Alexandra Lightle
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Scenario: You are the chief archivist of a historical society in Brooklyn, located in an early 20th century historic building in the Fort Greene area of the borough. It is Friday, 7 p.m., and the rest of the small staff of nine full-time and part-time employees has gone home. You are in charge of locking and securing the building and setting the alarm before you leave. You make the usual rounds, going from floor to floor and making sure that the lights are turned off, then you finally head towards the security alarm control panel on the ground floor of the building. As you attempt to set the alarm and proceed through its intricate menu, you notice that the digital control panel has picked up a water leak in the basement (many state-of-the-art alarm systems provide information on water infiltration as well as smoke, fire, open windows, breached doors, etc.). The alarm will not allow you to arm it until you have found the source of the water leak and remedied the situation. You head towards the basement to investigate, and you discover standing water about an inch deep pooling outside your main HVAC utility room. The pool is getting bigger very quickly, and it is slowly making its way towards your basement archives, where many of your most important archival collections are kept (mostly in boxes and on shelves, although your library school intern may have left some boxes directly on the floor earlier today). You enter the utility room, and you see water gushing out of the HVAC's drainage pan, which appears to be clogged or broken. You are not a plumber or a mechanic, so unfortunately you can't fix the problem yourself. What do you do now? Who do you call first? What do you do afterwards (later the same Friday evening, tomorrow, and first thing Monday morning)? How can your disaster plan give you the necessary guidance to deal with this situation? What do you do if you don't have a disaster plan, or if you realize that your plan is too out-of-date to be of much use? What do you do a week from now, and what should be on your staff's agenda next month, whether you have a working disaster plan or not?

The first thing I would do upon seeing the flood coming from the HVAC system would be to call the facilities manager and inform them of the extent and urgency of the situation, and ask them to call the HVAC repair people. I would then quickly make my way to the basement archives as I called my supervisor to inform them of what is happening, based on a previously established chain of command, and in turn, they would notify the other employees. I would quickly scan the archives and remove any boxes left on the floor and place them on higher shelves. I would then go to the breaker box and turn off the power to basement (which ought to be clearly labeled for situations such as this), in order to prevent the electrification of water should it reach any electronics. I would then call the building manager back and question them on the status of emergency response, and reach out to the HVAC company myself if necessary.

From here I would like to discuss my actions in two possible scenarios of what happens next. The first imagines that despite an emergency plan in place, the flood was not contained, and reached the archive, and discusses what preservation measures the staff will need to take. The second scenario involves stopping the flood before it caused any damage to the archives itself, but it is discovered during the process that our emergency plan provides minimal information and many of the important numbers to call are out of date, and the whole thing must be rewritten.

Scenario One: The facilities manager or HVAC company can't be reached, or some other obstacle prevents them from being there and despite my best efforts, the water reaches some of the lower shelves before anyone arrives to stop the flood. I would make sure any heat sources to the room are turned off, and any windows open, paired together with fans to keep the air circulating to avoid the build-up of humidity. After having the excess water removed from the floor via a wet vacuum as soon as possible, I would also remove any carpets, curtains, or other moveable material that may retain moisture. Then, very carefully, we would begin moving the material to an area where it can be properly dried, handling the material as little as possible. This would be followed by the separation of materials based on their preservation needs; in this case, audio cassettes and books. Working in groups, the staff would begin working on the drying process.

The group working with the audio cassettes needs to assign one person to copying all labels on the affected material, while the others work on emptying any water than may have gotten in to the plastic casing, and setting them up vertically to dry. The sooner the tape is removed from water, the more likely it is to be salvageable. If the tape was soaked in water containing sewage or salt, it needs to be rinsed, it must be done using distilled water only. However, in this case the tapes do not requiring rinsing, only air drying. When it is completely dry, the tape should be run against a felt pad that has not been treated with any sort of chemicals, and without the heads contacting the tape, in order to remove any particles that may have been dried onto the surface. If this can't be

done in-house, it will have to be sent to a professional, and once restored, it should be re-recorded as soon as possible. (NYU 4-9, Columbia 20). The tape should not be wound in anyway while it is wet, as wet magnetic tape is extremely delicate, and no attempts should be made to play it until it is thoroughly dried and cleaned.

