# MU Libraries Disaster Response and Recovery Manual

## Table of Contents

### Section 1 -- Initial Response in an Emergency

| Phase 1: | Procedures for Activating the Disaster Response Team (3) |
| Phase 2: | Damage Assessment (6) |
| Phase 3: | Recovery Preparation / Salvage Team (7) |

### Section 2 -- Salvage Priorities for Ellis Library (10)

### Section 3 -- Salvage Priorities for Archives and Branch Libraries

| 3.1 | Engineering Library (13) |
| 3.2 | Geology Library (15) |
| 3.3 | Health Sciences Library (16) |
| 3.4 | Journalism Library (18) |
| 3.5 | Newspaper Library (19) |
| 3.6 | Veterinary Medical Library (20) |
| 3.7 | University Archives (22) |
| 3.8 | UM Libraries Depository (25) |
| 3.9 | UM Libraries Depository Module 2 (U2) (26) |

### Appendices

| Appendix A | Recovery / Salvage Procedures (27) |
| Appendix B | Computer Based Systems (44) |
| Appendix C | Damage Assessment Form (46) |
| Appendix D | Command Post (48) |
| Appendix E | Communication / Media Plan (Response Team) (49) |
| Appendix F | Disaster and Emergency Equipment and Supplies (52) |
| Appendix G | List of External Sources for Disaster Recovery Services and Supplies (59) |
| Appendix H | Post-Disaster Report Form (64) |
APPENDIX I  Bibliography and Online Sources of Information (66)

APPENDIX J  Collection Location Floor Plans (67)

MU Alert Online - http://mualert.missouri.edu/

MU Environmental Health and Safety - http://ehs.missouri.edu/
SECTION 1: INITIAL RESPONSE IN AN EMERGENCY

Phase 1: Procedures for Activating the Disaster Response Team (DRT)
(back to top)

In the event of a disaster in Ellis Library or any of the branch libraries, please attempt to notify the following people in the order given:

A. Director of Libraries           Jim Cogswell                           882-4701

If the Director of Libraries is out of town or unavailable at the time of the disaster, contact him/her as soon as possible.

B. Acting Director of Libraries

If the Director of Libraries is out of town or unavailable at the time of the disaster, the Acting Director will activate and assume leadership of the Disaster Response Team (DRT).

MU Libraries Acting Director Roster

<table>
<thead>
<tr>
<th>Acting Director</th>
<th>Divisions</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ann Riley</td>
<td>Access, Collections &amp; Technical Services</td>
<td>882-1685</td>
</tr>
<tr>
<td>Deb Ward</td>
<td>Health Sciences, Research &amp; Information Services</td>
<td>882-7033</td>
</tr>
<tr>
<td>Mike Holland</td>
<td>SCARaB Division</td>
<td>882-4602</td>
</tr>
</tbody>
</table>

The Director, or the designated Acting Director, will notify and activate the other members of the Disaster Response Team (DRT) and the Contact for the Affected Area.

The meeting place for the Disaster Response Team (DRT) depends upon the library involved in the disaster:

- Branches: If possible, assemble in room 104, Ellis Library. Otherwise, assemble at the north entrance of Ellis. Move to the involved branch library from there.
- Ellis Library: If possible, assemble in room 104, Ellis Library. Otherwise, meet in Speakers Circle.

The Head of Library Security will notify the Campus Police, Campus Facilities Department and the Columbia Fire Department, if appropriate, as soon as possible. The Disaster Response Team
(DRT) will need a password to gain access to the disaster area behind police and fire department lines. Police and Fire departments determine the password.

The Disaster Response Team (DRT) will assess the damage following the inspection of the building by Campus Facilities, Campus Police and/or the Columbia Fire Department and declaring the site safe to enter.

Campus Facilities  882-8211
                   (after hours)  883-3333
Campus Police     882-7201
Columbia Fire Department  911

The Head of Library Security will notify the MU Libraries Communications Officer as soon as possible so that the C.O. can notify and provide information to other local parties if relevant to the disaster. The Libraries Communications Officer will also contact the local media if the building is uninhabitable and employees are not able to work.

If the initial assessment of damage indicates that the Libraries can handle the problem (500 or fewer items damaged), the Disaster Response Team (DRT) will activate the Salvage Team (ST) to move into the recovery phase. If additional help is needed in the recovery operation, the Salvage Team (ST) leader will contact and activate members of the Reserve Salvage Team (RST).

Disaster Response Team (DRT) Roster

<table>
<thead>
<tr>
<th>Member</th>
<th>Title/Department</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jim Cogswell</td>
<td>Director of Libraries</td>
<td>884-8008</td>
</tr>
<tr>
<td>Pat Jones</td>
<td>Head of Library Security and Ellis Library Building Coordinator</td>
<td>882-4220</td>
</tr>
<tr>
<td>Ann Riley</td>
<td>Access, Collections &amp; Technical Services</td>
<td>882-1685</td>
</tr>
<tr>
<td>Deb Ward</td>
<td>Health Sciences, Research &amp; Information Services</td>
<td>882-7033</td>
</tr>
<tr>
<td>Judy Maseles</td>
<td>Science Branches</td>
<td>882-2715</td>
</tr>
<tr>
<td>Ernest Shaw</td>
<td>Library Technology</td>
<td>882-4817</td>
</tr>
<tr>
<td>Ellen Blair</td>
<td>Business Office</td>
<td>882-9171</td>
</tr>
<tr>
<td>Mark Ellis</td>
<td>Administrative Associate</td>
<td>882-9169</td>
</tr>
<tr>
<td>Shannon Cary</td>
<td>Communications Officer</td>
<td>882-4703</td>
</tr>
</tbody>
</table>


Section 1: Initial Response in an Emergency

Contact for the Area Affected

<table>
<thead>
<tr>
<th>Area Affected</th>
<th>Contact</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Services</td>
<td>June DeWeese</td>
<td>882-7315</td>
</tr>
<tr>
<td>Library Technology Services</td>
<td>Ernest Shaw</td>
<td>882-4678</td>
</tr>
<tr>
<td>Engineering Library</td>
<td>Judy Siebert Maseles</td>
<td>882-2715</td>
</tr>
<tr>
<td>Geology Library</td>
<td>Stephen Stanton, Janice Dysart</td>
<td>882-4860, 882-9156</td>
</tr>
<tr>
<td>Health Sciences Library</td>
<td>Rich Rexroat, Deb Ward</td>
<td>882-8708, 882-7033</td>
</tr>
<tr>
<td>Journalism Library</td>
<td>Dorothy Carner</td>
<td>882-6591</td>
</tr>
<tr>
<td>Newspaper Library</td>
<td>Nina Johnson</td>
<td>882-4876</td>
</tr>
<tr>
<td>Special Collections &amp; Rare Books</td>
<td>Alla Barabtarlo</td>
<td>884-2376</td>
</tr>
<tr>
<td>UMLD</td>
<td>James Keyzer-Andre</td>
<td>884-1604</td>
</tr>
<tr>
<td>University Archives</td>
<td>Mike Holland</td>
<td>882-4602</td>
</tr>
<tr>
<td>Veterinary Medical Library</td>
<td>Trenton Boyd</td>
<td>882-2461</td>
</tr>
</tbody>
</table>

Salvage Team (ST) Roster

<table>
<thead>
<tr>
<th>Member</th>
<th>Unit</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michellele Dorsey</td>
<td>Salvage Team Leader</td>
<td>882-7394</td>
</tr>
<tr>
<td>Ruthe Morse</td>
<td>Cataloging</td>
<td>884-8757</td>
</tr>
<tr>
<td>Amy Lana</td>
<td>Acquisitions</td>
<td>882-4757</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cell 424-6324</td>
</tr>
<tr>
<td>Mike Holland</td>
<td>SCARaB</td>
<td>882-4602</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cell 999-4148</td>
</tr>
<tr>
<td>Gary Cox</td>
<td>University Archives</td>
<td>882-3727</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cell (816) 213-7074</td>
</tr>
<tr>
<td>Sharon Gaughan</td>
<td>Acquisitions</td>
<td>882-4285</td>
</tr>
<tr>
<td>James Keyzer-Andre</td>
<td>UMLD</td>
<td>884-1640</td>
</tr>
<tr>
<td></td>
<td></td>
<td>page 817-4957</td>
</tr>
<tr>
<td>Karen Witt</td>
<td>Special Collections &amp; Rare Books</td>
<td>882-3889</td>
</tr>
</tbody>
</table>
Section 1: Initial Response in an Emergency

Reserve Salvage Team (RST) Roster

<table>
<thead>
<tr>
<th>Member</th>
<th>Unit</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alla Barabtarlo</td>
<td>Special Collections &amp; Rare Books</td>
<td>882-2376</td>
</tr>
<tr>
<td>Anne Barker</td>
<td>Reference</td>
<td>882-6324</td>
</tr>
<tr>
<td>Marie Concannon</td>
<td>Government Documents</td>
<td>882-0748</td>
</tr>
<tr>
<td>Rebecca Graves</td>
<td>Health Sciences</td>
<td>882-0469</td>
</tr>
<tr>
<td>Rich Rexroat</td>
<td>Health Sciences</td>
<td>882-8708</td>
</tr>
<tr>
<td>Anselm Huelsbergen</td>
<td>University Archives</td>
<td>882-2839</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cell 529-1259</td>
</tr>
</tbody>
</table>

MU Libraries Employee Directory - [http://mulibraries.missouri.edu/about/directories/default.htm](http://mulibraries.missouri.edu/about/directories/default.htm)

Phase 2: Damage Assessment

A major disaster in the library would necessitate the evacuation of all personnel. In such a situation, actual recovery procedures to salvage the collections would have to wait until the building is officially declared safe to enter. Although disaster situations are impossible to predict, the brief outline of procedures listed below will be followed.

DRT Meeting location for reports and first phase planning:

If the building can be entered, meetings will take place at 104 Ellis Library.

If the building cannot be entered, meetings will take place at the Speakers Circle.

Police and Fire Department officials will gather with the Disaster Response Team (DRT) for a status report on the situation that should cover the extent of damage and when the building can be entered for recovery purposes.

The Disaster Response Team (DRT) will devise site visit procedures according to the extent of the damage and accessibility of the building. The Head of Library Security, if necessary, will appoint one or more staff to operate the Command Post for 24 hours during the initial recovery phase.
Basic-Site Visit Procedures

The Disaster Response Team (DRT) enters the building to assess damage when entry to the building has been approved by fire and/or police officials. High priority areas will be assessed first, followed by other affected areas.

