



State of the Holdings

The Condition of the Holdings at Library and Archives Canada

Stewardship Branch
Holdings Management Division

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Introduction

In July 2012, Library and Archives Canada (LAC) released the first public report on the state of its analogue holdings. The scope of this second report has now grown to include information on LAC's digital holdings and the potential risks associated with their ongoing preservation, as well as the strategies undertaken to minimize these risks.

The aim of these reports is to provide Canadians with an overview of LAC's holdings, the major challenges to their preservation, and steps LAC is taking to meet these challenges.

These annual reports summarize previously highlighted ongoing or completed projects, as well as new initiatives. Certain features are represented in each report, such as the Confidence Dashboard: Knowledge of the Holdings – Overview (Appendix A) and Facilities and Holdings – Overview (Appendix B), to gather insights and facts about our collection on a continuing basis.

LAC continues to value the feedback from peer organizations and the Canadian public regarding the preservation and management of the holdings. Should you wish to comment on the report, provide feedback or recommendations, you can do so by emailing communications@bac-lac.gc.ca

Scope of LAC's Analogue Holdings

Analogue holdings of LAC include both published and archival documentary heritage from government and private sectors. Along with the traditional books and textual documents, LAC also holds multimedia material in various formats, such as photographic, artistic, cartographic and audiovisual holdings. LAC holds approximately 430 km of analogue documentary heritage for the use of Canadians. More information about the scope of LAC's analogue holdings can be found in the first State of the Holdings report (July 2012).

Scope of LAC's Digital Holdings

LAC has been acquiring and preserving unpublished digital information resources (UDIRs), since 1973, when the Machine Readable Archives Division was created "...for the collection, preservation and servicing of machine readable (computer) records of historical value produced by the federal government and those of national significance created in the private sector."¹ Although organizational responsibility for the acquisition of these materials has been decentralized throughout the institution since 1986, LAC has continued to acquire digital material over this period.

LAC has been collecting and maintaining published digital information resources (PDIRs) since 1995 when the Electronic Publication Pilot System was developed. Published holdings fall into three categories. The first includes digital objects that have been acquired on a physical medium such as a CD or DVD and no analogue or print copy exists for that object, e.g., music, software, audiovisual material, etc. The second category includes digital material that accompanies a published analogue object as supplementary material on a CD or DVD, e.g., a disc that is placed in the sleeve of a book, multimedia kits, etc. The third category encompasses

¹ Public Archives of Canada. 1981. *Machine Readable Archives: Catalogue of Holdings*, p. 3.

published digital material that has been virtually acquired as part of LAC's e-publications, e-theses or Web harvesting applications.

The complexity of born-digital holdings is a challenge that all cultural institutions are facing. Ingest, authenticity, security, storage servers, access and migration are a few of the key activities and elements that digital holdings require to ensure their long-term preservation and future usability.

Identifying Risk

Project Updates

The following provides a progress report on the projects highlighted under “Identifying Risk” in the State of the Holdings, 2012.

Institutional Knowledge

In lieu of an integrated collection management system, LAC continues to look for ways to further awareness of the state of the collection by prioritizing and planning preservation projects based on institutional knowledge and the use of various stand-alone databases.

Collection Moves (395 Wellington, Collection Storage, Sprinkler Refit)

After a re-scoping exercise due to budgetary restraints and deadlines, the decision to pack and move collection material during the Sprinkler Refit project was re-evaluated. Staff had hoped to gain further insight as to the condition of the collection, as well as undertake some rehousing activities as part of the project scope. Taking the re-scoping of the project into account, LAC refocused by implementing trusted risk management strategies. To date, 13 of the 15 floors that hold collection material have been retrofitted without incident, and staff is still on target to meet the project deadline.

Surveys (Textual Records (Government and Private) 2008–2011)

After studying the first and second pilot results for large-scale surveying in consultation with Statistics Canada, LAC will refocus the survey program to concentrate on targeted censuses and surveys by directing efforts on a specific media, container type, or collection/fond. With input from Statistics Canada, LAC has developed its own survey tool kit.

Censuses (Microfilm Masters in the Preservation Centre, 2011)

Since the completion of the initial census of microfilm masters housed at the Preservation Centre, LAC has developed an overarching plan to gain an in-depth knowledge of all microform collections. The second phase of this project, to begin in April 2013, will detail information on the condition and the physical control of microform held in all LAC locations.

