Mission Dominica – Damage assessment cultural heritage on paper after hurricane Maria

Period: 9 - 14 April 2018

Valérie Martens-Monier, Paper Conservator at the National Archives, Curaçao

Figure 1. Offices of Physical Planning Department after hurricane Maria
INTRODUCTION

CARBICA, the Caribbean branch of the ICA (International Council of Archives) has asked me to visit Dominica and assess and report damage made by hurricane Maria to their collections. The funding of this mission was provided by the “Archive at Risk” program set up by the ICA, in order to provide first aid recovery in times of disaster.

This mission and report will serve as a preparatory phase to the upcoming “Caribbean Disaster Recovery” workshop (July 2018) that will introduce the parties involved to the program and give them tools to draft institutional disaster preparedness and recovery plans as well as prepare more actively for the next hurricane seasons. Representatives of the different islands which are at risk of being touched by disaster will be invited to attend this workshop.

This mission will also provide information in terms of preventive conservation and possible treatments of damaged objects on paper. A final “workshop” will bring all parties together to discuss and share their experiences before, during and after hurricane Maria struck the island. It will also be a good starting point to prepare for the upcoming hurricane season and set up a local network to share knowledge and materials in times of need.

Thanks to Mrs Vernanda Raymond, Chief Librarian at the Dominica Library and Information Service (DLIS), who has prepared this mission and arranged that most institutions open their doors and let us inspect their repositories, we were able to visit the following Institutions:

- DLIS, Archives and Documentation Center
- Public/Roseau Library
- Physical Planning Department
- The Registry and Law Library
- Roseau Presbytery and the Archives of the diocese of Roseau
- National Museum
- Agricultural Library
- Old Mill Cultural Center
- Police Department
- Bath Estate – Education Book Scheme
- Treasury
- Portsmouth Library
- Fort Shirley
- Meeting with Mrs. Chandler Hyacinth, Permanent Secretary, Ministry of Education and Human Resource Development and Mrs. Jermaine Jean-Pierre, Director ICT (Information and Communication Technology) Unit, Government of Dominica
Description of island

Driving from the airport (near Marigot) to Roseau takes approximately one hour and the winding road crosses the island from side to side, giving a good impression of the nature and geography. It is very mountainous and covered with rainforest and has 365 rivers! Most of the towns are situated along the coastline and on the riverbeds of rivers flowing to the sea. These rivers overflow regularly, causing great damage and casualties. It rains almost every day, sometimes just a few drops and the average temperature is 28°C during the day. The island has 9 active volcanoes. http://www.thedominican.net/articles/platpays.htm

Dominica is thereby facing several risks due to its location and geography: hurricanes, mudslides due to heavy rains and tropical storms, volcanic eruptions and earthquakes followed by possible tsunamis.

David, a category 4 hurricane caused great damage in 1979, but it is nothing compared to hurricane Maria, which hit the island on September 21st 2017. Approximately 31 people died and 34 are still missing, without counting those who suffered indirectly from the storm like the elderly and the homeless population.

It is estimated that 90% of the houses and buildings were damaged, leaving very few places to relocate. For instance out of 70 schools on the island, 21 were totally destroyed and 20 had small damage.

For the Dominican population, Maria was unprecedented and they were surprised by the force of the hurricane. The island was under hurricane warning and already experiencing bad weather. Preparations were made before and during the week-end. The Prime minister announced on Sunday at 6 pm that the Public offices would be closed on Monday. When Maria moved from a category 3 to a category 5, it was Monday afternoon. Offices were closed and further preparations there were not possible as people were home securing their own houses. The subsequent shutdown, which is standard in case of an upcoming storm, cut off communications and electricity.

Political situation

Dominica is part of the Common Wealth, having achieved independence from the UK in November 1978. A short year after, in August 1979, hurricane David struck the island, causing a large gap in historical records. This created an awareness that Dominica needed a proper record center. Government was even planning on placing the record center in a bunker but Maria interfered with those plans.

