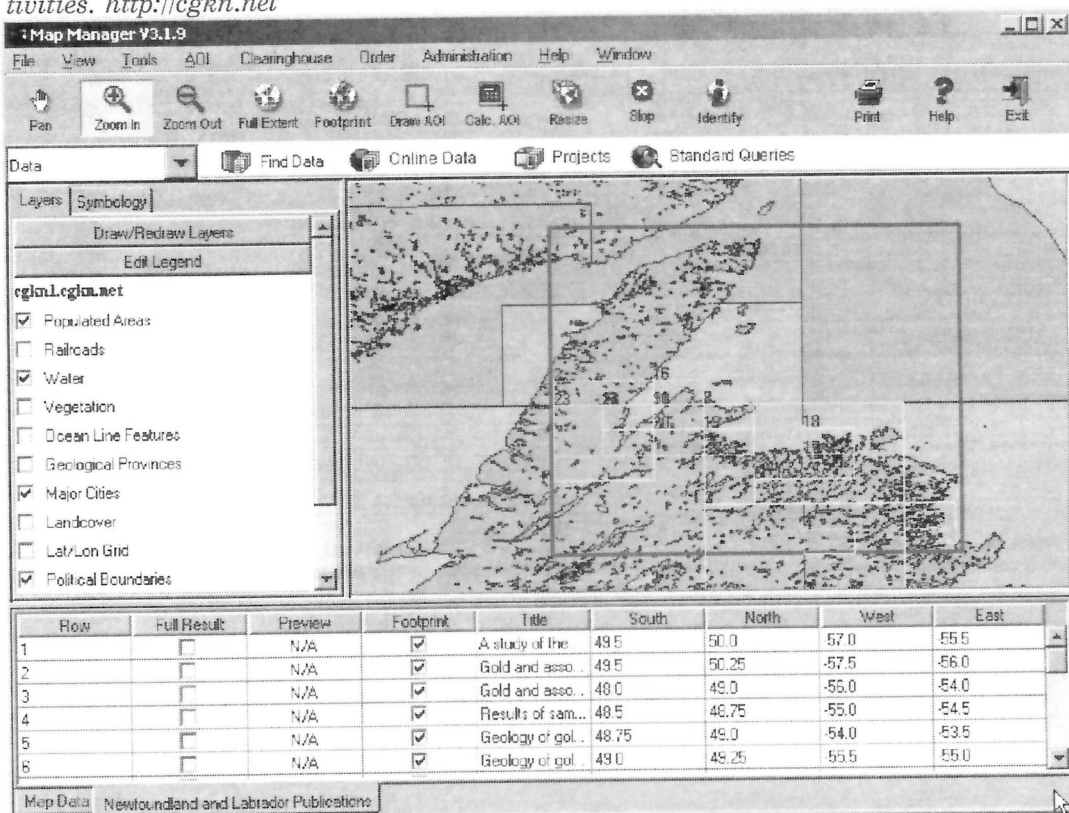


Figure 2. The current map interface for the CGKN Data catalog.

goal of clarifying NGSC priorities for the development of the CGKN. These priorities will then be used to develop a new two-year business plan to guide CGKN into the near future.

Activities

In May 2002, a new version of the CGKN web site () (Figure 1) was launched, which focused on the developing CGKN services and tools. It also provides easy access to information on CGKN projects and activities.

The first version of the CGKN Data Catalogue (Figure 2) also came on line in 2002. Currently, this application provides access to com-

prehensive catalogues containing consistent metadata describing the geoscience information available from the CGKN partnership agencies. It also allows viewing of agency map layers through a Web Mapping Service (Figure 3). Further developments to the catalogue's search engine will continue, based upon user feedback.

For an update on the latest developments of national standards and tools for bedrock geology, surficial geology and geochemistry, the reader is encouraged to visit the CGKN web site. This site will also be continually updated to include the latest exciting and essential tools that have the potential to add greater value and utility to NGSC agency data.

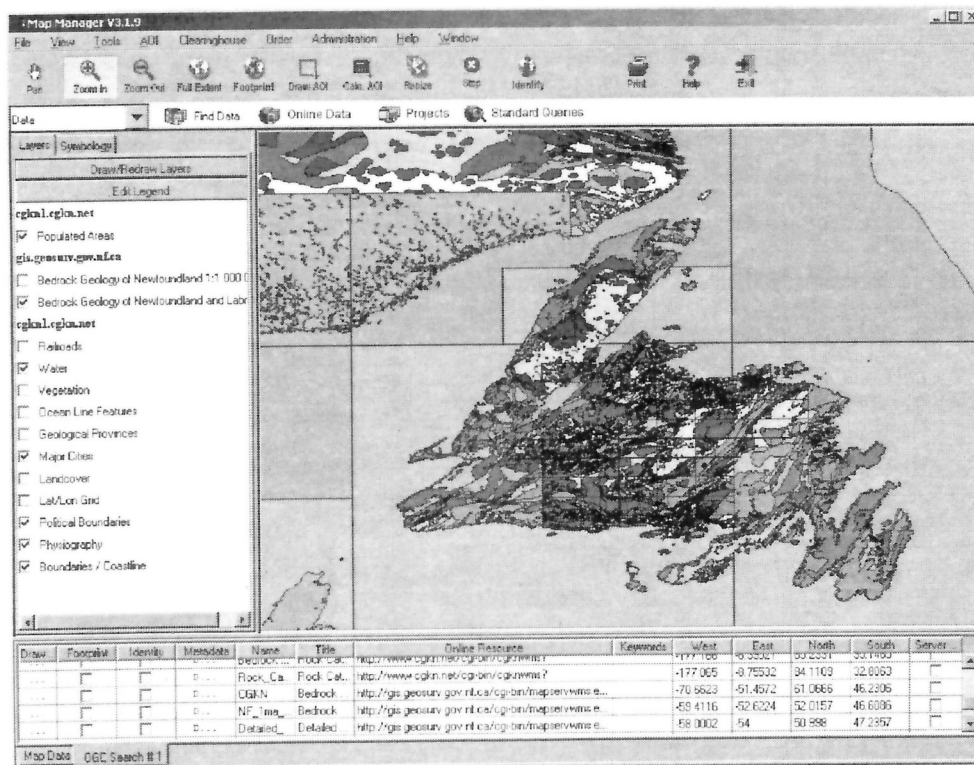


Figure 3. The Data Catalog map interface displaying bedrock geology from the Newfoundland and Labrador Web Mapping Service.