Southwest Virginia Community College

Emergency Records Management Program

January 7, 2014

Records Disaster Preparedness Plan

The college is responsible for insuring that there is a plan for the protection and recovery of public records. The purpose of records disaster preparedness is to provide guidance with regard to the recovery and restoration of critical documents and information that may be damaged or lost in a mishap or disaster. "Critical documents" are defined as documents and/or information necessary for the successful day-to-day operation of the institution. The value of records is listed below.

- Administrative or operational value – materials that assist the institution in performing its primary functions.

- Fiscal value – materials that establish the institution's financial rights and obligations.

- Historical, informational, or research value – materials that explain or clarify the institution's history.

- Legal or evidential value – materials that demonstrate the institution's compliance with legal requirements or materials that document the institution's functions, activities, or structure.

Risks and Hazard Assessment

Risks and hazards affecting records and recordkeeping systems should be identified and assessed in order to manage disasters appropriately. The following hazard checklist should be used to determine potential records disaster issues.

Industrial Disasters

- Electrical power failure ☐
- Fuel Supply failure ☐
- Water supply failure ☐
- Explosion ☐
- Fuel spill ☐
- Chemical spill ☐
- Structural collapse ☐
- Sewer failure or back up ☐
- Extreme / prolonged air pollution ☐
- Structural fire (internal) ☐
- Exposure fire (external) ☐

Natural Disasters

- Severe thunderstorm ☐
- Sleet, hail, ice ☐
- Windstorm ☐
- Flash flood ☐
- Slow-rising flood ☐
- Fire (bush fire) ☐
- Drought (prolonged) ☐
- Earthquakes ☐

Human (incl. Criminal) activity

- Accidents by individuals ☐
- Armed robbery ☐
- Arson ☐
- Bombing ☐
- Bomb threat ☐
- Riot and civil disorder ☐
- Sabotage ☐
- Terrorist attack ☐
- Hostage taking ☐
- Vandalism ☐

Accidents involving

- Bodily injury ☐
- Broken fuel pipes ☐
- Broken water or sewer pipes ☐
- Downed power or phone lines ☐
- Aircraft (crashes) ☐
- Construction equipment ☐
- Motor vehicles ☐
- Ships and boats ☐
- Trains ☐
- Transport or chemicals or fuels ☐

Implementation

Implementation of the provisions of this plan will depend largely on the nature of the cause of damage to records. Causes such as a leaking roof or a broken water line usually result in localized damage which is limited to an office, or floor of a building.

Causes such as fire or severe weather often result in more widespread damage. In such cases, it is possible that the SWCC Emergency Plan will be activated. The provisions of the SWCC Emergency plan will take precedence over the Records Management Disaster Preparedness Plan. When the SWCC Emergency Plan is in effect, the Records Management Disaster Preparedness Plan is to be activated only when clearance to enter the affected building(s) and begin assessing damage to records has been given.

In all situations, the safety of students, faculty and staff is of the utmost importance. Fire or severe weather may cause structural damage that renders a building unsafe to occupancy. In the case of flooding, the possibility of electrical shock exists even when there has been no structural damage. Personnel should not enter a damaged building until it has been inspected and deemed safe for occupancy.

A fast and efficient response is needed to ensure records damaged by water, fire, or a natural disaster can be preserved. As soon as the Records Manager is aware of a records emergency, the Library of Virginia's Emergency Contact will be notified of the event. The assigned LVA staff member can be located at: http://www.lva.virginia.gov/agencies/records/contacts.asp

To contact a Library of Virginia staff member after normal business hours about a records emergency, the following emergency numbers should be used.

(804) 615-5784
(804) 840-6006

Responding to the Situation

The following chart should be reviewed prior to the recovery operations beginning.

QUESTIONS	YES/NO
Is the cause of the disaster still ongoing?	
What needs to be done to prevent further damage?	
Is the site safe?	
What extent of the collection has been damaged?	
What is the main type of damage? (Water, fire, breakage)	
Are there any object or areas in immediate danger?	
Does the full Disaster Response Team need to be called? (See Telephone Tree)	
Does the situation need to be documented?	
Does outside help or expertise need to be called? (See Emergency Contact List)	
Does the environment need to be further stabilised? (eg water or smoke damage)	
Have any of the priority items been damaged?	
Does the Recovery Plan need to be activated?	
What needs to be done to allow the recovery to begin?	
Do we need to move to our off-site location?	