One of the consequences was also that the government started going digital. According to Mrs. Jean-Pierre, director of ICT, there is currently a project installing one filing system for the whole government. So far 2 ministries have been equipped. The ICT document management system is on a server, backed up by a storage system called QNAP.
ASSESSMENT

The assessments were made in the 2 major cities of Dominica: the capital Roseau and the second largest city, Portsmouth. Driving time between the 2 cities is about 1 ½ hour along the coast line.

ROSEAU, the capital

- **Documentation Center and Archives**

  Contact: Mrs. Vernanda Raymond, Head of the DILS (Dominica Library Information Service), Chief Librarian and her staff

  The Documentation Center building has sustained the storm with little damage considering the general state of the island after hurricane Maria. It is a sturdy concrete building with minimal openings (Fig. 2) which looks like a bunker.

The major problems occurred when the windows were blown off or into the rooms and water could pour inside the building and spill along the walls over several floors. The roof (which had just been redone) was punctured, probably by flying debris causing a leak in the ceiling. Another major effect of the hurricane was not only water nuisance but also mud due to the heavy rainfall and the rivers flowing over. The ground floor was covered with a thick layer of mud.

*Figure 2. Building housing the Documentation Center and the Archives*
The “bunker” houses the National Archives on the top floor, the National Documentation Center on the first floor and the Department of Treasury, storage for government stores and a small outlet of the National Postal service on the ground floor. The Roseau Public Library which suffered severe damage is now operating at the National Documentation Center. Additional space was made available on the ground floor to accommodate library users.

National Archives

**Contact:** Mr. Charles Raymond, Librarian II

- Oldest records date end of 18th century
- Records from ministry of Communication and Works: infrastructures of bridges, roads, schools, hospitals, courthouse etc.

According to Mr. Charles Raymond, supervisor at the Archives, only two boxes of records were impacted, however, prompt application of conservation measures saved the records.

The Archives’ storage room is equipped with metal shelving where all records are kept in archival boxes (Fig.3). Larger documents are wrapped in archival paper tied with linen bands stored in flat boxes. None of the shelves are against the wall and the windows are rather small along the top side of the walls. Climate is controlled by an AC unit working day and night. Four thermo-hygrometers placed in strategic places record temperature (~18 degree Celsius) and Relative Humidity (~41%). Although the RH is slightly low, the general condition of the storage is very stable and can be easily improved. Sliding cabinets would increase the storage volume but I am not sure the floor can handle the extra weight. All in all, a very satisfying situation even though the space is almost full. A bigger storage space will probably be necessary in a near future.

The Archives are discussing with the Government to create a separate repository to store the records that are being e-filed. Ideally Mrs. Vernanda Raymond says that this repository should become a record management center for the entire government services.

The Archives also dispose of a digital preservation room where currently almanacs from 1821 to 1879 are being digitally reproduced. This project began last year and 23 books have already been digitized. The appropriate software is being sourced for optimal use. The archives also use QNAP software.

Documentation Center

**Contact:** Mrs. Gershelle George-Noel, Acting Librarian II

- Computers for research, many school children use the documentation center.
- Books salvaged from the Roseau Library
The office of the Chief Librarian is situated in the Documentation Center, which is not the proper location according to Mrs. Raymond, who would prefer to be located at the main Library in order to oversee better the needs of the libraries.

Two days after the hurricane Mrs. Raymond came to check the situation. The center was flooded. Windows had been broken or blown away. One metal bookshelf standing against a wall has suffered but it has now been moved to a safer place, a few feet from the wall. Most of the office material had been stored safely and plastic covered the desks.

The staff was back to work after a week. As a first resort they used the water pouring into the building to clean up the floors and the walls from the mud. After two weeks, the staff went to help recover and salvage the books from the Roseau Library.

The broken windows will be replaced by better quality framing and opening. They will also be covered with UV filters. The new windows are being partially financed by the grant from CARBICA. The rest is payed for by Government.