Censuses (B10L² Photographic Albums, 2011)

With the census complete, training sessions and the prioritization process under way, staff has begun work on the photographic albums. Guidelines for various rehousing and stabilization activities are being developed as the project progresses. Staff is presently focusing their efforts on the rehousing and treatment pilot project of 18 photographic albums from the Indian and Northern Affairs collection. The results of the census will be integrated into the long-term preservation plan.

² B10L boxes are very old, acidic, and deteriorating. They are therefore not suitable for long-term storage or for client consultation.

Censuses (Aboriginal Language Religious Texts, 2011)

Upon completion of the census of aboriginal language religious texts housed in the Rare Books Collection, it was determined that 62 of the 332 volumes required conservation treatment to repair damage and stabilize weaknesses. The volumes were grouped according to covering material and treatment was begun. LAC book conservators have treated all items with leather coverings (27 volumes), and are now treating cloth and paper covered items. It is estimated that the project will be complete by the end of fiscal year 2012–2013.

Preservation Management of LAC Holdings

Strategies and Programs

Institutional knowledge, collection moves, surveys and censuses assist LAC in gathering information about the condition of holdings and in implementing appropriate responses that encompass some of the functions of holdings management outlined in the most recent report. LAC continues to preserve the collection through additional means.

With changing technologies, new best practices, and the diversity of collections, LAC must continually update, eliminate or create new programs that enable us to manage the collection.

This section summarizes several new and ongoing strategies, programs and risk management initiatives.

Migration Strategy and Action Plan for Legacy Digital Storage Media and Information Resources 2013–2016

State of the Digital Legacy Holdings

During 2012, LAC analyzed the legacy digital collection, and developed and drafted a migration strategy. The following is a brief overview of the Migration Strategy and Action Plan for Legacy Digital Storage Media and Information Resources 2013–2016, approved in January 2013.

Material in Scope for this Strategy and Action Plan

The scope of this migration strategy and action plan pertains to three categories of unpublished digital information resources (UDIRs) that are being managed by LAC as a digital collection or fonds of archival material. All of the categories pertain to information resources that have been acquired or are being preserved by LAC on a legacy physical carrier such as a computer disc, computer tape or similar storage device.

The holdings identified below only include those that are archival. They are being addressed at this time because there is enough evidence to indicate that these information holdings are currently at a risk of being lost unless they are immediately migrated to new storage technologies.

The categories are as follows:

- A collection or fonds of UDIRs that have been acquired and processed, and are stored on various 9-track tapes, 8 millimetre helical scan tapes (8mm), Digital Linear Tape (DLT) and Linear Tape-Open (LTO) tapes as preservation copies in the LAC Preservation Centre. These tapes contain all of the institution's preserved digital information holdings that have been acquired from the federal government and private sector donors since the early 1970s;

- A collection or fonds of UDIRs that are being held “on deposit”³ by LAC from various private sector donors. These holdings are stored on a variety of formats;⁴
- A collection or fonds of UDIRs that have been acquired on various legacy physical supports, but remain unprocessed as part of LAC’s registration and accession backlog of digital material.⁵

Current State

LAC has been providing holdings and preservation management services on its legacy holdings since 1973. Holdings that were previously acquired and processed by LAC need to be migrated to new preservation carriers, as some of these carriers are now obsolete, or close to it. Over the past two years, tape reading and data migration tests have determined that many of the 9-track tapes are now in poor condition because their polyurethane-based binder system is deteriorating from a process known as hydrolysis. It is estimated that up to 15% of the 9-track tape collection is affected by this process. This situation is critical as these 9-track tapes hold the initial preserved version of LAC’s digital collection.

Technology obsolescence is also a factor to an already critical situation. The tape drives that were used to copy the material to 9-track, 8mm and DLT tape are no longer being manufactured. LAC currently has a limited supply of operational drives that can be used to migrate these holdings to a new storage environment. The hardware and software associated with these drives must be installed on old personal computers that are also becoming obsolete. If the drives and computers break down, it is very difficult and expensive to have them serviced and repaired.

The following table provides a general summary on the condition of the digital collection within scope. It identifies any mitigation activities that are currently under way, and provides information about the state of the holdings.

³ “On deposit” refers to holdings that are electronically or physically transferred to LAC, but the legal ownership of the records is still held by a third party. LAC seeks approval from the donor to migrate digital records to an approved format. This avoids issues of obsolescence and ensures accessibility if/when they are legally transferred to LAC. Records that are not legally owned by LAC are not available to the public.