Type of Records

Electronic Data: In this case, records are maintained in an electronic format and are stored on network servers. These records include, but are not limited to: admissions files, academic transcripts, financial records, human resources records, e-mail, and web page files.

Paper Files: Even with the use of electronic data storage, there remains a significant amount of paper records that are considered critical to the institution. These records include but are not limited to: admissions files, academic transcripts, financial records, human resource records and various communications and directive that were created before the advent of the widespread use of electronic data storage. Additionally, there exist many paper records of an archival nature that, while not necessarily critical, are of great historical value to the institution.

Prevention of Loss or Damage

Electronic Data: The prevention of the loss of electronic data depends on routine backing-up of server files. The Information Technology Department performs a back-up of critical electronic data once every 24 hours during the work week. This includes all E-mail files, web server images, and application server images.

Paper Files: Most but not all critical paper format *academic records* are stored in a fireproof vault when not being used.

Some of the critical paper administrative records (financial, human resources, etc.) are stored in fireproof vaults and cabinets, but the voluminous nature of these records prevents storing all of them in such facilities.

Disaster Recovery

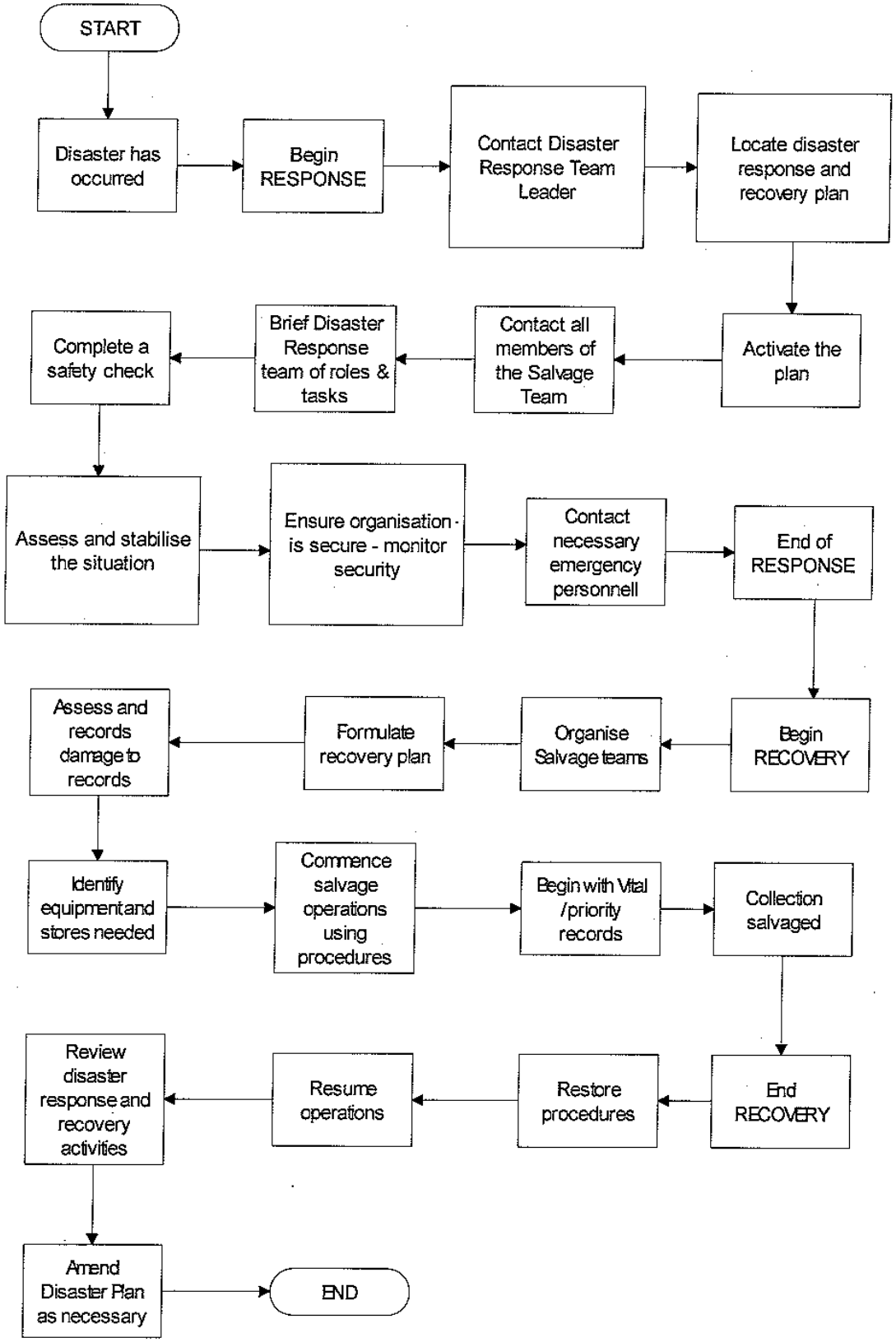
Given that the institution's electronic records are properly backed up and stored on a daily basis, the remainder of this plan will focus on the recovery and restoration of paper records and will deal with the most probably causes of damage; water and fire.

