Protection of museum collections in emergency situations: Solutions used in the state of Vermont (USA)

Jacek Dworzecki – Izabela Nowicka – Andrzej Urbanek – Izabela Szkurłat – Wojciech Horyń

Prof. et. Prof. Jacek Dworzecki, PhD. AMBIS University
Military University of the Land Forces in Wroclaw Poland
e-mail: jacekdworzecki@o2.pl
https://orcid.org/0000-0002-9357-5713

Assoc. Prof. Izabela Nowicka, PhD.
Military University of the Land Forces in Wroclaw Poland
e-mail: izabela.nowicka@awl.edu.pl
https://orcid.org/0000-0001-8974-0803

Assoc. Prof. Andrzej Urbanek, PhD. Pomeranian University in Slupsk Poland e-mail: andrzej.urbanek@apsl.edu.pl https://orcid.org/0000-0003-0667-4068

Msc. Izabela Szkurlat, PhD.
Pomeranian University in Slupsk
Poland
e-mail: izabela.szkurlat@apsl.edu.pl
https://orcid.org/0000-0001-6320-8421

Assoc. Prof. Wojciech Horyń, PhD. Military University of the Land Forces in Wroclaw Poland e-mail: wojciech.horyn@awl.edu.pl https://orcid.org/0000-0002-9887-5889

> Muzeológia a kultúrne dedičstvo, 2023, 11:2:73-85 doi: 10.46284/mkd.2023.11.2.4

Protection of museum collections in emergency situations: Solutions used in the state of Vermont (USA) The article presents organisational solutions for the protection of museum collections and cultural heritage sites using the example of the state of Vermont (USA). Also described are the solutions adopted by US nationwide agencies established to respond to natural disasters. In addition, the article introduces the mechanisms and organisational and legal solutions for managing information in connection with an emergency situation, taking into account the needs for protecting museum collections and objects important to the culture and history of the residents of the state of Vermont. The article in question was prepared on the basis of expert interviews, analysis of the literature and current laws and regulations.

Keywords: museum collections, protection, state of Vermont (USA), crisis situation

Introduction

Cultural heritage, tangible and intangible, is recognised by the international community as a pro-development stimulator of increasing importance to modern societies. The human community has recognised the protection of its heritage as extremely important and thus also requiring a specific strategy, both locally and globally. This protection is shaped through the prism of legal and organisational structures in both peacetime and wartime dimensions. There is no doubt that the state of threat to cultural heritage posed by armed conflict regardless of its scope is enormous. To ensure physical protection when relocating museum or cultural heritage collections, it is necessary to develop proper handling procedures and implement effective organisational and technical solutions. They will reduce the risk of losing, for example, exhibits during floods, fires, snowstorms or an attack by the armed forces of an aggressor state that does not abide by any international conventions and agreements.

The subject of analysis within the framework of this article is the information obtained in the framework of expert interviews and concerning the applied organisational and legal solutions and the procedure of information management by entities obliged to protect museum collections and objects classified as cultural heritage in the event of a crisis situation in the example of selected museum facilities of the state of Vermont (USA).

Information from experts from the State of Vermont Historic Preservation Office and from the Federal Emergency Management Agency (hereafter: FEMA) shows that efforts to protect cultural heritage in emergency preparedness and response cover prevention efforts, evacuation procedures, emergency response staff responsibilities, salvage operations and post-disaster assessments. This type of action is the foundation for protecting the cultural heritage of the United States of America in the event of an emergency.

The issue that was analysed during the interviews conducted by the authors of the article with American experts representing selected institutions of the state of Vermont concerned the problem of the protection of museum collections and cultural heritage objects and the correlation occurring between the subjects – employees of, for example, a given museum (who in the event of an emergency situation would face the evacuation of museum collections in their possession) and regional and national emergency management entities responsible for the implementation of comprehensive/systemic protection with regard to US cultural heritage.

Experts from around the world on the issue of practical cultural heritage preservation emphasise that every cultural repository needs two management structures: the day-to-day, business-as-usual hierarchy, and a "supercharged" management structure that takes over temporarily during a crisis or whenever events threaten to overwhelm normal business routines.

