

# Dealing with Disaster in Libraries

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*by Grant Collins*

No library is exempt from the risk of disaster. The very nature of library collections whether traditional or in digital form, is not exempt from a catastrophic event like fire or flood, or a slower undetected ruinous outcome, such as insect damage. Counter Disaster Planning is a fundamental strategy that all libraries should have in place. Principally it is a form of risk management that can prevent a disaster, and provide for a dedicated readiness plan, should a disaster occur. A disaster in a library is an unexpected occurrence that places items at risk and/or causes minor to major damage to collections. This paper gives an understanding of the issues affecting libraries today, and the principles for prevention and readiness procedures that are incorporated into a counter disaster plan.

## Questions

What is a disaster in a library? It is an unexpected occurrence that places items at risk and/or causes minor to major damage to collections and/or library management systems. Counter Disaster Planning is a fundamental strategy that all libraries should have in place. In today's library, the emphasis placed on recovery of irreplaceable heritage original collections and on-line material includes the element of a library's business continuity. This is prevalent where a disaster has impacted on automated library management systems and digital repositories, adding a further dimension to contingency planning.

What is a Counter Disaster Plan? It is a proactive, dynamic planning document that articulates

the necessary considerations in minimising risk to library collections, and is a guide for the implementing of disaster preparedness activities should a disaster occur.

Why do we need a Counter Disaster Plan? I have attended a number of library disaster scenes in the last ten years. At most of them I carried out the role of response coordinator. A number have been at State Library where a counter disaster plan is in place. I compare this to other libraries large and small, where there were no contingency plans in place. The main differences I experienced where there were no prior contingency plans developed were:

- \* The extra time required to complete the recovery to establish business as usual.
- \* No instant access to equipment and consumables required for response procedures.
- \* No guaranteed access and price negotiation to off-site facilities such as industrial freezer units.
- \* A chaos scene at the library.
- \* Higher loss of collections than would have been expected

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With one fire at a school library, a majority of the collections had been affected by fire, soot and water damage. This library had no contingency plan. I was requested to consult on the response requirements and procedures to salvage the collection. On arrival there were a large number of enthusiastic and well-meaning volunteers placing all the damaged collection items into cardboard boxes. A contingency plan would have detailed and informed the process to prioritise collections for the sequence of response, categorise levels of damage, and broken the volunteers up into teams to carry out respective response procedures. If the boxed damp collections were left unchecked, there potentially would have been a high risk of mould outbreak covering these items within two days.

### **Four Components in Compiling a Counter Disaster Plan**

#### *Prevention, Preparedness, Response, Recovery*

##### *Prevention*

Formulate an assessment of all risks to your Library. Examination of the facility plans or reports is a good starting point. Formulate measures to reduce or prevent risks from occurring. Establish mitigation for each of the risks. Causes of disaster in Australia include but are not limited to cloud bursts and lightning strikes; cyclone, hail and flooding; power failure and fire; mould and insect outbreak; earthquake; chemical contamination; poor building design and maintenance as well as poor storage system design; plumbing bursting or leaking; war, bombs, and terrorist attack.

##### *Preparedness - Being ready for disaster/catastrophe*

Develop a readiness plan that clearly articulates response and recovery procedures. Collate all emergency procedures into a single plan. Conduct practicality tests to ensure it works and keep it simple. I had reviewed a particular organisation's counter disaster plan that was well researched and a piece of exceptional writing. The bottom line was that in a catastrophe scenario I had doubts about its capacity to guide process in a logical and non-complex approach. In a disaster situation the only thing that should be sophisticated is the welfare of the people. Collate all resources into the plan including equipment, whether hired or purchased. If the intention is to hire the equipment, formulate a contract with your nominated supplier and agree on price and guaranteed use in any given circumstance, within the contract. This needs to be done in advance, because at the time of disaster it is too late. Have on hand all necessary supplies you would deem necessary for immediate response

to a disaster to collections. At the State Library of Queensland we have opted for a series of kits across our current transitional locations. This is supplemented by a larger scale counter disaster store for these consumables at our main Cannon Hill site (See sample Mobile Disaster Response Kit Contents on page 20.)

Establish a counter-disaster response network within your organisation. At State Library this has three tiers, including an emergency planning committee, team co-ordinator and team leaders, and team members. The emergency planning committee is made up of representation of staff members who will be responsible for prioritisation of the sequence in which items would be recovered and accordingly the level of treatment that may go into recovery of collections. The committee is also responsible for keeping the plan up-to-date. The team co-ordinator and team leaders are established to instigate the implementation of documented recovery procedures for the various media aligned to its prioritisation for recovery. These recovery procedures should be clearly articulated in the recovery plan that marries the type of damage to the type of media, e.g. water damage to a photographic negative, or fire and soot damage to an antiquarian book. The team members carry out these procedures under the guidance of their respective team leader. All contact details of each level of the counter-disaster network should be included within your disaster plan.