Disaster Recovery Kit

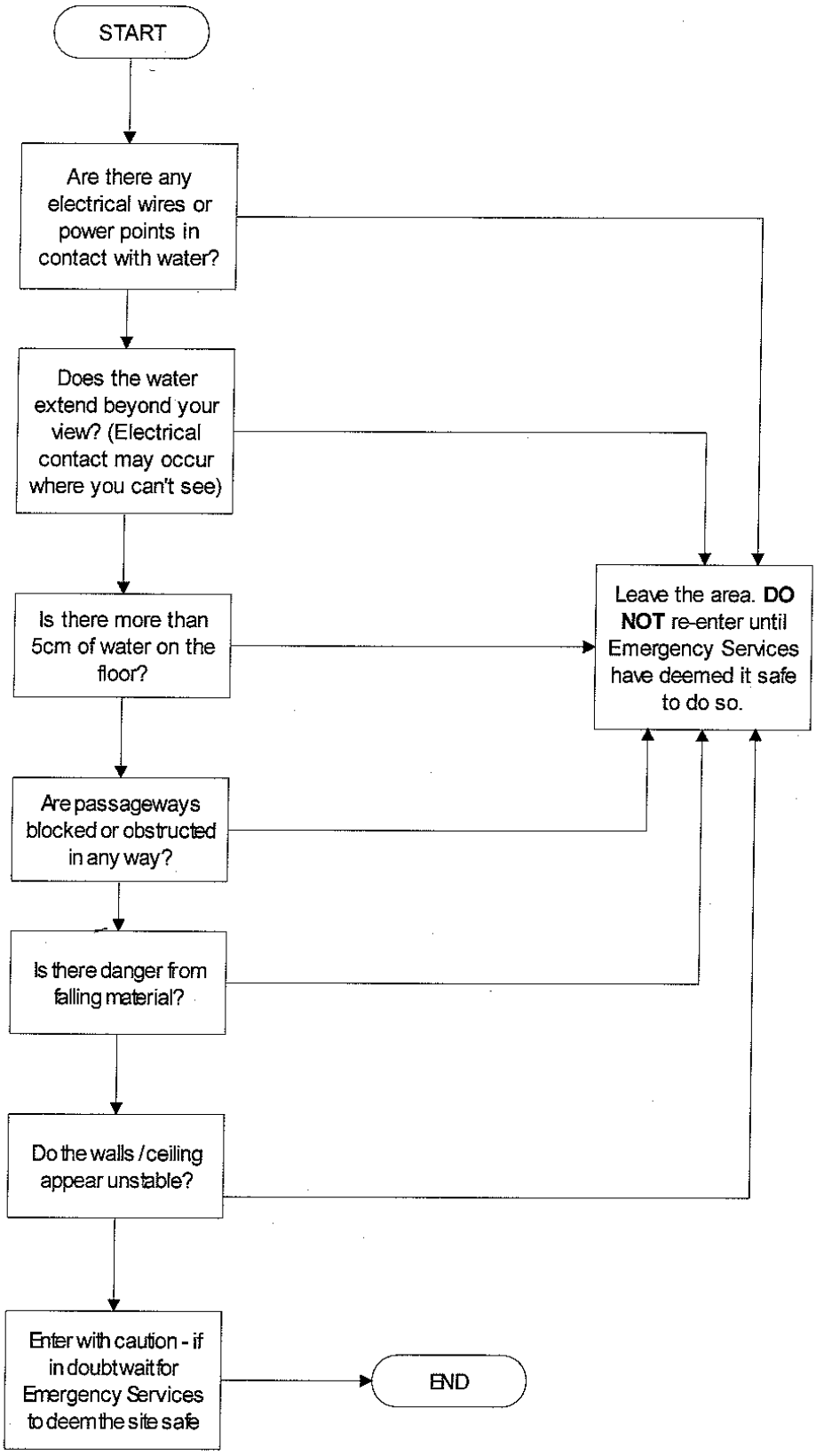
A disaster recovery kit should include enough supplies to initiate recovery procedures while additional supplies necessary to complete the recovery are being gathered. Salvage supplies will depend entirely on the types of media identified in the disaster.