The Disaster Response Team (DRT) inspects and records the extent of damage in the assessment form (Appendix C), indicating the following:

- Type of damage (water, fire)
- Type of material damaged (photographs, books, files and papers, etc.)
- Extent of damage, i.e., how many (volumes are involved)
  - 500 volumes and under
  - Over 500 volumes
- Severity of damage
- Brief environmental conditions (dampness, heat, etc.)
- Wet carpets, broken furniture, and damaged equipment
- Condition of surrounding area

Photographs of damage should be taken with a digital camera for recovery planning purposes, insurance claims, and security control of inventory.

Phase 3: Recovery Preparation
(back to top)

Meeting of Disaster Response Team (DRT) with Salvage Team (ST)

After Phase 2 damage assessment if a disaster is declared, the Disaster Response Team (DRT) will return to the designated Command Post along with the Salvage Team and begin to plan a salvage operation for damaged materials. In-house salvage, employing the Salvage Team (ST) and the Reserve Salvage Team (RST) will proceed if 500 or fewer items are damaged. Excess of 500 items damaged will trigger the use of external service contractor(s).
Based on information recorded in disaster recovery charts completed during the site visit of affected areas, the committees will:

- Establish priorities.
- Develop and assign teams for affected areas, using the names and telephone numbers recorded in Phase 1, Salvage Team (ST) and Reserve Salvage Team (RST).
- Assemble supplies from Appendix F, the local supply lists, and if necessary, the external sources for disaster recovery services and supplies in Appendix G.
- If additional supplies are needed assign library staff with library credit cards to obtain them at local stores.
- Develop a schedule for implementation.
- Define reporting mechanism and communication lines, including an established chain of command for recovery operations. This should include a method to deal with unforeseen modifications that need to be made during the recovery operation.

Administrative staff will take minutes during all meetings, answer telephones, and assist in the management of the recovery process from the Command Post, as needed.

**Procedures for Salvage Team (ST)**

Stabilize the environment with supplies at hand

The environment must be stabilized at around 65° Fahrenheit and 50% relative humidity. The following equipment should be readily accessible to help stabilize the environment:

1. Portable generators, in case a power failure occurs. (Campus Facilities)
2. Pumps, to remove large quantities of standing water. (Campus Facilities)
3. Fans, to circulate the air.
4. Environmental monitoring devices to measure the temperature and humidity. (Located in Materials Processing, University Archives, and Special Collections)
DO NOT UNDER ANY CIRCUMSTANCES

- enter an area until it has been declared safe by authorities.
- attempt to open a wet book.
- attempt to close an open book that is swollen.
- use mechanical presses on wet materials.
- attempt to separate books that are stuck together.
- use bleaches, detergents, water-soluble fungicides, adhesive tapes (or adhesives of any kind), paper clips, or staples on wet materials.
- use colored paper of any kind during salvage and recovery operations.
- pack newly-dried materials in boxes or leave them unattended for more than two days.
- place saturated materials next to lightly damaged materials.
- remove covers from books or scores.
SECTION 2: SALVAGE PRIORITIES FOR ELLIS LIBRARY

SPECIAL COLLECTIONS

Address: Room 401 Ellis Library
Phone: 882-2379
Contact: Alla Barabtarlo
Phone: 882-2376
Alternate Contact: Karen Witt
Phone: 882-3889
Building Coordinator: Pat Jones
Phone: 882-4220

Salvage Priorities:

Floor/Room Number: Fourth Floor, West

Room 401B (Vault)
Print materials – **Highest**
Handwritten Manuscripts – **Highest**

Room 401
LC classified rare books – **Highest**
Comic Art Collections – Medium
Frank Luther Mott Collection – Low

Room 401A
LC classified rare books – **Highest**
Dewey Classified rare books - **Highest**
Microfilm in 401A (MU theses/dissertations – negatives) – **Highest**

Room 401C
LC classified rare books - **Highest**
Comic Art Collections – Medium

Room 404
Microfilm materials – Low
Newspapers and periodicals on microfilm - Low
Print Indexes – Low

Room 407
Lago Collection – **Highest**
Section 2: Salvage Priorities for Ellis Library

SPEC-M - Medium
Closed Shelf Books – Medium
Microfiche Collection – Low
Closed Comic - Low

Room 408-409
Comic Art Collection - Highest
Print materials - Highest
Photographs and Negatives - Highest
Miscellaneous archival materials - Highest

Room 410
Print materials (posters) - Highest

4 West Stacks
Microform and print indexes - Low

Floor/Room Number: Third Floor, Central

Room 303
Maps – Highest
Microcard and microprint collection – Low

Room 304
Mary Lago Collection Photographs - Highest
Thomas Moore Johnson Collection – High
Closed Collection - Medium

Room 307C
Print materials - Low

Room 307D
Rare elephant folios - Highest

Floor/Room Number: Fourth Floor, East

Room 4C12
EDUC-T (TEXT) Collection - Low

Room 4D21
LC classified rare books - Highest
Salvage Priorities for Rare Books, Special Collections and Microforms in Order by Format

Book Collections

1. High Priority
   a. Books in 401B Vault
   b. LC classified rare books in 401
   c. LC classified rare books in 401C
   d. LC classified rare books in 401A
   e. LC classified rare books in 4D21
   f. Rare elephant folios in 307D
   g. Dewey Classified rare books in 401A
   h. Comic Art Collection in 408 and 409

2. Mid-level priority
   a. Comic Art Collection in 401 and 401C
   b. SPEC-M Collection
   c. Closed shelf books in 304 and 307
   d. Reference collections in 401
   e. Thomas Moore Johnson Collection in 4D21

3. Lowest priority
   a. Frank Luther Mott Collection in 4C12
   b. EDUC-T (TEXT) Collection 4C12

Microforms

1. Highest priority
   a. Microfilm in 401A (MU theses/dissertations – negatives)

2. Lower priority
   a. Microfiche collection in 406
   b. Microfilm collection in 4D21
   c. Microcard and microprint collection in 303

Special Collections Floor Plans (Appendix J):

Third Floor
Fourth Floor
SECTION 3: SALVAGE PRIORITIES FOR ARCHIVES AND BRANCH LIBRARIES

3.1 Engineering Library
3.2 Geology Library
3.3 Health Sciences Library
3.4 Journalism Library
3.5 Newspaper Library
3.6 Veterinary Medical Library
3.7 University Archives
3.8 UM Libraries Depository
3.9 UM Libraries Depository Module 2 (U2)

3.1 ENGINEERING LIBRARY
(back to top)

Address: W2001 Engineering Bldg. East, 6TH Street  Phone: 882-2379
Contact: Judy Siebert Maseles  Phone: 882-2715
Alternate Contact: Michelle Baggett  Phone: 882-1670
Building Coordinator: Mike Klote  Phone: 882-3798
Alternate Building Coordinator: Rex Gish  Phone: 882-8341

Salvage Priorities (in order of importance)

Floor/Room Number: W2001 EBE

<table>
<thead>
<tr>
<th>Type of material</th>
<th>Call Number(s)</th>
<th>Dates for Serials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve Materials (Reference/Classroom)</td>
<td>Circulation Desk</td>
<td></td>
</tr>
<tr>
<td>Reference Collection</td>
<td>Ranges 1-2</td>
<td></td>
</tr>
<tr>
<td>Specific Indexes and Abstracts:</td>
<td>Range 3-4</td>
<td></td>
</tr>
<tr>
<td>Engineering Index</td>
<td>ENGR-R Z 5851 .E6</td>
<td>1892-1980</td>
</tr>
</tbody>
</table>
Section 3.1: Engineering Library

IEEE Index
ENGR-R Z 5832 .I54 1972
ENGR-R Z 5832 .I542 1973-1995

Metals Index

HRIS abstracts

Computer & control abstracts.

Electrical & electronics abstracts.
TK145 .E43 1966-1974
ENGR-R TK 145 .E43 1975-1985

SAE Transactions Index

Annual index/abstracts
of SAE technical papers
ENGR-R TL 1 .S473 1984-

Engineering Library Floor Plans (Appendix J)
3.2 GEOLOGY LIBRARY

Address: 201 Geology Building  Phone: 882-4860
Contact: Stephen Stanton  Phone: 882-4860
Alternate Contact: Janice Dysart  Phone: 882-1828
Building Coordinator: Kevin Shelton  Phone: 882-6568 or Phone: 882-2040

Salvage Priorities (in order of importance)

Floor/Room Number: 201 Geology

Type of material: journal sets, then books, maps, computer files, framed lithographs on west wall of reading room (201). Favor English, then German, French and Spanish over other languages.

1. USGS Professional Papers, Bulletins, and Circulars (557.3). All
2. American Journal of Science (505 Am 3). All
3. 550.5 – 550.6. All
4. 560.5. All
5. Maps from the Map Room
6. Journal sets
7. Reserve Books (behind Circulation Desk).
9. Computer equipment
10. Rare Maps in wooden case, SW corner of Reading Room

Floor/Room Number: 213 Geology

Type of material: books

2. Water journals (GB's).
3. Dissertations (QE 26)
5. Missouri Geology (QE 131).
6. Canadian geology QE 185 – QE 186. All.

Geology Library Floor Plan (Appendix J)
3.3 HEALTH SCIENCES LIBRARY

Address: Medical School Complex
Contact: Deborah Ward
Alternate Contact: Rich Rexroat
Building Coordinator: Don Gerlach
Alternate Building Coordinator: Ken Hammann

Phone: 882-7033
Phone: 882-6280
Phone: 882-8708
Phone: 882-2516
Phone: 882-2495

Salvage Priorities (in order of importance)

Floor/Room Number: 3rd Floor, Room 301 & Display Cases

Type of material:

HSL 301 – Rare Books, keys for cases are available from Admin. Office and Tech. Services. Last priority for this priority would be the Classics of Medicine Collection.

Display cases – Dr. Lottes' memorabilia – Key in Admin. Office.

Floor/Room Number: 1st & 2nd Floor

Type of material:

2nd Floor – Circulation Desk – Reserve books and CIBA Slides

2nd Floor – Reference Collection – Reference books

1st Floor – ITS User Support Learning Laboratory - Computers
Section 3.3: Health Sciences Library

Floor/Room Number: 1st, 2nd & 3rd Floor

Type of material:

3rd Floor-Journal Stacks-Journals are arranged alphabetically

1st Floor-Book Stacks-Process the books that have call number beginning with "W" then do the other call numbers

2nd Floor-HSL 232-All file cabinets plus desk files.

