

NRCan Libraries As-Is Report



CANADA'S NATURAL RESOURCES

NOW AND FOR THE FUTURE

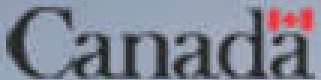
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The NRCan Library Network



Natural Resources
Canada

Ressources naturelles
Canada





Focus of Report

- Findings Findings from Federal Science e-Library
- Study from SSO Study
- Organizational Profile
- Clients
- Resources
- Status of Collections
- Services
- Issues facing libraries
- Improving efficiency and effectiveness – the libraries' response
- Observations



Summary of Findings from Federal Science e-Library (FSe-L) Study 2003

- **Study Focus**

- Only looked at the e-journal aspect
- Surveyed researchers, libraries, federal R&D funding environment and best practices in Scientific-Technical-Medical (STM) information delivery, in particular Canadian National Site Licensing Project (CNSLP)
- Departments involved: AAFC, DFO, EC, HC, NRCan and CISTI(NRC)
- There are 21,000 research professionals in the Government of Canada; over 2600 responded to the survey

- **Challenges to STM Information Supply**

- Journal prices increase per year up to 30-40% per title (+ 350% since 1988) while Federal science library budgets are constant
- Librarians are not able to meet demand, and have cancelled 18% of titles
- Federal library buying power has decreased by nearly 40%
- More than 50% of the STM journals sold are digital; Government e-journal purchases lag behind academic by 15%
- Seamless equitable desktop access is now a worldwide standard in academia and industry, however there is limited and uneven access for Government of Canada researchers



Summary of Findings FSe-L Study 2003 (2)

- **Role of Information in Research**
 - A key element of scientific infrastructure along with laboratories, technology, instruments and expertise
 - Scientists need access to published research; most read a minimum of 3-10 articles per week.
 - This information has a direct, positive impact on the quality of the work
- **e-Journal Solution**
 - Cost avoidance and better budget management (multi-year licences = predictability & stability in costs)
 - Better value for money (range of titles)
 - Productivity savings (reduce admin duplication, reduce researcher search time, reduce wait times)
 - Broader accessibility: smaller depts. that could not afford to purchase titles will be able to participate
 - Added functionality (email, alerts, etc.) and digital access (anytime, anywhere)
 - Improved scholarly communications via creation of “online community”
 - Nation-wide equitable access
 - Support for research & innovation agenda
 - Progressive advance in the virtual - digital environment



Summary of Findings from FSe-L Study (3) NRCan Researchers Speak out¹

- “... desktop computer access to as much of the library as is financially and technically feasible is the one sole key reason scientists here ... are able to keep up with their astronomical workload.”
- “In my view, ... we must have access to collections of e-journals and e-indexes that are comparable to those offered by universities. Access to journals in fields outside of our specialization is of particular value for generating new approaches and innovative methods of analysis.”
- “I would fairly say that it {desktop computer access} saves me about two full workweeks a year (at my salary, that works out to around \$3400). Now, if you were to multiply that by the number of scientists here at the GSC (I have heard a number of around 250), and assuming that each saves about the same amount of time, the total is: \$850,000.”

¹ These were comments in response to questions about the value of eLibrary services

Summary of Findings from SSO Study (Deloitte 2003) ¹



- **Organizational Profile**

- This sub-process includes approximately 41 FTEs -- 28% of the effort associated with Information Management in the Department. Over half of the FTEs associated with this sub-process reside in ESS.
- Decentralized organization-- sectors manage their own libraries
- Regional libraries managed at the branch/division level

- **Client Views**

- Increased use of Internet by library clients has led to expectations of faster service delivery times.
- Local autonomy is important to library users -- the organization must be able to respond to local users or it loses credibility.
- Researchers see library resources as an extension of their labs/offices

- **Observations**

- Escalating annual journal subscription costs, resulting in annual reduction in number of journals and a concern that as resources diminish, library services will be valued less by scientists.
- The response to continued reduction in funding has been extensive collaboration, informal and formal sharing of resources and information by library professionals within sectors, within NRCan, and within Government of Canada..
- Decentralization of library services challenges effectiveness of IM, and has led to duplication of software, services.