• Public/Roseau Library

Contact: Mrs. Vernanda Raymond, Chief Librarian

The Library of Roseau is situated in a hundred year old wooden building on a cliff overlooking the ocean. It is a beautiful location and a beautiful house. Unfortunately it has greatly suffered from Maria. The roof was almost entirely blown away and water was rising so high that the building was flooded in the lower floor (Fig.4).

Prior to the storm, all bookshelves and desks had been covered with tarpaulin.

Two weeks after the storm, staff went to the site to clear a path and see the extent of the damage. The loss was immense (Fig.5). They went in at their
own risk and started moving out the books from the unique collections, like the Dominica collection (98% saved) and the West Indies collection (10%) and as much as they could. The salvaged books are now kept in the Documentation Center, approximately 8 rows of bookshelves, about 10 feet long. Thanks to Book Aid International (UK) 25.000 volumes are being replaced. Unfortunately the old library will be torn down and replaced by a modern building.

For more pictures made before and after the storm as well as all efforts made for recovery, visit the facebook page of the Documentation Center: https://www.facebook.com/documentation.centre.

• Physical Planning Department

Contact: Mr. Kelvin Rolle, Chief Physical Planner, Mrs. Shyann Hill, Filing Clerk

The building suffered enormously. It is a former mill with sturdy stone walls that withstood the storm but the roof was shattered in ¾ of the building (Fig.6). Personnel was moved to another location where they could install their offices but the space was too small to store their files and archives. The documents have all been left behind in the old mill, which is planned to be pulled down and rebuilt. The question is, where will the files move to, when the time comes to rebuild?

After inspection of the storage areas (Fig.7), it seems that some of the archives could be salvaged and separated from the mold infested documents (probably 50%). We have discussed how to proceed with this salvaging operation, but the problem remains, where to relocate? This is a question that many collections face, given the amount of destruction on the island and the lack of covered, safe places remaining. Mr. Rolle suggested a container, to which I added that it should be air conditioned, otherwise new mold might develop given the climatological conditions on the island. A container with no climate control is like an oven. The other problem is that they tend to rust and are not always waterproof. That being said, a container could definitely be a solution but it should be air-conditioned and should not be left unattended, which unfortunately happens often.
Mr. Rolle suggested also that, while salvaging the records, the documents should be digitalized. This would also facilitate consultation which is an ongoing demand and safeguard the content of the records, given the uncertainty of their situation at present.

Electricity would have to be available somewhere in the building in order to achieve this... I have sensed much discouragement by the staff of this department. They felt somehow abandoned and left to solve their problems on their own. I suggested that if they started salvaging and being proactive, it might draw positive attention in order to get more help.

• **The Registry and Law Library**

This building contains all Registries (civil and land titles) as well as the Criminal Court Chamber and the Law Library on the ground floor. The building has sustained little damage on the side of the registry because the ceilings are made of concrete. There was some water seeping along the walls. Most damage occurred on the side of the Court chamber and by flooding on the ground floor.

Civil Registry
Contact: Mr. Ossie F. Walsh, Registrar Supreme Court

- Oldest records start early 19th century

Mr. Walsh received us in his tiny office and seemed very pleased and open about my visit. He is one of the few registrars with a separate office. He told us that the registry was trying to digitalize their records. The OECS (Organization of Eastern Caribbean States), based in Washington, have helped tremendously with a digitalization project in 2011 and 2012. A total of 415 civil registries were scanned and the project would
be continued by the Title section but there were problems with the cameras that needed to be replaced. The entire project stopped after hurricane Maria.

The Registry is actually one big open space shared by all and where the public also has to wait in line for the services. Desks are covered with piles of records, the rest being stored in cupboards along the walls and corridors (Fig.8). The lack of space is acute and some departments still don’t have computers and are taking requests and handling applications manually (Fig.9). It is not clear if older records are kept separately and where.

Hurricane Maria did cause some water damage and records got wet, a total of 15 bags, of which the exact content remains unknown. A team of three employees from the Documentation Center came to help in February 2018 to give advice on drying wet files. During our tour we saw some bags still containing untouched records in a separate room, on the damaged side of the building where a roof had just been replaced. We have not tried to look at them but expect the worst!