¹ DWORZECKI, Jacek, NOWICKA, Izabela, URBANEK, Andrzej, SZKURŁAT, Izabela. Legal protection and safety of works of art and other objects with historical or scientific value borrowed from other countries for the purpose of temporary exhibitions organised within the territory of Poland. In: *Muzeológia a kultúrne dedičstvo/Museology and Cultural Heritage*, vol. 10(2), 2022, p. 81. ISSN 1339-2204.

² ALEXANDER, Edward P., ALEXANDER, Mary, DECKER, Juilee. *Museums in motion: An introduction to the history and functions of museums* (3rd ed.). Lanham: Rowman & Littlefield, 2017, p. 43.

In meetings with J. T. Hart, Jr.³ and Amber Wingerson,⁴ representing The Sullivan Museum and History Center, and also Megan Liptak (Norwich University),⁵ Albie Lewis (FEMA),⁶ Katelynn Averyt (Smithsonian Institution),⁷ Jess Robinson (Division for Historic Preservation)⁸ and Laura Trieschmann and Jamie Duggan (Vermont Archaeology Heritage Center)⁹ the authors of the article based the interviews around issues such as:

- What types of potential natural hazards, disasters, and civilisation events are the collections collected in Vermont state museums most vulnerable to?
- In the case of the Sullivan Museum and History Center, who is responsible for creating crisis response plans and taking the first actions to protect the museum collections?
- What role does FEMA play in activities aimed at protecting cultural heritage and museum collections in connection with the occurrence of a crisis situation?

The interviews used a standardised expert interview script, which was approved in advance by the interviewes. During the interviews, the experts had unlimited opportunities to speak, and the scope of the problems of preserving museum collections, which were initially assumed for discussion, was significantly expanded thanks to the openness of the experts and their willingness to share their knowledge and experiences acquired over many years of performing their professional duties.

This article will present only selected issues raised during the interviews conducted during the authors' study visit to the United States. The full results of the research will be published at a later date, after a comprehensive analysis of the obtained survey results, which is still ongoing. The text of the article also includes information on the organisation and functioning of American institutions whose representatives participated in the research.

The Sullivan museum and history center in Norwich

The Sullivan Museum and History Center is the official museum of Norwich University, named for General Gordon R. Sullivan (US Army, retired), a 1959 Norwich graduate. It is located in Northfield, Vermont, and opened in 2002. The 16,000-square-foot facility contains both permanent and changing exhibits depicting items and exploring themes from the school's 200-year history and broader American military history.

The Sullivan Museum and History Center has a long-standing partnership with the Smithsonian Institution. This partnership brings many opportunities for growth for both institutions and for Norwich University. Through this collaboration, the Sullivan Museum and

³ John T. Hart, Jr. – Director Sullivan Museum and History Center, 158 Harmon Drive Northfield, Vermont 05663, USA.

⁴ Amber Wingerson - Curator of Exhibits and Collections, Sullivan Museum and History Center.

Megan Liptak – Assistant Director-Research Centers, Office of Academic Research, Norwich University, 158 Harmon Drive Northfield, Vermont 05663, USA.

⁶ Albie Lewis - Col. (Ret.), Vermont National Guard and FEMA, Hyattsville, Maryland 20782-8055, USA

⁷ Katelynn Averyt – Disaster Response Coordinator, Smithsonian Cultural Rescue Initiative, Smithsonian Institution, 600 Maryland Ave SW, Washington, DC 20002, USA.

⁸ Jess Robinson – Vermont State Archaeologist, Division for Historic Preservation, One National Life Drive Deane C. Davis Building, Montpelier, Vermont 05620, USA.

⁹ Laura Trieschmann – Vermont State Historic Preservation Officer; Jamie Duggan – Director of Preservation, State of Vermont, State of Vermont Cultural Heritage Protection, Vermont Archaeology Heritage Center, 60 Washington Street, Barre, Vermont 05641, USA.