1st Floor-Technical Services HSL 115-Withdrawal Shelf List.

Health Sciences Library Floor Plans (Appendix J):

- First Floor
- Second Floor
- Third Floor
3.4 JOURNALISM LIBRARY

Address: 102 Reynolds Journalism Institute (RJI)  Phone: 882-7502
Contact: Dorothy Carner  Phone: 882-6591
Alternate Contact: Sue Schuermann  Phone: 882-0660
Building Coordinator: Cindy Roe  Phone: 882-2489

Salvage Priorities (in order of importance)

Floor/Room Number: 102 RJI

Type of material:

1. Reference Collection in comfy seating area
2. Closed Reserve behind circulation desk
3. Journals shelved in Current Periodical Reading Room
4. Life Magazine in stacks
5. Reference Collection
6. Bound journal collection
7. Book Collection starting with the stacks on the left inside the doorway.

Journalism Library Floor Plans (Appendix J)
3.5 NEWSPAPER LIBRARY

Address: 315 Lee Hills Hall  Phone: 882-4876

Contact: Nina Johnson  Phone: 882-4876

Alternate Contact: Stephen Clayton  Phone: 882-4876

Building Coordinator: Kristina Conrad  Phone: 882-5742

Salvage Priorities (in order of importance)

- Historical clip files (biographical and subject) in file cabinets facing south wall
- Photo files in file cabinets facing north wall
- Bound volumes on top of file cabinets
- Bound volumes against east wall

Newspaper Library Floor Plan (Appendix J)
3.6 VETERINARY MEDICAL LIBRARY
(back to top)

Building address: W218 Veterinary Medicine
Phone: 882-2461

Contact: C. Trenton Boyd
Phone: 882-2461

Alternate Contact: Laura Buck
Phone: 882-2461

Building Coordinator: Lori Bernis
Phone: 882-3055
After Hours: 256-7017

Alternate Building Coordinator: Vicki Miller
Phone: 882-4477
After Hours: 474-8811

Salvage Priorities (in order of importance)

Floor/Room Number: W218B

Type of material:

Rare Books as indicated with rare book streamer

Floor/Room Number: W218A

Type of material:

Rare Books in Metal Display Case

Floor/Room Number: W218 Journal Stacks

<table>
<thead>
<tr>
<th>Type of material/Title</th>
<th>Call Number(s)</th>
<th>Dates for Serials</th>
</tr>
</thead>
<tbody>
<tr>
<td>American J. Veterinary Medicine</td>
<td>Journal Stacks</td>
<td>1910-1920</td>
</tr>
<tr>
<td>American Veterinary Review</td>
<td>Journal Stacks</td>
<td>1878-1915</td>
</tr>
<tr>
<td>Berliner Thierarztliche Wochenschrift</td>
<td>Journal Stacks</td>
<td>1885-1960</td>
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</tbody>
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### Section 3.6: Veterinary Medical Library

<table>
<thead>
<tr>
<th>Title</th>
<th>Location</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Echo Veterinaire</td>
<td>Journal Stacks</td>
<td>1879-1905</td>
</tr>
<tr>
<td>Jahresbericht Veterinarimedizin</td>
<td>Journal Stacks</td>
<td>1887-1943</td>
</tr>
<tr>
<td>J Comp. Med Surgery</td>
<td>Journal Stacks</td>
<td>1882-1898</td>
</tr>
<tr>
<td>J Comp. Pathol Therapeutics</td>
<td>Journal Stacks</td>
<td>1888-1964</td>
</tr>
<tr>
<td>North American Veterinarian</td>
<td>Journal Stacks</td>
<td>1930-1957</td>
</tr>
<tr>
<td>Recueil Medecine Veterinaire</td>
<td>Journal Stacks</td>
<td>1887-1960</td>
</tr>
<tr>
<td>Repertoire</td>
<td>Journal Stacks</td>
<td>1849-1851</td>
</tr>
<tr>
<td>Tropical Veterinary Bulletin</td>
<td>Journal Stacks</td>
<td>1912-1930</td>
</tr>
<tr>
<td>Veterinarized</td>
<td>Journal Stacks</td>
<td>1948-1987</td>
</tr>
<tr>
<td>Veterinarian</td>
<td>Journal Stacks</td>
<td>1828-1899</td>
</tr>
<tr>
<td>Veterinary Journal</td>
<td>Journal Stacks</td>
<td>1875-1948</td>
</tr>
<tr>
<td>Veterinary Magazine</td>
<td>Journal Stacks</td>
<td>1894-1896</td>
</tr>
<tr>
<td>Veterinary Record</td>
<td>Journal Stacks</td>
<td>1888-1960</td>
</tr>
<tr>
<td>Zeitschrift Fuer Tiermedizin</td>
<td>Journal Stacks</td>
<td>1876-1915</td>
</tr>
</tbody>
</table>

**Veterinary Medical Library Floor Plan** (Appendix J)
3.7 UNIVERSITY ARCHIVES

(Back to top)

Building Address: Lewis Hall, 5th & Rollins  
Phone: 882-7537

Contact: Michael Holland  
Phone: 882-4602

Alternate Contact: Anselm Huelsbergen  
Phone: 882-2839

Building Coordinator: Leanna Garrison  
Phone: 884-2113

Salvage Priorities (in order of importance)

Floor/Room Number: 703 Lewis Hall

Type of material:  MU Publications (Directories, Dept. Histories, etc.) – High  
Oversize Materials – High  
Catalogs and Bulletins – Medium/High  
Microfilm – Medium  
Savitar - Low  
Vertical File - Low  
MU Press Books - Low

Floor/Room Number: 704 Lewis Hall

Type of material:  Photographic Negatives – Highest  
Digital Media – High  
Other Archival Records and Collections – High

Floor/Room Number: 723 Lewis Hall

Type of material:  Finding Aids and Collection Inventories – High  
College and School Catalogs and Bulletins – Medium

Floor/Room Number: 725 Lewis Hall

Type of material:  Accession Records and Donor Records – High  
Pamphlets and Publications – Medium
Section 3.7: University Archives

Floor/Room Number: Lewis Hall Basement (Double Depth Yellow Lockers)

Type of material: Archival Collections & Publications – High

[In the event of a water involved disaster, concentrate on the materials located in or nearest to water levels. If the environment cannot be brought to within acceptable environmental levels all materials should be removed from the area within 48 to 72 hours.]

Floor/Room Number: Clark Hall Basement (Single Depth Yellow Lockers)

Type of material: Archival Collections & Publications – High

[In the event of a water involved disaster, concentrate on the materials located in or nearest to water levels. If the environment cannot be brought to within acceptable environmental levels all materials should be removed from the area within 48 to 72 hours.]

Floor/Room Number: B3A Clark Hall

Type of material: Portrait Paintings – Highest
Special Format Materials (Films & Discs)– High
MU Building Plans & Blue Prints – High
Small Archival Collections in Cabinets – High
Military Training Cards – High
Other Archival Records and Collections – High

[In the event of a water involved disaster, concentrate on the materials located in or nearest to water levels. If the environment cannot be brought to within acceptable environmental levels all materials should be removed from the area within 48 to 72 hours.]

Floor/Room Number: B23 Clark Hall

Type of material: Oversized Material – High
MU Sports Publications – Medium
Other Archival Records and Collections – High
Section 3.7: University Archives

[In the event of a water involved disaster, concentrate on the materials located in or nearest to water levels. If the environment cannot be brought to within acceptable environmental levels all materials should be removed from the area within 48 to 72 hours.]

Floor Plans for the Archives (Appendix J):

- 7th Floor Lewis Hall
- Lewis Hall Basement
- Clark Hall Basement
3.8 UM LIBRAIRES DEPOSITORY

Building Address: 2908 LeMone Industrial Blvd.  Phone: 884-1640

Contact and Building Coordinator: June DeWeese  Phone: 882-7315

Alternate Contact and Building Coordinator: James Keyzer-Andre  Phone: 884-1640

Alternate Contact: Dan Akins or Brian Cain  Phone: 884-1668

Salvage Priorities (in order of importance)

Floor/Room Number: Storage Module

Type of material: Books and printed matter. 1 million+ volumes.

Floor/Room Number: Processing Area

Type of material: Books and Printed matter. Computer and office equipment.

Floor/Room Number: Office

Type of material: Paper records, computer equipment and some books.

Floor/Room Number: Conference Room

Type of material: Computer equipment.

UMLD Floor Plans (Appendix J)
3.9  UM LIBRARIES DEPOSITORY Module 2 (U2)
(back to top)

Building Address:  2500 N. Stadium Blvd. Warehouse 1  Phone:  882-1562

Contact and Building Coordinator: June DeWeese  Phone:  882-7315

Alternate Contact and Building Coordinator: James Keyzer-Andre  Phone:  884-1640

Alternate Contact: Brian Cain or Dan Akins  Phone:  884-1562

Salvage Priorities (in order of importance)

Floor/Room Number: Storage Module

Type of material: Books and printed matter.  300,000+ volumes.

Floor/Room Number: Processing Area

Type of material: Books and Printed matter.  Computer and office equipment.

Floor/Room Number: Office

Type of material: Paper records, computer equipment and some books.

UMLD Module 2 Floor Plans (Appendix J)
APPENDIX A: SALVAGE PROCEDURES
(back to top)

Salvage at a Glance Chart  (Western Association for Art Conservation Newsletter Insert)
Salvage at a Glance article  (Canadian Council of Archives)

Salvage of Paper-based Materials
Salvage of Microforms
Recovery of Photographic Materials
Salvage of Motion Picture Films
Salvage Procedures for Magnetic Data Storage Media
Salvage Procedures for Optical Data Storage Formats
Recovery of Three-Dimensional Objects
Reference Sources

SALVAGE OF PAPER-BASED MATERIALS:

BOOKS AND DOCUMENTS TO BE FROZEN AND RECOVERED OFF-SITE

Removing wet and damaged books from the shelves for freezing and/or off-site recovery

1. Clear the floor and aisles before you start this process.
2. Begin with the most water saturated materials. These will usually be on the lower shelves, unless water has leaked from above.
3. Dirt/Mold should be removed before freezing. If time is limited, dirty and/or moldy books can be frozen (mud will brush off easily when it is dry). Wash Silt out immediately. It is impossible to remove once the book is dry.
4. If possible, pack all materials on-site. Remove unwetted or damaged materials so that they will not be damaged in recovery or clean up and infected by mold if environment is conducive to such growth. If all else fails, remove materials by human chain.
5. Keep accurate records of the locations from which the materials are removed. This can save a lot of headaches later.

