

Electronic Crossroads: Public Access to Computerized Environmental Legal Information, Final Report

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March 31, 1994

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I. ELECTRONIC AND PRINT FORMAT OF REPORT

This report is presented in both electronic and printed form. The electronic form is in *ELIB* -- the Environmental Legal Information Base -- with hypertext links ('jump links') to related information. Jump links are indicated by angle brackets>. The angle brackets have been left in the hardcopy version to show the reader how the jump links are used.

II. OVERVIEW OF PROJECT

Goals and objectives

The [West Coast Environmental Law Research Foundation](#) began the *Electronic Crossroads* project in February, 1993.

The project's overall goal is to enhance public access to computerized environmental legal information relevant to British Columbia.

The project began with three specific objectives:

- to convert WCELRF's library card catalogue into a flexible, multiuser database,
- to prepare an annotated, selected listing of sources of computerized environmental and environmental legal information, and
- to produce a policy analysis report with recommendations.

Personnel and advisory committee

The project manager is William Andrews, Barrister & Solicitor, who took a one year leave from his duties as Executive Director of WCELRF to lead the project. By the end of the project, more than a dozen [staff and contract personnel](#) had worked on the project. The project also received assistance from a [multisector advisory committee](#).

Funders

Funding for *Electronic Crossroads* and related subprojects was generously provided by

- the British Columbia Ministry of Environment;
- the Federal Environmental Assessment Review Office;
- the federal Environmental Innovations Program;
- the Notary Foundation of British Columbia;
- the Real Estate Foundation of British Columbia;
- the VanCity Community Fund; and
- the Vancouver Foundation.

System design

The project began with the [design of an information system](#), called the Environmental Legal Information Base (*ELIB*), capable of serving each of the specific objectives. The design phase identified the need for both database capability and [hypertext](#) capabilities. Following an extensive evaluation and selection procedure, the project manager selected [Gencat](#) relational database software and [Folio Views](#) full-text software.

He then created an [automated system for converting catalogue information](#) in the database into the full-word-indexed, hypertext Folio Views format for maximum ease of access by users. This system allows cross-references in the catalogue (from item to item, and from an item to the full text of the item -- where the full text is in *ELIB*) to be turned into jump links in the Folio Views format.

Putting information into *ELIB*

WCELRf's existing catalogue was cleaned up and imported into the Gencat system. In addition, numerous computerized sources of relevant information were catalogued, and selected ones were annotated. Dozens, and eventually hundreds of electronic books, reports, newsletters and statutes were catalogued and put into *ELIB*.

A [user-driven menu system](#) was created, providing simple access to the information in *ELIB* (in addition to access provided by the powerful searching features in the Views software). An was also added.

Special *ELIB* collections were developed on [environmental assessment](#), [voluntary legal methods of protecting private land](#), the [newsletters of the B.C. Environmental Network](#), and [the decisions of the B.C. Environmental Appeal Board](#).

With funding from the Real Estate Foundation, the protection of private land collection was augmented with [an interactive educational interface](#). The user's answers to a series of questions guide him or her to relevant legal information.

In addition, an easy, menu-driven guide to the [WCELRf library catalogue](#) was created, to facilitate searches by [subject](#), [type of item](#), [location](#), [geographic focus](#), etc.

III. INFORMATION POLICY

Copyright in statutes -- solving the problem

Of all the policy issues canvassed during the project, by far the most immediate unresolved issue is how to obtain reasonable public access to government statutes in computerized form in the face of the assertion of copyright over this information by the government publishers. Rather than producing a policy analysis report on this topic in the traditional way, it was decided to take an empirical approach by simply trying to solve the problem on a prototype basis.

Thus, the specific objective was to attempt to provide to the public computerized statutes relevant to protection of the environment. If the effort were to fail due to unresolved copyright problems, then this would be important for people to know, and it would be a basis for specific law reform or litigation options. If, on the other hand, the effort were successful, then (a) a useful information service would be provided and (b) the project would likely be a model for other governments and other information disseminators.

It was decided to focus on B.C. statutes for two reasons. First, it would likely be much faster to deal with the B.C. government than the federal government. Second, the B.C.

statutes are already officially published electronically (for a substantial price), so there is already a procedure for obtaining the official electronic version of the statutes.