⁴ The following legacy physical carriers are frequently encountered during the acquisition function and many of these formats reside in LAC’s backlog of unprocessed digital material, or material that is on deposit: 8”, 5” and 3.5” floppy discs; DDS/DAT tapes; IBM 9-track, 3480 and 3490 tapes; QIC, MC and DC data cartridges; CDs and DVDs; ZIP and JAZ discs, etc.

⁵ See footnote 4.

Condition Report for Digital Holdings by Container Type

Legend

Good: The material has essentially no damage.

Fair: The material has minor damage that does not impede its main intended use.

Poor: The material has significant damage and requires careful use and should be treated.

At Risk: The material has major damage that restricts its use, or is quickly becoming obsolete and therefore treatment action should be taken.

Container Type	Total Number of Containers*	General Statement Regarding Condition	Mitigation	Concerns
9-Track Tape	5,055	At Risk	Appropriate storage environment ⁶	Hydrolysis of polyurethane backing
8mm Tape	2,822	At Risk	Appropriate storage environment	Hydrolysis of metal backing
DLT Tape	128	Poor	Appropriate storage environment	How information was migrated
LTO Tape	1,303	Good	Appropriate storage environment	None
Total	9,308			

The strategy and action plan states “at the present time, there is no quick fix to the situation the institution faces with respect to the preservation of UDIRs that have been acquired since 1973.” LAC has started the implementation of a multi-year migration plan for these legacy holdings.

Audiovisual Migration Strategy

The LAC Audiovisual Migration Strategy establishes a systematic, risk-based and cost-effective approach to the migration of LAC’s extensive collection of analogue audio and video content to digital file formats over an initial 10-year period from 2009 to 2019.

The prioritization of content for digitization is primarily based on the format’s level of technological obsolescence, reflecting chronic struggles with equipment and expertise availability. Factors such as partnerships, the availability of private sector copying services, historical value, physical condition, client demand, accessibility, and the ability to migrate recordings using mass digitization approaches were also considered.

To date, 41,000 hours of content has been digitized. Several formats have been copied in their entirety including: D2 videotapes; digital audio tapes; mini discs; wire recordings and a variety

⁶ LAC currently stores masters at 18°C and a relative humidity of 40%.

of dictation formats. The strategy is now focused on quad and ¾ inch videotapes, and reel-to-reel audio tapes. See Appendix C, Conservation Labs.

Motion Picture Film Migration Strategy

LAC's conservation copying activities for motion picture film are in the process of going digital. A strategy for the digitization of motion picture film has been approved in principle and provides guidance on prioritizing the collection for copying and establishes LAC's digitization parameters. LAC is starting to procure the infrastructure required.

In anticipation of the shift to digital copying, LAC has combined its Motion Picture Film Laboratory and its Video Laboratory into one area, now called the Moving Images Laboratory. Technologies in these fields are converging and this combined laboratory allows LAC to leverage the use of equipment and expertise.

Collection Emergency Preparedness Program

In autumn 2012, LAC updated and revised its Collection Emergency Preparedness Program. The Holdings Management Division has created a comprehensive program that includes an updated disaster management guide, a restructured Collection Response and Recovery Action Team (CRRAT), a comprehensive training plan, and employee engagement strategies across the institution. Over the next two years, LAC will undertake a prioritization of holdings exercise that can be used to aid in salvage and recovery and future risk assessment plans.

Within the new centralized program, LAC in the National Capital Region (NCR) will administer and launch training sessions for staff at the Regional Service Centres within the next two years. This training was last offered to the regions in 1999. Since then, LAC has undergone several reorganizations and staff changes.

The Stewardship Branch is committed to ensuring that the emergency preparedness program remains relevant. The program is reviewed, revised and updated annually by CRRAT members and emergency contact information is revised quarterly. The program and direction are approved annually by the Director of the Holdings Management Division and the Director General of the Stewardship Branch.

Environmental Monitoring Program

The majority of LAC's holdings spend most of the time in storage. Temperature and relative humidity levels in storage spaces have a cumulative effect on the projected lifespan of all library and archival materials. LAC is developing a new strategic approach to monitoring environmental conditions in all 14 satellite buildings, especially those facilities with limited environmental controls. Standardized empirical data will be collected, compared and analyzed to gain an increased knowledge about collection storage spaces, which will assist LAC in making sound management decisions. Although pest management is part of monitoring the environment in buildings, it is not included in this program as it predates this initiative. Integrated Pest Management is a well-functioning program within LAC. See Appendix D, LAC Buildings: Environmental Monitoring Overview.