1 Information has not been validated by the library managers. The data is already two years hold and many changes have been implemented.





NRCan Libraries: A Definition

The NRCan Libraries and Information Centres support the mission of Natural Resources Canada through the timely access to information. Through the use of technologies and partnerships and the expertise of our staff, we provide comprehensive and cost-effective services to our clients while developing, maintaining and preserving information collections relevant to the sustainable development of Canada's mineral, forest and energy resources and landmass.





Libraries in NRCCan(1)

- Evolving Library Network consisting of 13 Libraries Managed by 4 Sectors
- ESS (25.7FTEs)
 - 1 library in Ottawa – Earth Science Information Centre (ESIC)
 - 2 regional libraries: GSC -Calgary and GSC -Vancouver
 - Library Services contracted from INRS in Quebec¹ and from DFO in Dartmouth and Sidney ²
- CFS (12FTEs)
 - 7 libraries: in Ottawa, Fredericton, Corner Brook, Ste Foy, Sault Ste Marie, Edmonton, and Victoria
 - PFC Victoria provides library space and services to Entomological Society Library
- EPS (15.5FTEs)
 - 1 library in Ottawa which provides services to CSS, MMS, EPS, ETPS, and the Executive Offices – Energy, Minerals and Metals Information Centre (EMMIC)
- ETPS (1.5FTEs)
 - 1 regional library – Library Services CETC - Varennes
 - In Devon, Library Services are contracted from Alberta Research Council and they have access to all EMMIC material

1 GSC Quebec owns a collection but services are provided through INRS

2 Operational budgets for Regional Libraries and Bookstores are managed by ESIC. Bookstore Revenues partially offset the cost of regional libraries.





Occupied Space

Ottawa

555 Booth	1040 m²
601 Booth	1037 m²
615 Booth	1716 m²
580 Booth	488 m²
Bells Corners	113 m²

Regions

CETC Varennes	50 m²
CETC Devon**	144 m²
GSC Vancouver	559 m²
GSC Calgary	500 m²
GSC Quebec	55 m²
PFC Victoria	686 m²
NoFC Edmonton	273 m²
GLFC Sault Ste Marie	537 m²
LFC Ste Foy	226.5m²
AFC Fredericton	356 m²
AFC Corner Brook	178 m²

*** Space is owned by Alberta Research Council*





Clients and Services

- **Internal**
 - Includes science and policy researchers, Corporate Services, Executive Offices and DMO
 - ~3000
- **External**
 - Includes academia, industry, federal and other governments, international clients and the general public
 -
- **Services provided**
 - Differ in scope of external clientele served and depth of collection
 - Reference
 - Document Delivery
 - Collection Development
 - Web Services
 - Catalogues
 - Database management (ETDE, GEOSCAN)
 - Depository function



Collections and Other Activities

- **Collections**

- Focussed complimentary collections with coordinated collection development and extensive resource sharing
- Some unique collections:
 - Rare books – ESIC and CFS/Ottawa
 - Mintec and Minproc – (reprints and reports) EMMIC
 - Woodlot Extension Library – CFS/NoFC
 - National Geoscience Map Collection – ESIC
 - Energy Technology Data Exchange (ETDE) national collection – EMMIC
 - Entomological Society of British Columbia – CFS/PFC
 - NRCan publications depository Collections

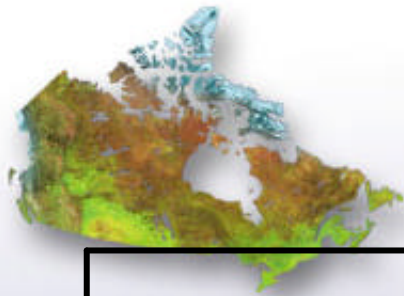
- **Other Activities**

- NRCan and ESS Photo Libraries
- Ask-A-Geologist
- Logan Legacy Fund (Canadian Geological Foundation)
- Providing IM expertise
- Ask-a-Librarian



Services to Clients (1)