##### *Prioritising*

The State Library of Queensland holds a variety of material identified by collection areas as being of high state and or national significance. During an emergency, which is affecting or has affected relevant collection areas, this material is given priority for recovery and treatment.

Priority Criteria are as follows:

Priority 1 is material that is identified as unique, highly significant to the collection and irreplaceable. Items assigned this priority are to be salvaged/recovered at all costs.

Priority 2 is material that is identified as rare and significant to the collection, difficult to replace but it is not unique. Items assigned this priority are to be salvaged/recovered as time permits. Also, items given this priority are likely to be recovered well and returned to a useable state.

Priority 3 is material that is identified as significant to the collection, not excessively difficult to replace

and not unique. Items assigned this priority are to be salvaged as part of a post-disaster recovery operation after the Priority 1 and 2 items are attended to. It is possible to discard and eventually replace Priority 3 items if necessary, as they are not unique.

### Mapping Collections

A further feature for forward planning contained in our Counter Disaster plan is the mapping of priority one collections. This prepares us to more efficiently locate and commence response procedures for high priority items in a given catastrophe. This is achieved by developing compactus/shelving diagrams and highlighting (colour shading) the location of these items on your map.

### Training

Develop a training module as part of your counter-disaster plan. This should include: Capacity to impart awareness of the organisations Counter-Disaster Plan. It should give particular focus to Disaster Response procedures. Sessions should be held with response teams that allow for application and practicing of documented response procedures. This would cover an introduction to the logic behind the preparedness plans and a simulation exercise that allows team members to apply the procedures for a range of collections and with differing types and levels of damage. The three areas that should be covered would include retrieval, categorisation and salvage practices. These sessions also have the value of allowing team members to get familiar with handling damaged collections and also team coordinators an opportunity to assess the competence and suitability of each trainee. An advanced session with team leaders would also be required that would allow for a more comprehensive understanding and manual dexterity for leadership of their respective teams in a given disaster scenario.

I was impressed by the approach of the Queensland University of Technology Library which had a majority of their Senior Management participate in recovery procedure training and used inventive means by which to impart and teach the various components of their recovery plan. This included some creative and at times humorous means of constructing wind drying tunnels for damp books.

### *Response - So a disaster has occurred*

Established procedures should be in place in the plan that instigate an immediate communications process once a disaster has occurred. At State Library this includes the sequence of contact commencing with the Building Manager → Disaster

Recovery Coordinator → Team Leaders → Team Members.

Access to the disaster site should be subject to confirmed accessibility via emergency services, e.g. fire brigade. Initial assessment is completed by the chair of the Emergency Planning Committee and Disaster Recovery Coordinator. It is important not to allow an unplanned and reactive "boots and all" approach to response procedures. My experience is that this assists in eventuating in chaos. The only instance where this should be implemented is in preventing any further damage. For example, if new leaks occur in collection locations other than the initial disaster site.

A pro-active approach would conduct a preliminary appraisal initially of the stability of the site to ascertain how you will access the collection area and retrieve the collections. At this point your thinking should be aimed at the best passage to transport your damaged items to a predetermined salvage centre. Time taken at the preliminary appraisal will save time in the overall response and recovery exercise.

At State Library, during our Millennium Library Project (redevelopment of the existing State Library) a salvage centre would be made available through the Department of Emergency Services. While the type of facility has been pre-determined, being a contingency has meant that the location would be selected from a list of available facilities at the time. State Library has specified that the salvage facility/building would have the following requirements:

- \* Approx 500-1000 sq metres (this would depend on how large your collection is)
- \* Accessible during flooding
- \* Telephone
- \* Small office space with toilet and kitchen facilities
- \* Sealed floors (loadings 5.0 kpa)
- \* Floor drain access
- \* Sink/water supply
- \* Emergency power
- \* Ceiling height min of 2.4 metres
- \* Basic lighting
- \* Lockable
- \* Security presence
- \* Smoke sensors
- \* Brisbane metro area
- \* Truck loading bay (weatherproof)
- \* Power points in regular intervals on the walls
- \* Air-conditioned with dehumidification control
- \* Be clean and dry
- \* Pallet truck/forklift
- \* Some basic shelving

Upon assessment of the extent of the damage, a summary of the resources for the response should be completed by the Disaster Recovery Coordinator. You are now in preparation for the recovery phase by instigating response processes. This would determine the number of team leaders and team members needed, and the consumables, equipment and services required for the response. Initial response plans would then effect the retrieval of collections commencing with high priority items designated on the mapping. There have been occasions where items on the floor or those at risk from falling from the edge of book shelves have been retrieved in these areas first, as they were at risk from further damage by the retrieval process. While team members are retrieving and recording those items, other teams would be designated to set up areas in the salvage centre to categorise the items for salvage. This can include anything from placing reels of microfilm into a bucket of water before being sent off for reprocessing, to packaging sodden books in preparation for sending to an industrial freezer complex. In some instances with significant items, this may require a photographic record for claiming on insurance. Another team led by the respective team leader would be assembling trestle tables and drying lines for the salvage operations to begin.