Risk Management Framework

LAC continues to develop its approach toward managing risk to the collection, which will further enable us to make informed decisions and allocate resources where the need and

benefit is greatest. In 2010, LAC created the first draft of the Risk Management Framework (RMF). This overarching look at our analogue collections and facilities provided us with an overview of the areas where we needed to focus further attention and provide recommendations for mitigation strategies. The next phase in analyzing the RMF will entail an explanation on the rationale behind the decisions made regarding the identified gaps. These will become priorities for future plans.

Further research in the field of risk assessment and evaluations are ongoing so that specific risk assessments of our holdings can be prioritized and undertaken. The assessments will determine where the greatest risks are, the potential for loss to the collection (monetary, historical, societal, use, etc.) and what measures need to be developed and implemented to reduce the risk. With the information collected, LAC will then build holdings management plans.

Conservation Treatment

As noted in the State of the Holdings report of July 2012, a document's inherent vice (e.g., acid hydrolysis of cellulose) and added external factors (e.g., mould) have a detrimental effect and appropriate accommodation measures alone cannot repair the continuing damage.

Conservation treatment involving mechanical or chemical intervention can enhance or sustain an object's original attributes, and can prolong the usable life of an object, making it accessible into the future.

Since April 2012, paper and photographic materials and works of art from LAC's holdings have gone through the conservation labs to support various programs such as digitization, loans, travelling exhibitions, client access, acquisition, and the preservation plan. Treatments can range from mould remediation to facilitate immediate access, to minor repairs for stabilization purposes, to full treatments that conserve the object's original intent.

Treatment of audiovisual and motion picture film materials includes inspection and repair in preparation for conservation and access copying. The complexity of some documents requires expertise from the various media labs, collection management, archivists and librarians resulting in a collaborative approach to treatment projects. See Appendix C, Conservation Labs.

Preservation Awareness (2012–2013)

To ensure that the collection is safely accessed and preserved, staff is aware of the need for continued knowledge on the care, handling and storage of the holdings. Best practices in preventive maintenance include the continuous training of staff whether that is a new training session, a refresher course, or a hands-on workshop. In addition to care and handling of the collection, staff must be equipped with proper training to ensure their own personal safety. Appendix E, Preventive Training, outlines the internal training that staff has completed during fiscal year 2012–2013.

New Directions

Regional Service Centres – Stewardship Approach

The Regional Service Centres (RSC) of Library and Archives Canada form a network of regional storage facilities across Canada that manages business and archival records on behalf of federal government departments and agencies. By 2015, the five RSCs that house records of business value will be closed, and three (Atlantic, Manitoba and Pacific) will remain in operation, with a mandate for the preservation of archival records and personnel files.

With the new approach, the Stewardship Branch will incorporate the holdings at the RSCs into the collection management inventory system. In addition, the Stewardship Branch will outfit and support an environmental monitoring program anticipated to be in place during 2013. Since 2011, LAC has incorporated pest monitoring in the Atlantic, Manitoba and Pacific RSCs.

Priority Actions

The following are LAC's priorities for action in 2013–2014:

Policy Instrument Development

- Develop the Stewardship Policy Framework.
- Finalize the Conservation Treatment Directive for analogue holdings, excluding audiovisual material.
- Update the Risk Management Framework.

Information Gathering

- Continue to concentrate on gaining a greater understanding of the parts of the collection where knowledge about the state of the holdings requires further elaboration (e.g., census of the globe collection in 2013).
- Continue to develop the survey program by identifying and prioritizing survey projects that will filter into the long-term preservation plan for both maintenance and conservation treatment work.

Implementation

- Continue preparation for the move to the Collection Storage Facility (CSF).
- Report on actions taken based on recommendations from the Audit of Inventory Management.
- Continue the implementation of the Audiovisual Migration Strategy.
- Initiate the Motion Picture Digitization Program.
- Implement the Digital Legacy Migration Strategy.
- Continue the integration of RSCs in holdings management strategies.
- Continue conservation and maintenance work on the B10L photographic album project.
- Continue ongoing conservation work on treaties written using iron gall ink which were identified during a survey in 2006;
- Provide custom enclosures for bound rare volumes to improve the level of preservation protection.

Training

- Continue staff development in preventive maintenance.