Typical supply kits might include items such as absorbent paper, plastic sheeting and drop cloths, blotting paper, flashlights, identification tags, chemicals (such as thyme, alcohol and disinfectants), rubber gloves, protective clothing, hand tool, etc.

Disaster Recovery Steps


START
Disaster has occurred
Begin RESPONSE
Contact Disaster Response Team Leader
Locate disaster response and recovery plan
Activate the plan
Contact all members of the Salvage Team
Brief Disaster Response team of roles & tasks
Complete a safety check
Assess and stabilise the situation
Ensure organisation is secure - monitor security
Contact necessary emergency personnell
End of RESPONSE
Begin RECOVERY
Organise Salvage teams
Formulate recovery plan
Assess and records damage to records
Identify equipmentand stores needed
Commence salvage operations using procedures
Begin with Vital /priority records
Collection salvaged
End RECOVERY
Restore procedures
Resume operations
Review disaster response and recovery activities
Amend Disaster Plan as necessary
END

Departments within the institution should approach disaster recovery for critical records in the following manner:


START
Are there any electrical wires or power points in contact with water?
Does the water extend beyond your view? (Electrical contact may occur where you can't see)
Is there more than 5cm of water on the floor?
Are passageways blocked or obstructed in any way?
Is there danger from falling material?
Do the walls / ceiling appear unstable?
Enter with caution - if in doubt wait for Emergency Services to deem the site safe
END
Leave the area. DO NOT re-enter until Emergency Services have deemed it safe to do so.

The department manager(s) of the affected area(s) should contact the Physical Plant and Records Manager with necessary post-disaster clean-up.

Department Managers and others designated responsible for specific records will be responsible for the initial assessment of the nature, extent, and severity of the damage to records in their respective areas. Since successful recovery depends on quick action, this initial assessment should be conducted as soon as possible after discovery of damage and once the building is declared safe.

The Department Manager should assemble the department's disaster response team and prepare to sketch out the Recovery Plan. The Department Manager should review the situation and make sure that all relevant information is obtained including:

- Extent and type of damage
- Priority list of objects/items that were damaged
- Condition of the environment of the building
- General feeling about size of recovery operation (will outside help be required?)
- Ensure all damage is documented and photographed
- Ensure adequate supplies are on hand
- Ensure all formal notifications have occurred
- Ensure all workers are well looked after and informed on progress

Once the initial assessment has been completed, the department manager should contact the Physical Plant and Records Manager for assistance in determining what steps should be taken to increase the likelihood of successfully recovering the damaged documents.

Actions necessary to recover documents can range from simply air drying damp records to hiring restoration specialists for severely damaged records.

On the advice of the Records Manager or a restoration specialist, saturated records may need to be frozen in preparation of freeze drying. Depending on the volume of records involved, the Cafeteria freezer may be used for this purpose until suitable offsite freezer storage can be located.

Restoration techniques for each type of media are important to expedite a quick and successful recovery program. Timing following a disaster makes the difference between salvaging water-damaged records and ending up with a collection of useless recording media. Rapid disaster response can prevent the accumulation of mold and chemical breakdown of paper.

Microforms and other photographic documents can often be successfully restored if they are kept wet with fresh water until the cleaning and drying process begins. It is very important to protect magnetic tape and related material from heat and moisture. Images that comprise the documentation are distorted or obliterated by exposure to a degree of heat and moisture that would not damage paper records. Once distorted or obliterated, these images cannot be restored. Thus, recovery measures will achieve little success. In some instances however, vacuum or

freeze-drying techniques may be utilized and professional assistance should be sought as soon as possible.

