Mitigating catastrophic risk from climate change through policy and technology

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Introduction

Most institutions rely on their disaster management plans to address threats to collections by climate change. This localized focus ignores the larger national and global problem. Many institutions have been moving ahead with digital preservation programs to safeguard their assets, but increasingly little has been mentioned regarding traditional microform preservation.

Although SAA provides climate change resources for archivists and a handful of briefs, actions, and resolutions, there is no one group within the organization solely dedicated to climate change. Archivists have not banded as one united profession to advocate to stop climate change at a sustained, national level.

Problem Statement

Will local disaster management planning and digital preservation be enough to address threats to collections from climate change? What advocacy has been done and has it been effective?

Research Methods

A general literature review was conducted to see if the issue has been addressed in scholarly articles. A further search was conducted to see if other archivists have addressed the problem by forming advocacy groups. Subsequent climate data was observed to make note of geographic areas within the U.S. with projected increases in extreme weather events and other climate risks that would adversely affect archives and data centers.

Further Research

- Comprehensive survey needed to document efforts of American archives to mitigate climate risk
- Continue to monitor existing groups (Project_ARCC) and conferences for updates on advocacy

Results & Findings

- Overreliance on storing AIPs with commercial data centers located in areas with extreme weather, better transparency needed
- Novel technological approaches for preservation receive little attention. Some solutions include:
  - Embedding human readable metadata onto microfilm to recreate digital objects in case of disaster
  - Using smart paint to shield electronics from potential nuclear disasters or EMP
- Need for centrally focused advocacy group specifically on stopping climate change (not disaster management)

Select References


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Models showing the likelihood of extreme weather events on the day of the SAA Research Forum. Climate change increasingly poses greater risks to collections and data centers. (NOAA, Data Snapshots, https://www.climate.gov/maps-data/data-snapshot.)