History Center has permanent access to collections held in the national collection housed in the 19 Smithsonian museums located across the US. On loan, exhibits from collections related to the history of Norwich University, the state of Vermont and the history of the region's contribution to the evolution of American history and the development of North American society are regularly presented in the form of thematic temporary exhibitions.¹⁰

The Sullivan Museum and History Center is named in honour of General Gordon R Sullivan, the highest-ranking graduate of Norwich University, who served as the 32nd Chief of Staff of the United States Army. The full-time staff serving the museum consists of the positions of: Director, three curators of permanent exhibitions and temporary displays, a curator of thematic collections, a curator of education and public programmes and a museum administrative officer. The museum's collection contains more than fifteen thousand artefacts including textiles, insignia, war trophies, weapons, jewellery, paintings, drawings, prints, sculptures, maps, scientific paraphernalia, architectural plans and furniture. The Sullivan Museum and History Center operates under the guidelines established by the American Association of Museums for the management of collections and also addresses ethical standards for professionals and best practices for museum facilities. For many years in developed countries around the world, the highest ethical standards in museology have been the working foundation for every modern professional manager who manages museum objects and collections. Lach year, the museum's collection is fuelled by new exhibits from private collectors, local donors and individuals with ties to the state of Vermont and US military history.

The museum hosts several thousand visitors annually and its funding comes from visitor fees, earmarked grants from the state government, a subsidy from Norwich University and donations.

Division for historic preservation in Montpelier, Vermont

The preservation of the state of Vermont's historic resources and cultural assets is the primary responsibility of the Vermont Division for Historic Preservation (hereafter: VDHP). The State Historic Preservation Office (hereafter: SHPO), part of the Agency of Commerce and Community Development, is responsible for executive implementation in this area. The VDHP plays a pivotal role in guiding the state's historic preservation programme, including the maintenance of hundreds of sites that relate to the rich cultural heritage of the state of Vermont. The Vermont Division for Historic Preservation operates under regulation 22 V.S.A. § 723(10) concerning the principles and implementation of the purposes embodied in the Vermont Historic Preservation Act¹² and The National Historic Preservation Act,¹³ which is legislation concerning the preservation of America's historic and archaeological cultural

¹⁰ Source: Interview with Amber Wingerson (Curator of Exhibits and Collections, Sullivan Museum and History Center). The interview was conducted on November 8, 2022 in Northfield (Vermont) by the article's authors.

¹¹ EDSON Gary (ed.). Museum Ethics: Theory and Practice.. London: Routledge, 1997, pp. 91–94.

¹² The Vermont Historic Preservation Act was established in 1975 by the Vermont Legislature with the passage of Title 22 V.S.A. Chapter 14: Historic Preservation. The Act requires that state agencies take measures to preserve any historic resources under its ownership. A state agency, department, division or commission must consult the Vermont Advisory Council on Historic Preservation before demolishing, altering or transferring any property that is of historical, architectural, archaeological and/or cultural significance, including any property listed in the State and/or National Registers of Historic Places. It is the responsibility of the state agency to initiate consultation with the Division for Historic Preservation and fulfill the requirements of 22 V.S.A. Chapter 14. Source: State of Vermont, Agency of Commerce and Community Development.

¹³ The National Historic Preservation Act of October 15, 1966 (Public Law 89-665 U.S.C. 300101, pp. 915–919).

heritage. The Act created the National Register of Historic Places, the National Historic Landmarks Program and the State and Tribal Historic Preservation Offices.¹⁴

Vermont Archaeology heritage center

The Vermont Archaeological Heritage Center, which was established in 2006 (hereafter: VAHC) is located in two facilities. The centre has facilities in the historic Spaulding Graded School in Barre and in the Mount Independence State Historic Site in Orwell. The VAHC serves as a central repository for artefacts and archival collections relating to the past of the lands of the state of Vermont and the northeast of North America. The centre hosts exhibitions, workshops and lectures and its collection is based on over 750 archaeological sites. The VAHC is funded by the state of Vermont's own resources, government earmarked grants and donations from individuals and public institutions.

Smithsonian institution

The Smithsonian Institution was established by an act of Congress in 1846 as an independent federal trust fund whose mission is to expand and disseminate knowledge of American culture, customs, traditions and heritage. Responsibility for the administration of the Smithsonian Institution rests with the Board of Regents, which consists of the Chief Justice of the United States, the Vice President of the United States, three members of the United States Senate, three members of the United States House of Representatives and nine citizens. The executive body of the Smithsonian Institution is the Secretary, who is appointed by the Board of Regents. The Smithsonian Institution currently manages 21 museums, 21 libraries, the National Zoo, research centres and several educational units and centres. The Smithsonian Institution manages the largest number of museum facilities in the world, employing several thousand people in facilities located around the globe. The Smithsonian Institute's Cultural Rescue Initiative Division is tasked with responding to emergencies that directly threaten the objects that make up North America's cultural heritage and world heritage sites. The division manages SCRI's research data related to cultural heritage at risk, and coordinates fieldwork for emergency response and the deployment of state or government resources for national and international missions related to the protection of museum collections and cultural heritage sites. In recent years, the Cultural Rescue Initiative Division has carried out assignments in Haiti, Syria, Iraq, Egypt, Mali, Nepal and the United States.

