# Insurance settlement negotiation 

By Cheryl T. Naslund<br>Assistant Physical Sciences Librarian<br>Dartmouth College

and Susan C. George<br>Physical Sciences Librarian<br>Dartmouth College

## A case study following a library disaster.

Kresge Physical Sciences Library serves the Dartmouth College community in the following subject areas: chemistry, earth sciences, astronomy, physics, mathematics and the computer sciences. The collection is composed of approximately 80,000 volumes with more than 1,500 serial titles.

From July through September of 1983 a series of water disasters, associated with the construction of a new addition on the roof, caused significant damage to the collection in Kresge Library. Eight separate flooding incidents occurred resulting in water damage to a total of 1,217 volumes. (For full information regarding this disaster, see Susan C. George and Cheryl T. Naslund, "Library Disasters: A Learning Experience," C $\downarrow R L$ News, April 1986, pp. 251-57).

In an attempt to determine, for insurance purposes, a dollar value associated with the loss of a library collection due to water damage, the following method was developed. It represents an initial effort to determine quickly and effectively a reasonable estimate, based on replacement costs, of damage in partial loss situations for purposes of insurance negotiation. The aim of this report is to serve as a catalyst for the development of guidelines for the calculation of loss associated with water damage that will be acceptable to both libraries and the insurance industry.

Water disasters result in varying degrees of damage ranging from minor edge wetting to thorough saturation: the worst case scenario results in total loss of the material. As a result of this disaster volumes sustained varying degrees of permanent damage ranging from mildly cockled pages with fully
usable text, to usable text block requiring minor repairs or rebinding, to completely unusable fused text blocks in volumes with coated paper. A majority of the material was restored to a usable condition; thus, the primary consideration was to determine what percentage of each volumes' original useful lifespan had been lost.

For ease of calculation, it was assumed that partial damage could be represented as some fraction of total damage as represented by full replacement cost. In addition to visible damage, partial damage estimates should also take into account the potential costs associated with the increased risk of mold and/or mildew growth during the remaining lifespan of the material. Owing to the varied nature of the subject matter and publishing origin of the materials damaged, several procedures, described below, were used to establish accurate replacement costs.

During the disaster an inventory including call number, short title and date was made. This inventory served as the basis for evaluation and was initially searched for materials identified as unique based on date. Owing to the small number of volumes involved published prior to 1950 , the possibility that such volumes might be of significantly greater value than other volumes in the general collection, and the small likelihood of replacement of these volumes with currently in-print editions, all pre-1950 volumes were evaluated separately and current replacement costs for these materials were provided on an individual basis by a rare and out-of-print book dealer whose credentials were acceptable to both the library and the insurance com-

## TABLE 1

## Sampling of Sources for Monograph Price Information

American Book-Prices Current (Dodd, Mead \& Co.) Books in Print (R.R. Bowker Co.)
Books Out-of-Print (R.R. Bowker Co.)
British Books in Print (R.R. Bowker Co.)
International Books in Print (R.R. Bowker Co.)
OCLC database (OCLC Inc.)
Publishers' Trade List Annual (R.R. Bowker Co.)
RLIN (Research Libraries Information Network) database (Research Libraries Group Inc.)

# TABLE 2 <br> Sampling of Sources for Serial and Journal Price Information <br> Single issue of publication <br> Serial accounting system <br> Ulrich's International Periodicals Directory (R.R. Bowker Co.) <br> Irregular Serials and Annuals: an international directory (R.R. Bowker Co.) <br> United States Book Exchange (USBE) 

pany. If complete or nearly complete sets were among items damaged, these were treated on a unique basis owing to the frequent practice of discount pricing for complete sets.

