Phoenix Historical Society / Museum P.O. Box 1466 Phoenix, OR 97535 Prepared by:

Last Updated: 7/13/2015

## Contents

# **INTRODUCTION**

#### **General Information**

This disaster plan was completed by **and a minor** on 7/13/2015. It is meant to assist in recovering collections from events ranging from a minor emergency to a major disaster. However, in an emergency it is important to keep in mind that **human safety is always the highest priority.** Recovery of collections should not begin until all staff and patrons are safe. The Disaster Planning Team gathered information for this plan.

Responsibilities of the team members were:

Gathering collection information:

President Secretary / Treasurer

Preparing a staff list: Secretary / Treasurer

Assessing risks: President Board Member

Devising opening and closing procedures:

President Docent

Devising a preventive maintenance checklist:

President Board Member

Determining salvage priorities: President

Collecting insurance and accounting information:

Secretary / Treasurer

Collecting facilities information and preparing floor plans: President Collecting information about local emergency services:

President Vice President
Gathering internal supplies: Secretary / Treasurer
Collecting information about external supplies: President <b>Constant</b> Secretary / Treasurer <b>Constant</b>
Devising emergency response and evacuation procedures: President <b>Constant</b> Vice President <b>Constant</b>
Preparing an emergency call list: Secretary / Treasurer Content Conten
Identifying a potential command center and/or alternative storage or drying space: President <b>Community</b> Vice President <b>Community</b>
Identifying potential volunteers and/or workers: Board member <b>Constant Constant</b> Docent <b>Constant Constant</b>
Coordinating staff training: Secretary / Treasurer
Coordinating distribution, review, and updating of the plan: Secretary / Treasurer <b>Constant of the plan</b> President <b>Constant of the plan</b>
Preparing communications and PR kit: President <b>Communication</b> Docent <b>Communication</b>
Communicating with bank or financial institution: Secretary / Treasurer

Maintaining relationships with "buddy" institutions: President **Constitution** Board Member **Constitution** Secretary / Treasurer **Constitution** 

Information Technology: Secretary / Treasurer

#### **Distribution of the Plan**

Copies of this plan have been distributed as follows -

Phoenix Fire Department

Phoenix Historical Society / Museum Department: Location of Copy

Shelf in office

#### How to Use this Plan

This plan consists of three main sections (response, recovery, and rehabilitation) and a number of appendices. The body of the plan is designed for ease of use during the early stages of a disaster. Thus, summary information is provided in the body of the plan and more detailed information (e.g., detailed salvage priorities, or additional sources of information) can be found in the appendices. Once initial response is underway, consult the appendices for more information as a recovery strategy is mapped out. Information on mitigating risks and preventing disasters (including a customized list of existing risks, as well as various forms and checklists) is also included in the appendices. This information should be consulted and updated regularly.

#### **Review and Updating of the Plan**

This plan is due to be updated in January, 2016. Responsibilities for updating the various sections of the plan have been assigned as follows –

Staff list/Disaster Team lists: Preventive maintenance: Opening/closing procedures: Facilities information/floor plans: Information technology: Insurance: Institutional salvage priorities: Evacuation instructions: Emergency numbers:

Secretary / Treasurer
President
President
Secretary / Treasurer
Secretary / Treasurer
Secretary / Treasurer
President
President
Secretary / Treasurer

In-house supplies:	President
External supplies/services:	President
Volunteer list:	Secretary / Treasurer
Areas for relocation/temporary storage:	Vice President
Communication with emergency services:	President
Availability of emergency funds:	Secretary / Treasurer
Staff training:	President

#### Scope and Goals of the Plan

This disaster plan addresses prevention of and response to emergencies that may affect the collections; it does not cover emergencies involving people (e.g. illness, injury, problem patrons). See the Historical Society president for this information.

As already noted, human safety is always the most important concern. No actions should be taken to protect or salvage the collections that might endanger human safety, and damaged collections should be addressed only after injuries have been attended to and the building is secure for people to enter.

The plan focuses on the most likely risks the museum faces: 1) minor flooding from roof or water leaks, 2) flooding or other damage from severe winter weather due to tree falling on roof, and 3) fire, due to the lack of a fire suppression system in the building. Preventive actions are covered in the appendices of this plan, while response and recovery procedures are addressed in the body of the plan.

Staff should be able to manage small water emergencies using the basic emergency instructions in Section 1 and the salvage information in Section 2. If a small scale emergency involves the special collections, outside consultation with preservation professional is advisable (see Appendix D for contact information).

For larger-scale damage, additional and a more detailed plan for recovery will be needed. Depending on the type of emergency, see the appropriate Emergency Instructions in Section 1, the initial Response Steps in Section 1, and the Salvage Procedures in Section 2 for

See the Appendices for supplies, services, record-keeping forms, emergency funds, insurance information, etc.

# Chapter 1 RESPONSE

### **1.1 EVACUATION PROCEDURES**

#### **General Procedures**

- Remain calm.
- Always respond to an evacuation order **do not** assume the situation is a drill or a false alarm.
- Remember that human safety is always the highest priority.
- Turn off electrical equipment if it is safe to do so.
- Assist anyone who requires help in leaving the building.
- Evacuate in an orderly fashion according to the evacuation routes that have been established.
- Move away from the building to the assembly area that has been designated in advance. Be sure not to block the street, driveway, or entrances.
- **Do not** reenter the building until instructed to do so.

#### **Clearing the Building**

Person responsible for clearing area:

Docent on duty

Assembly Areas Staff and patrons should gather in the following locations after an evacuation

Assembly: In front of museum

### **1.2 EMERGENCY NUMBERS**

## **1.2.1 Emergency Services**

Police/Sheriff-	
Name:	Phoenix City Police
Phone:	
<i>Call 911</i> Fire Department – Name: Phone:	District #5
<i>Call 911</i> Ambulance –	
Name:	
Phone:	911
Security monitoring company – Name: Phone: After-hours phone:	SOS Security
Local emergency management –	
Name:	Jackson County Emergency Management
Phone:	
After-hours phone:	
Regional emergency management - Name: Phone: After-hours phone:	Oregon Emergency Management
Poison Information Center:	

#### **1.2.2 Maintenance/Utilities**

For additional information about the building and systems, see Appendix A

Electrician – Name: Contact:

Welburn Electric

4529 S. Pacific Hwy. Phoenix, Oregon 97535

Phone: Cell phone:

Plumber – Name: Contact:

SOS Plumbing

206 S. Pacific Hwy Talent, Oregon

Phone: Cell phone:

Locksmith – Name: Contact:

Don's Locks

2940 N. Pacific Hwy Medford, Oregon 97501

Phone: Cell phone:

Exterminator – Name: Contact: Phone: Cell phone:

Orkin Pest Control

Computer emergency – Name: Contact:

Infostructure

S. Pacific Hwy Talent, OR

Phone: Cell phone: Architect/Builder – Name: Contact: Phone: Cell phone:

Gas Company – Name: Contact:

#### Straus and Seibert Architect

Avista

1111 E. Mission Ave. Spokane, WA 99252-0001

Phone: Cell phone:

Electric company – Name: Contact:

Pacific Power

P.O. Box 25308 Salt Lake City, UT 84125

Phone: Cell phone:

Water utility company – Name: Contact:

Phone: Cell phone:

Telephone company – Name: Contact: Phoenix City Shops

"B" Street Phoenix, OR 97535

Infostructure

288 S. Pacific Hwy. Talent, OR 97540

Phone: Cell phone:

Security system service – Name: Contact: Phone: Cell phone:

SOS Security

### **1.3 EMERGENCY CALL LIST**

If you discover an emergency, call the people on this list in order until you contact someone who can assist in addressing the problem. In consultation with that person, decide who else needs to be contacted. The disaster response team leader, the facilities maintenance supervisor, and the institutions director will need to be notified of any emergency, however small. In the case of a small-scale problem other staff members may not be needed at all, or you will only need to contact those who are in charge of the collections directly affected.

See the Staff/Key Personnel List for additional contact information.

Staff member

- 1 President
- 2 Secretary / Treasurer
- 3 Vice President
- 4 Docent
- 5 Board Member

Estimated response time 15 minutes 5 minutes 10 minutes 10 minutes 5 minutes

### **1.4 LIST OF STAFF/KEY PERSONNEL**

The following is a list of all institutional staff members AND other key personnel who are not staff members but are involved in your disaster planning efforts (e.g., members of the board of trustees, town building department personnel).



First Name: Last Name: Title:

Home phone: Cell phone: Home Email:

First Name: Last Name: Title:

Home phone: Cell phone: Home Email:

First Name: Last Name: Title:

Home phone: Cell phone: Home Email:

First Name: Last Name: Title:

Home phone: Cell phone: Home Email: Board Member Phoenix, Oregon 97535 Docent 97535 Docent Medford, OR 97501 Board Member Phoenix, Oregon 97535

### **1.5 DISASTER RESPONSE TEAM**

### 1.5.1 Disaster Response Team Responsibilities

This section lists which members of the disaster team will fill the roles likely to be needed during an emergency. Specific descriptions of the duties of each team member are found in Appendix B.

Disaster Response Team Leader:	President
Backup:#1 Backup#2:	Vice President <b>Board</b> Member
Administrator/Supplies Coordinator	:: Secretary / Treasurer
Backup:	President
Collections Recovery Specialist: Backup:	President Secretary / Treasurer
Subject Specialists – Subject/Department: Primary: Backup:	Entire museum President <b>Sector</b> Board Member <b>Sector</b>
Work Crew Coordinator: Backup:	President Docent
Technology Coordinator: Backup:	Secretary / Treasurer
Building Recovery Coordinator: Backup:	President Vice President

Security Coordinator: Backup:	President Board Member
Public Relations Coordinator: Backup:	Docent Secretary / Treasurer
Documentation Coordinator: Backup:	Secretary / Treasurer

### **1.6 ADVANCE WARNING EMERGENCY PREPARATIONS**

This section describes precautions to be taken if you have advance warning of an emergency (e.g., hurricane, flood, and wildfire). If you are using dPlan in Depth, the events that you have indicated pose the greatest risk to your institution are listed first.

#### **1.6.1** Thunderstorms/Lightning

A severe thunderstorm watch is issued when a severe thunderstorm (defined as damaging winds 58 miles per hour or more, or hail three-fourths of an inch in diameter or greater) is likely to develop. A severe thunderstorm warning is issued when a severe thunderstorm has been reported or identified on radar. Once a warning has been issued, it is important to take shelter and listen to a battery-operated radio for more information. Also, remember that thunderstorms can hit with no warning.

#### When a thunderstorm warning is issued –

- Ensure that flashlights and fresh batteries are available.
- Ensure that battery powered radios with weather band (and fresh batteries) are available.
- Ensure that auxiliary sources of electricity are in working order (e.g., generators).
- Check gutters and downspouts to insure they are functioning properly.
- Tie down loose objects outside the building (bicycles, garbage cans, etc.), or move them indoors.
- Put protective shutters/panels for windows in place.

Additional Information There are tall trees around the museum that could be damaged by lightning and fall on museum

#### **1.6.2 Severe Winter Storm**

A winter weather advisory is used when poor weather conditions are expected. A winter storm watch is issued when a storm is possible. A winter storm warning is issued when a storm is occurring or will occur shortly. A frost/freeze warning is issued when below freezing temperatures are expected. A blizzard warning is issued when heavy snow, near zero visibility, deep drifts, and severe wind chill are expected.

#### If a winter storm watch is issued –

- Check that the disaster kit is complete and that food, water, and/or batteries are not expired.
- Make sure that you have sufficient heating fuel as well as emergency heating equipment in case electricity is cut off. Be sure that fire extinguishers and detectors are operating properly.
- Ensure that auxiliary sources of electricity are in working order (e.g., generators).

Additional Information Winter storms, wind and rain could cause tall trees around the museum to fall.

### **1.7 EMERGENCY INSTRUCTIONS**

#### 1.7.1 Water Damage (Minor)

These instructions cover cases in which a small amount of clean (not contaminated) water leaks into a collection area. If sewage or other dangerous substances contaminate the water, protective clothing must be worn, and it is best to enlist professional assistance.

- 1. If possible, determine the source of the water leak.
- 2. If possible, cut off the water. Location and procedures for the main water shut-off valve are as follows –

Main water shut-off valve: Procedures:



3. Notify the person in charge of building facilities maintenance, also call the people on the **Emergency Call List** as necessary.

Facilities Maintenance –	
Name:	Board of Directors
Contact:	
	Medford, Oregon 97501
Phone:	
Cell phone:	
Email:	

- 4. Protect the collections from further damage as appropriate by -
  - (a) To the extent possible, move wet or vulnerable items to a dry, secure location nearby.
  - (b) If water is coming from above, protect collections by covering them with plastic sheeting. See Appendix C: **In-House Supplies** for the location of in-house supplies.
  - (c) If water is coming in on the floor, use books trucks (again, see Appendix C for inhouse supplies) to relocate materials to a safe area, starting with the materials closest to the floor.
- 5. See the **Recovery** section of this plan for instructions on drying wet collections.

#### 1.7.2 Fire

These instructions cover cases of fire (or activation of the fire detection system) in your building.

- 1. If you see fire or smell smoke, activate the nearest fire alarm.
- 2. Call the Fire Department –

Name: Phone:

District #5

Call 911

- 3. If it is safe to do so, determine the location and source of the fire.
- 4. If it is safe to do so, turn off computers and equipment, and close fire doors.
- 5. Evacuate the building. See the **Evacuation Procedures** elsewhere in this plan.
- 6. From a safe location, contact the people on the **Emergency Call List**, as well as the person in charge of building facilities maintenance.

Facilities Maintenance -

Name:	Board of Directors
Contact:	
	Medford, Oregon 97501
Phone:	
Cell phone:	
Email:	

#### REMEMBER

- Report the fire first, **do not** try to put it out first. If you are in immediate danger, evacuate first, then report the fire.
- **Do not** try to extinguish the fire if it is larger than a small garbage can.
- Always keep your back to your escape route.

### 1.7.3 Mold

If you discover mold on collections -

- Find out what is causing the mold growth. Look first for an obvious source of moisture such as a water leak. If there is no obvious source of moisture, look for less obvious problems, such as high humidity in a particular area, poor air circulation, or condensation along an outside wall.
- Consult a mycologist to ensure that no toxic mold species are present. If toxic molds are present, **do not** handle any materials yourself.
- Modify the environment so that it is no longer conducive to mold growth. Stop any leaks, remove standing water, and/or bring in dehumidifiers to reduce humidity. Keep the climate well below 70 degrees Fahrenheit and 50 percent relative humidity. Be sure to monitor temperature and humidity with a reliable monitoring instrument. Also minimize air circulation, as this can spread mold spores to other areas of the collection. Open and close doors as little as possible, block off air return vents (if possible) so that spores are not spread in the air handling system, and **do not** run fans.
- Isolate the affected items. Transfer them to an isolation room (this room should have low temperature and humidity, and should not use the same air-handling equipment as collection storage areas). Transfer materials in sealed plastic bags (see Appendix C: In-House Supplies and Appendix D: External Suppliers and Services) so that other materials are not contaminated during the move.
- Decide whether the affected items need to be retained. It may be possible to replace them easily. If they are not of long-term value, it may be possible to discard them. Alternatively, they could be microfilmed or photocopied, although they may have to be cleaned first.
- For items that need to be retained, consult a preservation professional before proceeding with drying and/or cleaning. In the past librarians have been instructed that it is possible to clean up small outbreaks of mold themselves, but over time it has become clear that this recommendation is problematic. Even molds that are not defined as toxic can cause people who work with them to develop debilitating allergies. Unfortunately, no standards exist to specify safe or unsafe levels of mold exposure. The severity of health problems depends on the type of mold, the amount of exposure, and the susceptibility of the exposed person. To be protected when cleaning moldy materials, one must wear a particulate respirator that filters 99.97 percent of particles from the air (also known as a respirator with a HEPA filter). The use of respirators in the workplace is governed by OSHA (Occupational Safety and Health Administration) regulations, which specify the type of respirator to be used in various situations, fit testing procedures, and training procedures. The regulations also require approval from a medical practitioner that the person is physically fit to wear this type of respirator. There may be liability issues if the institution does not comply with these regulations. While repositories that are part of a larger institution with a health and safety office may have the ability to comply with the regulations, smaller repositories are likely to find it more difficult.
- If the institution decides that it is unable to dry and/or clean moldy items that need to be retained, or if mold is discovered on a large amount of material (e.g., in whole stack ranges, drawers, or rooms), it is best to work with a commercial company experienced in

dealing with water damage and mold cleanup. See Appendix D: External Suppliers and Services for recommended service providers.

- If there will be a delay in transferring wet materials to a salvage company, freeze the affected items to avoid further mold damage. They can later be thawed and dried in small batches, or they can be vacuum freeze dried (with the exception of photographs).
- If the institution decides to clean up the mold in-house, following the OSHA guidelines referenced above, the moldy materials will need to be dried (if they are wet) and then cleaned. As noted above, wet and moldy items should be frozen if they cannot be dried immediately. They can later be thawed and dried in small batches. Instructions for drying and cleaning moldy collections can be found in NEDCCs Emergency Salvage of Moldy Books and Paper http://www.nedcc.org//plam3/tleaf39.htm and Managing a Mold Invasion: Guidelines for Disaster Response, http://www.ccaha.org by Lois Olcott Price (Conservation Center for Art and Historic Artifacts, 1996).
- Sterilize the affected storage area(s), and the climate control system if possible.

### 1.7.4 Earthquake

#### If an earthquake occurs -

- Drop, cover, and hold on in a supported doorway or under a piece of sturdy furniture if possible, but do not move more than a few steps to find a safe place. Do not try to run outside as you may be hurt by falling debris. Stay indoors until the shaking stops and you're sure it's safe to go out. When you do go outside, move away from the building quickly.
- Stay away from windows, in case they shatter.