Federal emergency management agency

The Federal Emergency Management Agency is a government agency that has been under the US Department of Homeland Security since 2003 and is responsible for emergency management. FEMA is an agency focused on hazard reporting, planning and the management of disaster prevention and mitigation activities. In its activities, FEMA cooperates with many other federal agencies and non-governmental organisations. Currently, FEMA has more than 15,000 employees and is supported by a 4,000-strong volunteer corps. As part of its activities, FEMA personnel are also engaged in analysing threats and developing legal, organisational and technical solutions aimed at protecting museum collections and cultural heritage sites

¹⁴ Source: Interview with Jamie Duggan (Director of Preservation, State of Vermont). The interview was conducted on November 10, 2022 in Barre (Vermont) by the article's authors.

threatened by the effects of natural disasters and other emergencies of both military and non-military nature.

Opinions of experts involved in the protection of museum collections and cultural heritage sites of the state of Vermont (USA) on potential threats and solutions used to prevent and neutralise the effects of emergencies caused by natural forces or caused by human factors

Experts who participated in the series of interviews indicated that in the actions taken by the state of Vermont institutions established to protect museum collections and cultural heritage sites, the basic breakdown of potential threats includes those caused by nature – i.e. flood, drought, fire, earthquake, hurricane, tornado, avalanche or landslide, volcanic eruption, extreme cold or heat – and threats whose main causal factor is human, i.e., disruptive individual, explosion, fire, hazardous materials spill, gas leak, medical emergency, mould outbreak, power outage, severe weather, suspicious package or item, suspicious person and vandalism, active shooter and other threats (e.g., threatening call or bomb threat). Experts pointed out that the state of Vermont is most often threatened by natural phenomena in the form of flooding and the occurrence of hurricanes and tropical storms.

Another question in the interviews concerned the responsibilities of the staff of the state of Vermont museums in the protection of museum collections, with a special focus on the situation in which there is a threat of natural disaster. Information was obtained on the responsibilities of the superintendent of museum collections, the custodial officer (responsible for individual collections), the facility manager and the interdisciplinary teams set up to respond to crisis situations and emergencies.

The superintendent has overall responsibility for preserving and protecting the park's museum collection. The superintendent is responsible for park-wide emergency planning and preparedness. The superintendent may delegate responsibilities for emergency operations coordination to the chief ranger, park safety officer, facility manager or other staff as appropriate. This delegation is made in writing and filed in the park central files and/or the superintendent's Orders.

The custodial officer, is responsible for preserving and protecting the museum collection, including museum emergency planning and preparedness. The custodian officer is responsible for developing and completing:

- risk assessments including:
- NPS Checklist for Preservation and Protection of Museum Collections;
- Risk Assessment Worksheet;
- Museum Mitigation Action Plan;
- Museum Collections Emergency Operations Plan (MCEOP) in collaboration with the emergency operations coordinator and facility manager; and
- the prioritisation of objects for relocation and salvage using the First Priority Criteria for Object Relocation and Salvage.¹⁵

¹⁵ Source: Interview with Laura Trieschmann (Vermont State Historic Preservation Officer). The interview was conducted on 10 November 2022 in Barre (Vermont) by the article's authors.

The custodian officer collaborates with the emergency operations coordinator to coordinate museum emergency response and salvage activities and training and with the facility manager to develop and implement the Museum Mitigation Action Plan.

The facility manager works with the custodian officer and emergency operations coordinator to:

- ensure regular inspection, testing and maintenance of the structure and building envelope, utilities, equipment and systems in structures and spaces housing collections in accordance with nationally-recognised codes, manufacturer's specifications and NPS policies and guidance;
- complete a comprehensive condition assessment of the building envelope, utilities, equipment and systems for structures housing collections; and
 - generate information.