Appendices

Appendix A – Confidence Dashboard: Knowledge of the Holdings – Overview

The following tables provide an update on LAC's confidence levels about its knowledge of the condition of specific holdings.

Archival Holdings Details – National Capital Region (NCR)*

Material Type	Confidence Level
Archival microfilm (masters)	Low
On deposit/Registry/Backlog	Low
Cartographic	<i>Medium</i>
Documentary art, photography and philatelic	<i>Medium</i>
Music manuscript	<i>Medium</i>
Private archives	<i>Medium</i>
Audiovisual	High
Government archives	High
Literary manuscript	High

*holdings in Ottawa, Gatineau and Renfrew areas

Archival Holdings Details – Atlantic Regional Service Centre (RSC)

Material Type	Confidence Level
Audiovisual	Low
Cartographic	Low
Electronic and digital	Low
Architectural plans ⁷	<i>Medium</i>
Ledgers	<i>Medium</i>
Photographic	<i>Medium</i>
Textual	High

Archival Holdings Details – Manitoba RSC

Material Type	Confidence Level
Audiovisual	Low
Cartographic and architectural plans	<i>Medium</i>
Microfilm	<i>Medium</i>
Textual	High
Ledgers	High
Photographic	High
Documentary art	High

⁷ Technical drawings are included with architectural plans.

Archival Holdings Details – Pacific RSC

Material Type	Confidence Level
Textual	<i>Medium</i>
Cartographic and architectural plans	<i>Medium</i>
Audiovisual	High
Ledgers	High
Photographic	High

Published Holdings Details – NCR

Material Type	Confidence Level
Canadian theses (film and fiche)	Low
Microfiches	Low
Microfilms	Low
Unprocessed holdings	Low
Rare books	High
Canadian Official Publications (COPs) – provincial	High
COPs – federal	High
Foreign International Official Publications	High
Juvenile	High
Monographs	High
Newspapers	High
Periodicals	High
Audiovisual	High
Philatelic	High

Appendix B – Facilities and Holdings – Overview

Preservation Centre (PC), Gatineau, Quebec

Description of Holdings

Archival: Registry (unprocessed) and permanent material: government and private textual; various media types (photographic, artistic, audiovisual); electronic and digital records

Published: Rare books; Library of Congress monographs and Canadian Official Publications (COPs) federal preservation copies

Circulation Statistics: January to December 2012⁸

Request Type	Containers Circulated ⁹
External (for client consultation)	30,028
Internal (for processing)	31,393
Total containers	61,421

2012 Yearly Review

- Selected monographs and COPs material was relocated in vault 42 and stored using high-density storage capabilities related to the CMS-HD new functionalities, in preparation for the move of collections to CSF;
- Preparing a list of government registry textual material (unprocessed) that can be relocated to CSF;
- Segregating government registry media material (unprocessed) to determine extent and best accommodation fit;
- Continue work on processing Registry backlog;
- Due to aging systems, a mechanical refit to cold vault 13 has begun and is anticipated to be completed by March 2013. Temperature set point of the vault will be adjusted from -18°C to -10°C ensuring a continued cold, stable environment that will be more sustainable in the future. Mechanical refit to cold vault 14 is planned for next fiscal year.

2011 Yearly Review

- Published monographs and COPs (federal) preservation copies to move to CSF;
- Review of registry materials in vaults under way (accessioning backlog and disposition).

⁸ Presently, LAC is not circulating preservation copies of published heritage material due to the impending move to CSF. These statistics include archival and rare books only.

⁹ A container may hold many items (e.g., box, folder, etc.) or a single item (e.g., folder, custom housing, frame, bound volume, etc.).

Nitrate Film Preservation Facility (NFPF), Ottawa, Ontario

Description of Holdings

Archival: Motion picture film and photographic negatives

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	183
Internal (for processing)	276
Total containers	459

2012 Yearly Review

- 1,134 panoramic images of military regiments were digitized at NFPF as part of Portrait Digitization Project and will be made available using JPEG2000 technology.

2011 Yearly Review

- Portrait Program digitization project under way on site (preservation-quality scans reduce handling of originals).

Renfrew Archives Centre (RAC), Renfrew, Ontario

Description of Holdings

Archival: Government and private textual documents

Published: Cartographic

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	24,797
Internal (for processing)	4,323
Total containers	29,120

2012 Yearly Review

- Disposition memo has been signed; LAC will ask several cultural institutions to review content and determine whether the deselected material meets their acquisition mandate.