Additional Information: Potential danger from falling trees and/or falling objects.

#### 1.7.5 Thunderstorms/Lightning

#### During a thunderstorm -

- Stay indoors.
- **Do not** handle any electrical equipment, telephones, or televisions during the storm because lightning could follow the wire.
- Avoid water faucets and sinks because metal pipes can transmit electricity.

Additional Information: There are tall trees around the museum that could be damaged by lightning and fall on museum

#### **1.7.6 Severe Winter Storm**

#### During a winter storm –

- If possible, staff members should not travel during a winter storm warning or a blizzard warning.
- Stay indoors and conserve fuel.
- After the storm, remove ice and snow from tree limbs, roof, etc. to prevent further damage.

Additional Information: Winter storms, wind and rain could cause tall trees around the museum to fall.

### 1.7.7 Gas Leak

#### If you smell gas indoors -

- Evacuate the building immediately, opening doors and windows to lower the concentration of gas inside the building. Gather all staff in a safe place away from the building.
- Call the gas company from another location to report the leak. **Do not** use the phone in the area of the leak, since phones can create sparks that could precipitate an explosion.
- Turn off any motorized equipment and avoid any other sources of ignition.
- **Do not** reenter the building until it is declared safe by the authorities.

#### If you smell gas outside your building -

- Call the local gas company immediately, from an area where you cannot smell gas (**do not** use the phone in an area where you can smell gas, as phones can create spark that could cause an explosion). **Do not** assume that someone else has already called.
- Make the occupants of neighboring buildings and passersby aware of the situation.
- Block off the area, if possible, until the gas company arrives.
- Avoid any sources of flame in the area
- Shut down motorized equipment and **do not** use pagers or cell phones in the area (such equipment can give off sparks).
- If the gas smell is strong and located close to your building, evacuate the building and gather staff in a safe area.

### Outage1.7.8 Power

#### If there is a power outage in the building or in your local area -

- Do not panic.
- If you suspect the outage is only within your building, check the fuse box.
- If you cannot determine the cause of the outage, call the local power company.
- If you are in an area with windows, open the blinds, curtains, or shades to provide light.
- Shut down the computer system and any other electrical equipment that was running before the outage.
- Evacuate immediately if you feel that it is unsafe to keep staff and patrons in the building, or if you are told to do so by the authorities.

### 1.7.9 Sewer System Backup

#### If a sewer backup occurs –

- Avoid contact with sewage-contaminated water.
- Quickly move any items (collections or otherwise) that are in danger but not yet affected to a safe area.
- Keep a written record of any items (collections or otherwise) that have been damaged or lost.
- Arrange for cleanup of the affected area. This may involve wet-vacuuming, mopping, cleaning walls and floors with soap and disinfectant, removing carpeting, cleaning up ductwork or appliances, etc. Due to the health risks, this type of cleanup is usually best done by professionals.

### **1.8 SALVAGE PRIORITIES**

Setting priorities for salvaging collections, institutional records, and other important materials is one of the most difficult but also one of the most important aspects of disaster planning. If an emergency occurs, there may be very little time for salvage. Materials could be lost while valuable time is wasted deciding what to save. A listing of priority materials and equipment allows the institution to concentrate on the most important items that are accessible for salvage. Following is a list of the most important materials (collections, office files, computers, and/or data) to salvage in case of a disaster. See Appendix F: Salvage Priorities (Details) for lists of salvage priorities for collections, institutional records (bibliographic and administrative), and information technology (data and equipment). If you are using dPlan in Depth, you may have uploaded a floor plan showing the location of the highest priority materials; this can be found in Appendix G. If you are using dPlan Lite, we encourage you to create such a floor plan and manually include it with Appendix G. In either case, a copy of the floor plan should be shared with the fire department.

Material or Equipment

- 1 Purple notebooks (Assession records)
- 2 PHS Year books including those in boxes 3 Organ



Items/shelf ranges/boxes have been color-coded so that materials that are a priority for rescue can be easily identified in an emergency.

The color-coding scheme is as follows: Yellow - Priority two Blue - Priority one

### **1.9 INITIAL RESPONSE STEPS**

This section provides a general outline of the initial steps that will need to be taken when an emergency causes more than minor damage to collections. Depending on the scope of the disaster, some of these actions may be carried out concurrently, while some may not be needed at all. For immediate response procedures for specific types of emergencies (fire, flood, power outage, etc.), or for minor damage to collections, see the section above. **In all cases, do not begin collection recovery efforts until the safety of staff and patrons has been assured.** 

#### **1.9.1** Notify Appropriate Personnel

- During working hours, contact the Disaster Response Team Leader. Disaster Response Team Leader: President
- Outside of working hours, use the Emergency Call List. Keep calling until someone who can respond is found.

#### **1.9.2** Assess the Damage

- **Begin to determine the extent of the damage.** The following questions will need to be answered, although you may not be able to get detailed answers at first.
  - What actually happened? How serious is the damage? How many and what type of materials are affected (e.g., general collections, local history materials, audio/visual materials, computers and data, plain paper, coated paper)? What kind of damage is it (e.g., water, fire, smoke)?
  - If water is involved, what kind is it (e.g., clean, dirty, rain, river, sewer)? How much water is/was there? What is/was the source of the water (e.g., flooding, leaky pipe)? Has the water source been shut off or stopped so that further damage can be avoided? Is there standing water in the building? Are wet collections soaked or just damp?
  - If collections are soaked, they will need to be frozen ASAP. If they are on coated paper, they will also need to be frozen immediately. If they are damp and there is space to do so, they can be air-dried. See Section II: Recovery of this plan for general salvage instructions, and instructions for salvage of specific media.
- If necessary, get clearance to enter the site. If serious damage has occurred (e.g., a serious fire), it may be necessary to wait until the appropriate officials declare the building safe to enter. Re-entry to the site may also be delayed if hazardous materials are present, or if the building is a crime scene (as in the case of arson).
  - If re-entry to the building is delayed, work must proceed from the off-site command center that has been designated ahead of time.

Command center location (*off-site*):

• Once it is possible to enter the building, make a detailed damage assessment. This should be done by the Disaster Response Team Leader, with assistance from other members of the team as needed.

Disaster Response Team Leader: President

- Remember to take photographs or video, and to document the damage in writing. At this point, you should begin filling out an Incident Report Form, located in Appendix E: Record Keeping Forms.
- Call the insurance company or in-house contact (for self-insurance). Insurance contact information is as follows –

#### Building/Equipment – Commercial Insurance Insurance policy(s) held by the institution –

Policy number: Policy inception date:	
Poncy expiration date.	
Insurance carrier	
Company/Organization: Contact:	Philadelphia Ins. Co.
	Data Crannel DA 10004
Phone: Cell phone:	Bala Cynwyd, PA 19004
Insurance agent or broker	
Company/Organization: Contact:	Ashland Insurance Inc. Russ Schweikert
Phone:	Ashland, Oregon 97520
Cell phone:	

*Collections* –See Appendix H: Insurance Information for more detailed information and specific procedures to be followed in case of damage or loss.

#### **1.9.3** Prepare for Recovery of Collections

• Get advice from a preservation professional. Unless the disaster is very small, it is likely that you will want to contact a preservation professional to ensure that you are responding properly. In the event of a major disaster, you may need to arrange for a professional to provide on-site assistance.

**Sources for preservation advice** – *Professional Preservation Advice - Regional Centers* 

Organization: WESTPAS Contact:

Phone: 888-905-7737 After hours phone: Web Site:www.westpas.org Specialty: various

Professional Preservation Advice - Conservators

Organization:	Balboa Art Conservation Center
Contact:	
	P.O.Box 3755
	San Diego, California 92163
Phone:	1-619-236-9702
After hours phone:	
Web site:	
Specialty:	various

#### • Determine whether additional personnel will be needed.

If you are using dPlan in Depth, Appendix I: Volunteer/Temporary Personnel provides lists of potential volunteers and temporary workers.

- Establish a strategy for managing all staff, volunteers, and other workers who will be working at the site. All workers (volunteer or otherwise) will need to check in and check out. Records should be kept of hours worked (in case payment is necessary, and to ensure that sufficient breaks are provided) and of who was at the site each day. See Appendix E: Record-Keeping Forms for a Volunteer Sign-In/Sign-Out Form.
- Staff and volunteers will need to be trained and supervised. The Collections Recovery Specialist and the Work Crew Coordinator will be in charge of this.

Collections Recovery Specialist: Work Crew Coordinator:

President Secretary / Treasurer 

• Snacks, meals, a rest area, and possibly counseling services will be needed. See Appendix I: Volunteer/Temporary Personnel for organizations that might assist in providing services for workers.

#### • Establish a command post for the recovery effort.

#### Potential sites are -

Command center location:

Alternate location #1: Alternate location #2 (*off site*):



- Establish security procedures for the recovery site. Only authorized persons should be allowed to enter the site some type of identification (e.g., badges, vests) should be arranged. If the site cannot be secured due to building damage, it may be necessary to bring in temporary security personnel.
- Decide what will be salvaged and what will be discarded. See Salvage Priorities for an overall list of priority materials. Additional salvage priorities for specific departments and types of material are found in Appendix F: Salvage Priorities (Detailed). Remember that salvage priorities may need to be adjusted according to the extent and or type of damage.
- Decide how the materials to be salvaged will be treated. See General Salvage Procedures for a summary of treatment options. Sort wet collections, separating those to be frozen from those to be air-dried. As you begin sorting and moving materials, it is essential to keep track of collections at all times; use the Packing and Inventory Form in Appendix E: Record-Keeping Forms for this purpose.
- Determine whether it will be necessary to relocate collections, either to dry them or to store them temporarily to protect them from danger while the building and damaged collections are salvaged. We urge you to assess frequently (at least once a year) possible sites in your community: school gymnasiums, empty or partly-empty warehouses, church halls, businesses with temporary space.

Potential drying space is – Within the building/institution –

Location: Space available: Contact: Phone: Cell phone: After-hours phone: Pager:

\_Off-site –

Location:

Space available: Contact: Phone: Cell phone: After-hours phone: At staff home or if needed, commercial storage with fan

#### **Potential space for relocation or temporary storage is** – *Within the building/institution* –

Location: none Space available: Contact: Phone<sup>.</sup> Cell phone: After-hours phone: Pager: Location: commercial storage in Phoenix Space available: Contact: Phone: Cell phone: After-hours phone: Pager:

• Gather supplies and arrange for services. Gather supplies and arrange for services. See Appendix C for a list of in-house supplies. See Appendix J for procedures for accessing emergency funds. Appendix D: External Suppliers and Services includes a list of companies specializing in building and collections recovery. There are a small number of companies nationwide that have experience working with cultural institutions to recover buildings and collections. These companies provide a range of services, from building dehumidification, to vacuum freeze-drying, to mold remediation. If you are faced with a significant disaster, it is likely that you will need to contact one of them for assistance.

#### 1.9.4 Stabilize the Building and Environment

Off-site -

If the emergency involves water (such as wet collections, furniture, carpeting, or even standing water), it is very important to quickly dry out the building and environment to avoid mold growth.

- **Do not** turn up the heat; this will not dry out the space and may encourage mold growth. If the outdoor humidity is low, open the windows.
- If the climate control system is working, it should be used to provide as much cooling and dehumidification as possible. The goal should be to keep the temperature below 70 degrees Fahrenheit and the humidity as much below 50 percent as possible.
- Wet carpeting should be removed and wet furniture and standing water should be removed. Even if the carpeting appears dry, it must be checked underneath to ensure that both the carpet and the padding are dry.
- If the climate control system is not sufficient to reduce the temperature and humidity to the desired levels, outside assistance will be needed. See Appendix D: External Suppliers and Services for companies that specialize in building dry out.

- Staff must monitor the temperature and humidity in the recovery area several times a day to ensure that the desired conditions are reached and maintained for the duration of the recovery effort. See Appendix E: Record-Keeping Forms for an Environmental Monitoring Form.
- Facilities maintenance personnel and the Building Recovery Coordinator should work together to coordinate building recovery issues.

Facilities Maintenance Personnel -



#### **1.9.5** Communicate with the Media and the Public

- The disaster response teams Public Relations Coordinator will be responsible for all interaction with the media and the public. It is essential that no one else provide information.
- Press releases should be issued periodically to local newspapers, and to TV and radio stations. It is important to inform patrons and other interested parties of the extent of the damage and the progress of recovery efforts.

Public Relations Coordinator – Primary: Backup:

Docent Secretary / Treasurer

# Chapter 2 RECOVERY

#### 2.1 GENERAL SALVAGE PROCEDURES

This section provides general background information on salvage techniques for water, mold, and fire-damaged collections.

#### 2.1.1 Freezing

If wet materials cannot be dried within 48-72 hours, they should be frozen because they are at risk of developing mold, particularly if there is high humidity. Freezing wet materials also stabilizes them, keeping water damage from worsening. Water causes a variety of damage to paper-based collections: book bindings and pages swell and distort, pages and documents cockle, water-soluble inks can bleed, and coated papers begin to adhere to each other as soon as the volumes begin to dry. However, once wet collections are frozen, no additional damage occurs. Thus, if freezing occurs quickly there is less physical damage and more chance that the materials can be salvaged rather than replaced. It is difficult to transfer wet collections directly to a salvage company for freezing quickly enough to prevent mold and minimize water damage, since there are only a few of these companies nationwide. In addition, institutions often require time to make decisions about what should be done and allocate funding for salvage. Thus, it is usually best to freeze collections locally, even if they will ultimately be sent to a salvage company to be vacuum freeze dried. A commercial blast freezer will provide the best results; materials should be frozen at -10 degrees Fahrenheit or lower.

Local freezing companies are *-Local freezer* (1) -

Local freezer (2) –

Name:

Contact:

Phone:

Cell phone:

After-hours phone:

Henningson Cold Storage Co.

Salem, Oregon 503-485-0720

Regulations that must be complied with:

Be aware, however, that not all paper-based materials can be frozen. The *Salvage of Specific Media* section indicates which materials should not be frozen. In general, bound volumes and paper records can be frozen. If necessary, most photographic materials can be frozen, although it is better to dry them immediately. Cased photographs (such as daguerreotypes, ambrotypes, tintypes) should **never** be frozen. If there is no local freezer facility available (due to a widespread disaster or other reason), a refrigerated truck may be needed to transport materials to the nearest freezer facility. A refrigerated truck will not freeze the collections, but it may keep them cool enough to avoid mold growth. See *Appendix D: External Suppliers and Services* for a source of refrigerated trucks.

### **2.1.2 Drying Options**

There are several options for drying wet collections. The method chosen will depend on the extent of the damage to collections and to the building, the amount of material involved, the rarity/scarcity of the damaged material, the number of staff or others available to provide assistance, and the funding available for salvage. If you choose to contract out for drying services, it is important to put a contract in place with the vendor. A sample contract is provided in *Appendix K: Disaster Recovery Contract.* A general summary of the drying options is provided here to assist your institution in making decisions. Remember that no drying method will undo the damage that has already been done, however. The materials will not look better after drying than they looked before drying began. However, some drying methods can minimize or prevent additional damage, and in general, the quicker collections can be dried (or frozen, as described above) the less damage there will be.

#### **Air-Drying**

Air-drying is best used for small numbers of damp or slightly wet books or documents. It is less successful for large numbers of items or for items that are very wet. It requires no special equipment and can be done on site using staff or volunteers, but it is very labor-intensive, requires a lot of space, and often results in bindings and paper that are very distorted. It is seldom successful for drying bound volumes with coated paper. There will also likely be additional costs for rehabilitating collections, such as rebinding, flattening of single sheets, and additional shelf space to store volumes that remain distorted after drying. It is important to always contact a conservator or other preservation professional about drying unique or rare materials; they will sometimes choose to air-dry the item(s) using special techniques, or they will suggest another drying option. In general, air-drying must be done in a clean, dry environment where the temperature and humidity are as low as possible. At a minimum, temperature must be below 70

degrees Fahrenheit and humidity must be below 50%. The air should be kept moving at all times to accelerate the drying process and discourage mold growth, but care must be taken not to blow away loose documents. Single documents can be laid out on tables, floors, and other flat surfaces, protected if necessary by paper towels or clean, unprinted newsprint. Bound volumes can be dried on tables covered with plastic or unprinted newsprint. The volume should be interleaved about every fifty pages with paper towels or unprinted newsprint, and then stood on its head, fanned open, and placed on several sheets of absorbent paper. If the edges are only slightly wet, interleaving is not required. When volumes are dry, but still cool to the touch, they should be closed, laid flat on a table or other horizontal surface, gently formed into their normal shape, and held in place with a lightweight. **Do not** stack drying books on top of each other, and check frequently for mold growth, particularly along the gutter margin.

The above instructions provide only very general guidance; additional instructions will be needed if air-drying is to be undertaken. There are a number of resources that provide detailed directions for air-drying wet materials.

See Appendix L: Additional Resources for Salvage of Specific Media.

**Potential locations for air-drying wet collections are** – *Within the building/institution* –

Location: Space Available: Contact: Phone: Cell phone: After-hours phone: Pager:

Off-site –

Location:

At staff home or if needed, commercial storage with fan

Space Available: Contact: Phone: Cell phone: After-hours phone:

#### **Freezer-Drying**

Books and records that are only damp or moderately wet may be dried successfully in a selfdefrosting blast freezer if left there long enough. Materials should be placed in the freezer as soon as possible after becoming wet. Books will dry best if their bindings are supported firmly to inhibit initial swelling. The equipment should have the capacity to freeze very quickly, and temperatures must be below 10 degrees Fahrenheit to reduce distortion and to facilitate drying. Expect this method to take from several weeks to several months, depending upon the temperature of the freezer and the extent of the water damage. Caution is advised when using this method for coated paper, as leaves of coated paper may stick to each other.