The increasing use of electronic equipment to handle large or complex quantities of work results in the concentration in a single location of recorded data that is of the utmost importance. The data, as well as the equipment, deserves proper protection. Methods to achieve maximum protection are available from the equipment manufacturer. There, professional assistance and guidance is often required when restoring these types of media.

Guidelines to Recovery by Records Media

Paper

Bond, Rag, Duplicating, Other

Response can be from immediate to 48 hours depending on temperature and humidity and extent of damage. (In high-humidity circumstances, deterioration of wet paper can begin within 2-4 hours.)

If damage is limited and most materials are only damp, air-drying in a well-ventilated area probably will suffice. If the volume is large and damage is extensive, with most materials soaked, recovery probably will require freeze and/or vacuum drying. Eruption of mold will require application of a fungicide. It is necessary to remove moisture from materials and reduce humidity levels in damaged records, and to eradicate mold.

Coated Papers

Response should be as soon as possible. Material should be frozen to retard deterioration. Freeze or vacuum drying is the only recovery method for this medium. It is imperative to remove all moisture without damaging or removing coated surfaces.

Photographic

Silver or Emulsion Films and Photographs

Response should be immediate. Immerse totally in cold water to avoid further damage. One teaspoon of salt may be added to hard water. This helps avoid softening or frilling of gelatin or emulsion layer. Drying out tends to promote sticking of adjacent surfaces.

Silver master rolls of microfilm should be washed and dried using a microfilm-processing machine in which all processing chemicals have been replaced with water.

Freezing should only be used if the recovery process is unavoidably delayed. Freezing may lead to image damage, but is less catastrophic than delayed treatment.

Color Films and Photographs

Response should be immediate. Once this medium is wet, keep it web. Begin air drying process. If drying must be delayed, freezes until drying process can If treated rapidly, photographic prints may be air-dried. Photographs can be frozen if necessary but do not freeze dry as it may result in disfiguring marks on the surface of the photograph.

To air dry:

- remove photographs from mounts or separate from each other to prevent the emulsion sticking
- rinse with cool water if necessary but do not touch or blot surfaces.

- place emulsion side up on blotters or lint free cloths or hang by placing clips on non-image areas, ensuring there is no overlap.

- if wet, immerse in clean cold water in polyethylene bags. Send to a processing laboratory within 2-3 days for reprocessing and drying (except historic ones).

Photographic negatives

To air dry:

remove negatives from envelopes
wash in clean running water, and
hang to dry or lay flat with emulsion side up.

Eastman color film should only be handled by a processing lab. If there are large quantities of negatives they should be frozen and air-dried.

If wet, negatives should be sealed in polyethylene bags and placed in plastic garbage cans under cold, clean running water while the negatives are still wet. They should be transferred to a laboratory within three days.

Glass plate negatives

Glass plate negatives should NOT be immersed in water. They should never be frozen or freeze-dried. Air-dry them immediately by laying flat onto blotter with the emulsion side up (duller side) or upright in a dish rack.

Fire

While water damaged materials do cause problems, simple techniques such as those described above can be used. The recovery of burnt collections presents additional problems. The effects of fire include heat, soot, burnt edges, melted coverings such as plastics, and possible water damage. The costs of restoration should be weighed against other alternatives. Burnt materials can be frozen, but any restoration other than basic cleaning; rebinding and rehousing should be left to an experienced conservator.

Books

Air-drying salvage procedures for books

1. Do not try to close open books

2. Remove plastic covers where possible

3. Interleave coated pages by placing paper towel, Reemay or waxed paper between every page pair. If paper towel is used, change it regularly.

4. If the book is wet, interleave every 3–5 mm with paper toweling, and stand it with the wettest end up. If the book is too weak to stand, lay it flat.

5. Change interleaving regularly.

6. Suspend pamphlets, light volumes and magazines over drying lines

7. For books with thick covers, place a sheet of water-resistant film such as polyester inside the front cover to prevent moisture migrating to the text.

8. Do not hang heavy or sodden books, newspapers or magazines.

Card indexes

Card indexes should be removed from drawers, stack on sides loosely and supported at each end.

Vellum and parchment

Vellum and parchment items are very fragile and susceptible to damage when wet. They should be fully supported at all times when being moved. Consult a Conservator before proceeding with any treatments. If nobody can be contacted interleave and freeze.