2011 Yearly Review

- Department of National Defence files disposition project—identification of material complete (200 bays), disposition memo sent to the Librarian and Archivist of Canada.

Collection Storage Facility (CSF), Gatineau, Quebec

Description of Holdings (once operational)

Archival: Second World War personnel service files and government and private textual files

Published: Monographs, serials and official publication preservation copies; print newspapers

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	N/A
Internal (for processing)	N/A
Total containers	N/A

2012 Yearly Review

- Projected completion of interior fit up is spring 2013;
- Move of collections to CSF is scheduled to begin in June 2013.

2011 Yearly Review

- Published monographs and COPs (federal) preservation copies to move to CSF;
- Review of registry materials in vaults under way (accessioning backlog and disposition).

395 Wellington Street (PANL), Ottawa, Ontario

Description of Holdings

Published: Library of Congress monograph preservation copies; music, newspapers, monograph, serials and official publication service copies; reference and microforms

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	28,146
Internal (for processing)	48,842
Total containers	76,988

2012 Yearly Review

- LAC integrated the Indian Collection of monograph materials into its holdings where needed; the remaining materials will be offered as one collection to a university;
- Retrospective separation of published preservation and service copies is ongoing;
- Intellectual and physical preparation of newspaper collection for move to CSF completed October 2012.

2011 Yearly Review

- A CSF Preparation of the Collection team is working on retrospective separation of published preservation and service copies;
- In autumn 2011, a variety of music audio formats were moved to the Preservation Centre; approximately 130 linear metres of material, plus other items to follow; shelved in various vaults according to space and environmental requirements.

Jean Edmonds Tower (JET), Ottawa, Ontario

Description of Holdings

Published: Library of Parliament and Library of Congress monographs; serials

Circulation Statistics: January to December 2012

Circulation statistics for JET are included in the statistics for the 395 Wellington building (see previous).

2012 Yearly Review

- The segregation and preparation of the collection of preservation and service copies was completed September 2012. Preservation copies will be moved to CSF and service copies will be moved to 395 Wellington building;
- Library of Parliament transfer collection packed and shifted to gain space for separation project.

2011 Yearly Review

- LAC will vacate JET when CSF is ready for occupancy;
- CSF team has not yet separated preservation copies and service copies of retrospective material. Service copies will be returned to 395 Wellington building, preservation copies will go to CSF.

79 Bentley Avenue, Ottawa, Ontario

Description of Holdings

Archival: Government textual documents

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	0
Internal (for processing)	0
Total containers	0

2012 Yearly Review

- Newspapers were prepared, boxed and updates to catalogue completed and relocated to 151 Bentley Avenue;
- Archival collections from Leeds Avenue are now housed in 79 Bentley Avenue.

2011 Yearly Review

- LAC will vacate Bentley Avenue buildings when CSF is ready for occupancy.

151 Bentley Avenue, Ottawa, Ontario

Description of Holdings

Published: Single issue and bound print newspapers

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	3
Internal (for processing)	2
Total containers	5

2012 Yearly Review

- Newspapers were prepared, boxed and updates to catalogue completed.

2011 Yearly Review

- LAC will vacate Bentley Avenue buildings when CSF is ready for occupancy;
- All materials physically and intellectually prepared and boxed for move to CSF.

Macoun (Pink Road), Gatineau, Quebec

Description of Holdings

Published: COPs (provincial and municipal) preservation copies; Foreign International Official Publications (FIOPs); United Nations Educational, Scientific and Cultural Organization (UNESCO)

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	0
Internal (for processing)	0
Total containers	0

2012 Yearly Review

- FIOPs material boxed but still at Macoun building;
- COPs (territorial, provincial and municipal) preservation material is physically and intellectually prepared and boxed; ready to move to CSF;
- LAC will keep one preservation copy at CSF and service copies have been offered to the provinces;
- LAC acquired 2,100 boxes of Court of Exchequer material dating from 1768 to 1970.

2011 Yearly Review

- Macoun building will be vacated when CSF is ready for occupancy;
- FIOP materials being shipped to the Quebec Regional Service Centre (QRSC) for storage, awaiting deselection approval;
- COPs (provincial and municipal) preservation copies will move to CSF;
- Provincial and territorial official publications currently included in deselection; briefing note on proposal to retain and continue to collect one preservation copy only.