#### Vacuum Freeze-Drying

This process calls for very sophisticated equipment and is especially suitable for large numbers of very wet books and records as well as for coated paper. Books and records must be frozen, then placed in a vacuum chamber. The vacuum is pulled, a source of heat introduced, and the

collections, dried at temperatures below 32 degrees Fahrenheit, remain frozen. The physical process known as sublimation takes place; that is, ice crystals vaporize without melting. This means that there is no additional swelling or distortion beyond that incurred before the materials were placed in the chamber. Many coated papers can be difficult to dry without sticking together once they are wet. Because it is nearly impossible to determine which papers will block, all coated papers should be treated the same way for the purpose of vacuum freeze-drying: before any drying takes place, and ideally within six hours of becoming wet, materials should be frozen at -10 degrees Fahrenheit or lower. Then they may be vacuum freeze-dried with a high potential for success. Rare and unique materials can be dried successfully by vacuum freeze-drying, but leathers and vellums may not survive. Photographs should not be dried this way unless no other possibility exists. Consult a photograph conservator. Although this method may initially appear to be more expensive because of the equipment required, the results are often so satisfactory that additional funds for rebinding are not necessary, and mud, dirt, and/or soot is lifted to the surface, making cleaning less time-consuming. If only a few books are dried, vacuum freezedrying can indeed be expensive. However, companies that offer this service are often willing to dry one client's small group of books with another client's larger group, thus reducing the perbook cost and making the process affordable. See Appendix D: External Suppliers and Services for vacuum freeze-drying service providers.

#### Vacuum Thermal Drying

Books and records that are slightly to extensively wet may be dried in a vacuum thermal drying chamber into which they are placed either wet or frozen. The vacuum is drawn, and heat is introduced. Drying typically occurs at temperatures above 100 degrees Fahrenheit, but always above 32 degrees Fahrenheit. This means that the materials stay wet while they dry. It is an acceptable manner of drying wet records, but often produces extreme distortion in books, and almost always causes blocking (adhesion) of coated paper. For large quantities of materials, it is easier than air-drying and almost always more cost-effective. However, extensive rebinding or recasing of books should be expected. Given the elevated temperature used in drying, it is most appropriate for materials with short-term (under 100 years) value.

#### **On-Site Dehumidification**

This is the newest method to gain credibility in the library and archival world, although it has been used for many years to dry out buildings and the holds of ships. Large commercial dehumidifiers are brought into the facility with all collections, equipment, and furnishings left in place. Temperature and humidity can be carefully controlled to specifications. Additional testing is being undertaken, but the technique is certainly successful for damp or moderately wet books, even those with coated paper, as long as the process is initiated before swelling and adhesion have taken place. The number of items that can be treated with dehumidification is limited only by the amount of equipment available and the expertise of the equipment operators. This method has the advantage of leaving the materials in place on the shelves and in storage boxes, eliminating the costly, time-consuming step of moving them to a freezer or vacuum chamber. See Appendix D: External Suppliers and Services for on-site dehumidification service providers.

#### 2.1.3 Packing

Whether collections are to be moved to another location for immediate air-drying or transported to a local freezer or commercial drying facility, the materials will need to be properly packed and the location/transport of all items will need to be documented. The order for packing collections

will depend on the extent of the damage and the institutions salvage priorities. If collections will be frozen and vacuum-freeze dried, it is usually best to begin with the wettest materials first so that they can be frozen quickly. If only air-drying will be possible, however, it is better to begin with the collections that are the least damaged and most easily salvaged. If sufficient staffing is available, one or more packing crews should be put together. This will be the responsibility of the Collections Recovery Specialist and the Work Crew Coordinator. See the Disaster Response Team for names and backups for these two positions. The packing crew would consist of a crew leader, box assembler, retriever of collections, wrapper, packer, sealer, record-keeper, and transporter. Book trucks, handcarts, or dollies can be used to move packed materials within the building. See Appendix C: In-House Supplies and Appendix D: External Suppliers and Services for resources. Materials can be placed in cardboard boxes, milk crates, Rescubes, or other containers as appropriate. If cardboard boxes are used, they should be no larger than 1.5 cubic feet, they should be lined with heavy-duty trash bags to prevent them from becoming wet, and they should never be stacked more than four boxes high. Packing instructions for specific types of collections can be found in the Salvage of Specific Media section below. If materials are muddy, sandy, or otherwise dirty, it may be necessary to rinse them before packing (assuming enough time and personnel are available). If materials have been damaged by salt water it is especially important to rinse them. Collections with soluble inks (watercolors, many manuscripts), animal skins (leather, vellum, or parchment), or works of art paper should not be rinsed, since rinsing may cause further damage. The area to be used for rinsing must have running water and good drainage. Personnel should be provided with rubber boots and waterproof clothing; see Appendix D: External Suppliers and Services for resources. If deposits of dirt are light, individual folders or volumes can be rinsed with a garden hose with a spray nozzle, keeping the item tightly closed to avoid transferring dirt between the pages. If deposits are heavy, a series of 3-8 large plastic garbage cans should be set up with a garden hose running into each can and the nozzle resting at the bottom. The water should be turned on to provide a slow but continuous flow into each can. Each item should be taken to the first can, held tightly closed, and immersed, and then to subsequent cans. The last station should have a hose with a spray nozzle for a final rinse. Excess water should then be squeezed from the volumes or folders. **Do not** try to remove mud or stubborn stains; this slows down the rinsing process and may further damage the materials. Note that the same rinsing procedure can be used for photographic materials and computer media, except that shallow dishpans or photo processing travs may be used instead of garbage cans.

#### 2.1.4 Documentation

It is essential to document where collections were moved and what was done with them. This documentation allows the institution to keep track of which collections were damaged and where they have been taken. It will also be needed for insurance purposes. Both written and photographic documentation should be maintained. Forms that will assist in documentation are provided in Appendix E: Record-Keeping Forms. These include the Packing and Inventory forms and the Incident Report Form (which should be used to document salvage decisions and who authorized them). In general, all boxes or other containers must be labeled on all four sides. The contents should be described as appropriate (e.g., by shelf range, call number, cabinet, drawer, record group, series). It is also helpful to indicate the quantity of material, the type of damage, the priority ranking of the material, and the destination of the container (e.g., floor/section and

box number) and the Packing and Inventory forms can be used to record the detailed information described above.

### 2.1.5 Fire Damage

Collections that have been involved in a fire often also suffer water damage, which has been addressed above. Problems that result specifically from fire include charring (either completely or just around the edges), smoke or soot deposits, and smoke odor. If collections have been charred but are still readable, they can be microfilmed or photocopied if they are of value, but great care must be exercised because the paper may be extremely brittle. Bound volumes that have been smoke-damaged or charred only around the edges can be sent to a library binder for trimming and rebinding. General materials with smoke or soot deposits on the edges can also be sent to a library binder for trimming, or they can be cleaned in-house using natural latex sponges to remove the deposits. Any rare, archival, or special collections materials should not be cleaned this way, however; a conservator should evaluate them. For collections with a residual smoke odor, there are professional companies that specialize in deodorization. Treatment in an ozone chamber will reduce the odor, but ozone is a powerful oxidizing agent that accelerates the aging of paper, so it should not be used on archival or other intrinsically valuable materials. Another possibility is to use storage boxes that incorporate zeolites; these have been shown to be effective in odor reduction.

### 2.1.6 Evaluation of Salvage Efforts

Once salvage has been completed, ensure that a Collection Incident Report Form (see Appendix E: Record Keeping Forms) has been filled out completely, documenting all decisions that were made during the recovery. It is also a good idea to evaluate how successful the salvage efforts were and whether any changes need to be made to the disaster plan.

### 2.2 SALVAGE OF SPECIFIC MEDIA

Following are very basic initial salvage instructions for the types of material found in your collections. Please note that detailed instructions are not provided here. If you wish to add them, such instructions are referenced in Appendix L: Additional Resources for Salvage of Specific Media. Also, if you wrote in additional types of material when you filled out the online forms, you are responsible for locating salvage instructions for those materials and adding them here. Again, see Appendix L: Additional Resources for Salvage of Specific Media. The following salvage instructions have been adapted from: Walsh, Betty, Salvage at a Glance, in *WAAC Newsletter* Vol. 19 No. 2 (May 1997)

http://palimpsest.stanford.edu/waac/wn/wn19/wn19-2/wn19-207.html; Walsh, Betty, Salvage Operations for Water-Damaged Archival Collections: A Second Glance, in WAAC Newsletter Vol. 19 No. 2 (May 1997)

http://palimpsest.stanford.edu/waac/wn/wn19/wn19-2/wn19-206.html; the salvage instructions sheets at the Minnesota Historical Society Emergency Response web site at http://www.mnhs.org/preserve/conservation/emergency.html;

Fox, Lisa, Disaster Preparedness Workbook for U.S. Navy Libraries and Archives; and the Emergency Response and Salvage Wheel (National Task Force on Emergency Response). See the bibliography for complete citations.

#### **2.2.1 Archival Materials**

*Documents with stable media* should be frozen or dried within 48 hours. They can be air-dried or vacuum freeze dried. **Do not** separate single sheets. Pick up files by their folders, interleave between folders every two inches with freezer paper, and pack in milk crates or cartons, filling them three quarters full. If it is known from the outset that the records will be vacuum freeze dried, interleaving is not necessary. *Documents with soluble inks (felt pens, colored pens, ball point pen)* should be dried or frozen immediately. **Do not** blot the surface. Interleave between folders with freezer paper and pack in milk crates or cartons. The documents can be air-dried or vacuum freeze dried.

#### 2.2.2 Art on Paper

*Prints and drawings with stable media should be frozen or dried* within 48 hours. Air dry or vacuum freeze dry. Dont separate single sheets. To pack, interleave between folders and pack in milk creates or cartons. *Oversize prints and drawings* should be frozen or dried within 48 hours. If they are damp, air dry or vacuum freeze dry. If they are wet, vacuum freeze drying is preferred. Use extra caution if folded or rolled. Pack in map drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood. *Framed prints and drawings* should be frozen or dried within 48 hours. If time permits, unframe and pack as for single sheets of paper (see archival materials and manuscripts, above). Once unframed and unmatted, air dry or vacuum freeze dry. Handle with care. Can be packed in map drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood. *Soluble media (watercolors, soluble inks, and hand colored prints)* should be frozen or dried immediately. Air dry or vacuum freeze dry. **Do not** blot. To pack, interleave between folders and pack in milk crates or cartons.

### 2.2.3 Audio Recordings, Compact Discs

Immediately air dry discs. Dry paper enclosures within 48 hours. If disks have been exposed to seawater, rinse in clean water immediately. **Do not** scratch the surface. Pack vertically in crates or cardboard cartons. Dry discs vertically in a rack. **Do not** vacuum freeze dry. However, CD cases and paper booklets can be vacuum freeze dried.

#### 2.2.4 Audio Recordings, Record Albums

Salvage shellac and acetate disks first, as they are sensitive to water. Dry within 48 hours. Freezing is untested; if it is necessary, freeze at above 18C (0F). Freeze or dry enclosures within 48 hours. Air dry, preferably with a record-cleaning machine. Hold discs by their edges. Avoid shocks and jolts during transport. Pack vertically in ethafoam-padded cases.

### 2.2.5 Audio Recordings, Tapes and Cassettes

Separate tapes into categories: dry tape, wet boxes only, and wet tapes. If water has condensed inside a cassette, treat the tape as wet. Immediately rinse off tapes soaked by dirty water or seawater. **Do not** unwind tapes or remove them from the reel. If they cannot be dried immediately, keep tapes wet, at their initial level of wetness (e.g., **do not** immerse tapes that are only wet on the outside of the tape pack). Tapes can stay wet for up to 72 hours if necessary, but care must be taken with tapes that have labels with water soluble adhesives and inks, or older

tapes that may disintegrate if immersed too long. To pack, keep tapes wet in plastic bags. Pack vertically in plastic crates or tubs. **Do not** freeze magnetic media. Air dry by supporting the tapes vertically on blotting material or lay the reels on sheets of clean blotter. **Do not** touch magnetic media with bare hands. Use fans to keep the air moving, but **do not** blow air directly on the items. If humidity is high, use portable dehumidifiers to slowly bring the humidity down to 50 percent. Dry tapes that have paper boxes and labels within 48 hours if possible; be sure to keep the tapes near their boxes for identification purposes.

### 2.2.6 Books, General Collection

*General books and pamphlets* should be frozen or dried within 48 hours. They can be air-dried or vacuum freeze dried. **Do not** open or close wet books, and **do not** remove book covers. Gently shape closed books to reduce the distortion set into the book on drying. If the water is very dirty, and there is enough time and help, consider rinsing; see the *General Salvage* section above for instructions. To pack wet books, lay a sheet of freezer paper around the cover and pack spine down in a milk crate or cardboard box. Fill boxes only one layer deep. If books have fallen open, pack them as is in cartons or trays, stacking them in between sheets of freezer paper and foam. Oversized volumes can be packed flat in cartons or bread trays, 2-3 books deep. *Books with coated papers* will stick together unless frozen or dried quickly. Freeze them, or keep them wet in cold water until they can be air dried.

### 2.2.7 Computer CDs/CD-ROMs

If discs have been exposed to seawater, wash them in tap water immediately. Immediately air dry discs. Dry paper enclosures within 48 hours. **Do not** scratch the surface during rinsing or packing. Pack vertically in crates or cardboard cartons.

### 2.2.8 Computer Disks, Magnetic

First consult with appropriate personnel to determine whether undamaged backups of data are available; if so, salvage may not be necessary. Separate into categories: dry, wet enclosures only, and wet media. If water has condensed inside disks, treat them as wet. Air dry disks; **do not** freeze. **Do not** touch disk surface with bare hands. Keep wet until they can be air-dried, and pack vertically in plastic bags or tubs of cold water.

### 2.2.9 DVDs

Immediately air dry discs. Dry paper enclosures within 48 hours. **Do not** scratch the surface. Pack vertically in crates or cardboard cartons. Dry discs vertically in a rack. **Do not** vacuum freeze dry.

### 2.2.10 Maps and Plans

*General considerations:* For materials in map drawers, sponge standing water out of the drawers. Remove the drawers from the cabinet, ship and freeze them stacked up with 1 inch x 2 inch strips of wood between each drawer. Pack loose, flat maps in bread trays, flat boxes, or plywood sheets covered in polyethylene. Bundle rolled maps very loosely to go in small numbers to the freezer, unless facilities are available for conservators to unroll them. *Stable media* should be frozen or
dried within 48 hours. They can be air-dried or vacuum freeze dried. Use extra caution if folded or rolled. Pack in map drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood. *Soluble media (maps and plans by reproductive processes and hand-colored maps)* should be immediately frozen or dried. They can be air-dried or vacuum freeze dried. **Do not** blot. Interleave between folders and pack in map drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood. *Drafting linens* should be immediately frozen or dried. They are coated with starch and may stick together like coated papers. They can be air-dried by separating sheets and interleaving or vacuum freeze dried. **Do not** blot the surface, and avoid pressure inks can smear away. Pack in containers lined with plastic map drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood. *Maps on coated papers* should be immediately frozen or dried. Vacuum freeze drying is preferred. Pack in containers lined with plasticmap drawers, bread trays, flat boxes, on heavy cardboard or poly-covered plywood.

## 2.2.11 Natural History Materials

Use a respirator and protective clothing to handle all natural history specimens, as they may contain arsenic or other toxic materials. *Animal study skins and taxidermy mounts* should be airdried slowly or frozen. They should not be handled directly. *Botanical specimens* should be rinsed only if necessary. Interleave and air dry herbarium sheets, and use presses if possible. *Fluid-preserved specimens* should be placed in sealed polyethylene boxes with a small amount of alcohol. *Geological specimens* should generally be rinsed and air-dried slowly, but consult a conservator, since there are some specimens that should be dried quickly. *Paleontological specimens* should be rinsed and air-dried slowly. Hold fragile specimens and those with old repairs together with ties during drying. Separate ties from specimens with waxed or freezer paper.

## 2.2.12 Negatives, Acetate

Acetate negatives in poor condition should be immediately dried or frozen. The recovery rate is low. They should be air-dried, thawed later and air-dried, or vacuum freeze dried. Handle carefully due to swelling of the emulsion. Pack horizontally. Acetate negatives in good condition should be frozen or air-dried within 48 hours. Drying methods in order of preference are: air dry immediately, thaw later and air-dry, or vacuum freeze dry. **Do not** touch the emulsion with bare hands. To pack, keep wet and pack in small plastic bags inside boxes.

## 2.2.13 Negatives, Nitrate

Deteriorated nitrate negatives with soluble binders should be immediately dried or frozen. The recovery rate may be low. They should be air-dried or thawed later and air-dried. **Do not** blot the surfaces. Pack horizontally *.Nitrate negatives in good condition* should be frozen or air-dried within 48 hours. Drying methods in order of preference are: air dry immediately, thaw later and air-dry, or vacuum freeze dry. **Do not** touch the emulsion with bare hands. To pack, keep wet and pack in small plastic bags inside boxes.

## 2.2.14 Negatives, Polyester

Polyester-based negatives should be frozen or air-dried within 48 hours. Drying methods in order of preference are: air dry immediately, thaw and air-dry later, or vacuum freeze dry. **Do not** 

touch the emulsion with bare hands. To pack, keep wet and pack in small plastic bags inside boxes.

## 2.2.15 Newspapers

*Bound or loose newspapers* should be frozen or dried within 48 hours. They can be air-dried or vacuum freeze dried. Pack oversize materials flat.