Volumes

Closed volumes can be cleaned before drying, by washing off dirt or mud on covers and edges using clean running water and a sponge.

Books and volumes that can stand upright can be placed on paper toweling with their covers slightly open and their pages lightly fanned. A gentle breeze from a fan can assist the drying process. Do not use heat, as it will encourage mould.

Priority volumes can be dried by placing plastic sheeting on the floor, standing volumes upright with pages fanned (if their spines will support them), and then forming wind tunnels around them from cardboard or plastic sheeting. Cool air from fans can then be directed down the tunnels.

Interleaving can be used for wet volumes that cannot support their own weight. Loose sheets of paper towel or blotting paper can be placed at 1-centimetre intervals though the volumes. Do not allow interleaving materials to exceed a third of the thickness of the volume or the spine will be damaged (the exception is with coated papers where each page must be interleaved). Replace interleaving materials when wet.

If adhesives are sticking to the interleaving sheets, a release material such as nylon gauze should be used as a barrier between them.

Pamphlets

Pamphlets and loose pages can be hung on lines or improvised drying racks providing you have enough space and assistance.

Files

Files should be removed from boxes carefully and laid flat. Bundles can be interleaved and pressed under a light weight or pages turned regularly; ensuring that the original order is maintained for each bundle. Cool air can be directed to the pages, but ensure that it is directed upward rather than directly on the pages. Replace the interleaved sheets when they become wet. Glossy papers should be fully separated and interleaved or frozen.
For saturated files, metal binders should be replaced with plastic tubing or plastic coated wire and pages fanned with some interleaving.

Magnetic

Immediate response! It is imperative to plan in advance for recovery in this media. Recovery techniques may include freeze or vacuum drying, other special cleaning techniques, and methods or retrieving data. The key consideration is to remove moisture and contaminants to gain access to the data. Reading, evaluating and verifying the data, and recopying information will likely be part of recovery.

Heat and water damage to this type media could result in subsequent damage to hardware as well as irretrievability of data. For vital records protection, it should be noted that this media is among the easiest to duplicate or store off-site.

If magnetic media (disks, audio, video) is damaged, teams should never try to make copies of it immediately because it might damage the hardware. If exposed to heat, an expert can advise of the chances of preserving the information.

Floppy disks and diskettes

If floppy disks are wet, they should be placed upright in cold distilled water until recovery is possible. Do not dry or attempt to freeze them. If full backup copies exist, then damaged media can be destroyed and replaced. If they need to be salvaged:

Remove from water immediately
Remove from jacket
Rinse off dirt with clean distilled water. Do not soak
Drip dry vertically in a disk drain or rack.
Clean with a soft lintless cloth. Move perpendicular to grooves, not in a circular motion. Do not use hairdryers.
Place cleaned compact disk in clean jackets.
Replace if mold or condensation is present or if there are deep scratches. Check playability and readability.

Magnetic tapes

DO NOT freeze, because the moisture in the tapes will cause permanent damage when frozen. Do not use magnetized tools/scissors.

DO NOT use hot or warm air to dry, as it will cause the tape to adhere.

Treatment of magnetic tapes will depend on the extent of water penetration. The casing usually keeps tapes clean and dry. If full backup copies exist, then damaged media can be destroyed and replaced.

Wet tape

Disassemble the case and remove the tape.
Rinse dirty tapes, still wound on reels in lukewarm water.
Support vertically on blotting paper to air dry.
Reassemble and copy.

Optical media

Compact disks

(If full backup copies exist, then damaged media can be destroyed and replaced.)

Remove from water immediately
Remove from jacket
Rinse off dirt with clean distilled water. Do not soak
Drip dry vertically in a disk drain or rack.
Clean with a soft lintless cloth. Move perpendicular to grooves, not in a circular motion. Do not use hairdryers.
Place cleaned compact disk in clean jackets.
Replace if mold or condensation is present or if there are deep scratches. Check playability and readability.

Microfilms

(If backup copies exist, damaged media can be destroyed and replaced.)

Silver halide microfilm should be kept underwater and not allowed to dry out. It should be sent to a processing laboratory within 72 hours. Vesicular and diazo film should be separated and air-dried:

- Extract water affected records and dry separately.
- Peg aperture cards up for drying.
- Unroll microfilms and air dry with the emulsion side up or send to film laboratory.
- Rewind film and store in dry containers.