The legal situation

The Province of British Columbia, by its Legislature, creates a statute. Being the creator of the statute, the Province of British Columbia holds the copyright to it. Unlike in the United States, there is no Canadian legislation that puts statutes into the public domain. The Province of British Columbia has an agreement with a fairly recently privatized Crown corporation called the Queen's Printer under which the Queen's Printer distributes the statutes in electronic form and asserts the Province's copyright over the information. (The privatization of the Queen's Printer makes no material difference to the copyright issues involved.) The Queen's Printer receives the statutes in electronic form from the Clerk of the Legislature.

At this point an additional complication arises. The Queen's Printer uses commercial software called Folio Views to put this text into a special computer format that when used with Folio Views software allows extremely fast searching of any word in any statute. The Queen's Printer sells a package of computer disks that contain this software and the statutes in the Folio Views format. The buyer receives three things: (1) the content of the statutes, (2) the right to use the Folio Views software according to the terms of the licence, and (3) the "value added" by the Queen's Printer in converting the statutes into the Folio Views format.

Asking for access

Obviously, what the project wants is the content of the statutes, not the Folio software licences or the Queen's Printer's added value. So, 'to make a long story short,' WCELR asked the Queen's Printer for permission to use the Queen's Printer's disk package to create a text-only version of certain statutes (e.g., stripped of the Folio Views formatting and software) for public distribution via the *ELIB* system. Theoretically, instead of using the Queen's Printer's disks, the project could have asked the Clerk of the Legislature to provide the unformatted text of the statutes. But that route would still require copyright permission from the Queen's Printer to allow distribution (in the absence of law reform or a legal challenge to the validity of the assertion of copyright). So, common sense suggested using the Queen's Printer's disks to obtain the content of (some of) the statutes.

Queen's Printer agrees

In a December 31, 1993, letter, Douglas Steele, Manager, Publications Centre, Queen's Printer, Ministry of Government Services, Province of British Columbia, stated that

"The policy of this government is that the Province wants to ensure that accuracy in the publication of the law is maintained and that public access to legislative material, to the greatest extent possible, is provided."

He continued,

"Since West Coast Environmental Law Research Foundation is a non-profit organization and provides general public access to environmental information, the Government of British Columbia would like to assist you and is prepared to license, on a non-exclusive basis, the right to access and use certain government information."

He stated that,

The two key conditions of this licence agreement would be:

1. That a copyright/disclaimer statement, similar to the following, appear when a user is accessing the statute information;

'Copyright in these statutes belongs exclusively to Her Majesty the Queen in right of the Province of British Columbia as represented by the Queen's Printer.

The use of these statutes is by permission of the Province of British Columbia and is intended for research, educational or informational purposes only. No person may reproduce these statutes by any means (other than for personal use) without the express written consent of the Queen's Printer of the Province of British Columbia.

The Province of British Columbia will not be responsible for any errors or omissions which may occur in these files. While every effort has been made to ensure accuracy and completeness, users should be cautioned that only those statutes printed by the Queen's Printer are admissible in courts of law by virtue of section 28 of the *Evidence Act* of British Columbia. Users contemplating litigation or seeking a definitive legal interpretation may wish, for this reason, to seek legal advice and to refer to the Statutes of British Columbia and Regulations printed in the B.C. Gazette, both of which are issued under the authority of the Queen's Printer for British Columbia.'

2. That the statutes not be modified before distribution."

License agreement not yet finalized

In a January 4, 1994, letter, WCELRf agreed to these conditions. The Queen's Printer began the drafting of a licence agreement. It requested and received a list of the statutes that WCELRf intended to put into *ELIB*. It requested and received an explanation of how each of these statutes relates to the needs of members of the public using *ELIB*. As of March 31, 1994, the licence agreement has not been finalized, but the Queen's Printer indicates that there are no serious stumbling blocks. Meanwhile, the statutes have been put into *ELIB* on a prototype basis.