## 2.2.16 Objects

In general when air drying, raise items off the floor on trestles, pallets, or lumber to allow air to circulate underneath the items. Sponges, clean towels, paper towels, or unprinted newsprint may be used to absorb excess moisture. Exchange wet for dry blotting material at least daily until items are dry. Check daily for mold growth. Drying of wood furniture should begin within 48 hours to prevent mold growth. Wooden objects should be dried slowly, since fast drying can cause irreversible damage. In general, rinse and/or sponge surfaces gently to clean, blot, and air dry slowly. Inspect painted surfaces to identify blistered or flaking paint. Do not try to remove dirt or moisture; air dry slowly. Veneer should be held in place with weights or clamps while drying, but be sure to provide a protective layer between the weight and the veneer. Polychromed objects require immediate attention; consult a conservator. Drying of upholstered furniture should also begin within 48 hours to prevent mold growth, and these items should also be dried slowly. Rinse off mud and remove cushions and other removable pieces. Wrap upholstered items in cloths (e.g., sheets, towels) to air dry and replace the cloths as they become damp. Wood parts should be blotted and air dried slowly. Many ceramics generally will suffer little damage from short-term exposure to water, but there are exceptions. It is important to identify the type of ceramic and consult a conservator before drying, as procedures can vary. If the ceramic is broken, cracked, or has mineral deposits or old repairs, place it in a clean, transparent polyethylene bag until it can be treated. Seal the bag and monitor it frequently for mold growth. If a stone object has a smooth surface, blot it gently and air-dry. If the object has a rough surface or an applied finish, do not blot it. Air-dry it on a plastic screen or clean towel. Metal objects can be rinsed and/or sponged and blotted, then air dried. If the object has an applied finish, do not blot or clean it. Air-dry it and keep any flaking surfaces horizontal.

## 2.2.17 Organic Materials

Leather and rawhide should be air-dried within 48 hours to avoid mold growth. Handle and move carefully, as leather (especially items with red rot) may be very fragile when wet. Rinse and/or sponge with clean water to remove mud. Drain and blot to remove excess water, and pad with toweling or unprinted newsprint to maintain proper shape. *Basketry* should be air-dried as soon as possible. Handle carefully, as it may be fragile and heavy when wet. Rinse, drain, then blot to remove excess moisture. Pad with clean paper towels or cotton sheets to retain the proper shape and absorb moisture. Cover with clean towels. Change the blotting material when it becomes wet. Air-drying of *bone, hair, horn, shell, and ivory* should begin within 48 hours. Handle carefully as these items may be extremely fragile when wet. Rinse, drain, and blot to remove excess moisture. Air-dry slowly on blotters on non-rusting screens.

## 2.2.18 Paintings

Air dry immediately. Tilt the painting to drain off excess water, and carry it horizontally to a work area. If you cannot hold it horizontally, carry it facing toward you, holding the side of the frame with the palms of your hands. Two people should carry larger paintings. Carefully remove paintings from frames in a safe, dry place. **Do not** separate paintings from their stretchers. Pack face up without touching the paint layer, and avoid direct sunlight. The order of removal and treatment is: first, the most highly valued; second, the least damaged; third, slightly damaged; and fourth, severely damaged. Consult a conservator for drying techniques.

### 2.2.19 Photographic Prints, Black and White

Albumen prints should be frozen or dried within 48 hours. They should be air-dried immediately or thawed and air-dried later. **Do not** touch the binder with bare hands. Interleave between groups of photographs with freezer paper. *Matte and glossy collodion prints* should be frozen or dried within 48 hours. They should be air-dried immediately, thawed and air-dried later, or vacuum freeze dried. Avoid abrasion. **Do not** touch the binder with bare hands. *Silver gelatin printing out and developing out papers* should be frozen or dried within 48 hours. Drying methods in order of preference are: air dry immediately, thaw and air-dry later, or vacuum freeze dry. **Do not** touch the emulsion with bare hands. To pack, keep wet and pack in plastic bags inside boxes. *Carbon prints and Woodbury types* should be frozen or dried immediately. They should be air-dried or thawed and air-dried later. Handle them carefully, due to swelling of the binder. Pack horizontally. *Photomechanical prints (e.g., collotypes, photogravures) and cyanotypes* should be frozen or dried within 48 hours. They should be air-dried or vacuum freeze dried. **Do not** separate single sheets. To pack, interleave every two inches with freezer paper and pack in boxes or crates.

## 2.2.20 Photographic Prints, Color

*Dye transfer prints* should be air-dried face up immediately. The recovery rate is poor. **Do not** touch the emulsion and transport horizontally. *Chromogenic prints and negatives* should be frozen or dried within 48 hours. Drying methods in order of preference are: air dry immediately, thaw and air-dry later, or vacuum freeze dry. **Do not** touch the binder with bare hands. To pack, keep wet and pack in plastic bags inside boxes.

## 2.2.21 Photographs, Cased

Ambrotypes and pannotypes should be dried immediately, as the recovery rate is low. They should be air-dried face up, and should never be frozen. Handle them with care, since the glass supports and binder are extremely fragile. Pack horizontally in a padded container. *Daguerreotypes* should be dried immediately. They should be air-dried face up, and should never be frozen. Handle them with care, since they have a fragile surface and cover glass. Pack horizontally in a padded container. *Tintypes* should be dried immediately. They should be air-dried face up, and should never be frozen. Handle them with care, since they have a fragile surface and cover glass. Pack horizontally in a padded container. *Tintypes* should be dried immediately. They should be air-dried face up, and should never be frozen. Handle them with care, since they have a fragile binder. Pack horizontally.

## 2.2.22 Scrapbooks

*Scrapbooks* should be frozen or dried within 48 hours. If the scrapbook is not boxed and the binding is no longer intact, wrap in freezer paper before freezing. Vacuum freeze drying is preferred, although it should not be used for photographs. If scrapbooks are to be vacuum freeze dried, the photographs should be removed first. Air drying may be used for small quantities that are only damp or water-damaged around the edges. The scrapbooks should not have large amounts of coated paper or soluble adhesives. **Do not** move items until an area has been prepared to receive them. Large scrapbooks must be supported with boards.

## 2.2.23 Textiles

Dry textiles with bleeding dyes as quickly as possible. Dry all other textiles within 48 hours to prevent mold growth. Air drying indoors in an air-conditioned area is recommended. If textiles cannot be dried within 48 hours, they can be frozen, but **do not** freeze beadwork or painted/stenciled items. To pack textiles for freezing, separate them with freezer paper to prevent transfer of dyes and pack flat. Handle wet textiles only as necessary since they are fragile; **do not** unfold delicate fabrics that are wet. Rinse, drain, and blot items with clean towels/cotton sheets to remove excess water. Provide adequate support when moving textiles, and **do not** stack wet textiles. Be sure to retain all identifying information, such as labels or tags, with each item. See the Minnesota Historical Society salvage instructions for details on air drying.

## 2.2.24 Transparencies, Color

Mounted *color slides and chromogenic color transparencies* should be frozen or dried within 48 hours. Drying methods in order of preference are: air dry in mounts if possible, thaw and air dry, or vacuum freeze dry. Handle by mounts or edges. To pack, keep wet and pack in plastic bags inside a box. *Additive color transparencies (Autochromes, Dufaycolor)* have a poor recovery rate because the dyes dissolve. They should be packaged to prevent damage. If they become wet, air dry immediately. **Do not** freeze. Handle carefully due to loose binding tapes and glass.

## 2.2.25 Videotapes

Immediately rinse off tapes soaked by dirty water. Dry within 48 hours if they have paper boxes and labels. Otherwise, tapes can stay wet for several days. **Do not** freeze. Air dry. **Do not** touch magnetic media with bare hands. To pack, keep tapes wet in plastic bags. Pack vertically in plastic crates or tubs.

# Chapter 3 REHABILITATION

(The following is adapted from Fox, Lisa, Disaster Preparedness Workbook for U.S. Navy Libraries and Archives, and Wellheiser, Joanna and Jude Scott, An Ounce of Prevention: Integrated Disaster Planning for Archives, Libraries, and Records Centres. See bibliography for full citations.)

Rehabilitation of collections is the process of returning collections to a usable state once they have been salvaged. Once wet collections have been dried, they are not simply ready to put back on the shelf. Depending on the nature and extent of the disaster, the rehabilitation process may be relatively quick and easy, or it may take a great deal of time and money. If there is a great deal to be done, it may be necessary to hire and/or train additional personnel to handle the work. Unfortunately there is no quick or easy way to make rehabilitation decisions; all damaged items must be examined and sorted, and categorized according to their needs. Options for rehabilitation of water-damaged collections include –

- Cleaning Some materials may have been rinsed before being allowed to dry. If dry paperbased collections still have mud or other debris, they can be cleaned by brushing or vacuuming. However, any works of art or other valuable materials need to be cleaned by a conservator. If materials have sewage contamination, they should be discarded or cleaned by a professional.
- Repair and rebinding If trained staff is available, it may be possible to do minor repairs to books and paper documents in-house. If there are a large number of books requiring rebinding, they should be sent to a commercial binder.
- Professional conservation treatment Treatment by a conservator is usually reserved for materials of significant value, due to the high cost of treating individual items. Treatment might include cleaning, removal of stains, rebinding, etc.
- Rehousing/relabeling Water-damaged boxes, folders, envelopes, sleeves, etc. will need to be replaced. Be sure to copy all identification information to the new enclosures. It may also be necessary to replace labels, card pockets, book plates, security tags, and other items.
- Data verification Tapes and disks that have been dried onsite or sent out to a commercial company for recovery need to be checked to verify that the data is readable.

Options for rehabilitation of fire-damaged materials include -

• Cleaning Dry-cleaning can be used to remove smoke and soot deposits. Vacuuming, cleaning with dry-chemical sponges, or dry-cleaning powder and erasers are common methods. Wet cleaning should not be used.

- Odor removal For collections with a residual smoke odor, there are professional companies that specialize in deodorization. Treatment in an ozone chamber will reduce the odor, but ozone is a powerful oxidizing agent that accelerates the aging of paper, so it should not be used on archival or other intrinsically valuable materials. Another possibility is to use storage boxes that incorporate zeolites; these have been shown to be effective in odor reduction. Placing collections in an enclosed container with baking soda, activated charcoal, or kitty litter may also help (these materials should not come into direct contact with the collections, however).
- Recovery of information in charred items In rare cases of collections that are badly charred but very important, it may be possible for a forensic science laboratory to retrieve information from the materials. This treatment is very expensive and would only be justified for unusually valuable items.
- Repair and rebinding As with water-damaged collections, charred items can be repaired and rebound. Charred edges would be trimmed and the volumes rebound, as long as the pages are not too brittle.
- Professional conservation treatment As with water-damaged collections, treatment by a conservator is usually reserved for materials of significant value, due to the high cost of treating individual items.
- Rehousing/relabeling Boxes, folders, and other enclosures that have suffered fire damage will need to be replaced. In addition, items that have suffered fire damage may be very brittle and may need special enclosures to protect them from future damage.

Also remember that additional activities will be required before collections can be returned to the shelves. Catalog records and finding aids will need to be updated to reflect any withdrawals, replacements, or other changes. Furnishings and shelving will need to be cleaned, repaired, and/or replaced. Finally, the collections themselves will need to be reshelved or refiled. In some cases, rehabilitation of the collections may not be possible due to excessive damage, or rehabilitation decisions, there are several alternatives that must be considered. It may be possible to discard some damaged materials, if they are non-essential or easily replaced. There are several options for replacement: photocopying, microfilming, purchase of a replacement copy, or purchase of a reprint or other edition. It is difficult to plan ahead for specific rehabilitation activities, since it is impossible to know the extent or nature of the disaster in advance. When the time comes to plan for rehabilitation, these general planning issues will need to be considered –

- What specific steps are needed for each rehabilitation activity?
- Who will carry them out?
- Who will supervise the work?
- Where will the work be done?
- Will temporary storage space be needed?
- What kind of work flow makes sense?
- Who will have authority to discard badly damaged items?
- What funds will be available? From the operating budget? From insurance?
- How should rehabilitation priorities be set to allow quick resumption of essential services?
- How much of the work can be done by staff and how much needs to be contracted out?

# Chapter A FACILITIES INFORMATION

## A.1 Utility/Shut-Off Control Locations and Procedures



## A.2 Fire Protection Systems

#### Fire extinguishers



Description of monitoring procedures: Monitored 24 hours a day. Has a loud audible alarm. When alarm goes off, the company notifies staff on list.

Detection system monitoring agencyName/Organization:SOS alarmContact:Cory Cames

Medford, Or 97501 541-773-3900

Phone: After-hours phone: Email:

Detection system service company Name/Organization: Contact:

Phone: After-hours phone: Email:

## A.3 Water Detectors

None

## A.4 Security

Location motion detector, sound, smoke and fire

Type of security

Date of last inspection of automated security system: yearly

Location of access codes for automated security system: passed by word of mouth

Description of monitoring procedures: No entry Security monitoring agency

,

Name/Organization: Contact: S.O.S. security Cory Carnes

Phone: Email: Medford, Oregon 541-773-3900 www.sosap.com

## A.5 Building Access



Location of access codes for automated security system: Verbally from person to person Indicate how the fire department would gain access to the building, if necessary: Break the door

## A.6 Climate Control Systems

Heating System		
Location	Description	Procedures for operation
Wall heater in each of main ro	oms Natural gas on thermostat	When museum is open, thermostats are set for comfort.
Heating system service compa	ny	
Name/Organization: Contact:	Avista	
Phone: After-hours phone: Email:	1-800-227-9187	
Date of last inspection and ma	intenance of the heating system: A	Annually
a <b>n</b> a .		

Cooling System		
Location	Description	Procedures for operation
In large room	Wall mount air conditioner	Used for comfort when museum is open

Date of last inspection and maintenance of the cooling system: as needed

## Chapter B

## **DISASTER TEAM RESPONSIBILITIES**

**Disaster Team Leader:** Activates the disaster plan; coordinates all recovery activities; consults with and supervises all members of the disaster team; establishes and coordinates an internal communications network; and reports to the director or governing body, as appropriate. Important: be sure that this person has authorization to act from the upper levels of the administration, if necessary.

Administrator/Supplies Coordinator: Tracks personnel working on recovery; maintains inhouse disaster response supplies; orders/coordinates supplies, equipment, and services with other team members; authorizes expenditures; deals with insurance company.

**Collections Recovery Specialist:** Keeps up to date on collections recovery procedures; decides on overall recovery/rehabilitation strategies; coordinates with administrator regarding collections-related services/supplies/equipment, such as freezing and vacuum freeze drying services; trains staff and workers in recovery and handling methods.

**Work Crew Coordinator:** Coordinates the day-to-day recovery work of library staff and volunteers to maintain an effective workflow; arranges for food, drink, and rest for staff, volunteers, and other workers.

**Subject Specialist/Department Head:** Assesses damage to the collections under his/her jurisdiction; decides what will be discarded and what will be salvaged; assigns salvage priorities among collections. Unless the institution is very small, there will be more than one subject specialist.

**Technology Coordinator:** Assesses damage to technology systems, such as hardware, software, and telecommunications; decides on recovery/rehabilitation strategies; sets priorities for recovery; coordinates with administrator for external services/supplies/equipment related to technology.

**Building Recovery Coordinator:** Assesses damage to the building and systems; decides on recovery/rehabilitation strategies for the building; coordinates with administrator for external services/supplies/equipment related to building recovery.

**Security Coordinator:** Maintains security of collections, building, and property during response and recovery; oversees response to medical emergencies.

**Public Relations Coordinator:** Coordinates all publicity and public relations, including communication with the media and the public. Provides regular updates of information to the media and the public. Takes names and phone numbers of potential volunteers.

**Documentation Coordinator:** Maintains a list of the priorities for recovery; keeps a written record of all decisions; maintains a written and photographic record of all damaged materials for insurance and other purposes; tracks collections as they are moved during salvage and treatment.