- **Database Searches** of library on-line catalogues and databases done by clients or by library staff on their behalf
- **Website visits** rather than hits
- **Queries** answered by reference staff
- **Documents borrowed from NRCan Collections** by NRCan employees and by external clients
- **Documents borrowed from other libraries** for NRCan employees referred to as Inter-library Loans (ILL)
- **Current Awareness Profiles** – profiles of research interests prepared by library staff for clients; clients are then alerted to new articles or publications in their area of interest



Services to Clients (2)¹


	2002-03	2003-04	2004-05 Estimated
Database Searches	439,013	524,993	585,000
Website visits	236,182	252,960	440,000
Documents borrowed from NRCan	20,638	21,123	21,000
Queries	14,683	12,504	15,000
Documents borrowed from other libraries	7,521	7,746	7,500
Current Awareness Profiles	302	357	550

1. Based on data received, not necessarily all services

13



Current Holdings 2004



	CFS	ESS	EPS ³ & ETPS	NRCan Network	TOTAL
Journal titles	4,262	15,088	5,147		24,497
Journal volumes	122,384	408,100	158,000		688,484
Books & Reports	189,452	178,001	87,189		454,642
E-Content	9,245 ¹	1,203	483	1,635	12,566
Maps	7,441	326,183	nil		333,624
Images	25,600	547,633	nil		573,233
Reprints/Reports			163,270 ²		163,270

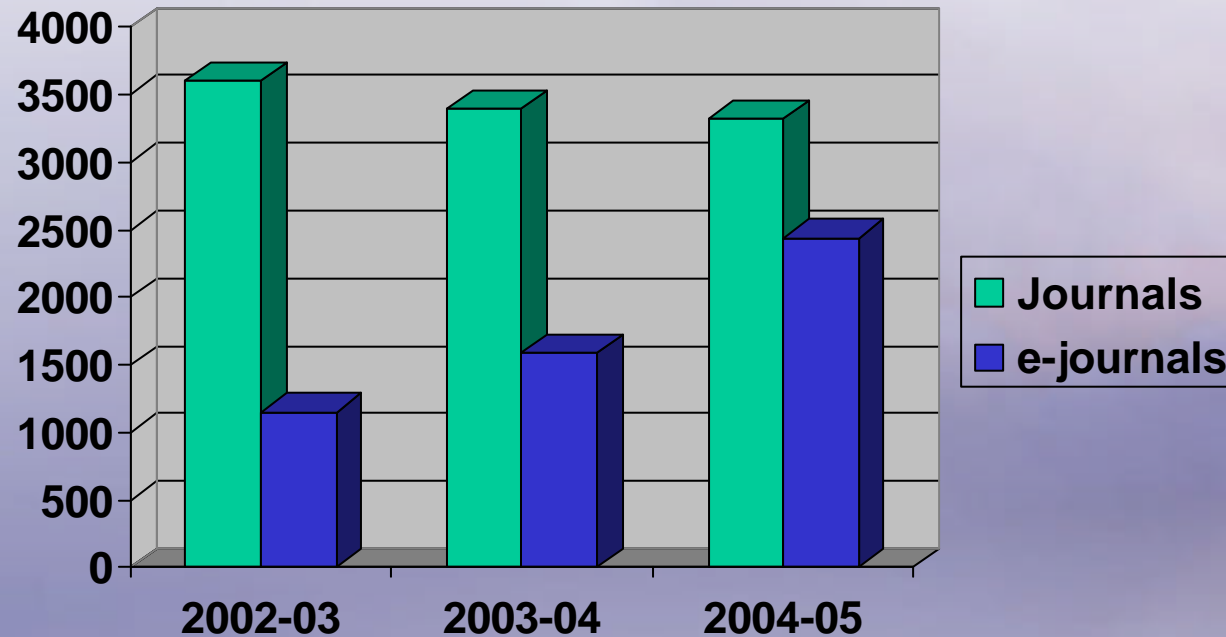
1. Access to 6.431 IT/IM @ www.books24x7.com are included
2. Back-up collections for ETDE, Minproc and Mintec databases
3. EPS provides library services to MMS, CSS, Executive Offices and ETPS in Ottawa