Folio Views explanation

To avoid confusion, it should be pointed out that after WCELRf obtains the text-only version of the statutes in electronic form from the Queen's Printer's disks, WCELRf itself adds value to the statutes by putting them into Folio Views format (version 3.01 rather than the version 2.x used by the Queen's Printer) and incorporating them with other documents in that format into *ELIB*. One of the features of the Folio Views 3.01 software is that it comes with a scaled-down version called "Viewer" that a Views owner (such as WCELRf) can distribute for free for non-commercial purposes. This is the software that is used to provide public access to *ELIB*.

Copyright permission form

Statutes are not the only information that poses copyright problems for an information disseminator. All information not in the public domain must be cleared for copyright before it can be distributed. To this end, the project designed and uses a standard Non-exclusive Copyright Permission form. It is written in the plain language style:

NON-EXCLUSIVE COPYRIGHT PERMISSION

Name of Document: _____

Author(s): _____

Publisher(s): _____

Date of Document: _____

I (please print name): _____

of (organization): _____

give West Coast Environmental Law Research Foundation the non-exclusive right to use the above document for non-commercial public access purposes in its Environmental Legal Information Base, and I am authorized to give this permission.

_____(signature)

_____(date)

Other information policy development activities

Although the project's primary focus was practical, it did include a number of activities aimed at promoting public access to computerized environmental legal information in policy development:

- a presentation to a national workshop on Dissemination of Government Information, at the annual meeting of the Canadian Library Association,
- presentations to two conferences on national information policy sponsored by the B.C. Library Association and others,
- participation in public consultations regarding the B.C. *Freedom of Information and Protection of Privacy Act*,
- participation in consultations regarding a draft B.C. policy on public access to computerized government information,
- participation in consultation on the development of the site registry under B.C. contaminated sites legislation,
- consultation with FEARO regarding the Public Registry under the *Canadian Environmental Assessment Act*, and
- participation in a public workshop on computerized environmental communications put on by the B.C. Environmental Network and sponsored by Environment Canada.

The project also provided legal assistance with the establishment of the Vancouver Regional FreeNet and the efforts to gain charitable status for freenets in Canada. The FreeNets are an important way in which members of the public are starting to have better access to computerized information.

IV. ACCESS TO *ELIB*

Current methods of access

Members of the public can access *ELIB* by modem at 604-684-2483, or by using a public terminal in the WCELRF library. People can also utilize *ELIB* by phoning WCELRF staff at 604-684-7378 for assistance regarding an environmental problem.

Distribution of disks

One of the original ideas regarding distribution of the *ELIB* information was to put it onto floppy disks along with the Viewer software. It would be distributed to users, who would install the software and datafile onto their harddrive. An important conclusion of the project is that this method is not as practical as was originally anticipated. Why? Because the advantage to the user of having information in a computerized infobase grows exponentially with the size of the infobase. Being able to quickly search a relatively small amount of information is not much better than having the information in hardcopy, and is less convenient in some ways. However, being able to quickly search a large amount of information (e.g., the hundreds of documents currently in *ELIB*) is far more useful than having the information in hardcopy. As *ELIB* expands over the months and years, the ability to quickly search this information resource will far exceed the value and practicality of having hardcopy of the same information.

Unfortunately, the practicality of distributing the infobase on disk **diminishes** with the quantity of information. At its current size, it would take more than 20 high density diskettes to hold *ELIB* and the Viewer software. For most of the target audience, this would not be practical.

One alternative would be to break up *ELIB* into smaller pieces that could be distributed separately. However, the Folio Viewer software (the version that can be distributed free for non-commercial purposes) cannot open more than one infobase at a time. This mandates the 'one big infobase' design currently used by *ELIB*.

CD-ROM distribution of infobases

The 'number of disks' problem could be avoided by putting *ELIB* onto a CD-ROM disk for distribution. The Folio Viewer is designed for creating CD-ROM disks. There would be plenty of space: *ELIB* is currently about 30 MB in size and one CD-ROM disk can hold about 640 MB of information. And, the cost of printing CD-ROM disks is falling rapidly.

But there would be problems. First, only a small percentage of the target audience currently has a CD-ROM drive. This may well change in the next year, but no mass acceptance of CD-ROMs has occurred yet. Second, updates would be expensive and difficult to keep current.