## **Chapter C**

## **IN-HOUSE SUPPLIES**

## C.1 Basic Disaster Supply Kit

Person responsible for inventorying supplies/equipment: President **Frequency** of inventory (four times per year is recommended): Twice a year

Item	Recommended	Quantity	Location(s)
	Quantity		
Aprons, plastic	1 box (100)	$\underline{\ } \underline{\ } \ $	$\underline{\ } \underline{\ } \ $
Book trucks, hand carts	2	1	Outside Storage
Brooms and dustpans	2	1	Rm #1 bathroom
Buckets (plastic)	2	1	Outside storage
Camera with film (disposable)	1	$\land \land \land \land \land \land$	$\land \land \land \land \land \land$
Clipboard	2	1	Outside storage
Dehumidifiers, portable	2	$\land \land \land \land \land \land$	$\land \land \land \land \land \land$
Ear plugs	20 pairs	$\overline{\langle \ } \ \overline{\langle \ } \ \overline{\ } \ \overline{\langle \ } \ \overline{\ } $	$\overline{\langle \ } \rangle $
Extension cords (50 ft.,	2	1	Outside storage
grounded)			-
Fans, portable	2	1	Rm #2 closet with
			chairs
First aid kit	1	1	Rm #1 office shelf
Flashlights (waterproof)	4 (or one per	1	Plugged in below
	department)		center cabinet in
	<b>1</b> /		Rm#2
Freezer bags (polyethylene,	40	15	Outside storage
various sizes)			C
Garbage bags, plastic (30 or 42	1 box (40)	20	Outside storage
gallon)			C
Gloves (nitrile)	1 box (100)	1 box	Outside storage
Markers (waterproof)	1 pkg.	3 markers	Outside storage
Masks, protective	1  box  (20)	3 masks	Outside storage
Milk crates/Rescubes	50	2	Outside storage
Mops	2	1	Rm#1 bathroom
Paper - absorbent white blotter	200 sheets (11 inches	s20	Outside storage
paper (used for drving loose	x 13 inches - each)		8
paper materials)	,		
Paper - uninked newsprint	2 large rolls (15	$\land \land \land \land \land \land$	$\land \land \land \land \land \land$
(used for interleaving wet	inches x 1100 feet -		
materials)	each)		
Paper pads (for clipboards)	1 pkg of 12	2	Outside storage
Paper towels	1 case (30 rolls)	8 rolls	Outside storage
1	· /		0

Pencils (sharpened) Pencils sharpener (handheld)	1 pkg of 12 1 5 rolls	12 1	Outside storage Outside storage
(polvethylene)	5 10115	1	Outside storage
Scissors	2	1	Outside storage
Sponges celluose	2	2	Outside storage
Tape (clear, 2 inches wide, with dispenser)	1 roll		
Tape (duct)	2 roll	1 roll	Outside storage
Tape (yellow caution)	1 roll	$\underline{\ } \underline{\ } \ $	$\underline{\ } \underline{\ } \ $
Toolkit (crowbars, hammers,	1	1 kit	Rm # office shelf
pliers, flat-head and philips-			
head screwdrivers)			
Utility knife	1	1	Outside storage
Utility knife blades	Package of 5	1	Outside storage
Waxed or freezer paper	7 boxes (75 feet each)	1 box	Outside storage
Wet/dry vacuum	2		

## C.2 Additional Supplies

Item	Quantity	Location(s)
Boots, rubber (or galoshes)		
Boxes, cardboard		
Bubble wrap	1 roll	Outside storage
Clothesline (nylon or 30 lb. monofilament)	$\underline{\ } \underline{\ } \ $	$\underline{\boldsymbol{\boldsymbol{1}}}$
Clothespins	$\overline{)} \overline{)} \overline{)} \overline{)} \overline{)} \overline{)} \overline{)} \overline{)} $	$\overline{)} \overline{)} \overline{)} \overline{)} \overline{)} \overline{)} \overline{)} \overline{)} $
Glasses (protective)		
Hard hats	1	Outside storage
Labels, self adhesive (even when wet)	$\underline{\ } \underline{\ } \ $	$\underline{\ } \underline{\ } \ $
Radio, battery-operated (with weather band)	$\underline{\ } \underline{\ } \ $	$\underline{\ } \underline{\ } \ $
Sponges, dry chemical (for removing soot)	$\underline{\ } \underline{\ } \ $	$\underline{\ } \underline{\ } \ $
Sump pump (portable)	$\underline{\ } \underline{\ } \ $	$\underline{\ } \underline{\ } \ $
Tables, portable folding	1	Outside storage
Tags with twist ties	$\underline{\ } \underline{\ } \ $	$\underline{\ } \underline{\ } \ $
Trash cans	1	Outside storage
Walkie-Talkies	$\underline{\ } \underline{\ } \ $	

## **Chapter D**

## **EXTERNAL SUPPLIERS AND SERVICES**

### **D.1 Freezing Services**

Local freezer (1) – Name/Organization: Contact:

Balfor USA - Medford

449 Pech Road Central Point, Oregon 97502 541-664-5454

Phone: After-hours phone: Cell phone: Regulations that must be complied with: Local freezer (2) –

Name/Organization: Contact: Henningson Cold Storage Co.

Salem, Oregon 503-485-0720

Phone: After-hours phone: Cell phone: Regulations that must be complied with:

## **D.2 Building Recovery/Collection Salvage Services**

There are a relatively small number of reputable companies experienced in salvaging buildings and collections (e.g., drying and cleaning buildings, wet books, documents, computer data, microfilm, and audio/video) for cultural institutions. The names of recommended companies follow.

#### American Freeze-Dry, Inc.

39 Lindsey Avenue Runnemede, NJ 08078 Telephone: (856) 546-0777 Hours: 9:00 a.m. - 5:00 p.m. M-F American Freeze-Dry is able to vacuum freeze-dry 50 cubic feet of wetted library materials (approximately 625 volumes) at a cost of \$55-60 per cubic foot. The company can also make arrangements for larger quantities with McDonnell Douglas (thermal vacuum drying) or a Canadian company with a 500-cubic-foot vacuum freeze-dry chamber.

#### Blackmon-Mooring Steamatic Catastrophe, Inc.

International Headquarters 303 Arthur Street Fort Worth, TX 76107 Toll Free: (800) 433-2940; 24 hr. hotline Telephone: (817) 332-2770 Fax: (817) 332-6728 URL: http://www.bmscat.com/index.asp

Hours: 8:00 am -5:30 pm M-F Disaster recovery services, odor removal, vacuum freeze drying BMS-Cat provides extensive recovery and restoration services and is able to handle almost any size emergency. Recovery services include paper based materials as well as electronic equipment and magnetic media. Book and document collections are vacuum freeze dried for approximately \$40 per cubic ft. based on a 500 cubic foot (approx. 6,250 volumes) load. BMS Cat offers a free standby service agreement that creates a customer profile, capturing information that is vital in an emergency prior to an event. A portable blast freezer is available.

#### **Disaster Recovery Services**

2425 Blue Smoke Court South Ft. Worth, TX 76105 Toll Free: (800) 856-3333 (24-hr. hotline) Telephone: (817) 535-6793 Fax: (817) 536-1167 Hours: 8:00 am - 5:00 pm M-F; 24-hr hotline *Disaster recovery and recovery planning services, vacuum freeze drying* 

#### **Document Reprocessors**

5611 Water Street Middlesex (Rochester), NY 14507 Telephone: (585) 554-4500 Toll Free: (888) 437-9464; 24-hr. hotline Fax: (585) 554-4114

#### URL: http://www.documentreprocessors.com

Hours: 8:00 am - 5:00 pm M-F Vacuum freeze-drying, disaster recovery of computer media, microfiche and microfilm, books, business records. Uses vacuum freeze-drying to recover water damaged materials. The vacuum freeze-dry chamber has an 800-cubic-ft. capacity which translates to approximately 10,000 volumes. The rate for freeze-drying varies but is generally about \$60 per cubic foot. Document Reprocessors also has a thermal freeze-drying process that employs heat and a cold trap. During the drying operation, materials cycle between from -40 to 60 degrees.

#### Midwest Freeze-Dry, Ltd.

Midwest Center for Stabilization and Conservation 7326 North Central Park Skokie, IL 60076 Telephone: (847) 679-4756 Fax: (847) 679-4756 URL: http://www.midwestfreezedryltd.com

Hours: Open by Appointment M-F; 24-hr. call monitoring *Freeze-drying of historical volumes, manuscripts, microfilm, blueprints. Uses vacuum freeze-drying to salvage wet books and documents. Their chamber will hold 150 milk crates (approximately 2500 cubic feet, or 31,250)* 

volumes). The cost to dry materials is based on the amount of water extracted from materials. Please call for price.

#### Polygon

79 Monroe Street Amesbury, MA 01913 Toll-Free: (800) 686-8377 (24-hr.) Telephone: (978) 388-4900 Fax: (978) 241-1215

URL: http://www.muntersmcs.com

Hours: 7:30 am - 8:00 pm M-F Disaster recovery services, building dehumidification, drying services, microfilm drying services. Will dry to customer's specifications or will recommend an appropriate method. Choices include: vacuum freeze-drying, in-situ drying through dehumidification, or stabilization by freezing materials to be dried at a later time. The vacuum freeze-dryer has a 100-cubic-foot, or 1,250 volume, capacity. Cost is approximately \$50 per cubic foot with a reduction for quantities greater than 500-cu.-ft.

#### **Solex Environmental Systems**

P.O. Box 460242
Houston, TX 77056
Toll Free: (800) 848-0484; 24-hr. hotline
Telephone: (713) 963-8600
Fax: (713) 461-5877
Hours: 8:00 am - 6:00 pm M-F Disaster recovery, dehumidification, building drying services.
Specialty is drying wet materials. Solex 's cryogenic dehydration chamber can accommodate a 40-ft. trailer of materials. Solex also offers vacuum freeze-drying and additional services, such as dehumidification of large spaces. The vacuum freezer has a capacity of 1000 cubic feet (12,500 volumes) at \$40 per cubic foot. The minimum job is 250 cubic feet.

## **D.3 Microfilm Salvage**

#### Eastman Kodak Company

Disaster Recovery Laboratory Toll Free: 800-EKC-TEST (352-8378) Telephone: (585) 253-3907

URL: http://www.kodak.com/global/mul/business/docimaging/ Reprocesses original camera films (only Kodak brand) free of charge. There is no limit on the number of rolls. Films should be packaged according to Kodak's instructions, which are given when Kodak is notified.

#### **New England Micrographics**

750 E. Industrial Park Drive Manchester, NH 03109 Toll Free: (800) 340-1171 Telephone: (603) 625-1171 Fax: (603) 625-2515 Email: sales@nemicrographics.com URL: http://www.nemicrographics.com Reprocesses any amount of water-damaged microfilm, and also provides off-site storage for microfilm and computer media. Cost is based on the size and nature of the request. Works with Fuji film and also Ilford color film.

## **D.4 Salvage - Electronic Data & Equipment**

#### **Aver Drivetronics Data Recovery Service**

42-220 Green Way, Suite B Palm Desert, CA 92211 Telephone: (760) 568-4351 Fax: (760) 341-8694 Email: aver@averdrivetronics.com

URL: http://www.averdrivetronics.com/In business since 1979. Specializing in repairing damaged data caused by hardware failure, virus contamination, and user error.

#### **Data Mechanix Services**

18271 McDurmott Street, Suite B Irvine, CA Toll Free: (800) 886-2231 E-mail: help@datamechanix.com

URL: http://www.datamechanix.com Specializing in the rescue of lost data from hard disk drives and other storage media.

#### **Data Recovery Labs**

85 Scarsdale Road, Suite 100 Toronto, ON M3B 2R2 Canada Toll Free: (800) 563-1167 Toll Free: (877) datarec Telephone: (416) 510-6990 Toll Free Fax: (800) 563-6979 Fax: (416) 510-6992 Telephone Support: 8 am - 8 pm EST E-mail: helpme@datarec.com

URL: http://www.datarec.comProvides custom-engineered data recovery solutions and data evidence investigations. Free pre-recovery analysis.

#### Data Recovery and Reconstruction (Data R&R)

P.O. Box 35993 Tucson, AZ 85740 Telephone: (520) 742-5724 E-mail: datarr@datarr.com URL: http://www.datarr.comA charge of \$75.00/per drive is required for decontamination of fire- or water-damaged drives. Offers a \$150.00 discount for non-profit organizations. No charge for preliminary diagnostics.

#### **ECO Data Recovery**

4115 Burns Road Palm Beach Gardens, FL 33410 Toll Free: (800) 339-3412 Telephone: (561) 691-0019 Fax: (561) 691-0014 Email: info@eco-datarecov.com

URL: http://www.eco-datarecov.com Specializing in electronic data retrieval and restoration of failed hard drives.

#### **ESS (Electronic System Services)**

239 South Lewis Lane Carbondale, IL 62901 Toll Free: (800) 237-4200 Toll Free: (888) 759-8758 Telephone: (618) 529-7779 Fax: (618) 529-5152 E-mail: info@savemyfiles.com

URL: http://www.datarecovery.orgCharges no evaluation fee, and can provide 24hour turnaround. Disks may be sent to the address above with or without prior approval. Please enclose your contact information with your hard drive.

#### Excalibur

101 Billerica Avenue 5 Billerica Park North Billerica, MA 01862-1256 Toll Free: (800) 466-0893 Telephone: (978) 663-1700 Fax: (978) 670-5901 Email: recover@excalibur.ultranet.com

URL: http://www.excaliburdr.comA computer recovery service that can recover data from loss caused by many types of disaster. They have experience working with many types of media and more than twenty operating systems.

#### **Micro-Surgeon**

6 Sullivan Street Westwood, NJ 07675 Telephone: (201) 666-7880 After 5:00 PM EST: (201) 619-1796 (please enter " #" after leaving your number) E-mail: info@msurgeon.com

URL: http://msurgeon.com/Offers evaluations based upon a flat rate of \$75 per drive and includes all diagnostic services related to determination of recovery feasibility. Special discounts for the educational market are offered.

#### Ontrack

6321 Bury Drive Eden Prairie, MN 55346 Toll Free: (800) 872-2599 Phone: (952) 937-5161 Fax: (952) 937-5750

URL: http://www.ontrack.comOffers emergency and on-site data recovery services as well as Remote Data Recovery (RDR);

#### **Restoration Technologies, Inc.**

3695 Prairie Lake Court Aurora, IL 60504 Toll Free: (800) 421-9290 Fax: (708) 851-1774*Offers a broad range of cleaning services, from cleaning and disinfecting heating ventilation and air conditioning systems (HVAC), to computer media. However their specialty is electronic equipment, including computers, printers, video tape recorders, cameras, etc.* 

#### **TexStar Technologies**

3526 FM 528, Suite 200 Friendswood, Texas 77546 Telephone: (281) 282-9902 Fax: (281) 282-9904 Email: texstar@texstartech.com URL: http://www.texstartech.com/index.htmlSpecializes in data recovery, computer security, software design, systems integration, and Internet services.

## **D.5** Salvage - Magnetic Media

#### Film Technology Company, Inc.

726 North Cole Avenue Los Angeles, CA 90038 Telephone: (213) 464-3456 Fax: (213) 464-7439 E-mail: alan@filmtech.com URL: http://www.filmtech.com Nitrate movie film duplication

#### John E. Allen, Inc.

116 North Avenue Park Ridge, NJ 07656 Telephone: (201) 391-3299 Fax: (201) 391-6335*Nitrate movie film duplication* 

#### Karl Malkames

1 Sherwood Place Scarsdale, NY 10583 Telephone: (914) 723-8853*Nitrate movie film duplication* 

#### **Restoration House**

Film Group, Inc. PO Box 298 Belleville, ON K8N 5A2 Canada Telephone: (613) 966-4076 Fax: (613) 966-8431*Nitrate movie film duplication* 

#### Seth B. Winner Sound Studios, Inc.

2055 Whalen Avenue Merrick, NY 11566-5320 Telephone: (516) 771-0028 or (212) 870-1707 Fax: (516) 771-0031 Contact: Seth B. Winner Email: Seth.B.Winner@worldnet.att.net Consulting and treatment of audio tape collections.

Able to work with a variety of formats.

#### **Smolian Sound Studios**

1 Wormans Mill Court Frederick, MD 21701 Telephone: (301) 694-5134 Contact: Steve Smolian *Well known for offering all types of audiotape restoration*. *Also works with acetate and shellac discs*.

#### **SPECS Brothers**

PO Box 5 Ridgefield Park, NJ 07660 Toll Free: (800) 852-7732 Telephone: (201) 440-6589 Fax: (201) 440-6588 Email: info@specbros.com URL: http://www.specsbros.com

Contact: Peter Brothers Specializes in the recovery of videotapes after any type of disaster. Offers recovery advice, assistance, as well as cleaning and copying services for affected tapes. SPECS Bros. also cleans and copies archival video and audiotapes.

## **D.6 Professional Preservation Advice - Regional Centers**

Name/Organization: WESTPAS Contact:

Phone:	, 888-905-7737
After hours phone:	
Web site:	www.westpas.org
Specialty:	various

## **D.7** Professional Preservation Advice - Conservators

Name/Organization:

Contact:

Phone: After hours phone: Web site: Specialty: Balboa Art Conservation Center

P.O.Box 3755 San Diego, California 92163 1-619-236-9702

various

## **D.8** External Sources for Supplies

Item	Local Supplier Contact	Alternate Supplier
		Contact
Aprons, plastic	Home Depot	
Book trucks, metal	Home Depot	
Boots, rubber	Home Depot	
Boxes, cardboard	Home Depot	
Brooms/dustpans	Home Depot	
Buckets, plastic	Home Depot	
Camera/film		
CB radio/ham radio, nearest		
Clothesline (nylon or 30 lb. monofilament)	Home Depot	
Construction materials (wood, screws, nails)	Home Depot	
Dehumidifiers, portable	Home Depot	
Dry ice		
Extension cords (50 ft, grounded)	Home Depot	
Fans, portable	Home Depot	
Freezer bags, polyethylene (various sizes)	Home Depot	
Freezer or waxed paper	Home Depot	
Garbage bags, plastic (30 or 42 gallon)	Home Depot	
Generator, portable	Home Depot	
Glasses, protective	Home Depot	
Gloves (leather work gloves)	Home Depot	
Gloves (nitrile)	Home Depot	
Hard hats	Home Depot	
Ladders	Home Depot	
Lighting, portable	Home Depot	
Milk crates, plastic or Rescubes	Home Depot	
Mops	Home Depot	
Other		

Paper towels	Home Depot	
Paper absorbent white blotter paper (used	Home Depot	
for drying loose paper materials)		
Paper uninked newsprint (used for	_	
interleaving wet materials)		
Phone, nearest off-site	_	
Plastic sheeting (heavy)	Home Depot	
Protective clothing, disposable	_	
Pump, portable	_	
Respirators	Home Depot	
Sand bags	Home Depot	
Security personnel (additional)	_	
Sponges (cellulose)	Home Depot	
Sponges, dry chemical (for removing soot)	Home Depot	
Tables, portable	Home Depot	
Thermohygrometer	_	
Toilets, portable	_	
Trash cans	Home Depot	
Truck, refrigerated	_	
Walkie-talkies	_	
Water hoses (with spray nozzles)	Home Depot	
Wet/dry vacuum	Home Depot	

## **D.9 External Suppliers**

Name/Organization:	Home Depot
Contact:	
	Phoenix, Oregon 97535
Phone:	
Type of Materials Available:	

## **D.10 Staff Supplies**

Following is a listing of supplies that staff members have on hand at home and could contribute in the event of a disaster.

Type/Item	Amount of supplies	Staff member
Box trolly	1	President
Camera	1	Secretary / Treasurer
RV / Trailer	1	President

# Chapter E RECORD KEEPING FORMS

The following basic forms have been provided to assist you in documenting any incidents that may damage your building and/or collections. Use them as is, modify them for your circumstances, or devise others as needed. Please consider keeping multiple photocopies of any forms that you anticipate using with your in-house disaster supplies since access to a photocopier may not be possible in an emergency.