#### *Recovery - Establishing business continuity*

By now you will have established the extent of the catastrophe and the resources required for the recovery. You will also have established a process for retrieval, categorization and salvage/recovery. With your respective teams in place you are now ready for the recovery phase to begin. This is where your documented processes for recovering the range of media affected by the differing causes of damage are instigated.

- \* Items of high significance should be forwarded directly to a conservator.
- \* Your prioritisation should be driven by your established priority listing.
- \* Those items that are frozen would be last items that you would recover. By freezing these collections you have simply bought yourself time, particularly against the possible onset of mould.

- \* Prepare the repository for return of the collections. This would include such measures as replacement of carpets, and drying, cleaning, or replacement of storage systems.

#### Post Recovery

The post-recovery phase is an essential component of prevention and improvement for the counter disaster plan. It is also essential for allowing robust discussion on what went well and what would improve the plan. These results should be forwarded to the Emergency Planning Committee in updating the document. Post-recovery should also act as a prompt for redressing the cause of the disaster, also any contractual arrangements with external services and replacement of supplies that were used for the recovery phase. It should also perform the monitoring of the collections to ensure that once they have been returned to their store, that no mould outbreaks occur as books that have become wet have a capacity to absorb large quantities of water.

In conclusion, the work that goes into the development of a functional disaster readiness plan will ensure that your library is effectively managing risk to the collections and library management systems. Your Counter Disaster Plan will ensure that if disaster one day strikes, your organisation is prepared.

Grant Collins

#### **Bibliography**

Donaldson J (2003) State Library of Queensland, Counter Disaster Plan  
National Library of Australia – Disaster Plan 2000  
Redefining Disasters – State Library of NSW 1995  
Hey N (2004) IT Disaster Recovery, State Library of Queensland



# Sample Mobile Disaster Response Kit

## Contents Checklist

Check	Description	Quantity
	Disaster Response Procedures	
	Adhesive Waterproof Tape, Masking tape and dispensers	2 each
	Bandages – crépe/gauze	4
	Bin Liners	
	Blotting Paper	2 reams
	Buckets	3
	Cartridges for HEPA Respirators (see PPE)	6
	Cleaning Cloths	20
	Clipboard	1
	Detol & Detol Hand wash	1
	Disposable Camera & other documentation equipment	1
	Drying Lines & Pegs	3
	Dust Bunnies	20
	Dust Masks - Disposable	20
	Dust pan and broom	2
	Extension Lead	1 x 30m
	Eye Wash	1
	First Aid Kit	1
	Foam Sponges (Large – car washing type)	2
	Folded Sorbents	1 pack
	Freezer Bags	25
	Garbage Bags (blue and black)	25
	Glasses, Safety	2
	Gloves, cotton	15 pairs
	Gloves -Disposable Latex	1 box
	Gloves, Finger Grip	
	Greaseproof or Silicon Paper	1 roll or 1 ream
	HEPA Respirators (see PPE)	3
	Knives (Stanley knives or box cutters)	2
	Marker Pens	24
	Masking Tape and Dispenser	1 roll
	Paint brushes	6 various sizes
	Paper Towels – perforated, interleaving	7 rolls
	Pencils	16
	Pens	15
	PPE - Personal Protection Equipment (Gloves, respirators, clothing, boots etc)	2 pairs of each
	Plastic Paper Clips	1 box
	Polyethylene Sheeting-cover/protect collections/quarantine area or Tarpaulins	2 lengths
	Polypropylene Plastic Containers with lids	10
	Power Boards	1 x 6 outlets
	Rolling Organisers (with wheels and red lid clips)	8 (to contain kit)
	Scissors, non-magnetic	2
	Sponges – Soot	5
	Sponges – Household small	1 pack
	Spray Bottles	1
	Stanley Knives	4
	Staple Gun & staples	1
	Step Ladder	
	Storage Units	
	String	1 roll
	Tarpaulins	
	Twist Ties (Gardening Twine)	
	Wet Ones – Personal Hygiene	1 dispenser
	Whistle – calling people to assemble or evacuate	1