Trends in Journal Holdings¹

Current Titles



1. Much e-content bundled with print





Resources 2003-2004

	CFS	ESS	EPS¹ & ETPS	TOTAL
TOTAL \$K	1,512	2,592 ²	1,608	5,700
FTE	12.0	25.7	17.0	54.7
SPACE m²	2,257	3,867	1,691	7,815 ³

1. EPS provides library services to MMS, CSS, Executive Offices and ETPS in Ottawa
2. Includes contributions to DFO and INRS for Library Services in Dartmouth, Sidney and Quebec
3. This is equivalent to approximately 5 floors in 580 Booth





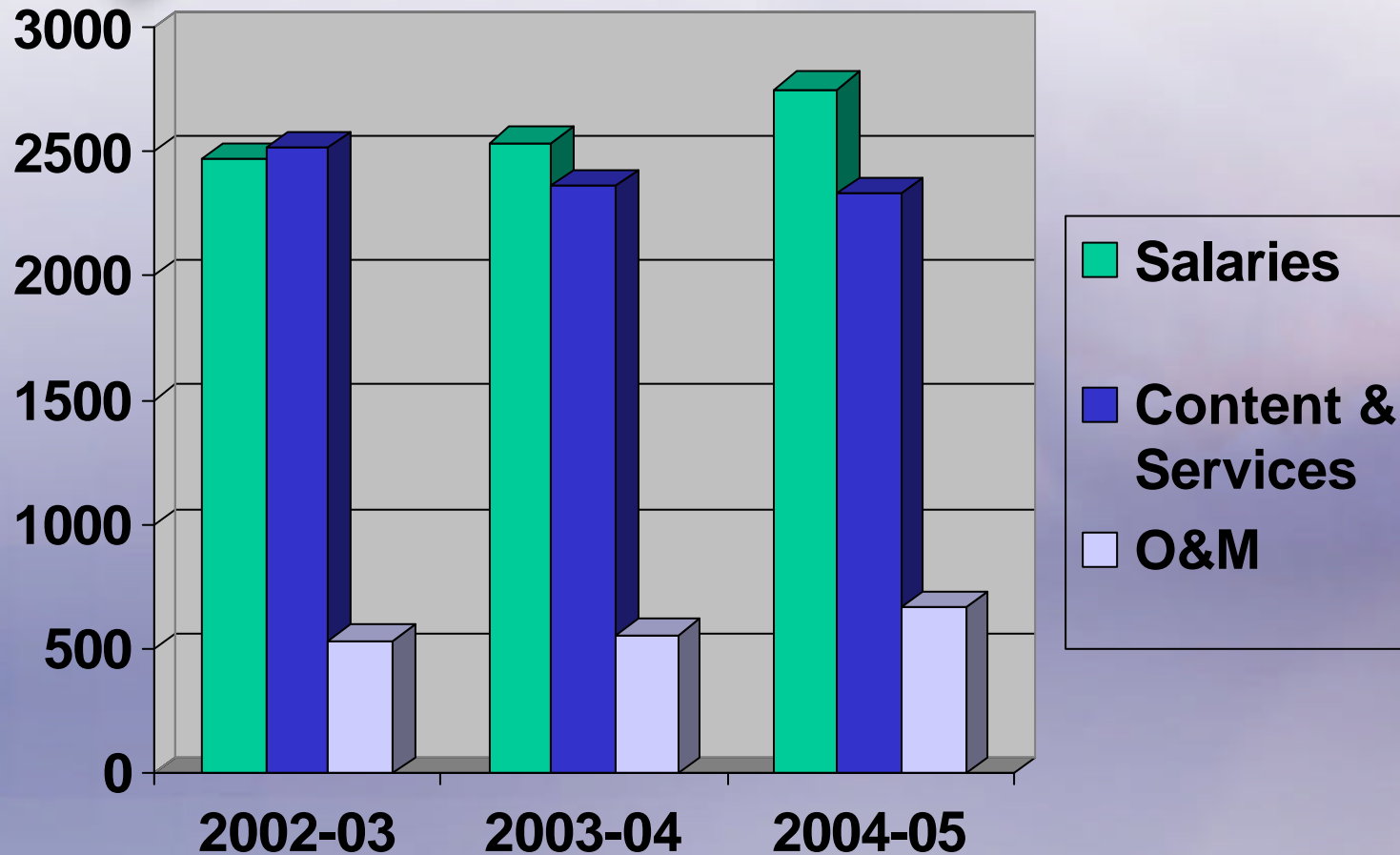
Cost Recovery

- ESS external clients are charged for document delivery; 2003-04 revenue: \$19,300
- As the National Earth Science Library, ESIC has aligned its cost recovery practices with other major national libraries: CISTI, AAFC, HC



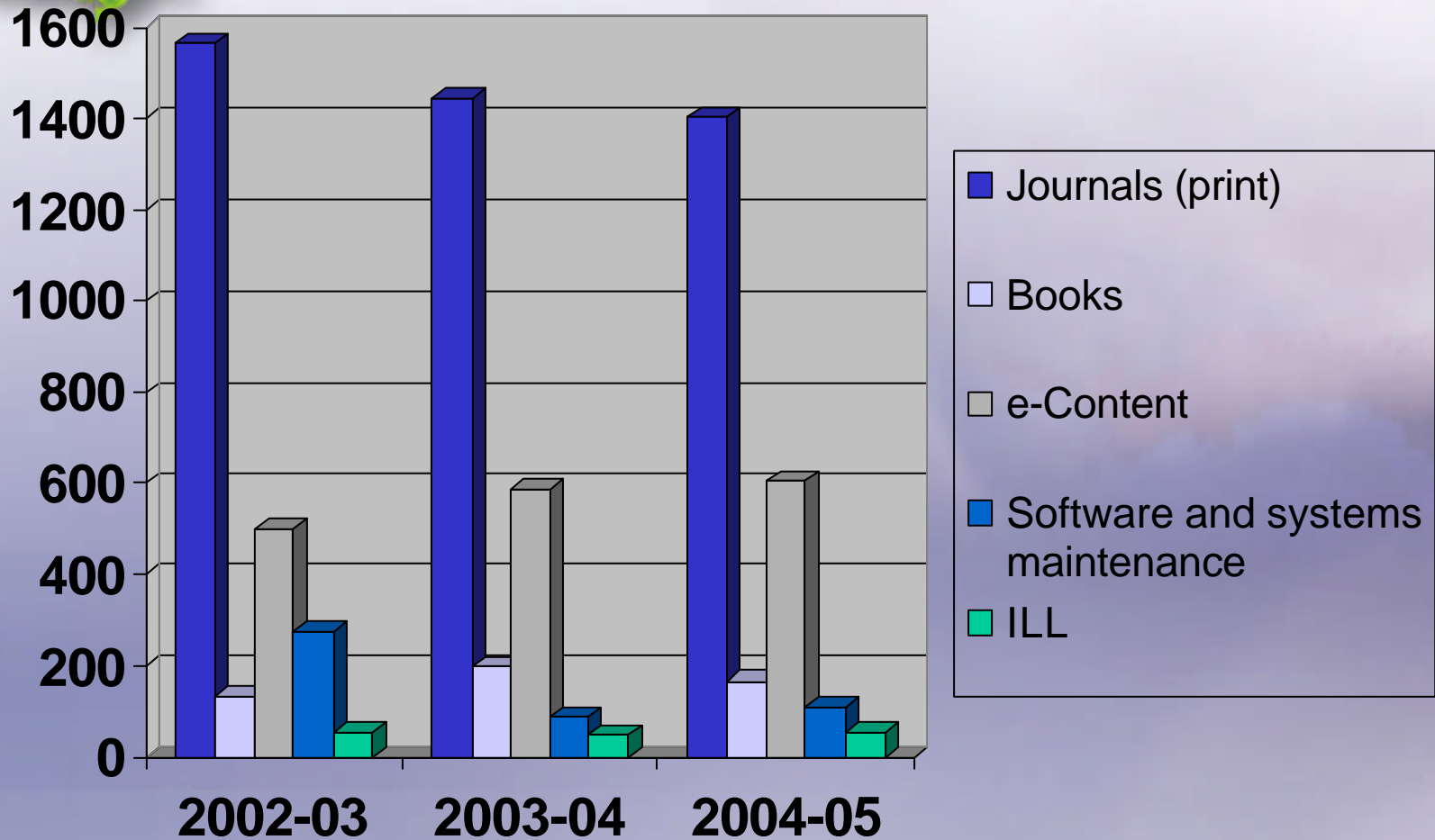


Expenditure Trends (\$K)