The interdisciplinary team, coordinated by the curator, participates in planning and preparedness for museum emergencies. The team should include the emergency operations coordinator, facility manager, safety officer, chief of cultural and/or natural resources and regional curator. It should additionally include the historical architect advisor, cultural landscape specialist, conservator and other specialists as needed. The team should meet regularly to discuss emergency planning and mitigation projects.

In the case of the Sullivan Museum and History Center, the creation of emergency response plans and initial actions to protect the museum's collections are the responsibility of the facility's director, who works closely with Norwich University authorities and the state FEMA office in this regard. The plans are updated once every three years. Once a year, drills are conducted in cooperation with Norwich University and local emergency services and FEMA during which actions are taken to assess the effectiveness of the procedures in place for the protection of museum collections in the event of an emergency situation caused by natural factors as well as those triggered by human factors. Museum employees are responsible for preparing a catalogued list of the museum's holdings and selecting them in terms of, among other things, the level of difficulty in the context of their evacuation in the event of an emergency. In the event of a need to evacuate museum collections, the university delegates military student cadets to assist, who, together with museum staff, use technical means (containers, lifts, trucks, etc.) belonging to local firefighting units, the National Guard and equipment contracted by FEMA for rescue operations. Museum collections can be transported to one of the many museums in the country that are affiliated with the Smithsonian Institution.

A management mechanism called the Incident Command System is used as part of the ongoing response to an emergency situation directly threatening museum collections and cultural heritage sites. The Incident Command System is a highly standardised, top-down, military-based management structure that supersedes the management structure of every other agency that responds to an event.¹⁸ This management tool is used to meet the demands of small or large emergency and nonemergency situations. It represents best practices and has

¹⁶ Source: Interview with J. T. Hart, Jr. (Director Sullivan Museum and History Center). The interview was conducted on November 8, 2022 in Northfield (Vermont) by the article's authors.

¹⁷ Source: Interview with Megan Liptak (Assistant Director-Research Centers). The interview was conducted on November 10, 2022 in Norwich University (Vermont) by the article's authors.

¹⁸ CARMICHAEL, David. W. Implementing the Incident Command System at the Institutional Level: A Handbook for Libraries, Archives, Museums, and Other Cultural Institutions. Washington: Heritage Preservation, 2010, p. 27.

become the standard for emergency management across the United States.¹⁹

The task of the superintendent of museum collections within the Incident Command System mechanism-based activities is to:

- ensure that collections and structures housing collections are included in ICS planning documents, including the Business Continuity Plan;
- liaise with the head of the ICS Operations Section and attend planning meetings to represent the needs of the collections and coordinate activities that affect the collections and structures housing the collections; and
 - organise regular ICS training for all museum staff.

Participants in the interviews were also asked to provide a definitional snapshot relating to the concept of emergency planning, which is commonly used in museum facilities in the state of Vermont. The existing approach in this regard indicates that emergency planning includes risk assessment, removal or reduction of hazards and vulnerabilities and the implementation of emergency operations plans, Emergency Response Steps and salvage procedures.

The issue of the cooperation of museums and other institutions involved in promoting the cultural heritage of the state of Vermont with companies and external institutions within the framework of the Incident Command System was also raised in the interviews conducted. The creation of the currently used ICS solutions has its origins in 2002 when the U.S. Department of Homeland Security prepared two extremely important documents harmonising the scope of actions taken by government agencies in the event of a national emergency. There was the creation of a document called the National Response Plan (U.S. DHS 2004a), which defines the responsibility for implementing actions in the event of a major crisis of a non-military nature, and the creation of a regulation called the National Incident Management System (U.S. DHS 2004b), which indicates the use of specific crisis policy tools, primarily the ICS.²⁰ The NIMS describes the characteristics of ICS creation (U.S. DHS 2004b, 9-12) and the mechanisms and rules for its use (Combining Structural Forms in the Search for Policy Tools: Incident Command Systems in U.S.).

The ICS is a solution that standardises, among other things, the scopes of responsibilities and assigned positions for those participating in rescue operations, the responsibilities of the various components of the system, and the terminology used in operations. The ICS also includes a very clear division of tasks and responsibilities for those carrying out direct rescue operations and those performing activities of an auxiliary nature.

