COLLECTIONS RISK ASSESSMENT AT THE DENVER MUSEUM OF NATURE & SCIENCE

Southward, Jude[1], Heather.Thorwald[1], Garnet.Muething[2], Robert Waller[2]*
[1] Denver Museum of Nature & Science, Denver, Colorado, USA
[2] Protect Heritage Corp. Ottawa, Ontario, CANADA
rw [at] protectheritage.com
* Author for correspondence

The Denver Museum of Nature & Science (DMNS) received funds from the Institute of Museum and Library Services-Museums for America program to complete a risk assessment of collections in storage. The goal of the project was to develop a preservation strategy based on a systematic and quantitative evaluation of risks to the collection.

The DMNS collections contain more than one million objects in diverse areas including anthropology, earth and space sciences, zoology, and library and archives. Collections are dispersed among 49 locations, of which only one meets optimal museum standards. The other 48 locations are crowded and lack one or more important features such as fire detection and suppression systems, centralized security, or temperature and relative humidity controls. These conditions jeopardize long-term preservation, restrict public access, and place human safety at risk.

Risks to collections had been identified in previous conservation assessments. Still, the DMNS lacked a comprehensive and balanced understanding of all risks affecting collections. A more holistic understanding is required for daily operational preservation funding. It is critical for the inevitable trade off decisions that will occur in the value engineering phases of facility design as the Museum prepares to build a new collection storage facility in 2011. For example, when cost savings must be found and the Museum is presented a choice of reducing investment in security, climate control, or fire protection, then which choice will have the least impact on expected long term loss of collection values?

This poster discusses the process and outcomes of the risk assessment as it occurred at the DMNS. Participating staff included Research and Collections, Security, Facility Operations, and the Board Champion for Collections. Staff identified 31 collection units to evaluate. A comprehensive list of risks was developed based on the Cultural Property Risk Analysis Model (CPRAM; Waller 2003). In this model, the magnitude of risk is measured as the product of fraction susceptible, loss in value, probability and extent ($MR=FS \times LV \times P \times E$). The DMNS identified an average of 91 specific risks for each collection unit. These risks were grouped into three types: rare, sporadic, and continual. For examples, a major earthquake would be a rare event in Denver, Colorado, while light exposure and damage is continual for some objects on permanent exhibit. Staff identified three kinds of value in which loss in value (LV) might occur; these values are discipline, historic, and public access.

The technical result of the risk assessment exercise is a comprehensive accounting of all identifiable risks to the collections. This will serve as a basis for rational preservation resource allocation both in ongoing collection care and in new facility design. The less tangible but equally important result is a vastly improved mutual understanding of collection preservation issues among all parts of the Museum.

Reference

Waller, Robert. *Cultural Property Risk Analysis Model: Development and Application to Preventive Conservation at the Canadian Museum of Nature.* Göteborg Studies in Conservation 13, ISSN 0284-6578; ISBN 91-7346-475-9 Göteborg Acta Universitatis Gothoburgensis, Göteborg; 2003. xvi + 189 p.p.

Keywords