 Titles Department  
**Contact:** Mrs. Vincia Auguiste, Registrar of Land Titles  
- Oldest certificate dates of 1886

Mrs. Auguiste showed some documents that had water damage in her office (Fig.10). Colored inks had bled and mold growth was found. She had been told to throw them away but she thought the information was still significant and readable and she decided to save them. After attending the workshop, she will know how to handle this type of...
damage in the future. For now it is important that she protects herself when handling these moldy documents.

Mrs. Auguiste then led us to the storage room where the oldest records are kept (Fig.11). They haven’t sustained any damage but the storage system is not optimal. A large AC unit (working only during the day) hangs from the ceiling above a wide table covered with stacks of records. Mr. Toussaint suggested wisely they move the AC to the side (where a door used to be) because of the risk of leakage on the documents, or at least temporarily cover the area at risk.

The wooden shelves are not adjustable and are very large. The documents are stacked up in high piles making access and handling more difficult. There are no archive boxes or other archival materials used. The storage is very full and Mrs. Auguiste would like to have sliding cabinets but says there is no budget for that. The question is: would the floor (they are situated on the top floor) withstand an increase in weight?

Much of the records present in this room should be moved to a national repository. Unfortunately the National Archives does not have the space available.

Law Library
Contact: Mr. Martin Samuel, Law Library Technician (on temporary leave)

Mr. Samuel led us through the building and showed us the -now empty- Court Room and the damage made by hurricane Irma. We then moved to the ground floor where the Law Library is situated. The law books are all stored in rolling shelves from floor to ceiling (Fig.14). Unfortunately due to the flooding and subsequent mud nuisance, the railing system was clogged and the cabinets cannot role anymore. Mr. Samuel showed us the traces of mud and water on the walls (Fig.12). It is obvious that all the books on the lower shelves were flooded but as long as the cabinets are not made operational, these wet books (probably dry by now, but full of mold) cannot be evacuated and are creating a big risk of infection to the “clean” books in the Library.
Recent pictures taken by Mr. Raymond, show the dramatic mold growth on the books! (Fig. 13)

- **Roseau Presbytery and the Archives of the diocese of Roseau**

  **Contact:** Mrs. Gertrude Isaac and Father Nigel Karam, Dean of Roseau
- Birth, baptism, death and marriage registers

The roof of the office of the Presbytery was blown off (Fig. 15) and the staff had to move to a building next door. Some registers got wet and Mrs. Isaac tried to dry them with a blow dryer. I demonstrated other drying techniques for books without the use of electricity, like for instance by fanning them out (Fig. 16) or by using absorbent paper between pages and regularly replacing them with dry sheets. Father Karam said they would like to build their own archives and asked for advice on necessary requirements for such a project.

Archive of the diocese of Roseau

- Archive about the history of the diocese of Roseau,
- Back up records identical to the Presbytery
- History of the island (not only religious but also civil)

The storage room is situated inside the Bishop Arnold Boghaert Catholic Center. A single room with just one door and very up to date archival shelves and boxes (Fig. 17). The brand new shelves were partially set up and I suggested to avoid placing them directly against the walls. Unfortunately this storage room does not have any climate control, except for a dehumidifier that was not plugged in.

Mrs. Knight, recently appointed caretaker of these archives, was very interested in matters of conservation and looked forward to attend the workshop.

• National Museum

Contact: Mrs. Avonelle Seraphine, administrator

The curator, Dr. Lennox Honychurch, was not present but we met him at Fort Shirley in Portsmouth.