## E.1 Collection Incident Report Form

This form should be used to keep a record of any incident that causes damage to collections. The second section of the form provides a salvage timeline form to keep track of salvage decisions <i>.Initial Report</i>
Person Completing Form:
Today's Date:
Date of incident:
Time of incident:
Collection(s) involved (type and quantity):
Description of incident:
Damage to collections:
Immediate action taken to minimize damage:

## **Collection Incident Report Form,**

page 2 Salvage Timeline

method (e.g., air dry,	Description of items	Quantity	Person who	Date	Date
freeze, vacuum	-	ofitems	authorized	begun	finished
freeze dry,			salvage		
professional					
conservation)					

#### Collection Incident Report Form, page 3 Collection Rehabilitation Timeline

Date disaster area cleaned:\_\_\_\_\_

By whom:

/disposition (e.g., discard, replace, microfilm, photocopy, clean, repair, rebind)	Description of items	Quantity of items	Person who authorized decision(s)	Date(s) treated	Date returned to shelf

## E.2 Building Incident Report Form

Use this form to document any building problems, whether or not they caused collections damage. These forms should be maintained in a building log notebook, so that a history of building problems will be available.

Location: \_\_\_\_\_

Date:

Person reporting problem:

Description of problem:

Description of action taken:

If collections were damaged, describe briefly (and fill out an Incident Report Form):

## E.3 Packing and Inventory Form

(Adapted from Pack out Form, in Disaster Preparedness Workbook for U.S. Navy Libraries and Archives, by Lisa Fox. Newport, RI: U.S. Naval War College Library, 1998, rev. 2000.)

Number	Original storage location (e.g., Rm #2)	Contents (e.g., call numbers, record series)	Format of material (e.g., books, photographs)	Quantity of material (e.g., number of volumes, items, folders)	Damage (e.g., wet, damp, mold, smoke)	Salvage priority (e.g., number 1, 2,)	Destination (e.g., air dry, freezer, vacuum freeze drying)

## E.4 Volunteer Sign-In/Sign-Out Form

Name, address, and phone number	Time In	Time Out	Work performed	Date

## E.5 Environmental Monitoring Form

(Use one form for each room/area that needs to be monitored. Readings should be taken at least every four hours.)

Relative Humidity	Time	Person taking reading	Equipment used
5			

## E.6 Bomb Threat Form

Date:				
Time:	_ am/pm			
Person receiving the call:				
ASK THE FOLLOWING QUESTIONS				
Where is the bomb?				
What does it look like? <i>round square package briefcase</i>				
Other:				
When will it detonate?				
What will cause it to explode?				
Why are you calling?				
Why was it placed?				
Who placed the bomb?				
What is your name?				

#### **KEEP ASKING QUESTIONS UNTIL THE CALLER REFUSES TO ANSWER OR HANGS** UP!!

Additional Information (write down everything you can remember):

Approximate age of caller: \_\_\_\_\_

Sex of caller:

Callers exact words:

Describe the callers voice and speech (e.g., high pitched, deep, raspy, soft, calm, angry): Describe any background noise: (e.g., street noises, voices):

## E.7 Donors Form

(Use this form to keep track of supplies or other materials donated for the recovery effort.) Date: \_\_\_\_\_

Donor name, address, and phone:

Supplies or other materials donated:

# Chapter F

## **SALVAGE PRIORITIES (DETAILED)**

## F.1 Salvage Priorities - Institutional Records

Administrative Records
Name of record group

1 – Assesssion and loan records

**Bibliographic Records** Name of record group



Location of records

## F.2 Salvage Priorities - Collections Overall



## F.3 Overall Institutional Salvage Priorities

Collection

- 1 Purple notebooks (Assession records)
- 2 PHS Year books including those in boxes

3 – Organ



# Chapter G INSURANCE INFORMATION

## G.1 Property Insurance - Buildings, Machinery, and Equipment -Commercial Insurance

Please note: much of the information printed here should be found in your Summary of Insurance and your Claims Manual(s), if your insurance agent has provided them.

The institutions risk/insurance officer –

Name: Title: Work phone - Extension: Cell phone: Weekend/after hours phone:

## **G.1.1 Type and Extent of Coverage**

**Insurance policy held by the institution** – Policy number:

Policy inception date:
Policy expiration date
Property covered:
Amount of coverage:
Amount of deductible, if there is one:

#### **Insurance carrier**

Company/Organization: Contact Person:

> Suite 10 Bala Cynwyd, PA 19004

Phone:

#### Insurance agent or broker

Company/Organization: Contact Person:



Phone: Cell phone: After hours phone:

Frequency of review and updating of this policy: Person responsible for reviewing and updating this policy: How insurable values on the policy are determined: Annual President

*Property appraisal(s)* –

Material(s) appraised: Date of last appraisal: Person conducting appraisal:

Procedures required by the insurance company in case of damage or loss:

Documentation required to prove loss:

Describe the insurance company's procedures for inspecting the building and/or machinery and/or equipment covered under this policy, and the steps taken if a serious exposure is discovered:

## **Chapter H**

## **VOLUNTEER/TEMPORARY PERSONNEL**

In the case of a large disaster, additional help may be needed (e.g., to dry materials, to pack out wet collections). The Disaster Team Leader should determine whether or not volunteers or temporary workers are needed. Possible sources of volunteers include local community organizations and staff members of other area libraries. While it is difficult to plan ahead for specific circumstances, you should take a few minutes to consider a number of issues relating to volunteers and/or temporary workers –

- Where will you get volunteer workers?
- What will you do if volunteers simply arrive on the scene? If you do not need them, or you are not yet prepared to organize and train them, it is best to take names and phone numbers and tell them they will be contacted when they are needed. The public relations coordinator should do this.
- In cases where there is a lot of recovery work to be done, it may be necessary to hire temporary workers rather than to rely on volunteers. If this were necessary, would the institution be required to put out bids? If so, could this be done ahead of time?
- How will insurance coverage be provided for volunteers or temporary workers? Specific provision must be made for such workers within the institutions insurance policy if they are to be properly covered and the institution is to avoid liability.

Once volunteers or temporary workers are on the scene, they must be properly managed -

- Volunteers and/or temporary workers must be registered, and all workers (including staff) must be provided with some type of identification. Volunteers and other workers must be required to sign in and out every day.
- You will need to determine their qualifications (e.g., what experience do they have with library collections, are they capable of strenuous physical activity such as lifting and carrying boxes), find out when and for how long they are available, and draw up a work schedule for each person.
- Volunteers and/or hired workers must also be properly trained and supervised. It is recommended that the Collections Recovery Specialist provide training and the Work Crew Coordinator provide day-to-day supervision.
- Volunteers and/or workers must be supplied with any protective gear that is needed, such as gloves and protective clothing, and they must be trained to use them properly.
- Just like staff members, volunteers and temporary workers will need periodic breaks and refreshments. Breaks are normally needed about every two hours, and must be mandated so that workers do not become too tired.
- In a large disaster, you may also need to arrange for a second group of volunteers or workers to take over from the initial group.

### H.1 Potential Volunteers/Workers

Experienced Volunteers/Workers (Staff members from other cultural institutions who would be able to assist in an emergency) –

Name: Title: Institution:

G (1 O
Southern Oregon
Historical Society

Medford, OR 97501

Work phone: Home phone: Cell phone:

Trained in CPR/First Aid? No

General Volunteers/Workers (Potential volunteers or organizations that might provide volunteers if asked) – Name/Organization: Southern Oregon Historical

Name/Organization:	Southern Oregon His
	Society

Contact:

Medford, Oregon 97501

Work phone: Home phone: Cell phone:

Trained in CPR/First Aid? Unknown

,

**Temporary Workers (Potential sources for hiring temporary workers)** Organization: Contact:

Phone/ext.: After-hours phone:

## H.2 Services for Staff/Volunteers/Workers

It is very important to remember that in any disaster you must also provide for the emotional needs of staff members, volunteers, and temporary workers. In a widespread disaster, some of them may also be dealing with the disaster at home. Even a relatively small event that is confined to the building (or even to a single department) can be emotionally upsetting. You should consider who might provide counseling or other assistance to staff, volunteers, or other workers if needed.

The Red Cross web site http://www.redcross.org provides a search tool to locate your local chapter. *The American Red Cross provides counseling and other services* –

The American Red Cross National Headquarters 2025 E Street, NW Washington, DC 20006 Phone: (202) 303-4498

The Red Cross web site http://www.redcross.org provides a search tool to locate your local chapter.

### Additional local organizations that would be able to provide counseling and other

**assistance** – Organization: Contact:

,

Phone/ext.: After-hours phone:
# Chapter I EMERGENCY FUNDS

# I.1 In-House Funds

 Persons who are authorized to disburse funds –

 Name/Title
 Disbursement procedures

 President
 Image: Comparison of the second s

Persons who can provide authorization for large purchase orders – Name/Title Procedures President

,

Institutional charge accounts -

Organization: Contact: Phone: After-hours phone: Access procedures: Persons authorized to incur charges:

# **I.2 Additional Funds**

*If additional funds are needed, contact* – Name/Organization: Contact:

Phone/ext.: After hours phone: Access procedures:

# **Chapter J**

# **DISASTER RECOVERY CONTRACT**

### J.1 Disaster Recovery Contract

This is a draft of a proposed **Disaster Recovery Contract** that the FLICC Preservation & Bindery Working Group has developed for Federal Agencies, especially, Federal Libraries and Archives. A **Disaster Recovery Contract** is usually not in place at the time a disaster occurs, and will have to be instituted on an emergency basis after a disaster has occurred. The affected Federal Agency will have to work with their Procurement Office to put such a contract into place.

What follow are recommendations that should be in a Disaster Recovery Contract and what should be expected from a credible recovery firm. The most critical part of the contract is developing a **SCOPE OF WORK** that describes the services to be performed. The nature of the work to be performed will have to be written in order to place the contract. The SCOPE OF **WORK** should be written using an institution's existing Disaster Preparedness Plan. The SCOPE OF WORK will have to be flexible, as the initial assessment of the disaster will often not reveal the full extent of the damage to the facility or to the collections. A major factor that must be considered is **SECURITY**. If a disaster site has been designated a crime scene due to a criminal activity or terrorism, security will become paramount. It will complicate your efforts for disaster recovery, as the disaster site will not be accessible until the security authorities release it. An additional security factor will be if the disaster site holds classified records. The procurement office in awarding the disaster recovery contract must address this concern. Another important consideration is the **TERMS of the CONTRACT**. The contract must start on a specific date and continue until the services have been rendered and the work described in the SCOPE OF **WORK** is completed. A third consideration is **PRICE**. This will have to be negotiated between the vendor, librarian/archivist and the procurement office. The vendor will have a rate schedule for standard items and the ability to obtain needed equipment at a cost plus price. It is vital to place the contract as soon as possible after the disaster to avoid additional damage to the facility and to the collections.

TIME IS CRITICAL IN A DISASTER. THE FASTER THE CONTRACT CAN BE PLACED, (WITHIN 24 to 48 HOURS), THE MORE LIKELY THAT THE FACILITY CAN BE STABILIZED AND THE DISASTER RECOVERY OF COLLECTIONS STARTED. THE LONGER THE WAIT-----THE HIGHER THE RECOVERY COST AND THE LESS CHANCE THAT RECOVERY EFFORTS WILL BE SUCCESSFUL.

Remember, that once the requirements are stated in the **SCOPE OF WORK** for the Disaster Recovery Contract, it is very important that the contract negotiations be followed very closely. The selection of the right contractor is absolutely essential for the clean up of a disaster site. A

review of the contractors qualifications is imperative and the Library - Archives must have input into the selection process. This document deals primarily with the recovery of the site and the collections.

For information on a sample Disaster Recovery Planning document for a Business Resumption Plan see the University of Toronto website at http://www.utoronto.ca/security/drp.htm.

It is an example of this type of a plan. (Other plans will be added)

Some of the items you need to consider when writing the **SCOPE OF WORK** are described below.

# **J.2** Contract and Performance Specifications

Vendor Qualifications Have the facilities, experience, qualifications, and expertise to provide professional advice and packing, freezing, and drying services to Federal Agencies affected by a disaster. Other services will include air treatment, smoke neutralization, sanitization, deodorization and the treatment and removal of mold. The recovery of damaged technology is another facet that must be considered. Provide freezer and/or drying trucks, packing supplies, and personnel to assist Federal Agencies that have been affected by a disaster that is beyond their capability of handling. Have systematic procedures and policies in place for the removal of library materials from a disaster-struck Federal Agency to ensure that all the materials have been identified, inventoried, and kept in as much order as possible given the situation in the Federal Agency. Have the capacity to freeze large quantities of library materials if the quantity to be dried is too large for the current drying capacity of the firm due either to the current available space or the amount of the material. Have the facilities and expertise to dry varying amounts of materials of varying degrees of humidity and to remove mold and decontaminate materials when necessary. Have drying policies and procedures in place to determine when the materials have reached normal equilibrium. Ensure that all materials are completely dry. When appropriate, have the capability, and/or arrangements, for cleaning the materials after they have been dried. Be capable of returning the materials to the affected Federal Agency in order, in appropriate boxes, etc., and in as usable a form as possible considering the degree of the disaster.

Required Services Respond to a disaster scene within 24 hours of being called by the Federal Agency or designated preservation site. Provide the most practical and efficient options for the salvage, recovery and rehabilitation of the collections, whether this means packing, freezing, and vacuum-freeze drying; packing, freezing, and drying at another facility; drying the materials and building in place; or other options. Freeze and completely dry the library and/or archival materials affected by a disaster and return these materials to the Federal Agency in usable form when completed. During the drying process constantly monitor and manipulate the materials to ensure that they are completely dried and not stuck together. Under the direction of Federal Agency staff or designated preservation professional, provide advice to affected libraries/archives, on their damaged materials.

#### Time and Materials Schedule I.

#### Labor A.

#### **Operations Personnel Labor (Samples)**

This listing applies to personnel engaged to fulfill the terms of the contract, whether regular full time employees of the vendor or temporary hires employed directly by the vendor or secured through a labor service. The rates, which will be established by the vendor, are per person per hour.

#### CLASSIFICATION

General Cleaning Laborer Clerical General Restoration Supervisor/Technician Remediation Supervisor/Technician Resource Coordinator Project Accountant Assistant Superintendent Electronics Restoration Supervisor/Technician Industrial Corrosion Control –

• Supervisor/Technician

Documents Recovery Specialist Superintendent Project Manager Project Director Health and Safety Officer Certified Industrial Hygienist Technical Consultants/Engineers Operation Technician Variable Labor Labor Pool (Temp labor) Labor Management Fee\* –

• Where customer supplies labor force

Dry Laborer, Customer Site Dry Room Setup Dry Supervisor, Customer Site Dry Room Setup File Jackets Labor Only File Labels Labor Only Fire Damage Edge Trim Labor Only Inventory Pack out Supervisor Inventory Pack out Labor Laborer Mold & Mildew Removal Labor Only Pack-In Labor Laborer Pack-In Labor Supervisor Pack out Labor Laborer Pack out Labor Supervisor Photo Copy Documents Labor Only Retrieval & Delivery Labor\* (Time and one-half after 8 hours and on Saturdays. Double time on Sundays/Holidays).

#### **B.** Other Labor Provisions

- 1. Standard Hours All labor rates are for the first 40 hours worked in a workweek, exclusive of the vendor holidays.
- 2. Non-Standard Hours The rates for labor performed by all classifications in a workweek over 40 hours will be 1.5 times the rates scheduled. Rates for labor performed on the vendor recognized holidays would be 2.0 times the rates scheduled. In the event the vendor is required to pay double time for any work performed, pursuant to state or federal law or the terms of any collective bargaining agreement, the rates for such labor hours shall be 2.0 times the rates scheduled.
- 3. Travel time for personnel shall be billed to the contract at the rates provided by the vendor.
- 4. These rates and provisions are predicated upon the vendor standard wage rates and overtime compensation practices. To the extent the work under a particular contract is subject to Federal and State minimum wage or hour laws or collective bargaining agreements which modify the vendor standard rates and practices, adjustments shall be made to the hourly rates and other labor provisions stated above.

*C. Consulting* These sample rates apply to personnel who have been retained to provide project management of a job.

#### CLASSIFICATION -

Project Engineer/Scientist/Hygienist or other Environmental Specialists. Preservation Consultants. Project Manager Superintendent Accountant Supervisor Secretary/Clerical

Administrator *II*.

#### Equipment Rental

#### A. Equipment Rental

*Vendor Owned Equipment* The vendor will establish rates that apply to equipment that is owned by the vendor and utilized in the performance of the work (whether supplied from the vendor inventory or specially purchased by the vendor for performance of the work).

#### CLASSIFICATION

Air Compressor Air Mover/Carpet Dryer Boroscope Dehumidifiers **Distribution Panel** EDP - Tool Set EDP - High Pressure Sprayer EDP - Instrument Drying Oven Foamer Fogger - Spray Mist Fogger - Thermo-Gen Generator - Less than 100 Kilowatt Heaters (In-Line) HEPA Air Filtration Unit - 2000 CFM High Pressure Moisture Extractors HVAC - Air Tool Kit HVAC - Cutting/Spray Kit HVAC - Duct Auger HVAC - Duct Sweeper Hygrothermograph - Recording Injectidry Interseptor Lambrite - Dry Clean Machine Lights - Quartz Demolition Micromanometer Micromanometer - Recording Moisture Meter - Penetrating or Non-Penetrating Negative Air Machine Ozone Generator - Model 330 Ozone Generator - Model 630 Radio - Personnel Communication Refrigeration -

- Cooling Coils Only
- Chillers
- DX Units

Refrigerant Dehumidification Units Respirator Sprayer - Industrial Airless Steamtic 8100E Extraction System Steamatic TMU Extraction System Thermohygrometer Trailer - 40 ft. Storage Trailer - Refrigerated 40 ft. Storage Trailer - Utility (inclusive of mileage) Truck - Box (inclusive of mileage) Ultrasonic Decontamination Vat - 500 Watt Vacuum - Barrel Vacuum - Commercial Canister Vacuum - EDP Anti-static Vacuum - Handheld Vacuum - HEPA Vacuum - MV II Vacuum - Upright Van - Cargo/Passenger Washer - High Pressure

- 1. The daily rental rate by the vendor shall be charged for each calendar day or portion thereof during which the equipment is utilized to perform the work, regardless of the number of shifts on which the equipment is used during the day.
- 2. During the course of performance of the work, the vendor may add additional equipment to the schedule above at rates to be determined by the vendor.
- 3. The customer shall pay for any repairs or maintenance performed on the equipment on the basis of cost plus twenty percent (20%) mark up.
- 4. In the event any item of rental equipment is damaged beyond reasonable repair by conditions at the work site, the customer shall be charged the replacement cost plus twenty percent (20%).