If microfilms cannot be dried immediately, they should be immersed in clean, cold water for no more than 2 to 3 days and taken to a laboratory. Duplication is recommended where possible.

Packing records in a recovery operation

There are two types of packing that may be needed in a recovery operation: pre-evaluation packing where records need to be packed and taken to a different treatment site, in other parts of the building or in a different building, and post evaluation packing where records are packed for freezing.

Using either method, boxes should not exceed the weight recommended by Occupational Health and Safety Officers. All rare, intrinsically valuable and delicate material should be prepared for freezing separately from other materials and in separate categories so they can be located and identified for treatment by a conservator.

For pre-evaluation packing, paper records can be packed in plastic crates and taken by trolleys to the vehicle. Plastic crates are better for very wet records than cardboard boxes, which can sag and break with moisture and pressure. Volumes should not be flattened, simply packed as they are. They should be taken to the evaluation manager at the treatment site.

For post evaluation packing where there are small amounts of damaged materials, debris can be washed away under cold running water (if clean) by experienced people unless the material is fire damaged or contains soluble inks and dyes. Volumes, books or groups of papers should be held in two hands and dipped into containers of clean water or a hose should be gently applied providing the water is not contaminated. No materials should be scrubbed. In cases where there are vast amounts of material to pack, washing may not be viable.

The following packing rules should apply:

Volumes

Very wet volumes should be packed separately and vertically with their spines down. Volumes of similar size should be packed together in a single layer and supported so that they do not bend. There should be a little space left in plastic crates to allow for their expansion when frozen.

If it is likely that dyes from the covers of volumes will run, or if time allows, they should be individually wrapped or at least every other wrapped. Use wax or freezer paper, not plastic or plastic coated paper.

Documents, files and cards

Wet files should be wrapped in batches that are not more than 10cm deep. Large items should be packed flat on the bottom so that they will not sag. If wet file covers are removed because of damage care should be taken to identify loose documents.

Soaking wet bundles of wet paper that sustain damage should be packed into large plastic bags or packed on their side in boxes. Do not try and separate them, as it is labor intensive.

Scattered sheets should be placed together in relation to their location and the approximate location noted. Files and cards should be left where possible in the original boxes, unless the contents are dry and can be taken out and put in dry boxes without risk of damage. Burnt, scorched or dirty records should be supported on single sheets of uncolored cardboard or heavy paper when transferring to crates.

Microfilm

Microfilm should be left in storage cartons and secured with rubber bands to retain labels.

Maps and plans

Large format items such as maps should be interleaved with blotting paper and polythene and placed on flat supports (may be several on each). Do not build up too much weight.

Remember when packing that you need to record information about the item and its location. If records are not in boxes or containers, or if the containers have no identification, label each box or bundle showing the location and identification if possible. Use a soft pencil and paper to write on labels that should be tied onto boxes or bundles. Do not use colored paper, felt tipped or ballpoint pens; or write on the records themselves. Crates should be numbered and the numbers added to documentation, and the removal and destination of boxes should be recorded.

Material should not be piled on top of each other or moved in large batches. It should not be left packed for more than a few hours. If the journey to the freezing facility is long, refrigerated vans are desirable.

Summary

While no records disaster plan assures successful resumption of business operations, such a plan greatly increases a favorable survival or recovery. Prior identification and protection of vital records, a clear plan for reconstruction and salvaging these records, and prior thought about the necessary steps to take after a disaster allows a department to enter a crisis situation with confidence and direction.

The college utilizes the dPLAN online template for mitigation, preparedness, response, and recovery records management operations. dPLAN is recommended by the Library of Virginia. dPLAN serves as the SWCC Records Contingency of Operations Plan (COOP) and the specifics of this online plan are "Not subject to FOIA under Va. Code §2.2-3705.2."

Public disclosure of dPLAN would have a reasonable likelihood of threatening public safety by exposing vulnerabilities. It contains sensitive and confidential information that is not subject to FOIA under Virginia Code §2.2-3705.2. Accordingly, Southwest Virginia Community College is withholding this plan from full public disclosure. Refer any request for a copy of this document to Southwest Virginia Community College's legal counsel or the Virginia Attorney General's office.

The plan will be tested periodically to validate effectiveness and to identify areas that could be strengthened. In addition, the Records Management Program will be reviewed and amended as state, federal, and other related guidelines are provided to the Records Manager.