Packing wet and damaged books for freezing and/or off-site recovery

1. Remove volumes from shelves in order.
2. Wrap freezer paper around each volume. Make sure the waxed side of the freezer paper is next to the book. Place books in clean plastic milk crates with their spines down.
3. Do not layer books inside the crate; use one layer only. Make sure the volumes are packed snuggly so they don't shift, slide or lean.
Appendix A: Salvage Procedures

4. Wrap open books as found and place on top of a packed container. Do not place more than one open book in a container. Be sure there is a freezer paper barrier between the packed volumes and the open volume. This will stop any binding dyes from leaching from book to book.
5. Do not separate books that are stuck together. Pack the two books as one volume.
6. Pack items in the condition in which they were found. Do not attempt to close open books or open closed books that are wet.

Keeping records of wet and damaged books removed for freezing and/or off-site recovery

1. Label each container with your institution's name and assign it a number.
2. On a separate sheet, record the box number, call numbers of first and last volumes packed, and the total number of books in each container. If the books are not in call number order, note the location where the books were found.
3. If the containers are sent to more than one freezer, note which container numbers were sent where.
4. Keep records of all damaged items.
5. Keep records of discarded items.

Transporting wet and damaged books removed for freezing and/or off-site recovery

1. Materials should be taken to a freezing facility as soon as possible to prevent the growth of mold. Care should be taken that containers do not fall over during transport, as further damage may result.
2. Materials should be placed in refrigerator trucks if they cannot be frozen within forty-eight hours.

Freezing records, documents, and unbound materials to be recovered off-site

1. Freeze unbound and single page items as found
2. Do not remove from file cabinet drawers, document cases, or folders.
3. Do not turn containers upside down to empty or drain.
5. Materials should be placed in refrigerator trucks.

VOLUMES TO BE RECOVERED ON-SITE BY MU SALVAGE TEAM

Washing procedures for muddy or severely moldy volumes on-site

1. Keep the book tightly closed and hold it under cold, clean, running water.
2. Remove as much mud as possible from the binding by dabbing gently with a sponge. Do not rub or use brushes and do not sponge the pages or edges, as these actions can force the mud into the spine or the wet pages, causing further damage to the volume. Let the motion of the running water remove the dirt.
Appendix A: Salvage Procedures

3. Squeeze the book gently and with even pressure to remove excess water and to reshape the binding. Placing the book between two pieces of Plexiglas and pressing equally on both sides works well to remove water.

4. Do not wash
   - open or swollen volumes
   - vellum or parchment bindings or pages
   - full or partial leather bindings
   - fragile or brittle materials
   - works of art on paper
   - water-soluble components (ink, tempera, water-colors, dyes, charcoal, etc.)
   - manuscripts
   - volumes printed on coated-stock (glossy) paper

Drying procedures for water saturated volumes on-site

1. Do not open—wet paper tears easily!
2. Set volumes on their heads on absorbent paper. Pages tend to droop within the binding when a volume is shelved upright, so setting it on its head will counteract this tendency. Plastic sheeting should be placed under the paper toweling or unprinted newsprint to protect table tops. Turn the volumes right side up when changing the paper beneath them. Their position should be reversed each time the paper is changed and the wet paper removed from the area.
3. Covers may be opened to support the volume.
4. Aluminum foil may be placed between the cover and the end leaf to prevent staining from binding dyes.
5. When most of the water has drained, proceed as for "Damp Volumes".

Drying procedures for damp volumes on-site

1. Very carefully open the book (not more than a 30 degree angle).
2. Keep the volume in an upright position.
3. Place interleaving sheets at intervals of twenty-five leaves (fifty pages).
4. Change interleaving frequently. Do not reuse unless the sheets are being impregnated with fungicide. Ortho-Phenyl Phenol (O-PP) has been found to be less toxic than thymol and is recommended. Mix one pound of O-PP to one gallon of acetone or ethanol (do not use methanol, as it may cause the ink to bleed). Safety equipment (mask, eye goggles, and rubber gloves) should be worn when preparing and using this solution.
5. Continue to change the paper underneath and remove from the area.

Drying procedures for slightly damp volumes with only wet edges on-site
Appendix A: Salvage Procedures

1. Stand volume on its head and fan open slightly. Paperback books may support each other with a barrier between them or they may be wedged with Styrofoam pieces. Position volumes in the path of circulating air.
2. When almost dry, lay the volumes flat and place weights (not other drying books) on them to minimize distortion. Do not stack wet volumes.
3. Lightweight volumes (less than six pounds) may be hung on lines to dry.
4. Use monofilament nylon lines, not more than 1/32" diameter, not more than five or six feet long, spaced approximately one-half inch apart.
5. Do not line-dry a saturated volume as the monofilament will cut through the wet paper.

Salvage procedures for volumes with coated paper on-site

1. Wet coated stock paper should be handled with care, as the print will slide off the wet pages if it is rubbed.
2. Do not allow wet books with coated stock paper to dry in a closed state as the pages will permanently bond together. Almost all attempts to separate stuck pages by rewetting them have failed. Vacuum freeze drying of coated stock volumes is rarely successful.
3. Keep volumes submerged until the pages can be separated. The only chance of saving such materials is to interleave every page and air-dry.

RECORDS, DOCUMENTS AND UNBOUND MATERIALS TO BE RECOVERED ON-SITE BY MU SALVAGE TEAM

Separation procedures for wet loose sheets on-site

1. Place a sheet of polyester film (Mylar) on top of a stack of wet, unbound papers (or the first page of a bound volume).
2. Rub gently with a bone folder—surface friction will cause the paper to adhere to the film.
3. Peel back the top sheet and place it on top of a piece of polyester web. Non-woven interfacing, such as Pelion, is most effective.
4. Remove the polyester film (Mylar).
5. Place another piece of polyester web on top of the wet sheet.
6. Repeat the process, separating the wet sheets one at a time and interleaving them with polyester web (Materials may be frozen at this stage).

Drying procedures for wet loose sheets on-site

1. Air-dry the sheets (supported by the polyester web) by placing them on absorbent paper on tables, on drying racks, or on top of closely spaced monofilament lines. Air in the room should be kept circulating, but fans should not blow directly on the materials.
Appendix A: Salvage Procedures

2. The papers may be flattened when they are almost dry by placing them between two sheets of blotting paper (to remove excess moisture) and applying even pressure with weights.
3. Wet loose sheets can be freeze dried before or after separation and interleaving with polyester web sheets.

SALVAGE OF MICROFORMS:

RECOVERY OF SILVER-HALIDE ROLL MICROFILM

1. Keep wet microfilm under water and promptly send it to a processing laboratory specializing in microforms.
2. To prevent the film from blocking and bonding, fill the plastic storage box or shipping container with clean distilled water before shipping it to a recovery services provider.
   - The Eastman Kodak Company provides free emergency service for cleaning and drying its own black-and-white roll microfilm if water damaged.
   - Call the Kodak testing lab in Chicago (800-EKC-TEST), which offers twenty-four-hour emergency service. Information on how to package and ship will be provided.
   - Fuji Photo Film U.S.A., Inc. offers "No Charge Disaster Recovery Services" for restoration of water-damaged Fuji microfilm.
   - Call the Fuji office in Dallas (800-927-FUJI, extension 9326) for information on how to package and ship wet microfilm.

RECOVERY OF VESICULAR AND DIAZO ROLL MICROFILM

Note: Vesicular and diazo microfilm and fiche are very durable copy microform formats. They do not easily scratch, nor does their chemical composition easily degrade in water or readily support mold and insect infestation.

1. Wash off mud or dirt under cold, clean running water.
2. Air-dry or dry with cheesecloth to prevent mold and mildew formation.

RECOVERY OF VESICULAR AND DIAZO MICROFICHE (4"x 6" cut sheets)

- Treat the same as vesicular and diazo microfilm.

RECOVERY OF SILVER-HALIDE MICROFICHE (4" x 6" cut sheets)
Appendix A: Salvage Procedures

1. Dip the wet fiche in a wetting agent such as Kodak Photoflo solution or very mild detergent if Photoflo solution is not available and then rinse with cool distilled water.
2. Gently separate individual sheets one from the other using gloved hands.
3. Air-dry the fiche sheets at room temperature in a dust free area on a soft and absorbent surface having no lint.

RECOVERY OF PHOTOGRAPHIC MATERIALS (PHOTOGRAPHS, NEGATIVES, AND PRINTS):

PHOTOGRAPHIC MATERIALS – GENERAL INFORMATION

Note: Photographic processes have changed and evolved in the last century and a half. As a result, it is difficult to provide simple advice for the recovery of all types of photographs.

- One cardinal rule: immersion time should be limited.
- Air-dry immediately; otherwise recovery rate will be low.
- Some historic processes are extremely vulnerable to damage from water
- Immersion stains images, causes them to separate from mounts, and dissolves or binds emulsions.
- Mold begins to grow within 48 hours at 60%RH and 70F and can cause permanent staining.
- They may stick to their enclosures or to each other if dried without careful attention.
- Any attempt to separate them after they have dried may result in damage to the emulsion or to the image.

IDENTIFICATION OF 19TH, 20TH CENTURY PHOTOGRAPHS

1. Daguerreotypes (positive image on copper support - no paper support)

   Ways to recognize:
   - Turn the angle of view and the image changes from light to dark
   - Popular from 1840s to 1860s.
   - Usually in small hinged cases of wood or leather if made in the U.S.

2. Collodion Ambrotypes (positive images on glass support - no paper support)

   Ways to recognize:
   - In reflected light has a creamy whitish appearance.
   - Images appear as positive, no matter what the angle of light- in contrast to daguerreotypes.
   - Popular from 1855-1865, mostly late 1850s.
Appendix A: Salvage Procedures

- Often in cases if made in the U.S.

3. Tintypes (positive images on iron support – no paper support)

Ways to recognize:

- Hold a magnet against the non-image bearing side to detect iron.
- Late 1850s into the 20th century.

4. Lantern Slide – a slide (about 2x2) mounted between two pieces of glass and projected by an oil lantern through various lenses.

5. Glass Plate Negatives - a reversed photographic image transferred onto glass.

6. Pannotypes - wet collodion applied to a dark surface, generally leather or linen, resulting in a positive image. The technique was cheap and could be sold in different formats, including one to fit a locket.