**B.** Equipment Rented by The Vendor The rental rate for any items of equipment the vendor rents from third party vendors specifically for use in performing the work shall be the vendor 's cost thereof plus twenty percent (20%).

#### III. Materials A.

#### Materials

#### CLASSIFICATION

Anti-Microbial Sealer Applicators - 6" Cotton Biocides/Disinfectants Box - Book Box - Dish Box - Freeze Dry Carpet Deodorizer Cartridge - N-95 Cartridge - Respirator Coil Cleaner Cotton Cleaning Cloths Desiccant 25 Desudser

Dry Solvent Stain Remover EDP-Corrosion Control Lubricant #1 EDP-Corrosion Control Lubricant #2 **EDP** - VCI Device Emulsifier - Powder Emulsifier - Liquid Filter - HEPA for Air Filtration Unit Filter - HEPA for Vacuum Filter - Primary Filter - Secondary Fireman's Friend Abrasive Compound Furniture Blocks **Furniture Pads** Furniture Polish Glass Cleaner Gloves - Cotton Gloves - Latex Gloves - Leather Gloves - Nimble Finger (N-Dex) Goggles Hexathane (MS, CS, or LO) Lemon Oil Mop Heads Odormatic Paper - Corrugated Paper - Craft Pigmented Sealer **Polishing Pads** Polyester Filter Material Polyethylene Bags - 3-6 mil Polyethylene Sheeting Pump - Barrel Syphon Reodorant **Restoration Sponge** Safety Glasses Shrink Wrap Stainless Steel Polish Steel Wool Suit - Tyvek Tape - Boxing Tape - Duct Tape - Masking Thermo Fog Spray Trash Bags - Disposable Vinyl & Leather Conditioner

Please note that vendors will have proprietary products.

#### **B.** Additional Provisions Respecting Materials

- 1. All prices shall be applied to all materials on the schedules above which are utilized in the performance of the work, whether shipped to the site from the vendor inventory, shipped directly to the site from the vendor 's sources, or purchased locally by the vendor from either an affiliated or non-affiliated entity.
- 2. During the course of performance of the work, the vendor may add additional materials to the schedule above at rates to be determined by the vendor.

#### IV. Document Remediation

Specific freeze drying costs will be determined *per job*, based on the factors relevant to each job and pricing per cubic foot. These factors include, but are not limited to -

- Nature of Damage
- Moisture Saturation
- Degree of Char/Soot Residue
- Mold/Mildew Infestation
- Smoke Odor
- Deodorization Requirements
- Contamination Factors Include Debris, Sewage, Silt, and/or Hazardous Materials

The above rates represent the changes for freeze-drying only. Labor, equipment, materials and other costs incurred in connection with document remediation will be billed in accordance with the appropriate schedules and provisions.

#### V. Desiccant Dehumidification

Specific costs for Desiccant Dehumidification services will be determined per job, based on factors relevant to each job and pricing per square foot. These factors include, but are not limited to -

- Nature of Damage
- Moisture Saturation
- Height of Buildings, Ceilings and Affected Space
- Length of Job and/or Time Constraints
- Other Contamination Factors

The above rates represent the charges for Desiccant Dehumidification only. Labor, equipment, materials and other costs incurred in connection with remediation, deodorization and other services will be billed in accordance with the appropriate schedules and provisions contained in this Exhibit.

#### VI. Small Tools

Items such as, shovels, ladders, demolition carts, extension cords, small hand tools, etc. are provided by the vendor but are not included in the Schedules above. The vendor shall be compensated for these items by application of a small tool charge in the amount of three percent (3%) of total labor billings.

The compensation paid the vendor for all services such as laboratory services, testing services, and other services which are not identified in Sections IV or V above or performed by individuals billed to the customer in accordance with Section I above, but are subcontracted by the vendor, shall be the vendor 's cost for such subcontract service plus twenty percent (20%) the vendor mark-up on such costs.

The vendor shall be compensated for costs incurred for travel, lodging and per diem costs for vendor employees assigned to the work on the basis of the vendor 's cost for such items plus twenty percent (20%) the vendor mark-up on such costs.

The vendor shall be compensated for costs incurred for the transportation of equipment, supplies and materials to and from the site of work and for other job related charges not listed in the sections above on the basis of the vendor 's cost for such charges plus twenty percent (20%) the vendor mark-up on such charges.

The rates contained in this schedule are exclusive of federal, state and local sales or use taxes and any applicable federal, state or local approvals, consents, permits, licenses and orders incident to performance of the work. The vendor shall be compensated for all costs incurred which are described above on the basis of the vendor 's actual cost incurred for such items.

Prepared by Robert E. Schnare, Co-Chair of the FLICC Preservation & Binding Working Group November 8, 2002.

# Chapter K

# ADDITIONAL RESOURCES FOR SALVAGE OF SPECIFIC MEDIA

Albright, Gary, Emergency Salvage of Wet Photographs, in Preservation of Library and Archival Materials: A Manual, edited by Sherelyn Ogden. Andover, MA: Northeast Document Conservation Center, 1999.

Available online at http://www.nedcc.org//plam3/tleaf38.htm.

Buchanan, Sally, Emergency Salvage of Wet Books and Records, in Preservation of Library and Archival Materials: A Manual, edited by Sherelyn Ogden. Andover, MA: Northeast Document Conservation Center, 1999. Available online at

http://www.nedcc.org//plam3/tleaf37.htm.

Conservation Center for Art and Historic Artifacts. *Managing a Mold Invasion: Guidelines for Disaster Response*. Technical Series No. 1. Philadelphia: Conservation Center for Art and Historic Artifacts, 1996. Available at http://www.ccaha.org. Conservation Center for Art and Historic Artifacts.

Disaster Recovery: Salvaging Photograph Collections.

Philadelphia: Conservation Center for Art and Historic Artifacts, 1998 Available at http://www.ccaha.org. Conservation Center for Art and Historic Artifacts. *Disaster Recovery: Salvaging Art on Paper*.

Philadelphia: Conservation Center for Art and Historic Artifacts, 2000. Available at http://www.ccaha.org. Conservation Center for Art and Historic Artifacts. *Disaster Recovery: Salvaging Books*.

Philadelphia: Conservation Center for Art and Historic Artifacts, 2002. Available at

http://www.ccaha.org.Balloffet, Nelly. *Emergency Planning and Recovery Techniques*. Elmsford, NY: Lower Hudson Conference, 1999. Available at

http://www.lowerhudsonconference.org.

See Section 4: Recovery for information on salvaging books, documents, maps, art on paper, parchment, leather, film, computers, magnetic tape, paintings, textiles, wooden objects, and furniture.

Interactive Emergency Response and Salvage Wheel, available at

http://www.fema.gov/ehp/ers\_wl.shtm.

This information is from the Emergency Response and Salvage Wheel, a sliding chart designed for archives, libraries, and museums. It is also a useful tool for home or business and is available in English and Spanish versions. The Wheel was produced by the Heritage Emergency National Task Force, a public-private partnership sponsored by FEMA and Heritage Preservation http://www.heritagepreservation.org).

For further information or to order the Wheel, call toll-free 1-888-979-2233.Minnesota Historical Society Emergency Response web site, at

http://www.mnhs.org/preserve/conservation/emergency.html.

Detailed salvage instruction sheets are provided for the following types of objects: Archaeological artifacts Books: Cloth or Paper Covers Books: Leather or Vellum Covers Disaster Salvage Tip Sheet Inorganics: Ceramics, Glass, Metals, Stone Leather and Rawhide Magnetic Media: Computer Diskettes Magnetic Media: Reel-to-Reel Tapes Microfiche Microfilm and Motion Picture Film Organics: Bone, Hair, Horn, Ivory, Shell Paintings on Canvas Paper: Coated Paper: Framed or Matted, Preparation for Drying Paper: Uncoated Photographs and Transparencies **Record Albums** Scrapbooks **Textiles and Clothing** Textiles: Costume Accessories Vellum and Parchment: Bindings and Documents Wood National Park Service.

Conservograms. Available at

http://www.cr.nps.gov/museum/publications/conserveogram/cons\_toc
.html.

See the section on Emergency Preparedness, which includes the following:21/1 Health and Safety Hazards Arising from Floods 21/2 An Emergency Cart for Salvaging Water-Damaged Objects 21/3 Salvage of Water-Damaged Collections: Salvage at a Glance 21/4 Salvage at a Glance, Part I: Paper Based Collections 21/5 Salvage at a Glance, Part II: Non-Paper Based Archival Collections 21/6 Salvage at a Glance, Part II: Object Collections 21/7 Salvage at a Glance, Part IV: Natural History Collections 21/8 Salvage at a Glance, Part V: Textiles Patkus, Beth Lindblom, Emergency Salvage of Moldy Books and Paper, in Preservation of Library and Archival Materials: A Manual, edited by Sherelyn Ogden. Andover, MA: Northeast Document Conservation Center, 1999. Available at http://www.nedcc.org//plam3/tleaf39.htm. Walsh, Betty, Salvage Operations for

Water-Damaged Archival Collections:

A Second Glance, in WAAC Newsletter Vol. 19 No. 2 (May 1997). Available at http://palimpsest.stanford.edu/waac/wn/wn19/wn19-2/wn19-206.html. Walsh, Betty, Salvage at a Glance, in WAAC Newsletter Vol. 19 No. 2 (May 1997). Available at

http://palimpsest.stanford.edu/waac/wn/wn19/wn19-2/wn19-207.html. Waters, Peter, Procedures for Salvage of Water-Damaged Library Materials.

Extracts from unpublished revised text, July 1993, the Library of Congress. Available at http://palimpsest.stanford.edu/bytopic/disasters/primer/waters.h tml.

# **Chapter L**

# PRE-DISASTER COMMUNICATION WITH EMERGENCY SERVICES

# L.1 Fire Department

Date of last inspection by the fire marshal: Contact person within fire department: Phone: Cell phone: In-house liaison to fire department: Backup liaison: Date of last in-house review of collection priorities: Date of last on-site review of collection priorities, collections salvage procedures, and building re-entry procedures with fire department personnel:



Contact person within police department: Title: Phone:

Cell phone:

In-house liaison with the police department:

Backup liaison:

Date of last on-site review of the building and contents with police department personnel:



Darin Welburn



# L.3 Local Emergency Management Agency

Local emergency management agency:	Phoenix Police Department
Contact person(s):	
Title:	Chief
Phone:	
Cell Phone:	
In-house liaison with local emergency management	President
agencies:	
Backup liaison:	Vice President
Date of last on-site review of the building and contents	·
with emergency management personnel:	

# L.4 Regional Emergency Management Agency

Regional emergency management agency: Contact person(s): Title: Phone: Cell Phone: Jackson County Emergency Management

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# Chapter M COMMAND CENTER/TEMPORARY SPACE

In a disaster, temporary space may be needed onsite or offsite for a command post, temporary relocation of collections, or for drying collections.

#### **Command Center**

During a disaster, a command center will be needed to serve as a base of operations for the Disaster Response Team. It is essential to have one central location through which all recovery activities are coordinated. All communications and decisions should be made through the command center. Locations that might be used as a command center are:

Primary location:

Alternate location #1: Alternate location #2 (*off-site*):



## **M.1 Relocation/Temporary Storage of Collections**

Areas (within the building, in another building within the institution, or off-site) to which collections in imminent danger of becoming damaged can be relocated, or where undamaged collections can be temporarily stored are listed below.

*Within the building/institution:* 

Location: Space Available: Contact person: Phone: Cell phone: none

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# M.2 Drying Space

Areas (within the building, in another building within the institution, or off-site) that can be used to air-dry wet collections are:

Within the building/institution: Location: Space Available: Contact person: Phone: Cell phone: After-hours phone: Pager:

*Off-site:* Location:

At staff home or if needed, commercial storage with fan

Space Available: Contact person: Phone: Cell phone: After-hours phone: Pager:

# Chapter N

# **INFORMATION TECHNOLOGY**

# **N.1 Emergency Contact Information**

The following people and organizations can provide assistance in case of temporary information systems failure or damage. Remember that it is very important to keep all account numbers and passwords current, and to indicate who on staff knows them.

#### **Information Technology Department**

(for problems with hardware and software) Department name:

Contact: Phone:

#### **Remote Storage Site for Backups**

In-house staff member who is familiar with account details and passwords:

Secretary / Treasurer

Secretary / Treasurer

#### Phone:

Procedures for retrieving backups in an emergency:

#### Internet service provider

In-house staff member who is familiar with account details and passwords:

Organization name: Contact:

Phone: Account number: Procedures for reactivating service in an emergency:

#### **Online subscription service(s)**

Infostructure

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288 S. Pacific Hwy. Talent, Oregon 97540 541-773-5000 25142 In-house staff member who is familiar with account details and passwords: Organization name: Contact: Secretary / Treasurer

Phone:

# N.2 Software and Equipment Inventory

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#### Software Inventory

The following software is used within the institution None Name of software package:

**Computer Equipment Inventory** The following computer hardware is in use within the institution

Make and model:

Serial number: Location of equipment:

# N.3 Data Backup

The following electronic data is unique and maintained solely in-house – If any of this data is not currently backed up, devise backup procedures immediately.

Type of data: Location of data: Person responsible for backup: On site location of backup: Off site location of backup: Frequency of backup: Assession information Secretary / Treasurer

# N.4 Data Restoration

The following people on staff know how to restore backed up data – Staff Person: Secretary / Treasurer **Market Descretary** The following people outside the institution can assist in restoring backed up data – Organization name: Title: Phone:

# N.5 Software and Hardware Reconfiguration

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The following people within the institution know how to reinstall and reconfigure software and hardware in the event of a disaster -Staff Person:

Secretary / Treasurer

The following people outside the institution can assist in reinstalling and reconfiguring software and hardware in the event of a disaster -

Organization name: Title:

Phone: Cell phone:

# **Chapter O**

# **PREVENTION AND PROTECTION**

Assessing risks, engaging in preventive building maintenance, maintaining information about building systems, and putting in place consistent opening and closing procedures can prevent disasters that might damage collections, as well as protect collections from any disasters that do occur.

## **O.1** Natural - Hazards and Risks

## **O.1.1 Priority 1 - Must be Addresses**

## **O.1.2** Priority 2 - Should be Addressed

#### Thunderstorms/Lightning

Thunderstorms area fairly common occurrence, but they can cause severe damage. They can involve heavy rain (which can in turn cause flash flooding), high winds, lightning, and hail. They can also cause tornadoes. Lightning is a serious danger whenever there is a thunderstorm. Lightning is very powerful; it can start fires, cause electrical failures, and seriously injure or even kill people. Hail (which can be as large as a softball) can also cause damage and injury, making it even more important to take cover. Preventive actions to reduce the risk of thunderstorm / lightning damage –

- Be sure staff members know and take seriously the signs that a thunderstorm is imminent (threatening clouds, distant thunder and lightning).
- Keep a disaster kit stocked in case staff members are unable to leave the building for some time (flashlights, radio with weather band, batteries, food and water, first aid kit, etc.). Check all items every six months and replace any expired items (e.g., water, food, batteries).
- Ensure that staff members know how to turn off the electricity and water in case this becomes necessary.
- Check for hazards near your building, such as dead or rotting trees and branches that could fall during a severe thunderstorm.
- Consider installing lightning rods to carry the electrical charge of lightning bolts safely to the ground.

Additional details on your institutions risk, and additional actions that should be taken: There are tall trees around the museum that could be damaged by lightning and fall on museum

#### Earthquake

An earthquake is a sudden, violent shaking of the Earth caused by the shifting of the Earth's crust. The outer layer of the earth's crust consists of a number of large plates that slowly move over, under, and past each other. Sometimes, however, some of the plates are locked together. Once enough energy accumulates, the plates suddenly break free, causing an earthquake at the point where the plates join. The Richter Scale is used to measure the magnitude of earthquakes. This is a logarithmic scale, meaning that an earthquake measuring 5 on the Richter scale is ten times as large as an earthquake measuring 4). Any earthquake that measures 6 or more on the Richter scale is considered major; earthquakes with a magnitude of 8 or more on the Richter scale can do catastrophic damage. Minor earthquakes usually do not cause much damage, but larger earthquakes can cause extensive damage, including collapsed buildings and bridges, broken gas lines, and downed power and phone lines. In a worst-case scenario, an earthquake could trigger landslides, avalanches, flash floods, fires, and/or tsunamis. Buildings that are constructed on unconsolidated landfill, old waterways, or other unstable soil are most at risk. Trailers and manufactured homes not tied to a reinforced foundation anchored to the ground are also at risk. Earthquakes can occur at any time of the year. Recommended procedures for prevention of earthquake damage are as follows -

- Ensure that staff members are aware of evacuation routes (provide an alternate in case the primary route is blocked)
- Put together a disaster kit (drinking water, canned/no-cook food, non-electric can opener, first aid kit, battery-powered radio with weather band and alert, flashlights and extra batteries).
- Bolt bookshelves to wall studs and use solid back and end panels (these should be metal or <sup>3</sup>/<sub>4</sub> inch plywood, but not particle board). Cross bracing can be used if solid panels are impossible. Use more than one cross brace on tall units, and weld or bolt the braces securely to the unit.
- Enclose document collections in boxes to prevent damage from falling. Rare and/or fragile books should be in boxes or wrappers, as should unbound serials.
- Consider some method of restraint to keep books from falling off shelves during an earthquake. A number of methods are available, including tilting shelves slightly from front to back, using bungee cords, or installing protective bars that extend from the upper shelves. Consult other libraries with experience in earthquake protection before making a decision.
- Bolt filing cabinets securely to the wall or to each other, and ensure that all drawers are latched to prevent the contents spilling out.
- Secure medium-sized items that might fall (telephones, lamps, computers, etc.), using Velcro-like fastening sets available for this purpose (note that this is appropriate for items weighing 20-80 pounds). Small items can be anchored to shelves using soft dental wax.
- Large or very heavy equipment may require special straps, brackets, bracing, or tethering cables. Consider strapping the water heater to wall studs and bolting down any gas appliances.
- Install flexible pipefittings, which are less likely to break, to avoid gas or water leaks.
- Install strong latches or bolts on cabinets so that content do not fall out.
- Store large, heavy, and/or fragile items on lower shelves.