Bulletin board access

The current modem access to *ELIB* referred to above is inadequate because it is limited to one phone line. Thus, steps are being taken to put *ELIB* on existing bulletin board systems (BBSs) which have multiple phone lines plus an established user base. Three BBSs have agreed to host *ELIB*: the EC-INFO board run by Environment Canada, EarthNet run by the Canadian Earthnet Society, and the Alternatives BBS operated for Greenpeace. At this point in time, none of them have *ELIB* available on more than a test basis. Each system requires some technical fine-tuning to run *ELIB* properly.

The technical issues are caused by the fact that *ELIB* and the Viewer software are actually separate from the BBS. The user comes into the BBS and then leaves the BBS software through a program called Doorway and goes to Viewer. After using *ELIB*, the user returns through Doorway to the BBS. So, when the user presses a key the keystroke goes to their communication software, to their modem, to the BBS's modem, to the BBS, to Doorway and then to Viewer. Each connection is a potential source of problems, so it is not surprising that fine-tuning is required. An important technical observation: a Folio Views infobase can be run over a modem using Doorway, but there is some fine-tuning required.

Internet access

During the life of the project the relevance of the Internet to public access to environmental legal information has changed dramatically. When the project began, most people in the environmental legal information community seemed to view the Internet as a tool used mostly by academics and computer specialists. Environmentalists and governments rarely used it. Now, one year later, the "information superhighway" is a household word in North America. Countless thousands of people are obtaining access (of various types) to the Internet every month. Governments are quickly linking their internal electronic communications networks to the Internet, and are beginning to establish information 'servers' on the Internet. FreeNets are springing up in communities across Canada, providing free local access to some Internet services. Environmental BBSs are quickly connecting to the Internet in order to provide their users with Internet E-mail addresses and other Internet services. Clearly, the Internet is undergoing a metamorphosis from a relatively obscure technical communication facility to a widely used common-denominator of electronic communications.

The burgeoning use of the Internet means a vast increase in the quantity and quality of relevant information in electronic form that the project is able to obtain and put into *ELIB*. Also, one of the BBSs that is going to host *ELIB* -- EC-INFO -- is accessible from the Internet (by Telnet). Thus, *ELIB* will be available to a much larger number of people (millions of people) without a long distance phone call. This access is limited, however, in that users will have to know that EC-INFO exists in order to go to it and find *ELIB*.

This points to the future direction of the development of *ELIB* -- to put *ELIB* directly on the Internet, so that people can get information from it using the full power of the Internet. For example, people doing a search on a topic would find relevant information in *ELIB* even if they did not know that *ELIB* existed. Putting *ELIB* directly on the Internet would also allow *ELIB* users to make full use of the Internet by obtaining information from other sources around the world, pointed to by *ELIB*.

As mentioned above, the Folio software used by *ELIB* features jump links or "hypertext." This is extremely powerful, as it allows different documents to be linked where appropriate, and it allows the creation of interactive interfaces to narrow down the information presented to the user. Fortunately, there is a new system on the Internet called the World Wide Web (WWW) (not to be confused with the Web, an environmental BBS in Toronto) that provides hypertext links across the Internet. It is quite like Folio Views, except that it is fantastically more powerful, as the linked documents don't have to be on the same computer. If *ELIB* were on the Internet in WWW format, then a reference in *ELIB* to, say, a government statutes information server on the Internet would let the *ELIB* user jump directly to that government information source.

V. CONCLUSIONS AND RECOMMENDATIONS

- 1. The project demonstrates the feasibility of creating a publicly available resource containing computerized environmental legal information in full-text form linked to card catalogue records.**
- 2. The project establishes that with the cooperation of government Crown copyright in statutes is not necessarily a barrier to a non-profit association providing public access to environmental statutes in electronic form for non-commercial purposes.**
- 3. The project shows that hypertext (jump link) software can be used to create easy-to-use, interactive systems for guiding users to relevant environmental legal information.**
- 4. The Internet is now a widely used, common-denominator electronic communications system. Information providers should make their information available on the Internet. Information seekers (often the same people as the information providers) should obtain access to the Internet.**
- 5. Governments should make the full text of statutes, regulations, reports and other government documents publicly available on the Internet. And, as an integral component of this method of disseminating information, governments *must* financially support FreeNets and other public access computer utilities.**