7. The following dates indicate common use and may assist with identification:

- daguerreotype (1839-1860)
- ambrotypes (1851-late 1860's)
- tintypes (late 1850's-1930)
- pannotypes (ca. 1840s-1860s)
- glass plate negatives (1847-ca.1925)
- lantern slides and glass stereoviews (1850's-1940's)
- carbon prints (1855-present)
- gum prints (1855-present)
- woodburytypes (1865-present)
- deteriorated or unhardened gelatin prints
- deteriorated nitrate or safety film (1887-present)
- color slides and transparencies (1935-present)
- color negatives (1942-present)
- color photographs (1933-present)

PRIORITIES FOR RECOVERY OF PHOTOGRAPHIC MATERIALS

1. All photographic materials require immediate attention.
2. Prints are more vulnerable than film or negatives.
3. If negatives exist, salvage the negatives, and make new prints in the future.
4. Color is more sensitive than black and white.
5. Color slides, negatives, and film should be treated professionally within 48 hours of being wetted.

Salvage First:

- ambrotypes
- tintypes
Appendix A: Salvage Procedures

- collodion wet plate negatives
- gelatin dry plate negatives
- lantern slides
- deteriorated nitrate or safety films
- autochromes
- carbonprints
- woodbury types
- deteriorated or unhardened gelatin print
- all color materials

Salvage Second:

- daguerreotypes
- salted paper prints
- albumen prints
- collodion prints
- platinum prints
- cyanotypes

TREATMENT OF WATER DAMAGED PHOTOGRAPHS

Salvage of photographic materials - general information

Note: Generally, wet photographs should be air-dried as soon as possible. Photographs will stick to each other and to other materials if they are allowed to dry in a stack or block.

1. Keep photographs damp until they can be separated, place them in sealed polyethylene bags.
2. Immerse the bags in cold water.
3. Sometimes it is not possible to separate photographs. If this is the case, freeze them and consult a conservator. Note: This is a last resort as freezing is potentially harmful to photographic materials. If freezing photographic materials is the only option, freeze the materials fast and at a very low temperature.
4. Do not blot or touch the emulsions in any way. Some may not survive wetting.
5. To avoid fingerprints, never place fingers on wet emulsions.
6. Do not allow the emulsion to come into contact with other materials until the photograph is completely dried.

Cleaning photographs damaged by dirty water or sediment

1. Rinse in cold, clean water before drying or freezing.
2. Place them on a rigid support, such as cardboard or a wooden board, when moving or transporting them.
3. They should then be tilted to allow excess water to run off.
Appendix A: Salvage Procedures

Air drying photographs - general information

1. If possible air-dry the photographs immediately.
2. Set up fans, dehumidifiers and cool temperatures (RH 35-50%, Temperature 45-55 degrees F).
3. Drain off excess water.
4. Separate photographs from their enclosures, frames, and from each other.
5. Cased photographs such as Daguerreotypes, Ambrotypes, and tintypes are discussed in prior section.
6. Before unframing, make very sure the photo is not sticking to the glass.
   - If the emulsion is stuck to the glass or to the mat, just remove the molding and backing.
   - Allow the photo to dry on the glass.
   - Or freeze the photo and glass.
   - Do not try to force them apart.
7. If they are stuck together or adhered to glass, freeze (see below) and consult a conservator at a later date.
8. If pieces have separated from the photograph, save them for later reattachment by a photograph conservator.
9. Air-dry either flat or on lines of monofilament (plastic spring-type clothespins may be used to hang on the lines) dry emulsion (image) side up.
10. Alternatively, place face up on absorbent material such as blotters, uninked newsprint, paper towels or a clean cloth.
11. Photographs may curl during drying; they can be flattened later.
12. Let photographs dry up to 48 hours.

Drying cased photographs (Daguerreotypes, Ambrotypes, Tintypes in cases)

1. Air-dry cased photographs as soon as possible.
2. Do not immerse in water and do not freeze.
3. If water has gotten inside the case, dismantle and air-dry all parts.
4. Remove the assembly from the case.
5. Fold back the preserver frame.
6. If there is sealing tape, cut it, and take the assembly apart
7. Lay photographs face up with components beside them on absorbent paper, and change it as it becomes wet.
8. Place daguerreotypes face up.
9. Place collodion emulsion (dull and sticky) side up.

Air-drying negatives, transparencies, and lantern slides

Roll film and cut film negatives
Appendix A: Salvage Procedures

1. Dry these emulsion (dull and sticky) side up on sheets of polyester web over absorbent paper, and change paper as it becomes wet.
2. Alternatively, hang carefully on a line with plastic clips sheet film negatives and transparencies.
3. These have a gelatin layer on the back that could stick to paper, so dry films emulsion side up on polyester web covered absorbent paper.

Glass negatives

1. Handle very carefully to avoid breakage.
2. If they are not too wet, dry face up on blotters.
3. Dry vertically by propping them up on their long sides or in racks.
4. If broken, cracked, or with flaking emulsions, dry flat.

Lantern slides, Autochromes and Dufaycolor

1. If lantern slides are waterlogged, it may be necessary to disassemble them by carefully slitting the paper seal around the edges and separating the photograph from the protective cover glass.
2. Dry the photograph face up on blotters and keep the cover glass with it, also face up, for later reassembly.

Deteriorated nitrate and acetate-base negatives

1. The recovery rate will be low.
2. Dry these emulsion (dull and sticky) side up on sheets of polyester web over absorbent paper, and change paper as it becomes wet.
3. If they are in an early state of deterioration they may be hung on lines.

Slides in plastic or paper mounts

1. If slides are in plastic sleeves and pages, remove them.
2. If slides are dirty, rinse and dip in "Photoflo" slide cleaner.
3. If there is a small amount of water and if it is in a controlled environment, slides may be dried in their mounts.
4. Slides may be air dried by hanging on a line or propped on edge, otherwise, unmount slides.
5. Keep and dry the mounts if they have information on them.
6. Hang slides on a line by edges.
7. After drying, then remount.

FREEZING OF PHOTOGRAPHIC MATERIALS - GENERAL INFORMATION

1. If time does not permit air-drying, photographic materials may be frozen as a last resort.
Appendix A: Salvage Procedures

2. Freezing allows the institution time to plan, organize, and coordinate their disaster recovery plans and minimizes the damage to the materials.
3. Freezing is not a drying method and will not kill mold spores.
4. Water damaged materials can be stabilized and salvaged, when frozen and stored at low temperatures (ideally -20 F). As the emulsion may be damaged by the formation of ice crystals, freezing as quickly as possible is recommended (smaller ice crystals will cause less damage).
5. Use a self-defrosting fast-freezer that has the capacity to freeze items very quickly, at temperatures below –10 degrees F.
6. Items must be left in the freezer from several weeks to several months.
7. As staff time and space permit, items can be taken out of the freezer and air dried before they are returned to their regular shelves.

Freezing photographic prints

- If immediate air-drying is not possible or if photographs are stuck together, freeze them.
- Place photographs in small plastic bags, several to a bag. The stacks should be kept small enough that all the photographs in the stack can be air dried upon thawing.
- If possible, interleave photographs with non-woven polyester material or wax paper (makes it easier to separate).
- The photographs must be kept wet until they are frozen and they should be frozen at a rapid rate to –5 degrees C or colder.

Freezing photographic negatives

- Negatives should be separated before freezing as they tend to stick together when thawed.
- Freezing of negatives must be a last resort as damage is often the result of freezing negatives.

DRIYING FROZEN PHOTOGRAPHIC PRINTS AND SLIDES – GENERAL INFORMATION

1. Frozen photographs are best dried by thawing, followed by air-drying.
2. As the photographs thaw, they can be separated by peeling them off the stack one at a time.
3. Individual photographs can be carefully peeled from the group and placed face up on absorbent material to air-dry.
4. Continue to air dry as described above.
5. Dried or frozen photographs are reasonably stable. They can be stored until a conservator can be consulted.

Vacuum drying and vacuum freeze drying - (NOT recommended for photographs)
Appendix A: Salvage Procedures

Note: Wet collodion glass plates must never be freeze dried, they won't survive. Also true for ambrotypes, collodion lantern slides and tintypes.

1. Vacuum drying or vacuum thermal drying.
   - This method uses a vacuum thermal-drying chamber.
   - Wet or frozen items are placed in the chamber.
   - A vacuum is drawn.
   - Heat is introduced.
   - The materials are dried.
   - The temperature stays above 32 degrees F.

2. Vacuum freeze drying.
   - In this method, frozen materials are placed in a vacuum chamber.
   - A vacuum is drawn and carefully controlled heat is applied.
   - The temperature is kept below 32 degrees F.

Salvage of Motion Picture Films:

Film Recovery Procedures – General Information

1. Motion picture film must not be allowed to start drying rolled up because the emulsions will stick.
2. Best results will be obtained if the films are washed and dried by a film processor.
3. This should be done within 72 hours.
4. If film is in cans, check if water has gotten inside. If only the containers are wet, dry them and re-label if necessary.
5. If film is wet, keep the film wet until it is shipped to a professional processing lab.
6. If film is wet, keep them wet and cool by sealing them (while wet) in plastic bags and immerse the bags in cold water in clean plastic pails.
7. Add ice to the water to keep it cool, especially when shipping them for treatment.
8. Arrange for treatment as soon as possible. For black and white, emulsions separate in 3 days. For color, color layers separate, and dyes fade, in 2 days.
9. If arranging for treatment within the time limits above are not possible, freeze materials as quickly as possible (quick freezing as in a blast freezer results in smaller (less damaging) ice crystals.

See Appendix G For Film Recovery Service Vendors
Appendix A: Salvage Procedures

Salvage Procedures for Magnetic Data Storage Media:

Magnetic Storage Media – General Information

Note: Storage media and devices that store digital or analog media come in a number of varieties ranging from hard drives in computers and data storage units to removable storage media such as diskettes and tapes. These storage media and devices have in common their dependence on magnetic polarity capture on a ferromagnetic substance adhered to a plastic or metallic base. Thus all varieties are prone to the same types of damage when exposed to water and combustion products.

Tapes (audio, video, computer)

Note: Water is especially damaging to tapes. The longer they have been wet, the greater the damage and data loss will be. Do not attempt to play any damaged tapes, as they can damage the equipment on which they are playing.