- Store any chemicals or other hazardous materials in closed cabinets with latches, on bottom shelves.
- Hang heavy items, such as pictures and mirrors, away from anywhere people sit, since earthquakes can knock things off walls.
- Brace overhead light fixtures so they do not fall.
- Consider installing laminated safety glass if you have a large expanse of windows, or install protective film over existing windows to help prevent shattering of glass.
- Repair any deep cracks in ceilings or foundations, and consult an expert if you see signs of structural problems.
- Consider having your building evaluated by a professional structural design engineer, who can give advice on how to reduce earthquake damage to your building.

#### Additional details on your institutions risk, and additional actions that should be taken: Potential danger from falling trees and/or falling objects

# **O.1.3** Priority 3 - Could be Addressed

#### Severe Winter Storm

The term **winter storm** covers a variety of weather events. Winter storms often involve heavy snow, sleet or freezing rain. If very heavy snow is accompanied by high winds and extreme cold, the storm is termed a **blizzard**. A **Noreaster** is a specific type of storm characteristic of the eastern U.S. coast, in which a low-pressure system gathers strength as it moves up the mid-Atlantic coast, bringing heavy snow and hurricane force winds, along with coastal flooding and beach erosion. Noreasters usually occur between October and April (although they can occur at any time and sometimes involve rain rather than snow). When rain falls on surfaces with a temperature below freezing, an **ice storm** can occur. A **winter weather advisory** is used when poor weather conditions are expected. A **winter storm watch** is issued when a storm is occurring or will occur shortly. A **frost/freeze warning** is issued when below freezing temperatures are expected. A **blizzard warning** is issued when heavy snow, near zero visibility, deep drifts, and severe wind chill are expected. Preventive actions to reduce the risk of severe winter storm damage –

- Install storm windows in your building (or cover windows with plastic), insulate walls and attics, and caulk and weather-strip doors and windows.
- Winterize your building. Make sure gutters are clear, repair any roof leaks, and trim any tree branches that could fall on your building during a storm.
- Insulate pipes in your building and allow faucets to drip a little during cold weather to avoid freezing.
- Learn how to shut off the water in the building (in case a pipe bursts).
- Ensure that the roof of your building is able to sustain the weight of heavy snow accumulation.
- Put together a disaster kit in case staff members must remain in the building during the storm (drinking water, canned/no-cook food, non-electric can opener, first aid kit, battery-powered radio with weather band and alert, flashlights and extra batteries,

blankets/cots/pillows). Check all items every six months and replace any expired items (e.g., water, food, batteries).

Additional details on your institutions risk, and additional actions that should be taken: Winter storms, wind and rain could cause tall trees around the museum to fall

#### **Other Natural Hazards**

Additional details on your institutions risk, and additional actions that should be taken: The museum is located with tall trees all around. Falling trees could be a potential risk.

## **O.2 Industrial/Environmental - Hazards and Risks**

- **O.2.1 Priority 1 Must be Addresses**
- **O.2.2 Priority 2 Should be Addressed**

## **O.2.3 Priority 3 - Could be Addressed**

#### **Power Outage**

Power outages can occur in many different situations. Sometimes they are precipitated by a storm or natural disaster, in which case the power outage may be only part of the emergency. Sometimes, particularly in summer, a power outage occurs due to overuse of electricity resources. While a power outage alone rarely poses a direct threat to collections, it may cause damaging conditions (e.g., rise in temperature and/or humidity when the HVAC system shuts down), and it may pose a threat to staff and/or patrons.

Additional details on your institutions risk, and additional actions that should be taken: Loss of heat and air conditioning

#### Sewer System Backup

Sewer system backups often occur because of heavy rains that increase the water pressure in the sewer system, causing sewage to flow into buildings through the basement drains. If there is a widespread power outage in the area, the sewer system may fail due to lack of power to parts of the system. Sewer backups can also result from inappropriate materials being disposed of down the drains, or from shrub or tree roots cracking or breaking the sewer lines. Sewage backup presents a number of risks: damage to the building, damage or destruction of materials stored in the basement, possible electrical malfunctions in the building, and the possibility of disease. Preventive actions to reduce the risk of sewer backup –

- **Do not** pour grease down a drain, as it will solidify after it cools off, either in the property owners sewer line, or in the main sewer line.
- **Do not** dispose of anything in the toilet except bathroom tissue.
- Avoid planting trees or shrubs near the sewer line, to reduce the chances of roots damaging the pipes. It is also possible to replace older sewer pipes with plastic piping, which is not damaged by roots.
- Consider modifying your plumbing system to prevent sewage backup into your building. Modifications might include installing a sump pump, check valve, shut-off valve, and/or

ejector pump. Consult a qualified plumber for advice on appropriate modifications for your building.

Additional details on your institutions risk, and additional actions that should be taken: Damage to flooring

#### Gas Leak

Natural gas is a general term for a commonly used fuel used for heating, cooking, and heating water. It is primarily composed of methane, which is mixed with varying quantities of other gases. Natural gas can be dangerous if it leaks, as this can result in explosion or fire, or poisoning through inhalation. Natural gas has no odor, color, or taste, so local gas companies adds a rottenegg smell to the gas to enable people to smell a leak. If your institution or nearby buildings use natural gas, there is a possibility of leakage in the gas lines serving the area or in those inside your building. The causes of gas leaks vary. Common causes include accidental damage due to digging or construction in the area, and damage from natural disasters. Gas leaks pose a significant risk to your staff, building, and collections. While indoor gas leaks are the most dangerous because the gas is concentrated in a confined area, an outdoor gas leak is also dangerous. Preventive activities include –

- Be aware of the location of nearby gas mains.
- Be aware of the signs of a leak in a gas pipeline (e.g., odor, a blowing or hissing sound, dirt or water being thrown or blown into the air, fire coming from the ground, brown patches in vegetation near a pipeline)
- Consider purchasing one or more natural gas detectors that will warn you of a gas leak within your building, particularly if you have staff members with a diminished sense of smell. These detectors vary in price, features, and ease of installation. How many you need depends on how many sources of gas there are in your building and how far apart they are.
- Maintain up-to-date contact information for the local gas company.

Additional details on your institutions risk, and additional actions that should be taken:

## **O.3 Building/Systems/Procedures - Hazards and Risks**

## **O.3.1** Water Hazards

**O.3.1.1 Priority 1 - Must be Addresses** 

#### **O.3.1.2** Priority 2 - Should be Addressed

Collections stored on the floor There are few items on the floor.

#### **O.3.1.3** Priority 3 - Could be Addressed

*Roof* No current leaks, low risk

Gutters and downspouts Gutters are routinely cleared of pine needles

Bathrooms/kitchens nearby or above collections

# **O.3.2** Fire Hazards

#### **O.3.2.1** Priority 1 - Must be Addresses

#### **O.3.2.2** Priority 2 - Should be Addressed

#### **O.3.2.3** Priority 3 - Could be Addressed

Fire detection system not routinely inspected and maintained

No fire suppression system We have 2 fire extinguishers that need to be maintained regularly

*Fire suppresion system not routinely inspected and maintained* Our two extinguishers need to be serviced routinely.

Insufficient number of fire extinguishers We have 2 extinguishers

*Collection includes cellulose- nitrate base films (these are a fire hazard) Other*: Museum sits among tall pine trees.

# **O.3.3 Climate Control**

#### **O.3.3.1** Priority 1 - Must be Addresses

#### O.3.3.2 Priority 2 - Should be Addressed

Partial air conditioning Use window air conditioner

Humidification system Do not have a humidification system.

#### **O.3.3.3** Priority 3 - Could be Addressed

No climate control Have gas heating system that is maintained routinely

Inadequate air circulation Use ceiling fans in both rooms

*Occasional extremes of temperature in collection storage areas (greater than 75 degrees Fahrenheit)*Rarely exceeds 75 degrees F.

Occasional extremes of relative humidity in collection storage areas (greater than 50 percent) Rare extremes in relative humidity

# **O.3.4** Security

- **O.3.4.1 Priority 1 Must be Addresses**
- **O.3.4.2 Priority 2 Should be Addressed**

#### **O.3.4.3** Priority 3 - Could be Addressed

Collections have been vandalized Collection materials have been stolen

## **O.3.5 Housekeeping/Pests**

- **O.3.5.1** Priority 1 Must be Addresses
- **O.3.5.2 Priority 2 Should be Addressed**

#### O.3.5.3 Priority 3 - Could be Addressed

No written policies/procedures for housekeeping Housekeeping done by docents as needed

Visible dust and dirt in collections storage areas Dust and dirt removed by docents as needed

Garbage not removed from the building daily Garbage removed from building as needed

Food and drink allowed in the building Food and drink are allowed in building but not close to colections

Collections not cleaned once per year (note: this must be done by trained staff) Docents clean collections as necessary

# **O.3.6** Storage

- **O.3.6.1** Priority 1 Must be Addresses
- **O.3.6.2** Priority 2 Should be Addressed

#### **O.3.6.3** Priority 3 - Could be Addressed

Shelving is not anchored to the wall, floor, ceiling, or other shelving (where appropriate) There are some shelves that need to be anchored to the wall.

*Shelving not braced* Not all shelves are braced to earthquake standards. However our risk of an earthquake is low.

Books not shelved snugly Not all books are shelved snugly

Archival collections not enclosed in boxes Not all archival collections are in boxes. Some are on display

Valuable collections stored near windows

## **O.3.7** Personnel

- **O.3.7.1 Priority 1 Must be Addresses**
- **O.3.7.2** Priority 2 Should be Addressed

#### **O.3.7.3** Priority 3 - Could be Addressed

Staff members not trained in emergency procedures Training is done as needed

Staff members not sufficiently trained in security procedures Training is done as needed

Security staff not trained to recognize hazards and respond properly to collections emergencies Training is done as needed

# **O.4 Preventive Maintenance Checklist**

Use the following checklist(s) as a reminder for carrying out preventive maintenance activities. **Daily** 

Person responsible for checking that all activities have been completed: Docent on duty for the day does the cleaning & Person responsible

Weekly Use the following checklist as a reminder for carrying out preventive maintenance activities.

All docents

**Seasonally** Use the following checklist as a reminder for carrying out preventive maintenance activities.

Person responsible for checking that all activities have been completed: President

Twice per Year (Minimum) Use the following checklist as a reminder for carrying out preventive maintenance activities.

Done as an ongoing function

#### Check/update insurance on building and equipment

Person responsible:

Secretary / Treasurer

#### Check/update insurance on collections

Person responsible:

Secretary / Treasurer

#### **Revise/prepare building maintenance budget**

Person responsible: President

# **O.5** Opening Procedures Checklist and Schedule

The purpose of the opening checklist is to ensure that no hazards are present and that no problems have occurred while the building was closed. Use the following checklist when opening the building.

**Opening Checklist** No signs of unusual or off-hours activity No evidence of water leakage (walls, ceilings, floors, storage areas) No unusual smells or sounds No apparent major change in temperature overnight No small appliances left plugged in overnight Lights are working (including emergency lighting) Sinks and toilets in working order

Equipment is operating properly 3

#### **Opening Procedures Responsibilities and Schedule** Monday Primary: Vice President Tuesday Primary: Docent Wednesday Primary: Docent Secretary / Treasurer Backup: Thursday Primary: Docent Friday Secretary / Treasurer Primary: Backup: Docent Saturday Primary: N/A Sunday Primary: N/A

# **O.6** Closing Procedures Checklist and Schedule

Regular closing procedures are essential to preventing disasters. The purpose of the closing checklist is to ensure that no hazards are present and that all protection equipment is working properly. Use the following checklist when opening the building.

**Closing Checklist** Keys secure and accounted for Doors to secure areas closed and locked Windows locked No one hiding/sleeping in building (check bathrooms) Security system is armed as required No unusual smells or sounds No evidence of water leakage (walls, ceilings, floors, storage areas) Refrigerators and freezers plugged in and operating All small appliances unplugged Sinks and toilets in working order

*Equipment is operating properly* – \_\_\_\_\_ Other equipment: Air conditioner turned off.

**Closing Procedures Responsibilities and Schedule** 

Monday		
Primary:		
Vice President		
Tuesday		
Primary:		
Docent		
Wednesday		
Primary:		
Backup:Docent	Secretary / Treasurer	
Thursday		
Primary:		
Docent		
Friday		
Primary:		
Backup:Secretary / Treasurer	Docent	
0 4 1		
Saturday N/A		
Sunday		
N/A		

# **O.7** Construction and Renovation

Construction and/or renovation is NOT planned for my institution/building.

# Chapter P STAFF TRAINING

Staff training is crucial to successful disaster planning. It should begin with the members of the disaster planning and response teams, and expand to include all staff. In particular, training staff in the mechanics of the plan ensures that they will be familiar with it and be able to use it effectively if an emergency occurs.

#### **Disaster Planning Team**

The disaster planning team can be trained in a variety of ways. Team members should certainly be encouraged to educate themselves through the use of books and articles on disaster planning, and to monitor online resources such as list-servs and web sites relating to disaster planning. More formal types of training should also be offered, such as disaster planning workshops by outside agencies or in-house training sessions (e.g., seminar, group discussion, case study exercise). Whatever type of training is chosen, the leader of the disaster planning team should be responsible for ensuring that all members of the team are periodically given the opportunity for additional training to keep up to date on new developments in disaster planning.

*Team member in charge of coordinating training for the disaster* President **President President** 

Describe current and planned training for the disaster planning team: Meeting with all board members and follow up meetings as needed

**Disaster Response Team** It is crucial for all members of the Disaster Response Team to receive training (preferably hands-on) in first response procedures, salvage methods for damaged collections, and procedures for recognizing and dealing with any hazards that might be present at the disaster site. The fundamental goals of training should be to familiarize the team with all elements of the disaster plan and to give them experience working together as a team.

*Team member in charge of coordinating training for the disaster* President **President President** 

Describe current and planned training for the disaster response team: Training the Board of Directors will be done at regular meetings There are various possible training methods, but remember that practical and hands-on training will be the most effective. Options include:

- Formal disaster response/recovery workshops (offered by library and conservation organizations)
- First aid and/or CPR training
- In-house training (e.g., hands-on sessions focused on specific topics, tabletop disaster exercises, or mock disasters)
- Individual use of books and articles on disaster response, salvage, recovery, and rehabilitation
- Individual use of online resources (such as list-servs and web sites) to keep up-to-date on new developments in disaster response, salvage, and recovery methods for collections Subjects that should be addressed include:
  - Team-building
  - Handling wet and damaged collections
  - Recovery procedures and the use of equipment
  - Workplace health and safety (relating to emergency response)
  - Proper use of protective clothing and equipment
  - Hazards of exposure to mold
  - Crisis counseling

**General Staff Training** The importance of training all staff in emergency procedures and implementation of the disaster plan cannot be overstated. Staff members are often the first line of defense against disasters, observing problems as they occur. They must be able to recognize that there is a problem, know how to respond, and know whom to call. The following training activities should be carried out regularly.

#### Person responsible for seeing that all training has been done: President

*Review basic preventive measures during staff meetings (e.g., protection from water/fire, security procedures)* 

Suggested frequency:	Semi-annually
Frequency:	Semi-annually
Person responsible:	President
Review specific evacuation	routes and general emergency procedures during all-staff meeting
Suggested frequency:	Semi-annually
Frequency:	Semi-annually
Person responsible:	President
Review procedures for oper	ation of the security system with appropriate staff
Suggested frequency:	Semi-annually
Frequency:	Semi-annually
Person responsible:	President
Review procedures for oper	ation of the climate control system with appropriate staff
Suggested frequency:	Semi-annually
Frequency:	Semi-annually

Person responsible: President *Review procedures for operation of the fire detection system with appropriate staff* Suggested frequency: Semi-annually Frequency: Person responsible: N/A Review proper procedures for operation of the fire suppression system with appropriate staff Semi-annually Suggested frequency: Semi-Annually Frequency: Person responsible: President *Review how to operate a fire extinguisher with all staff* Suggested frequency: Annually Semi-annually Frequency: Person responsible: President Hold staff meeting to review proper implementation of the disaster plan (e.g., how to recognize a potential threat, what to do, how to report a problem, how and when to activate the plan) Suggested frequency: Annually Frequency: Semi-annually Person responsible: President *Conduct tabletop disaster exercise* Frequency: Annually Person responsible: President First Aid/CPR TrainingFirst Aid Staff member: Docent Date of training: Description of training: hospital training several years ago CPR Staff member: Docent Date of training: Description of training: hospital training several years ago Staff member: Docent Date of training: Description of training: Hospital training several years ago

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Information here/below is ONLY for institution's located in Massachusetts.