The ICS establishes common planning and resource management processes and allows for the integration of facilities, equipment, personnel, procedures and communications operating under a common organisational structure. Operations related to a regional or nationwide emergency are conducted using the ICS as part of the National Incident Management System (NIMS). The Unified Command System is used when other agencies are involved. Under the ICS, the Incident Commander (IC) has overall responsibility for managing emergency response activities. After the ICS is activated, emergency response activities, including those related to the museum programme, fall under the authority of the IC.

¹⁹ JONES, Jefferson P., NIMS Incident Command System Field Guide 2nd Edition, 2012, pub. Jones & Bartlett Learning, p. 9.

²⁰ FEMA National Incident Management System Third Edition, October 2017, by United States Government FEMA, pub. Independently published, pp. 17-28.

The Incident Commander is assisted in his operations by a three-level information management system. Information is passed through the various levels of command, whose task is to verify and filter the information reaching the Incident Commander. This is intended to eliminate the situation whereby the Incident Commander receives too much information or is burdened with making marginal decisions of a technical nature. Such action is intended to help the Incident Commander focus on the overall response to the emergency situation. The three-level emergency information management system includes: a Public Information Officer position (PIO), a Security Officer position and a Liaison Officer position.

The Public Information Officer:

- advises the Incident Commander on information dissemination and media relations (note that the Incident Commander approves information that the PIO releases);
- obtains information from and provides information to the Planning Section;
- obtains information from and provides information to the community and media.

The Safety Officer:

- advises the Incident Commander on issues regarding incident safety;
- works with the Operations Section to ensure the safety of field personnel; and
- ensures the safety of all incident personnel.

The Liaison Officer:

- assists the Incident Commander by serving as a point of contact for representatives from other response organisations; and
 - briefs and answers questions from supporting organisations.

From the local level, the emergency response process moves to a higher level of decision-making as follows:

- Local first responders use the ICS to manage the incident. If additional assistance is needed, the local Emergency Operations Center (EOC) will assist. Larger communities or counties may have a permanent, staffed EOC directed by a full-time emergency manager; in smaller communities or counties an EOC may be established as needed during an emergency.
- If local resources are overwhelmed by the extent of the emergency, the community requests state assistance. Emergency operations are coordinated from the state EOC. Every state maintains an EOC that can expand as necessary to accommodate incidents. Larger states may have one or more intermediate organisational levels with regional EOCs that are activated when a particular region or district is affected.
- If more resources than the state has available are required, it can request assistance from other states through interstate mutual aid and assistance agreements such as the Emergency Management Assistance Compact (EMAC).
- If local, in-state regional, state and mutual aid resources are inadequate to deal with the event, the governor requests federal assistance via an emergency declaration (for a limited emergency) or a presidential major disaster declaration in a more catastrophic situation. This request is made through FEMA.

An expert representing the Smithsonian Institution who participated in the interviews indicated that her institution holds several training sessions on the implementation of ICS mechanisms each year. These training sessions are addressed to those involved in the preservation of museum collections and cultural heritage sites. According to the expert, the most interesting programme dedicated to the protection of museum collections and cultural heritage sites that the Smithsonian Institution conducts every year is a programme called Heritage Emergency and Response Training DC. During the five-day residential course for 25 heritage and emergency management professionals from across the country, there are thematic workshops, lectures and practical exercises conducted by the staff of the Smithsonian Cultural Rescue Initiative, as well as with the participation of representatives of the Heritage Emergency National Task Force and other subject matter experts from the Smithsonian Institution.²¹ As part of the conducted classes, practical field exercises are also carried out based on scenarios of emergencies, such as natural disasters, the effects of which threaten museum collections or cultural heritage sites. Participants in the exercises become familiar with modern technical and organisational solutions, as well as legal regulations, which make it possible to increase the effectiveness of rescue operations aimed at protecting museum collections.

As another of the experts participating in the interviews pointed out, slightly different organisational arrangements are in place for the operation of state archives located in the United States. While the Smithsonian follows the Incident Command System (ICS) to coordinate operations and recovery, the National Archives has its own Emergency Response Team for collections recovery that consists of staff members who assume alternate roles during an emergency.²² The team consists of an Emergency Coordinator, Recovery Coordinator, Conservator and Emergency Registrar. The Emergency Coordinator decides whether an emergency should be declared and then decides what actions to take and delegates responsibilities as they arise. The Recovery Coordinator leads the recovery effort within the archives, making treatment decisions and actively training staff and volunteers in recovery roles. The Conservator works closely with the Recovery Coordinator to triage collections and complete appropriate treatments. The Emergency Registrar records the details of the emergency response and recovery, including all communications and collection movement.