Salvage and recovery procedures for magnetic tape

- Break open the cassettes or remove from canisters.
- Wash in clean or distilled water.
- Air-dry, drying with cheesecloth, run through a tape cleaner or winder, or gently separate the reel flanges with spacers (such as inert grommets) to allow water to run off, promote air flow, and prevent tape-to-flange adhesion. Do not dry with heated air flow, as it will result in adhesion of the media.

Diskettes

Priorities for salvaging magnetic diskettes

- Highest priority - Disks with the most debris (mud, soot, etc. on them).
- Disks damaged only by water would be a lower priority.

Handling precautions for magnetic diskettes

- Disks can be salvaged but as a general rule, the more advanced the technology and the more dense the data compaction, the less the chance of recovery.
- Do not use machines with electric motors near magnetic media. If using a vacuum cleaner a long hose can keep the motor away from the media.
- Consider that when making copies of salvaged disks/discs that the item may cause damage to the computer, rendering it inoperable.
- Do not use hair dryers or cleaning products.
Appendix A: Salvage Procedures

Salvage and recovery procedures for magnetic diskettes

- Retain, or replace labeling using wax crayon.
- Remove disk from the jacket or case by cutting it with NON-METALLIC scissors.
- Rinse disk in cold distilled water.
- Dry with lint free towels and insert into a new clean dry jacket.
- Make new copy of the disk and discard the original damaged magnetic diskette.

SALVAGE PROCEDURES FOR OPTICAL DATA STORAGE FORMATS (CD, DVD, etc)

OPTICAL DATA STORAGE FORMATS – GENERAL INFORMATION

Note: Optical Storage formats are more robust than magnetic storage media. Binary data is recorded into the plastic material of the disk and not onto a layer coated onto the diskette. Thus loss of coating and delaminating is not a significant problem. The optical media is most prone to deformation caused by heat and scratching or abrasion, both of which cause data and functional loss.

Priorities for salvaging optical data storage media

- Highest priority - Disks with the most debris (mud, soot, etc. on them).
- Disks damaged only by water would be a lower priority.

Handling precautions for optical data storage media

- Compact disks can be salvaged but as a general rule, the more advanced the technology, the less the chance of recovery.
- Do not use machines with electric motors near magnetic media. If using a vacuum cleaner a long hose can keep the motor away from the media.
- Consider that when making copies of salvaged disks/discs that the item may cause damage to the computer, rendering it inoperable.
- Do not use hair dryers or cleaning products.

Salvage and recovery procedures for optical data storage media

- Handle disks by the outer edges.
- Use distilled water to rinse clean.
- On recorded side (no writing), working from the center of the disk in a straight line, wipe off with a soft, dry cloth (lint-free is preferable).
- Make new copy of the disk if the recovered one shows damage.
- Label the old disk if only the case contains content information and label the new copy of the disk with a wax crayon.
Appendix A: Salvage Procedures

RECOVERY OF THREE-DIMENSIONAL OBJECTS:

GLASS AND STONE OBJECTS

1. Air dry if they have been immersed in relatively clean water.
2. If they have been exposed to salt water, mud, oil, or other contaminants, keep them wet until you can consult a conservator.
3. Pottery that has been previously restored using a water-soluble glue should be left for treatment by a conservator.

CERAMICS AND PORCELAIN (Glazed, Unglazed, Painted)

Note: Many old pieces have been repaired, and those repairs will come apart when immersed for any length of time.

1. Gilded pieces should be dabbed off with a soft cloth.
2. Glazed pieces can wait until there is time to wash them.
3. Air-dry at room temperature.
4. Keep pieces together in plastic bag or box and label.
5. Bag or box when possible, and pack dry if possible.
6. Wrap pieces individually to prevent more damage.

PAINTINGS

Paintings – general information

- Separate the merely wet paintings from those with structural damage. Structural damage is tears in the canvas, flaking, lifting, and dissolving of paint and ground layers. Consult a conservator for these paintings.
- The treatment of items of high monetary, historic, or sentimental value should only be performed in consultation with a conservator.

Treating paintings under glass

- Remove the backing material from the frame.
- If the item is not stuck to the glass, carefully remove it from the frame and air-dry.
- If the object appears to be stuck to the glass, do not attempt to remove it from the frame.

Salvage and recovery procedures for works on canvas or cloth (acrylic or oil)

1. If the painting is on an easel, transport horizontally, with the image facing upward. If unable to do this, carry painting facing you, holding sides of frame with palms of hand.
Appendix A: Salvage Procedures

2. Use more than one person to transport the larger paintings.
3. Water damage must never be frozen. Air-dry immediately.
4. Paintings should be unframed before drying, but not removed from stretcher.
5. Structurally sound paintings should be dried flat and face down on clean, padded surfaces, followed by a layer of Japanese tissue paper. Make sure tissue paper is not wrinkled.
6. Cut blotters to the inside dimensions of the stretcher frame.
7. Cut a sheet of plywood or thick masonite to the same dimensions, or smaller to fit inside the stretcher keys.
8. Cover the back of canvas with a blotter (abut blotters end to end for a large canvas), then the board, and finally weights.
9. Change the blotter frequently until the canvas is dry. If the tissue on the face of the painting sticks to the paint layer, leave it in place.

ARTWORKS ON PAPER

Salvage and recovery of artworks on paper

1. Do not separate sheets that are stuck together.
2. Do not blot the surface of artworks on paper which have water-soluble media.
3. Interleave artworks in a folder.
4. Transport artworks flat with supports or in their containers.
5. Artworks should be air dried.
6. When artwork has mold, warped, saturated backings or when works are stuck together, it may be appropriate to freeze and vacuum freeze dry.
7. To dry paintings with high or fragile impasto layers, consult a conservator.

REFERENCE SOURCES:

General Disaster Plan Information:


Bibliography of Photograph Preservation:


Appendix A: Salvage Procedures


Smithsonian Institution. *Photographic Negatives in the Juley Collection: Their Care and Preservation*. Slide/Tape program, approximately 30 minutes long.


Disaster Recovery and Conservation Information on the Internet:


National Archives - [http://nara.gov/](http://nara.gov/)
APPENDIX B: COMPUTER BASED SYSTEMS

Introduction
Pre-Disaster Planning
Post Disaster Procedure

INTRODUCTION

The MU Libraries' computers and printers can be adversely affected by three (3) factors arising from disasters such as tornadoes, fires, floods, explosion or earthquakes. These three factors are:

1. Damage caused by water;
2. Damage caused by extreme heat/fire
3. Damage caused by impact.

The consideration of disasters such as radiation, EMP, and other natural disasters is considered beyond the scope of this plan.

PRE-DISASTER PLANNING

The objective of a pre disaster plan is to minimize, or eliminate, the adverse effects of accidents, disasters and/or catastrophes. Such a plan must consider the preservation of both the hardware and the software.

Hardware Preservation

There are a number of viable options for the protection of computer systems.

a. Ensure that all servers are plugged into appropriate uninterrupted power supplies (UPS), and configured to shutdown gracefully.
b. Computers, printers and modems are plugged directly into surge suppressors.
c. Situate all equipment on flat, well supported and stable surfaces.
d. Have ready access to off-site equipment, parts, and services.

Data Preservation

The most effective means of protecting and preserving data entail:

a. Frequent and consistent data backups.
b. At least one set of off-site storage for critical databases and files.
c. Inventory software licenses.
POST DISASTER PROCEDURE

1. Disconnect all computers and peripheral equipment from electrical outlets (disconnect all plugs from the surge suppressors, or disconnect the surge suppressors from the electrical outlet).
2. Examine the equipment and ascertain both the nature and the degree of the damage.
3. Non-functional systems should be inventoried and stored for potential data recovery. Refer to Appendix H, Post Disaster Report Form.
4. Many core library functions depend on the University telecommunications network for access to off-site systems. LTS will coordinate with the MU Division of IT to assess and repair any damage to this infrastructure.
5. Replace affected systems as prioritized by the DRT during the Recovery Preparations phase of the disaster. Refer to Phase 3: Recovery Preparation.

SEE APPENDIX G FOR COMPUTER (IT), DATA AND HARDWARE RECOVERY SERVICES
## Appendix C: Damage Assessment Form

Identify the types of material that have been damaged and estimate quantities:
- bound volumes
- unbound paper
- photographic prints and negatives
- videotape, audio tape, etc.

Identify the nature of the damage, e.g., materials are:
- damp
- wet
- smoke damaged
- fire damaged
- muddy

### Damage Assessment Form

<table>
<thead>
<tr>
<th>Nature of Damage (water, fire)</th>
<th>Type of Material Damaged (books, journals, photos)</th>
<th>Extent of Damage (how many volumes, linear feet)</th>
<th>Rough Call # Range/ Floor/ Room</th>
<th>Environmental Conditions (dampness, heat, wet wall, carpet)</th>
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### DAMAGE ASSESSMENT FORM

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APPENDIX D: COMMAND POST
(back to top)

A Command Post is only necessary in a catastrophic emergency. It serves to coordinate disaster recovery activities and functions as a central reference point for information on the disaster. The Disaster Recovery Team (DRT) will meet in Stotler Lounge, in the Memorial Union.

EQUIPMENT AND SUPPLIES

_____ Telephones
_____ Purchase order forms
_____ Computer (Laptop?) with network connection and printer with paper
_____ Library floor plans
_____ Photocopier
_____ Notebooks
_____ Paper, pencils, pens, tape, staplers
_____ Battery-operated radio
_____ Tables and chairs
_____ Name badges
_____ Gloves
_____ Hard hats
APPENDIX E: COMMUNICATION / MEDIA PLAN (Disaster Response Team)

The communication plan informs the three main constituencies of the Libraries:

- the MU Libraries' employees
- the patrons who use the Libraries
- the media.

Depending upon the type of disaster, differing courses of action may be needed once the initial plan is in place.

**Phase 1: Communication must be one of the priorities after safety**

**Employees**

- If the disaster occurs when most employees are not at work, they need to know whether or not to come to work the following workday.
- They need to know if they need to assist in disaster recovery in any way.
- They need to know what affect the disaster had upon the Libraries as a whole and in their specific workspace.
- They need information on a continuing basis after the initial contact.

**Patrons**

- If the disaster is widespread, there will probably be fewer initial questions regarding the libraries' being open and other related questions.
- If the disaster relates only to the MU Libraries and one or more of those buildings, the patrons need to know when services will resume, what services will resume first, how to determine when services will resume, and what to do with library materials until services resume.
- Patrons who do not reside in Columbia will need to have a way to know of the disaster and the extent that the Libraries have been damaged.
Appendix E: Communication / Media Plan

Media

Since Columbia is a city with a heavy concentration of all types of media, the first persons on the scene of any disaster need to be prepared to work with the media. The media may assist in a most positive way in informing both employees and patrons about the disaster and may convey important information that all persons need to know.