- Used to be an old Market Building for slave trading which took place on the square below, built in 1810
- Then was a post office before it became a museum in 2007

The museum suffered damage to parts of the roof and the front balcony causing water to infiltrate and damage some framed objects hanging on the walls. The roof has been repaired and the museum is now open to the public (Fig. 20.).
It is quite amazing that no artifacts have directly suffered from the storm, especially considering the layout of the exhibition rooms. Most of the panels and vitrines are covered with posters and reproductions of photos and paintings. Many artefacts are ethnographical or archeological from the indigenous past of the island. A few original objects are to be found among which a large map of the island from 1776, a silver staff given as an official present to the governor, a cabinet with china and an old oxidized clock, etc. There is also a wooden vitrine with books and paperbacks hanging next to the open door leading to the balcony (Fig. 18). It is directly exposed to light (even direct sunlight) and the moist air from the nearby sea. One can see that the paper has already turned dark brown.

The museum does not have any climate control, just a few ceiling fans and no security or secured vitrines for the valuable objects. A few colored spotlights shine inside some vitrines and on walls exhibiting posters but also framed prints and colored photographs, of which the colors have long faded away (Fig. 19). The conditions are not suitable for old artefacts, especially photographs.

In the staircase hangs a very large oil painting depicting Queen Victoria. One can see that it has suffered from sea water. It needs to be unframed and looked at by a paintings conservator.

Mrs. Seraphine said that there is a storage in another location but she has no knowledge of the content and does not have a key for it. Therefore she does not know if other objects have sustained damage.
• **Agricultural Library**

**Contact:** Mrs. Samora Lawrence, Library Assistant

The roof withstood the storm but doors and windows were broken and water could flow in. The floors covered with rug stayed wet for a long time. The building had no electricity for a month.

Mrs. Lawrence was back in her office a day after the hurricane, afraid that looters would steal the electronical equipment. She is the only personnel of the Library. She was told to throw away all the wet items. The loss is estimated at 30%.

The room is equipped with an AC unit and a fan. The space is currently used by other staff from the Ministry of Agriculture that had to be relocated after their units were damaged by Maria. The Library is very crowded now (Fig.21). The old rug is still covering the floor and should be replaced as it probably is a health hazard.

• **Old Mill Cultural Center**

**Contact:** Ms. Geiselle Hyacinth, Mr. Raymond Lawrence, Mr. Aron Hamilton

The site consists of two buildings: the old mill and the plantation house.

The roof of the old mill was greatly damaged (Fig.22). It used to house the offices, a storage space for all new publications, contemporary paintings and an exhibition room. The plantation house was the actual museum but after the hurricane, the staff had to move there until the roof of the main building is restored. This should occur within a month.

Many publications were damaged by water and cannot be sold anymore (Fig.24). There is a collection of cassette tapes, dvds and videotapes in a former office that need to be kept in a cooler and dryer climate. There were no archives or other records seen.
The plantation house survived the hurricane rather well. Posters cover the walls and some traditional “hairy” costumes still remain from the former museum exhibits (Fig. 23). The space is now filled with desks and staff.

![Figure 23. Old mill outside and inside](image)

![Figure 22. Traditional costume](image)

![Figure 24. Publications sold at the Mill](image)
• **Police Department – SSU Police Academy**

  **Contact:** Corporal Ivan Gachette

  The only building we visited was the Police Academy which suffered greatly of hurricane Maria (Fig.25). The entire roof blew off and the winds and water did the rest. Partition walls are gone and there is nothing left of the office, the classroom nor the library which contained 350 law books, specific training books for the police.

  We have not seen any other police records, which were kept in another building. We were told that they were damaged entirely.

  ![Figure 25. Police Academy building](image)

• **Treasury Department**

  **Contact:** Mrs. Simon

  The building, situated next to the Documentation Center suffered similar type of damage (Fig.26). The ground floor housing the computer center was flooded and almost all the electronical equipment was lost (Fig.27). The first floor, having larger windows than the Documentation center, were battered by heavy winds and water, gushing into the offices (Fig.28).

  The staff had to be relocated to the nearby financial center. The building still needs to be repaired, starting with the front door rolling shutter that cannot be

  ![Figure 26. Treasury building](image)
closed, causing a security issue for the highly sensitive records kept in this department. Mrs. Simon hopes they can move back within 3 months.