An expert representing FEMA indicated that FEMA and the federal government have also significantly increased funding for disaster relief and preparedness. FEMA's public assistance programme, for example, was 24 percent larger in 2010–19 than in the previous decade (2000–09). From 2017 to 2020, FEMA allocated \$45 billion in disaster relief and financial assistance to communities across the country. Additionally, since 2002, FEMA has provided more than \$52 billion in grants to support state and local preparedness investments. Included in this amount are funds dedicated to museum facilities, which have been used to develop mechanisms (organisational and technical) that will effectively support emergency operations in the context of protecting museum collections and cultural heritage sites in the event of an emergency that realistically threatens the protected facilities.²³

²¹ Source: Interview with Katelynn Averyt (Disaster Response Coordinator, Smithsonian Cultural Rescue Initiative, Smithsonian Institution). The interview was conducted on November 10, 2022 in Northfield (Vermont) by the article's authors

²² Source: Interview with Jess Robinson (Vermont State Archaeologist, Division for Historic Preservation). The interview was conducted on November 9, 2022 in Montpelier (Vermont) by the article's authors.

²³ Source: Interview with Albie Lewis (Col. Ret. Vermont National Guard and FEMA). The interview was conducted on November 11, 2022 in Hyattsville (Maryland) by the article's authors.

However, FEMA is not the only key player in emergency management at the federal level. An expert, relying on a report by the Pew Charitable Trusts, pointed out that FEMA's Disaster Relief Fund, which is the institution's key source of funding for emergency response, accounted for less than half (44 percent) of all federal funds spent on responses by government agencies and institutions related to disasters that occurred between 2005 and 2014. The remaining 56 percent came from the budgets of 17 major federal departments and agencies, including the Department of Agriculture, the Department of Housing and Urban Development, the Department of Defense, the Department of Transportation and the Department of Health and Human Services.

Conclusion

A number of activities undertaken by institutions responsible for the protection of museum collections and cultural heritage sites in the state of Vermont are carried out on the basis of the Incident Command System and emergency response plans prepared jointly with the government and local authorities. An important issue is to have personnel and technical resources ready for immediate use, which is helped by local authorities, state authorities and organisations with a national character. Exercises initiated by state authorities and nationwide organisations are also constantly being carried out, which affect the level of preparedness of museum institutions in the event of a natural disaster the effects of which pose a real threat to museum collections and cultural heritage sites. ²⁵

The state of Vermont is most often exposed to the occurrence of floods and hurricanes.²⁶ According to experts, adequate preparation and synergistic cooperation between institutions, authorities and residents of the state has allowed, for the past three decades, effective responses to natural disasters. After 1973, there has been no recorded situation in the state of Vermont in which museum collections or large-scale cultural heritage sites were destroyed as a result of a natural disaster.²⁷

References

ALEXANDER, Edward. P., ALEXANDER, Mary, DECKER, Juilee (2017). Museums in motion: An introduction to the history and functions of museums (3rd ed.). Lanham: Rowman & Littlefield. ISBN: 978-1-4422-7879-0.

BAUER, Kilgo, R. (2020). *Preventive care*. In: SIMMONS, John E., KISER, Toni M. (eds), Museum registration methods (6th ed.). Washington: Rowman & Littlefield. ISBN: 978-1-5381-1310-3.

²⁴ FATORIĆ, Sandra, SEEKAMP, Erin. Securing the Future of Cultural Heritage by Identifying Barriers to and Strategizing Solutions for Preservation under Changing Climate Conditions. In: *Sustainability*, no. 9(11), 2143, 2017, pp. 2–20.

²⁵ BAUER, Kilgo, R. Preventive care. In: SIMMONS, John E., KISER, Toni M. (eds), Museum registration methods (6th ed.). Washington: Rowman & Littlefield, 2020, pp. 325–331.

²⁶ CLIFFORD, Deborah Pickman, CLIFFORD, Nicholas R. The Troubled Roar of the Waters: Vermont in Flood and Recovery. Durnham:, University of New Hampshire, 2007, pp. 22–24.

²⁷ SHINN, Peggy. *Deluge: Tropical Storm Irene, Vermont's Flash Floods, and How One Small State Saved Itself.* Lebanon (New Hampshire, USA): University Press of New England, 2013, p. 85.