1255 Leeds Avenue, Ottawa, Ontario

Description of Holdings

Archival: Government and private textual

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	90
Internal (for processing)	90
Total containers	180

2012 Yearly Review

- LAC has prepared, boxed and removed its holdings from Leeds Avenue. Holdings temporarily relocated to 79 Bentley Avenue and Renfrew until CSF is ready for occupancy.

2011 Yearly Review

- Leeds Avenue building must be vacated by December 2012;
- Government textual to move to CSF;
- Private textual to move to Renfrew.

Regional Service Centre – Pacific (PRSC), Burnaby, British Columbia - Tier 3¹⁰

Description of Holdings

Archival: Registry (unprocessed), accessioned (unprocessed) and permanent material: government textual; various media types (photographic, audiovisual); ledgers; maps and architectural plans; electronic and digital records

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	1,144
Internal (for processing)	0
Total containers	1,144

The PRSC has a high rate of circulation requests for Aboriginal Affairs and Northern Development Canada (RG10) holdings

2012 Yearly Review

- Integrated Pest Management program implemented in winter 2011.

Regional Service Centre – Manitoba (MRSC), Winnipeg, Manitoba - Tier 3

Description of Holdings

Archival: Registry (unprocessed) and permanent material: government textual; various media types (photographic, artistic, audiovisual, microfilm)

Circulation Statistics: January to December 2012

¹⁰ TIER 3 = Poor Quality: Space not appropriate for storage of collection material. Significant fluctuations in temperature and humidity in relation to outdoor conditions: usually >25°C but can reach 30°C+ in some buildings; RH ranges 20% to 75%.

Request Type	Containers Circulated
External (for client consultation)	760
Internal (for processing)	0
Total containers	760

2012 Yearly Review

- The RSC in Manitoba continues to integrate archival holdings of the former Prairies-Northwest RSC in Edmonton, Alberta into its archival holdings. Preservation issues are being addressed as they are encountered;
- Integrated Pest Management program implemented in winter 2011.

Regional Service Centre – National Capital Region (NCR RSC), Ottawa, Ontario

Description of Holdings

Archival: Government textual; personnel files

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	26
Internal (for processing)	0
Total containers	26

2012 Yearly Review

- Plan and costing exercise is still under way.

2011 Yearly Review

- Currently developing enclosure and move plan for Second World War personnel files.
- Will be moved to CSF when building is ready for occupancy.

Regional Service Centre – Quebec (QRSC), Québec, Quebec

Description of Holdings

Published: Monograph preservation copies, FIOPs; loose-leaf updates

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	N/A
Internal (for processing)	N/A
Total containers	N/A

2012 Yearly Review

- Deselection approval received for FIOPs and loose-leaf, and process under way.

2011 Yearly Review

- FIOPs and loose-leaf update material is awaiting deselection approval;
- Preservation copy materials will go to CSF when it is ready for occupancy;

- Monographs – preservation copies (new items) will continue to be boxed and shipped to Québec for storage until CSF is ready for occupancy.

Regional Service Centre – Atlantic (ARSC) Halifax, Nova Scotia - Tier 3

Description of Holdings

Archival: Registry (unprocessed) and permanent material: government textual; various media type (photographic; audiovisual; cartographic; architectural and technical drawings; electronic and digital records)

Circulation Statistics: January to December 2012

Request Type	Containers Circulated
External (for client consultation)	247
Internal (for processing)	0
Total containers	247

2012 Yearly Review

- Integrated Pest Management program implemented in winter 2011.

Appendix C – Conservation Statistics (April to November 2012)

Analogue Conservation Treatment Labs

This table represents the number of items that were treated for mould, assessed, or received conservation treatment.

Media	Mould	Assessment	Treatment
Bound volumes	10	75	820
Maps and manuscripts	8,887 ¹¹	48	2,669
Prints and drawings	1	171	489
Photographs	0	62	100
Paintings	0	62	100
Totals	8,898	418	4,178

Audiovisual Conservation Treatment Labs

This table represents the amount of audiovisual media that was copied.

Media	Hours Copied	TBs ¹² of Masters	TBs of Access
Quad (video)	587	23.480	1.770
¾ inch (video)	2,433	97.322	5.513
Satellite (video)	339	13.527	0.291
Cassette (audio)	6,817	15.075	0.546
Reel-to-Reel (audio)	4,562	9.354	0.403
Totals	14,738	158.758	8.523

Motion Picture Film Conservation Lab

This table represents the amount of Motion Picture Film that was processed and/or copied.