The ground floor of the “bunker” was used as a storage unit for the Treasury and has also suffered from flooding. Documents placed on the lower shelves visibly need attention as some of them still feel moist and mold has been growing on furniture even though the room seems to be dry now. Without any climate control and bearing in mind the high level of humidity and temperature in this room, one should consider removing the molded furniture, drying the still wet documents and isolating the moldy elements for further treatment (be it dry mold removal, disinfection or digitalization).

- **Bath Estate, Ministry of Education, Education Book Scheme**

  **Contact:** Mr. Frampton and Ms. Lisa Royer

  We finally went to a former school where staff was relocated in old classrooms. We were told that documents were wet and had been placed into a container near the former office, a few meters away. We were not brought to see this container. Mr. Frampton opened the doors of another container situated along the side of the building, under a roof (Fig.30). It seemed in rather good shape, containing school material of which only 5% had suffered damage by leakage. Access into the container was denied because they were waiting for treatment against rodents. Mr. Frampton was not being very helpful and openly admitted that he was not interested!

  We then met Ms. Royer in a former classroom where she showed us all the new books that had been received. The boxes were all stacked up on the floor (Fig.29). There were no bookshelves available. The only bookshelf in the room was situated along the wall, still full with books damaged by water. No selection was made as to which books were maybe reusable. Ms. Royer seemed overwhelmed by the situation and the shortage of resources made available. She came to attend the workshop to learn more about salvaging books.
PORTSMOUTH, second largest town of Dominica

• **Portsmouth Library**

  Contact: Ms. Monique Matthew, Librarian II

  Almost the entire roof of the building was gone (Fig. 31). Mrs. Matthew came to the site one day after the hurricane. At first, she had to deal with the aftermath of hurricane Maria alone because the rest of the staff could not reach the Library. They were able to access the library only 4 days later, which is already amazing considering the state of the roads after the storm. Several volunteers came to help as well.
They first made a path to a shelf that had stayed up and used a large tarpaulin over 2 parallel shelves to create a safe zone where they could work without getting wet. Electricity is still not available.

Mrs. Matthew estimates the loss of books at 90%. Fortunately, the Portsmouth mobile Library has sustained no damage and is out and running providing some solace to the greedy readers.

• **Cabrits National Park and Fort Shirley**

  **Contact:** Dr. Lennox Honychurch,

  - Archeological artefacts (Fig. 34)
  - Historical Monument restored in its original state
  - Museum

  Dr. Honychurch is a well-known figure of the island. Trained archeologist, he is a historian, a writer and a former politician very much involved with the past of Dominica. His personal collection is the core of the National Museum of Roseau, which he helped establish.

  He is also the thriving force behind the restoration of the main buildings of Fort Shirley (Fig. 35), applying well documented old building techniques into the elevation of the rest of the walls, the windows and shutters, as well as the wooden beam structure of the roof. Dr. Honychurch believes that this is the reason why all the fort buildings have sustained the hurricane so well and is planning to publish an article on the subject to share his findings with his islanders but also the rest of the Caribbean islands that face the danger of hurricanes.
Figure 35. One of the buildings inside Fort Shirley
The table below gives an estimate of the damage to buildings and collections:

<table>
<thead>
<tr>
<th>Locations</th>
<th>Damage to building</th>
<th>Loss of collection</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DLIS</td>
<td>10%</td>
<td>None?</td>
<td>In use</td>
</tr>
<tr>
<td>- Doc. Center</td>
<td></td>
<td>1 document</td>
<td></td>
</tr>
<tr>
<td>- Archives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roseau Library</td>
<td>100%</td>
<td>75%?</td>
<td>Relocated at DLIS</td>
</tr>
<tr>
<td>- no restauration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Planning Dpt.</td>
<td>80%</td>
<td>Still needs to be assessed, maybe 50%</td>
<td>Staff only is relocated</td>
</tr>
<tr>
<td>Registry</td>
<td>25%</td>
<td>15 bags (%age unknown)</td>
<td>In use</td>
</tr>
<tr>
<td>- Civil Registry</td>
<td></td>
<td>15% (not accessible)</td>
<td>No access</td>
</tr>
<tr>
<td>- Law Library</td>
<td></td>
<td>5% (office records)</td>
<td>In use</td>
</tr>
<tr>
<td>- Titles Dept.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roseau Presbytery</td>
<td>25%</td>
<td>5%?</td>
<td>Relocated</td>
</tr>
<tr>
<td>Archive of the diocese of Roseau</td>
<td>none</td>
<td>none</td>
<td>In use</td>
</tr>
<tr>
<td>National Museum</td>
<td>20%</td>
<td>Only painting is staircase</td>
<td>In use</td>
</tr>
<tr>
<td>Agricultural Library</td>
<td>10%</td>
<td>30%</td>
<td>In use</td>
</tr>
<tr>
<td>Old Mill Cultural Center</td>
<td>50%</td>
<td>75% publications</td>
<td>In use partly</td>
</tr>
<tr>
<td>- Old mill</td>
<td>None</td>
<td>None</td>
<td>Staff relocated here</td>
</tr>
<tr>
<td>- Plantation house</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police Academy</td>
<td>90%</td>
<td>100%</td>
<td>Closed</td>
</tr>
<tr>
<td>Treasury</td>
<td>60%</td>
<td>unknown</td>
<td>Closed, staff relocated</td>
</tr>
<tr>
<td>Bath Estate, Education book scheme</td>
<td>unknown</td>
<td>unknown</td>
<td>Relocated staff</td>
</tr>
<tr>
<td>Portsmouth Library</td>
<td>80%</td>
<td>90%</td>
<td>Closed</td>
</tr>
<tr>
<td>Fort Shirley, Portsmouth</td>
<td>none</td>
<td>none</td>
<td>In use</td>
</tr>
</tbody>
</table>

This mission was very well organized by Mrs. Raymond and I was really impressed by her dedication, her excellent management skills, her knowledge, extending far beyond her level of education and her modesty. She is surrounded by an efficient team, always ready to help and eager to learn\(^1\). The Documentation Center, under her leadership since 2015, is a beacon for the community. It has been operating and running just a few weeks after the hurricane thanks to the hard work of the staff.

Mrs. Raymond has written a disaster Preparedness and Recovery Plan in May 2016, which is being reviewed every year. The plan is destined for all staff of the Dominica Library and Information Service (DLIS) in Roseau, Portsmouth

\(^1\) One of the staff members, Mr. Prince St-Jean, will start an MA in Archival Administration at the University of Wales
and Marigot. In this plan she clearly marked which collections should be given priority and which area of responsibility is given to each staff member. It provides pre-disaster preparation measures and includes a list of emergency supplies which is also re-evaluated annually. An appendix is dedicated to recovery of books that have sustained water damage and show signs of mold growth. A clear chain of command is set up so that everybody knows who he/she has to report to, even if someone is absent.

With this shared knowledge and much sweat and determination, the staff have cleaned premises and saved many books that would have been discarded otherwise. They found creative ways to dry the documents that could be saved (Fig. 36).

Once they were finished with this task, they started offering their help to other institutions, like the Registry for instance which was mentioned earlier.

![Figure 36. Drying books at the Documentation Center](image)

Dominica faces many risks due to natural disasters and has been preparing for them to some extent. When calamity strikes, of course the priority is to save lives and make sure communications and transport are reestablished as soon as possible. The general feeling among the population is that government has failed by not having prepared for the storm, and announced it much too late.

Maria had such a big impact that there is need for a whole new strategy for the entire island. Much has been done in terms of disaster preparedness, according to Mrs. Raymond. The island has a National Emergency Organization as well as a National Disaster Plan, but everything needs to be revisited after this exceptional hurricane.

The challenges of post disaster management have caused much unrest and during my stay, a change of cabinet occurred. As a result of that, a new ministry was created: the Ministry of Environment, Climate Resilience, Disaster Management and Urban Renewal!