Similarly to announced snow days and other school closings, the radio and television stations may use announcements to inform employees not to report to work on a certain day. However, a plan needs to be in place so that the radio and television stations know whom the official spokesperson is who has authority to speak on behalf of the MU Libraries. That person is the Director of Libraries in all cases. However, working with MU News Bureau to get an effective, efficient message to all news outlets is preferred. News Bureau personnel know all of the contact persons at all local radio, television and newspapers and are known to all of those news agencies.

A sample news release prepared in advance with spaces to be filled in is also recommended so that time can be used the most efficiently.

Since a disaster is "news," one can assume that the site of a large-scale disaster will have several reporters, including live network feeds, present. Police and firefighters will keep reporters and all other persons a safe distance from any site until danger has passed but there will be reporters nearby and wanting interviews with anyone willing to talk.

The MU Libraries Media Guide process is the one to use in times of disaster as well as any other time. The primary media contact persons should be a part of working with the media. Jim Cogswell is the official spokesperson for the MU Libraries and unless he designates otherwise, all reporters should be referred to him either directly or through the primary media contact persons depending upon the circumstances at the time.

News Bureau contact:

The News Bureau has a pager that is monitored all of the time and that number (999-8756) should be called first before talking to any media in times of a disaster. If media personnel call before we have had an opportunity to talk with News Bureau, tell them that we are in the process of collecting information and that someone will call them back. We may also use 882-6211 which is the main number for the News Bureau office during normal work hours on a weekday.

The News Bureau recommends that we take advantage of the website http://mualert.missouri.edu/ which can be used to transmit information that is immediately
needed to everyone. This website is currently used by MU as a way to inform the MU community about late-breaking news of all types.

**Phase 2: Once the Command Post is set up**

Many of the same issues dealt with in Phase One will need to be re-played in Phase II. Employees, patrons and news media will all need to be aware of where the command post is, who is staffing it, what services are being provided there, and what access there is to persons not working there.

There will also need to be regular updates about disaster recovery to employees and to patrons. The news media will not want minute details after the first few days.

Telephone trees may or may not be used at this point and will depend upon telephone service in the area. Division and Department Heads should be in regular contact with employees who work in those divisions and departments.

Communicating by the Libraries web site is important and should be instituted as soon as it is possible to get information on the web site.

**Phase 3: Throughout the recovery period until the Libraries re-open**

As time passes, there will be more reliance upon the web presence and the importance of keeping the information timely and accurate.
APPENDIX F: DISASTER AND EMERGENCY EQUIPMENT & SUPPLIES

Library Map of Supply Locations
Appendix F: Disaster and Emergency Equipment & Supplies

CABINET A

Location: In corridor outside Room 29 North door

- 4-Flashlights
- Light bulbs (assortment)
- Dust Masks
- Clothes Pens
- Phone Cord
- Batteries
- Mop Buckets
- Scissors
- Pads of Paper
- Foam blocks
- Pencils
- Sling Psychrometer
- 3-Clipboards
- 1-1st Aid Kit
- 700 yards of Omniflex Monofilament (fishing line)
- 1-Box of Freezer Paper-Less than 100 Sq.Ft.
- 1-Box of Aluminum Foil (Heavy Duty) 37 Sq FT-less than 7 Yds.

CABINET B

Location: Corridor outside room 29 North Door

- Surge Protectors
- 2-25FT. Extension Cords
- Trash Bags
- Mop buckets
- Cheesecloths
- Sponges (Assorted sizes)
- Large Roll of Paper
- "Caution" Tape Roll
- 6 pairs of Rubber Gloves
Appendix F: Disaster and Emergency Equipment & Supplies

CABINET C

Location: Corridor outside Room 29 North Door

- Plastic (used but clean)
- Rubber Boots-S, M, L
- Hard Hats
- Building Maps
- Spray Paint
- Ponchos
- Plastic Aprons
- 2-Boxes Plastic 10 x 100-6 mil. - 2000 Sq.Ft.
- 1-Box Plastic 10 x 100-6 mil. – 1000Sq.Ft.
- 1-Can Marker Paint with Inverted Tip

CABINET D

Location: Corridor outside Room 29 North Door

- 3-Brooms
- 2-Mop
- KLET Floor sign - Caution
- 2-Buckets
- 3-Flat Bricks
- 1- Dust Pan
- 1-Small Ladder
- 1-Snow Shovel

CHANGING CLOSET

Location: Security Office, Room 93

- Large Professional Wet Vac. (with attachments).
- Large 1st Aid Kit
- Wet Floor Signs
- Clear Plastic 10'x100' Box
- Box of Tools: Hammers, Screwdrivers, Nails, Pliers, Ects.
- 1-Blanket
GRAY OVERHEAD COMPARTMENTS

Location: East Wall, Security Office, Room 93

CABINET A

- 2-Bottles of Hydrogen Peroxide
- 2-Bottles of Alcohol
- 1-Container of Sani-cloths (Germicidal Disposable Wipes)
- 12-XXLarge Zip Lock Plastic Bags
- Latex Gloves (S, M, L)
- 1-Neosporin
- 1-Box Absorbent Cotton Balls
- 1-Box Cotton Swabs
- 2-Small 1st Aid Kits
- 1-Mini Sewing Kit

CABINET B

- 5 Foot Extension Cord
- 25 Foot Extension Cord
- 1-Bull Horn
- 3-Rolls of Duck Tape
- 1-Roll Two-sided Tape

CABINET C

- 7-Flashlights
  - Flashlight Batteries
  - Flashlight Bulbs
- 5-DoorStops
- 1-Tape Recorder-small
- Light Bulbs
- 1-Tape Measure
PLASTIC SHEETING

**Location:** Ellis Library & Branch Libraries

Ellis Library

- 4D61 (Supply Room) 8 Boxes
- 93 (Security office) 2 Boxes
- Disaster Cabinet C 3 Boxes

Branch Libraries

- Engineering 0 Boxes
- Geology 1 Box
- Health Sciences 1 Box
- Journalism 1 Bundle
- Math Sciences 2 Boxes
- University Archives 2 Boxes
- Veterinary Medical 2 Boxes

TELEPHONE AND COMPUTER WIRING CLOSET

**Location:** Room 19 (Telephone & Computer Wiring Closet)

- Rescubes – 105 boxes
- 1 Blanket
- Large Trash Cans with lids

SURPLUS SAVE ROOM

**Location:** Room 37A

- 1-Wet Vac. (Extra) – with attachments
SPECIAL COLLECTIONS

- Fans (2)
- Portable dehumidifiers (10)
  - Location (Room Numbers):
    - 401 (2)
    - 401A (3)
    - 401C (1)
    - 404 (1)
    - 405 (1)
    - 409 (1)
    - 307B (1)

There are five commercial-sized dehumidifiers mounted in various rooms with drains that are built in. In an emergency, these could be detached and used with some effort, but they are not generally portable.

Special Collections also has ten portable floor units. These can be readily borrowed and transported to a location in case of an emergency.

Room 4D21 has its own air conditioning and dehumidification controls, left over from when the space was used by the Museum of Art and Archaeology. It would be theoretically possible to remove the books from this room and use it as a treatment area (with extra dehumidifiers added). Of course, the Depository would be a better location, but this is an alternative.

Special Collections also has two small oscillating floor fans that could also be borrowed.

MU DEPOSITORY

- First aid kit (1)
- Hard hats (3)
- Flashlights (3)
- Scissors (2)
- Trash bags (several boxes)
- Paper Towels (3 cases)
- Rescubes (5 cartons)
- Extension cord (1-100 ft)
Appendix F: Disaster and Emergency Equipment & Supplies

- Box fans (2)
- Plastic sheeting (1 16 ft x 100 ft roll)

DISASTER RESPONSE KITS

Locations: Annex, Archives, Engineering, Geology, Health Sciences, Journalism, Math, Special Collections, UM Depository, and Veterinary Sciences

Contents:

- Plastic aprons
- Rubber boots
- Plastic buckets
- Disinfectant wipes
- Scissors
- Extension cords (25 ft.)
- Flashlights
- Batteries for flashlights
- Freezer paper
- Trash bags
- Rubber gloves
- Dust masks
- Clipboards
- Notepads
- Paper towels
- Polyethylene sheeting
- Sponges
- Yellow Caution tape
- Duct tape
- Masking tape
- Waterproof marking pens
APPENDIX G: LIST OF EXTERNAL SOURCES FOR DISASTER RECOVERY SERVICES AND SUPPLIES  (back to top)

ART MOVERS

Smith Kramer Fine Art Services  
1622 Westport Road  
Kansas City, MO 64111  
Phone: (816) 756-3777  
Toll Free: (800) 222-7522  
Web: http://www.smithkramer.com/web3/  
email: skexhibit@smithkramer.com

ART RESTORATION

Regional Alliance for Preservation (RAP) - http://www.rap-arcc.org/

AUDIO-TAPE REFORMATTING & RESTORATION

Vidipax  
450 W. 31st St., 4th Floor  
New York, NY 10001  
Toll Free/Emergency: 1-800-653-8434  
Phone: (212) 563-1999  
Fax: (212) 563-1994  
Email: info@vidipax.com

Specs Bros.  
PO Box 5  
Ridgefield Park, NJ 07660  
Toll Free/Emergency: 1-800-852-7732  
Phone: (201) 440-6589  
Fax: (201) 440-6588  
Email: admin@specbros.com

BOARDING-UP SERVICES

Brady's Glass  
203 N. Providence Rd.  
Columbia, 65203-4189  
Phone: 442-6143  
(email established in the 1950s, easiest to reach during business hours)

Koonse Glass Co., Inc.  
300 N. 10th St.  
Columbia, 65201  
Phone: 449-0084  
(email established in the 1960s, does lots of business with MU)
BOOK CONSERVATORS

James Downey
Legacy Bookbindery
2011 N. Country Club Drive
Columbia, MO 65201
Phone: (573) 442-0855
jdowney@legacybookbindery.com

Richard Baker
Books & Paper Conservation
1712 (rear) S. Big Bend Blvd.
St. Louis, Mo 63117
Phone: (314) 781-3035
Web: www.RichardCBaker.com