Linear feet of film processed	Number of film titles copied ¹³
87,375 feet	125

Audiovisual and Motion Picture Film Conservation Labs

This table represents the number of items that were assessed.

Category	Total Items Assessed
Video	3,044
Audio	528
Film	11,466

¹¹ Most mould removal performed on archival files are driven by ATIP requests.

¹² TBs = terabytes.

¹³ Previously, a title was considered fully preserved if all three stages of copying had been completed (printing elements, archival master, access copy.) This year marks a new approach in that only one generation is required to scan digitally.

Appendix D –Environmental Monitoring at LAC

Overview of Environmental Monitoring

This table provides an overview of the environmental monitoring at LAC broken down by building.

Building Name	Existing Monitoring	Projected Monitoring
395 Wellington Street	Dataloggers, hygrothermographs	Continuation of current practice
Jean Edmonds Tower	Dataloggers	Not applicable - vacating when CSF is occupied
79 Bentley Avenue	Dataloggers	Not applicable - vacating when CSF is occupied
151 Bentley Avenue	Dataloggers	Not applicable - vacating when CSF is occupied
Macoun (Pink Road)	Dataloggers	Not applicable - vacating when CSF is occupied
Regional Service Centre – NCR	Dataloggers	Networked dataloggers
Regional Service Centre – Pacific	Have not yet taken responsibility for this building; pest monitoring only at present	Networked dataloggers
Regional Service Centre – Winnipeg	Have not yet taken responsibility for this building; pest monitoring only at present	Networked dataloggers
Regional Service Centre – Halifax	Have not yet taken responsibility for this building; pest monitoring only at present	Networked dataloggers
Renfrew Archives Facility	Building automation system Dataloggers, hygrothermographs	Continuation of current practice
Collection Storage Facility	Construction ongoing	Networked dataloggers
Place de la Cité	Building automation system Dataloggers, hygrothermographs	Continuation of current practice
Preservation Centre	Building automation system dataloggers, hygrothermographs	Continuation of current practice
Nitrate Film Preservation Facility	Building automation system dataloggers, hygrothermographs	Continuation of current practice

Appendix E – Preventive Training

Preventive Training

This table describes the various preventive training sessions run by LAC.

Training Title	Description
Care and Handling in the Art Vault	Care and handling of paintings, miniatures and globes for circulation staff new in handling specialized media
Care and Handling	Refresher course on care and handling of textual documents for ATIP staff
Care and Handling	Care and handling of textual documents, works on paper, and mixed media for reassigned staff
Cased Objects Workshop	Instruction and techniques on specialized housing of photographic cased objects for collections maintenance staff
Care and Handling – CSF	Course for new staff joining CSF project
Collection Emergency Preparedness Program	Introductory course for Collection Response and Recovery Action Team members and leaders, including instruction on mould and collection response and recovery methodologies in various LAC facilities
Collection Emergency Response Training Workshop	Instruction and hands-on exercise designed to increase emergency response team decision-making capacity
Mould	Several sessions provided throughout LAC and to external partners Creation of mould blog on LAC SharePoint site
Respiratory Protection Program	Respiratory fit testing provided to staff who may work with holdings that are contaminated by mould
Sink Mat Workshop	Instruction and techniques for collections maintenance staff on specialized housing of fragile or problematic works requiring sink mats
Wraps for Bound Volumes Workshop – CSF	Instruction and techniques for CSF staff on preparing various paper and poly custom wraps for bound volumes
Ongoing Conservation	Cross-training within conservation specialties to address succession planning and professional development

Appendix F – New Model for Descriptive Metadata

A major element of sound holdings management relates to the ability to retrieve material: the extent of control that an institution exercises over where material is located and how readily it can be identified. As with many other large archival institutions throughout the world, LAC has only described a portion of its holdings down to the file or item level. To take the example of government textual records, while the extent of material acquired has grown markedly over the past three decades, LAC has continued to fall behind in applying resource-intensive traditional approaches to the description of holdings. An internal report in 2007 documented a downward trend in processing over the 1980s, where more than 80% of incoming accessions were fully described at the outset of the 1980s and only one-half were described by 1990. Furthermore, not since 1996, when 25% of incoming government accessions were processed, have even 10% of annual government accessions been processed. LAC is currently developing a new model for descriptive metadata with the aim of enhancing the discoverability of its holdings.