Expenditure Trends (\$K)





Innovative Initiatives

- **Sharing**

- Sharing numerous e-journal licenses, library system licenses, database licenses, search engines (e.g. Sirsi Licence, Unicorn, Science Direct e-journals, GeoRef & Ingenta databases.)
- Development of Sector Library Networks in CFS and ESS with seamless access to all collections across Canada.
- Resource and Information sharing via NRCan Libraries Network (joint RFP, AGM)
- Development of a library network marketing team for joint initiatives (monthly articles in the Source, IM Awareness Package)
- Shared licenses with NRCan Libraries & CFL Consortium for NetLibrary e-books.
- Shared Integrated Library system supported by ESS, CFS and EMMIC.
- GSC Calgary Library and the Gallagher (Geology) library at U of C have an agreement for special borrowing/lending privileges.
- GSC/INRS partnership provides GSC researchers in Quebec with access to e-content of all Quebec university libraries (CREPUQ) and those negotiated with CNSLP

- **Developing the eLibrary**

- Participation in the NRCan Library Gateway (NOL Activity)
- Participation in Federal Science e-Library Initiative.
- Full Text and Dynamic web applications in EMMIC (e.g. full-text e-pubs, conference website).
- Desktop access to searchable e-journal database, subject-specific database, e-books through NetLibrary are available through library internal web pages (e.g. Metafore)
- Linkages to bookstores in CFS and ESS
- CFS/Ottawa looking at new web communication tools such as a library blog



Innovative Initiatives (2)

- **Service improvements**
 - Participation in LibQual Survey (North American initiative led by American Research Libraries (ARL))
 - EMMIC developing a Portfolio Service. Client focussed reference service based on the model used at Foreign Affairs Canada.
 - Continual enhancement of STAR database to further integrate GEOSCAN with publishing services and with ESS scientific groups, and to support the e-commerce initiative with the GSC Bookstores
 - Libraries are keeping up with or leading in using and adapting information technologies. (e.g. Taxonomies, Databases, Dynamic web applications, Metasearch engines)
 - EMMIC serving 4 Sectors and Executive Offices in Ottawa
 - preparing a proposal for a completely integrated dynamic website which will manage all web services and tools, and also link them directly to Users' Profiles.
 - Already planned to integrate existing software with this new site.
 - Become the “Home Depot” for information services



Challenges

- **Costs outpacing resources**
 - Expensive electronic resources (databases, e-journals) and difficulties negotiating affordable licences.
 - Increasing cost of technological applications
- **Management of e-content**
 - Time spent maintaining the integrity of online products/content; tracking; providing access; monitoring vendor and publisher trends to stay on top of the best online resources and to facilitate clients' access to these
 - Technological variances and different vendor approaches need to be managed to offer optimum service to clients
- **Responding to expectations**
 - New research staff are accustomed to comprehensive information resources in the university environment. Libraries need to find the best offerings within their limited resources.
 - Providing value added service in an environment in which there is increasing access to library services and information via the desk top



Challenges (2)

- **Enhancing Level of Service**

- Adapting to changes and always re-inventing how we do business to remain ahead of client expectations
- Continually upgrading staff skills and providing training to clients on new resources and new modes of access
- Finding libraries' place in the IM spectrum of activities
- Serving NRCan staff in remote locations
- Aligning library resources with clients' needs in a rapidly changing environment
- Responding rapidly to ever increasing client demands Online resources are always expanding and changing...it is a challenge to be on top of the best online resources and to facilitate the clients' access to these.
- Establishing more effective linkages with departmental publishing units
- Delivering high quality service with a less stable staff complement as a result of increased use of terms and casuals