Deborah Wender
Northeast Document Conservation Center
250 N. Main St.
Andover, MA 01810
Phone: (978) 470-1010
Fax: (978) 475-6021
Email: ccaha@ccaha.org

Glen Ruzicka, Conservation Center for Art & Historic Artifacts
264 S. 23rd St
Philadelphia, PA 19103
Phone: (215) 545-0613
Fax: (215) 735-9313
Email: ccaha@ccaha.org

Etherington Conservation, Services
6204 Corporate Park Drive
Browns Summit, NC 27214
Phone: Toll-Free 1-800-444-7534
Web: http://www.thehfgroup.com/

CLEANING SERVICES

Kelley Klean, Inc. Service Team of Professionals
10 S Rangeline Rd
Columbia 65201-8718
Phone: (573)214-0990

Servpro of Columbia
3200 Zepnick Ct.
Columbia 65205
Phone: 449-1999
Fax: (660) 886-9195
COMPUTER (IT) SERVICES

The following items can be purchased from any of the vendors below:

- CD Rom Drives
- Computers
- CPU cases
- Hard Drives
- Network interface Cards
- Network cables
- Printers
- Power Supplies
- Surge Protectors
- Keyboards
- Monitors

Vendors (not listed by preference):

Dell Computer (800) 274-7799 Ext 64045
http://premier.dell.com/

eProcurement
http://www.umsystem.edu/ums/departments/fa/management/procurement/apps/epro/

Tiger Tech (MU)
(573) 882-2131
http://www.mubookstore.com

UM Division of IT
(573) 882-500
http://DoIt.missouri.edu/

- Data Recovery

Ontrack Data Recovery
9023 Columbine Road
Eden Prairie, MN 55347
Toll Free: 1-800-347-6105
Phone: (952) 937-5161
Fax: (952) 937-5750
Web: www.ontrack.com

Data Recovery Group
21800 Melrose Ave Ste #1
Southfield MI 48075
Phone: (877) 825-1784
Web: www.datarecoverygroup.com
Appendix G: List of External Sources for Disaster Recovery Services and Supplies

CBL Data Recovery Technologies
200 Business Park Drive
Armonk, NY
USA 10504
Toll-Free 1-800-551-3917
Web: www.cbldatarecovery.com

Electronic Discovery Solutions Web: www.kroll.com/

Data Recovery Services, (800) 304-7189 http://www.datarecovery.net/

Drive Savers (800) 440-1904 http://www.drivesavers.com/

MicroCom (800) 469.2549 http://www.data-master.com/

American Data Recovery, Inc (800) 450-9282 http://www.adrdatarecovery.com

-Hardware Recovery

Restoration Technologies Inc.
3695 Prairie Lake Ct
Aurora, IL 60504-3134
Toll Free: 1-800-421-9290
Email: http://www.restorationtechnologies.net/

Belfor Property Restoration
2275 Cassens Dr., Suite 115
St. Louis, MO 63026
Phone: (314) 863-0900
Contact: Shari Westbrook
Fax (636) 326-7887
Cell (314) 565-7683
Email shari.westbrook@us.belfor.com

FILM, VIDEO AND AUDIO RECOVERY SERVICE VENDORS

Kodak and Fuji will process water damaged film and negatives, and will answer questions.
Kodak 716-724-4000 or 800 EKC-TEST
Fuji 800-877-0555
Appendix G: List of External Sources for Disaster Recovery Services and Supplies

Cinema Arts, Inc.
P.O. Box 70
South Sterling, PA 18460
717/676-4145
Repairs and duplicates all types of motion picture film.

Film Treat
42-44 Orchard Street - 4th Floor
Long Island City, NY 11101
718/784-4040
Restoration of motion picture film.

Document Reprocessors
5611 Water Street
Middlesex, NY 14507
716/554-4500
Vacuum drying, cleaning, respooling and duplication of videotape.

Smolian Sound Studios
1 Wormans Mill Court #4
Frederick, MD 21701
Phone: (301) 694-5134
Email: smolian@erols.com or smolian@soundsaver.com
Web: http://www.soundsaver.com
Restores most types of audio media

WRS Motion Picture and Video Laboratory
213 Tech Road, Pittsburgh, PA 15205
Phone: (412) 937-1200
Fax: (412) 922-1200
Email: Jackn@wrslabs.com
Web: http://www.wrslabs.com
Processes, transfers and restores all types of film, video and CD-ROMs.

FREEZING DRYING
Midwest Freeze-Dry, Ltd
7326 N. Central Park
Skokie, IL 60076
Phone: (847) 679-4756
Fax: (847) 679-4191
Email: mfd7326@sbcglobal.net
Web: http://www.midwestfreezedryltd.com/
APPENDIX H: POST-DIASTER REPORT FORM

Identify the types of material that have been damaged and estimate quantities:
- bound volumes
- unbound paper
- photographic prints and negatives
- videotape, audio tape, etc.

Identify the nature of the damage, e.g., materials are:
- damp
- wet
- smoke damaged
- fire damaged
- muddy

Salvage Treatment:
- Off-site or local
- Freeze
- Air-Dry/Interleave
- Replace
- Rebind
- Withdrawn
- Mold

<table>
<thead>
<tr>
<th>Date of Disaster:</th>
<th>Location of Disaster:</th>
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</table>

Description of Disaster:

Personnel Involved:

<table>
<thead>
<tr>
<th>Type of Disaster and Source of Problem</th>
<th>Type of Material Damaged (books, journals, photos)</th>
<th>Extent of Damage (how many volumes, linear feet)</th>
<th>Rough Call # (Range/ Floor/ Room)</th>
<th>Salvage Treatment (list number of items treated)</th>
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64
Appendix H: Post-Disaster Report Form

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</tbody>
</table>

Form completed by:                                    Date:
APPENDIX I: BIBLIOGRAPHY AND ONLINE SOURCES OF INFORMATION
(back to top)

- Disaster Plans (gathered by Stanford)
- Disaster Mitigation Planning Assistance
- dPlan
- ALCTS Disaster Preparedness Clearinghouse
- Northeast Document Conservation Center
- Inland Empire Libraries Disaster Response Network
- NYU Disaster Plan Workbook
Engineering Library Floor Plan:
Geology Library Floor Plan:
Health Sciences Library Floor Plans:

First Floor

Second Floor
Third Floor

P = Fire Alarm Pulls
E = Fire Extinguishers
Journalism Library Floor Plans:

Lower Level

**RED** is top salvage priority = LC Oversize and Missourian Microfilm by staircase
Yellow is 2nd priority = LC call # in first room, Bound Journals, thesis/dissertations, Deweys in second room.

Fire Extinguisher

Upper Level

Red = current periodicals, reference section, reserves and ready reference and videos.
Yellow = Frank Lee Martin Portrait, the Chinese figures and Chinese wall hanging in office area.
Newspaper Library Floor Plan:

Columbia Missourian Newspaper Library
Veterinary Medical Library Floor Plan:

University Archives Floor Plans:

- Clark Hall Basement
- Lewis Hall Basement
- Lewis Hall 7th Floor
CLARK HALL BASEMENT
LEWIS HALL BASMENT:
No archives records in rooms.
Only yellow cabinets in corridor.
University Archives
Lewis Hall 7th Floor Room Numbers

706
Director
Phone: 882-4602

705
Reference Archivist
Phone: 882-3727

704
Staff Office

703
Reading Room

701
Closet (w/wash bay)

722
Film and Audio

723
Workroom (w/rescue)

725
Workroom

726
Technical Services Archivist
Phone: 882-2839

* This diagram not drawn to scale

8/4/2010
UM Library Depository Floor Plan:

UMLD Storage Module

<table>
<thead>
<tr>
<th>EXIT</th>
<th>EL</th>
<th>EL</th>
<th>EL</th>
<th>EL</th>
<th>EL</th>
<th>EL</th>
<th>EXIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA</td>
<td>FA</td>
<td>FE</td>
<td>FA</td>
<td>FE</td>
<td>FA</td>
<td>FA</td>
<td>FA</td>
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<tr>
<td>Eqpmnt</td>
<td>Shelves</td>
<td></td>
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<tr>
<td>Tarps</td>
<td>Tarps</td>
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</tbody>
</table>

- Fire extinguishers FE
- Fire alarms FA
- Emergency lights EL
- Exits EXIT
- Location of salvage priorities STORAGE MODULE
- Location of emergency supplies ES

UMLD Upstairs Machine Room (Mezzanine)

<table>
<thead>
<tr>
<th>STAIRS</th>
<th>EXIT</th>
<th>JC Console</th>
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<tbody>
<tr>
<td></td>
<td>Building Plans</td>
<td>MEZZANINE</td>
</tr>
<tr>
<td></td>
<td>Boiler1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boiler2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boiler3</td>
<td>Air Handlers</td>
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</table>

79
# UMLD Front Area and Loading Dock

<table>
<thead>
<tr>
<th>Movement</th>
<th>FE</th>
<th>FA</th>
<th>EL</th>
<th>Rectangle Name</th>
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<tbody>
<tr>
<td>CHEM Door to</td>
<td></td>
<td></td>
<td></td>
<td>Bath/Shower Storage</td>
</tr>
<tr>
<td>Shower Storage</td>
<td></td>
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<tr>
<td>Front Door</td>
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<tr>
<td>Supply Cabinet</td>
<td></td>
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<tr>
<td>PROCESSING AREA</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Staff PC</td>
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<tr>
<td>Loading Dock</td>
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<tr>
<td>4K PCs</td>
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<tr>
<td>Staff PC</td>
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<tr>
<td>Exterior Driveway</td>
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<tr>
<td>EL</td>
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<tr>
<td>Conference Room</td>
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<tr>
<td>Spare PC</td>
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<tr>
<td>Door</td>
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<tr>
<td>Records Office</td>
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<tr>
<td>Door</td>
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<tr>
<td>STAFF ROOM</td>
<td></td>
<td></td>
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<tr>
<td>Door</td>
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</tbody>
</table>

**Outsite Area**

- Fire extinguisher (FE)
- Fire alarms (FA)
- Emergency lights (EL)
- Exits (EXIT)
- Location of emergency supplies (ES)

---

*UMLD has a chemical emergency shower (Chem. Shower) in the receiving area for use in case of a chemical accident.*
UM Library Depository Module 2 (U2) Floor Plan:

Fire extinguishers FE Exits EXIT Location of emergency supplies ES
Location of salvage priorities STORAGE MODULE