- CARMICHAEL, David. W. (2010). Implementing the Incident Command System at the Institutional Level: A Handbook for Libraries, Archives, Museums, and Other Cultural Institutions. Washington: Heritage Preservation. ISBN: 978-09829-366-2-7.
- CLIFFORD, Deborah Pickman, CLIFFORD, Nicholas R. (2007). The Troubled Roar of the Waters: Vermont in Flood and Recovery. Durnham: University of New Hampshire. ISBN: 978-15846-565-4-8.
- DWORZECKI, Jacek, NOWICKA, Izabela, URBANEK, Andrzej, SZKURŁAT, Izabela (2022). Legal protection and safety of works of art and other objects with historical or scientific value borrowed from other countries for the purpose of temporary exhibitions organised within the territory of Poland. In: Muzeológia a kultúrne dedičstvo/Museology and Cultural Heritage, vol. 10, no. 2. ISSN 1339-2204, e-ISSN 2453-9759.
- EDSON, Gary (ed.) (1997). Museum Ethics: Theory and Practice. (eds), London: Routledge. ISBN: 978-02039-738-6-8.
- FATORIĆ, Sandra, SEEKAMP, Erin (2017). Securing the Future of Cultural Heritage by Identifying Barriers to and Strategizing Solutions for Preservation under Changing Climate Conditions. In: *Sustainability*, no. 9(11), 2143. https://doi.org/10.3390/su9112143.
- FEMA (2017). FEMA National Incident Management System Third Edition. United States Government FEMA. ISBN: 978-10907-897-1-6.
- JONES, Jefferson P. (2012). NIMS Incident Command System Field Guide 2nd Edition. Jones & Bartlett Learning. ISBN: 978-18904-954-1-1.
- SHINN, Peggy (2013). Deluge: Tropical Storm Irene, Vermont's Flash Floods, and How One Small State Saved Itself. Lebanon (New Hampshire, USA): University Press of New England. ISBN: 978-16116-831-8-9.

Law regulations

The National Historic Preservation Act of October, 15. 1966 (Public Law 89-665 U.S.C. 300101, pp. 915–919).

The Vermont Historic Preservation Act

Internet sources

https://www.nedcc.org/costep/starterkit.pdf (accessed Nov 21, 2022).

https://www.culturalheritage.org/about-us/foundation/programs/heritage-preservation (accessed Nov 21, 2022).

https://www.archives.gov/preservation/records-emergency (accessed Nov 21, 2022).

https://archivescanada.ca/wp-content/uploads/2022/08/RBch5_en.pdf (accessed Nov 22, 2022).

https://training.fema.gov (accessed Nov 22, 2022).

https://libguides.ala.org/disaster/preparedness (accessed Nov 22, 2022).

https://dplan2020.org (accessed Nov 22, 2022).

Other sources

Interview with Amber Wingerson (Curator of Exhibits and Collections, Sullivan Museum and History Center). The interview was conducted on November 8, 2022 in Northfield (Vermont) by the article's authors.

Interview with J. T. Hart, Jr. (Director Sullivan, Museum and History Center). The interview was conducted on November 8, 2022 in Northfield (Vermont) by the article's authors.

Interview with Jess Robinson (Vermont State Archaeologist, Division for Historic Preservation). The interview was conducted on November 9, 2022 in Montpelier (Vermont) by the article's authors.

Interview with Jamie Duggan (Director of Preservation, State of Vermont). The interview was conducted on November 10, 2022 in Barre (Vermont) by the article's authors.

Interview with Laura Trieschmann (Vermont State Historic Preservation Officer). The interview was conducted on November 10, 2022 in Barre (Vermont) by the article's authors.

Interview with Megan Liptak (Assistant Director-Research Centers). The interview was conducted on November 10, 2022 in Norwich University (Vermont) by the article's authors.

Interview with Katelynn Averyt (Disaster Response Coordinator, Smithsonian Cultural Rescue Initiative, Smithsonian Institution). The interview was conducted on November 10, 2022 in Northfield (Vermont) by the article's authors.

Interview with Albie Lewis (Col. Ret. Vermont National Guard and FEMA). The interview was conducted on November 11, 2022 in Hyattsville (Maryland) by the article's authors.