Opportunities



- **Embracing Service Transformation**
 - Single Library Gateway
 - More than e-library and single access to catalogues
 - Truly seamless and transparent access to all information holdings and services from a dynamic website (this will eliminate need for duplication)
 - PortFolio Services/Account Representative Approach
 - Aligning clients-services-collections-library specialist
 - Just-in-time services
 - On-demand publications rather than developing just-in case collections
 - Creating the Canadian Natural Resource collection
 - Within NRCan? Within 5NR?
 - Accessible to all
 - Using GIS technology to link library information resources to geographic locations across Canada

- **Responding to Client Needs**
 - Ongoing dialogue with Client Advisory Committees to ensure alignment of services with client needs



Opportunities (2)

- **Building Partnerships**
 - Joint and shared services and tools with NRCan / 5NR / Alliance of S&T Libraries
 - Participation in national and international library networks
 - The Federal Science E-Library initiative – the provision of more on-line products to clients at reduced cost
 - Continue to enhance the NRCan libraries gateway to access regional, national and global resources
- **Sharing and Coordination**
 - Share expertise and learn from the best practices and experience of other libraries through network initiatives
 - Increase coordination of technical services, vendor licences, e-journals, software licences
- **Adopting New Technologies**
 - Allow seamless access and service for clients
 - Move towards Open Access in publishing presents an opportunity for reducing cost of information supply
 - Open Access provides an opportunity to build linkages with internal staff (e.g. editors, authors)

Observations



- **Data**

- Need to better exploit metrics provided by database vendors to get a more complete picture of demand and usage
- It is challenging to show the true value of the services the libraries offer – how do you put a value on:
 - an article quickly secured for a researcher that was critical to his investigations,
 - the time saved searching in a wide variety of available resources
 - evaluation of tools by librarians and provision of easy access
 - the information provided to a manager that was needed for decision making.
- Need for departmental approach to metrics that would facilitate for easy comparisons.
- Need to put in place a common measurement tool for all NRCan Libraries; the Library Quality Survey may provide benchmarks needed to design the CMT

- **Systems**

- Much work has been done in standardizing library systems...more could to be done;

Observations (2)



- **Resources allocated**

- Budgets are not keeping up with the increasing costs of e-content
- Vendors still remain inflexible on licence agreements. This limits the extent to which a single electronic copy can be accessed by all NRCan users.
- Need to continue building partnerships with others (e.g. Federal e-Library, ARL)
- As technology enhances access to our collections, the need for multiple physical sites/collections should be examined.
- Libraries occupy ~7764m² which costs NRCan \$2.6M per year . This represents 2.6% of NRCan occupied space.
- We have 55 FTEs in an environment that is becoming increasingly complex; the nature of their work is changing, this has implications for organizational design, program delivery and training requirements.

- **Organization within NRCan**

- Science libraries are an integral part of the science programs and increasingly a key element in the delivery of programs and policy development.
- NRCan libraries should continue to develop a more integrated approach, building on what they have already accomplished.
- NRCan libraries should investigate potential benefits of sharing information with science programs for inclusion in their respective databases.



Observations (3)

- NRCan employees – whether in policy or scientific research, and depending on their work location and sector – are not able to access all of the department’s information resources
- Why? And What needs to change to accomplish that goal?
 - Need for increased purchasing power/influence over the publishers of e-content
 - Need for integrated, seamless and easily accessible information to ensure success of an integrated science program
 - Need to define and/or look at options for the “Library of the Future”
- Whether the integration of information resources needs to be real or virtual requires further study



In Summary

- NRCan Libraries have a long history of collaboration and sharing
- They have taken advantage of new technologies as they become available and are building their e-content in so far as funding permits
- As an integral part of the science infrastructure both within NRCan, the Federal Government and Canada, they must remain responsive to clients (internal and external) if they are to contribute to Canadian R&D
- Status quo will see a continuing reduction in their buying power and make them less able to provide adequate services to their clients
- NRCan has the opportunity to lead the Federal Government to the next level in the delivery of information resources to its clients, both internal and external.