Those working with the books will first need to carefully move them to the designated drying area by packing them in storage boxes, spine down, with the covers protected by blank news print or wax paper to prevent them from sticking together, and in only one layer per box to avoid further misshaping the wet volumes (Columbia, 14). Each box should be carefully labeled with what's inside with corresponding lists and labels (NYU 4-3). Once they have been transferred, they should be laid out on absorbent materials, but never directly on wood, as the wet covers may become stuck to it. From here the books must be sorted into groups based on the urgency of conservation actions that need to be taken. Books with leather or vellum binding are more susceptible to water damage, and need to be treated right away (NYU 4-4). Additionally, any books with coated paper will likely have to be frozen by a professional conservator. Until that can be done, they should not be allowed to air dry without any attention, as their pages may become irrevocably stuck together. Every single page should be interleaved with wax paper until it can be frozen (Columbia, 14). After sorting by material, the volumes should then be sorted based on level of wetness. Any books that are dripping water will have to also be sent to a professional conservator. Books that are wet, or damp around the edges can be air dried in-house. In order to do this, the wet books should be laid on their spine, with cardboard rolls used as supports for the heavy and wet covers. They then need to be interleaved with absorbent material, like paper towels, approximately every 5-10 pages, or every 20-30 pages, depending on the level of dampness. (Columbia, 15, NYU 4-2) These should be switched out every 15- 20 minutes. Books that are damp around the edges should be stood on the head or tail end, depending on which side is

wetter, with their leaves fanned out. As these volumes dry they should be monitored closely for any signs of mold growth.

Throughout the air-drying process there should be some uniform steps that ought to be taken with each media type. These include taking many photographs of items and their bibliographic information, to provide reference points, and to be submitted to the insurance company as soon as possible. The temperature should not be allowed to go higher than 65°F and the relative humidity levels should be maintained around 25-35%. None of the material being air dried should have any fans blowing directly onto them, but there should be fans aimed towards the air directly above the materials to encourage the circulation of water particles in the air away from the area (Columbia, 15).

The Monday following the flood the insurance company should be contacted with an inventory of damaged material. At the end of the week, a comprehensive examination of all materials will determine whether or not they are dry, and if there are some that may require more professional attention due to curling or dirty material. A month after the flood, the HVAC professionals should come back and recheck the system to ensure everything is in optimal working condition. Over the next month the staff should be sure to restock emergency supplies, and perhaps add some new material, such as sand bags to block the doors. We should also look into options for security systems that will provide notifications to staff off-site should any leak, flood, or fire break out. There should also be a full report generated covering each step taken throughout the entire process for future reference.

Scenario two: Although damage was prevented, we almost discovered the hard way that our emergency preparedness plan is lacking up-to-date key information. To remedy this, we would set up an emergency planning committee that will determine what should be included in a comprehensive emergency guide, based on the recommendations of the NEDCC guideline. First,

the committee must create a chain of command structure, to ensure the efficient response actions can be taken. Once this has been established, the committee would need to conduct a risk analysis. This includes external threats like hurricanes, flash floods, wildfires, etc., and internal risk factors, such as potential pipe leaks and storage areas that may be more vulnerable than others should there be another HVAC flood.

Following this, a preparedness plan must then be constructed. This includes a list of emergency supplies that should always be on hand, and their costs. There should be a list of numbers to be contacted in case of emergency and in what order they should be called. Some examples of numbers that should be included in the list are: fire/police department, ambulance; security company; facilities maintenance personnel, and their after-hours counterparts; professional recovery and conservation businesses; electrician, plumber, heating and cooling system professionals; insurance company, etc. The list should also include any account numbers/passwords that may be needed. Then the committee should set priorities when it comes to salvaging material. A color-coded map may be created to quickly indicate where the high priority material is located. (NEDCC, 4). The emergency plan must then give directions of what immediate steps should be taken in the event of an emergency, such as those outlined in scenario one. There are software programs such as dPlan, that help automate all this information, and keep it up to date. If this is not used, then the emergency plan should be reviewed every six months to a year to ensure it has the most accurate information.

By taking preventative steps, cultural institutions can ward off, or else recover quickly from, any damage that may threaten their collections. The more detailed the plan the greater the loss mitigation will be.

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