During this mission, it also became clear that salvaging cultural heritage and records of historical value stands very low on the list of priorities when it comes to post disaster management. It took much too long before clearance was given to access buildings with important records. Security is also crucial, to avoid looting or theft of sensitive
material, for instance at the Treasury. And it is worrying to see the state of the Department of Physical Planning more than 6 months after the storm.

Mrs. Raymond showed me briefly the National Plan in print. She appears in one of the many columns but not by name, just her function, Chief Librarian. No further information is added as to what public authorities should be doing once Mrs. Raymond has reported to her superior, Permanent Secretary (PS) of Education, after a natural disaster.

When we met with PS of Education, Mrs. Chandler Hyacinth, she agreed that historical and cultural artifacts and documents should be given more attention within the National Disaster Plan and be properly integrated in the recovery phase.

**NEEDS**

**Prioritizing**

Creating a list of monuments, artefacts and documents that are considered of National Value. Within each collection or department the same preselection should be made. These collections should be held separate or grouped, properly packed, labelled and noticeably marked as a priority item (in case of an evacuation).

**Preservation**

Still much has to be done to inform the caretakers of collections and museums on basic preventive conservation measures and the necessity of climate control to preserve objects for a longer period of time. The use of archival boxes for current and past records make handling, sorting and selection easier. They create a layer of protection around paper files and also old books. They should be used more systematically.

- Archival equipment from thermo-hygrometers to boxes. After reading this report and attending the workshop, all parties involved should have an idea of what they need, or at least where to find the information required to produce a wish list
- Books and Document Scanners
- Equipment for the Libraries, bookshelves and furniture
- Training in preventive conservation, archival studies, record and storage management, all fields related to conservation and heritage
- A new repository for the National Archives, where Government records can also be properly managed in the future
- A new National Library with a safe space for the special collections

**Health issues**

A major concern now is that many records, which have been saved and are now dry, are still covered with mold residues that need to be treated (see the Law Library). All these documents could become a health hazard. I have demonstrated how to remove residual powdery mold from dry documents using vacuum and
HEPA filters, but personnel need protective gear to undertake such work, and maybe some sort of tent, like on the picture below (Fig. 37), in order to isolate treatment areas from office areas.

![Protective tent used for treatment of mold, Conservation Center for Art and Historic Artefacts. Photo by Juliet Baines.](image)

I am also very worried about the Agricultural Library where the rug should be replaced rapidly because it is a definite health hazard.

As of today, many documents are still moist or even wet, due to ongoing water seepage and storage in open air or insalubrious basements. After so many months the outburst of mold is such that it is of utmost importance that staff protect themselves well when they start recovery!

Further disinfection treatment on documents with Gamma radiation cannot be undertaken due to lack of this specific equipment and specialized staff.

**Disaster preparedness**

The persons attending the workshop have agreed to write their own disaster plan, using the one from the Documentation Center as a model.

- Emergency kits at each location
- Extra tarpaulin and large plastic boxes with covers for the most precious items
- Extra protective gear (gloves, masks and overalls)
- Tents to be used as workspaces for salvaging or treating infested documents
- A designated coordinator of operations per service, who organizes drills
- Contacts and appointments with local freezing facilities
- Alternate electricity power provided by generators or solar systems
CONCLUSION

Culture and history may not be a priority but if you make it one then you can achieve much. The Documentation Center and its dedicated staff are the proof of that. They have also been reaching out to other institutions and can be used as a model in many ways. Still the staff needs to continue to gather more information in archival matters and conservation treatment.

Hopefully, the group gathered for the workshop will combine forces and set up a network that can reach out over the whole island. Mrs. Raymond agreed to play a leading role, ensuring the group gets together regularly, be it for writing the disaster plan, sharing information, following trainings or classes, borrowing small equipment or coordinating large orders of materials, etc.

Due to the interest shown for the workshop by government staff (including the Ministry of Culture) as well as the constructive meeting with the PS of Education and Human Resources, I am confident that archival records and cultural heritage will get the necessary attention.