Once the unique titles that were likely to skew a representative sample of the collection had been removed, a random representative sample was used to estimate the total replacement cost for the remainder of the damaged volumes. In selecting a representative sample of the entire collection, it was important to remember that individual physical volumes were being replaced; therefore it was necessary to count all volumes individually rather than as members of a given title. This step required minor editing from catalog card information of the original inventory list because, in the haste to compile it during the disaster, multiple volumes of a single title received a single entry. For purposes of obtaining an accurate random sample, each inventory list entry that included multiple volumes was counted as if it were separate entries for each volume. This approach assumed that the cost of any volume in a set was equal to one divided by the number of volumes in the set (1/\#vol in set) times the price of the set. Although this may not always be the case, in this situation these figures were not extrapolated to replace whole sets and any discrepancies were assumed to accurately reflect replacement costs as incurred.

The damaged volumes consisted of monographs, serials and journal volumes. Because each of these categories were not equally represented in the collection and their average replacement costs differed markedly, the percentage of each type among the damaged materials was determined. In this case, the process was accomplished quickly by a student assistant who compared the inventory list of damaged volumes to a list of Kresge Library journal holdings, marking a " J " adjacent to the
journal entries. The same process was then carried out for the remaining titles, matching them against the serials catalog holdings and marking an " S " adjacent to serial entries. The remaining titles represented monographs. Professional guidance of the student assistant greatly reduced the number of titles that required checking based on the librarian's experience with the titles in the given subject areas. A librarian further checked any titles which presented confusion.

To obtain a random but representative sample of the damaged collection, a selection of 15-20\% of the volumes on the inventory was chosen. The $20 \%$ sample size representing 243 volumes and every fifth item in the damaged collection proved to be manageable. In this case a die was thrown to select the starting entry, and every fifth entry in each of the monograph, serial and journal categories was chosen from inventory pages shuffled to reduce any ordering effect resulting from call number arrangement. In this situation, the inventory was made in a relatively random fashion owing to the fact that many areas of the collection were affected to a small degree and to the fact that frequently only a few books were damaged on any given shelf. Larger scale damage in a restricted area might require a different approach to avoid sampling a systematic relationship between books and to ensure obtaining a truly random sample. It may be possible statistically in some circumstances to use a smaller sample size, but for the initial effort and in the likely event that this procedure would be used with other collections exhibiting differing degrees of homogeneity, a sample size of $20 \%$ was considered, based on consultation with a statistician, to be statistically valid and large enough to include the variation expected from a diverse population. In any given situation it is recommended that consultation concerning the statistical validity of a se-
lected sample size be sought.
Each monographic title in the randomly chosen sample was individually searched and a price established (see Table 1). Volumes which were not located using these sources were then searched in out-of-print dealers' catalogs. For journals and serials, a current issue was examined to determine the availability and cost of back issues. The subscription price, prorated for the number of issues, was used as a last resort if single issue prices were unavailable (see Table 2).

The availability of each volume was determined along with the cost. This becomes critical when volumes are to be replaced physically, and is of lesser consequence when the total replacement costs are serving only to establish a basis of calculation for a partial loss insurance settlement. Whenever possible and acceptable, however, replacement of the actual volume with alternate formats was considered; microforms, reprints, Books on Demand service (University Microfilms), etc. If a volume was available, its actual replacement cost was used. If a volume was unavailable, but replacement with an alternative format was appropriate, the actual cost of the alternate format was used. For materials that were out-of-print, unavailable in alternative formats and otherwise unavailable from an out-of-print dealer, the cost at time of publication was used.
Prices located in Books in Print (BIP) and other up-to-date sources were reported in current dollars and needed no adjustment. Other prices were recorded in dollars based on the year of publication and required adjustment for inflation. Price indexes and rates of inflation were based on national figures published for science material. Published cost data from the Bowker Annual for U.S. hardcover science books, U.S. chemistry and physics periodicals, and U.S. science and technology serials were used. The formula applied is given as Formula 1.

In the case of pre-1977 titles, it was necessary to adjust the price for inflation in two steps to reflect the 1981 re-scaling of the price index by Bowker to a 1977 base year (i.e., published index scales cover the periods 1969-1980 and 1977-present). Prior to 1972 publication price indexes and inflation trends are less detailed and pose some additional problems. In this survey only a few pre-1972 titles appeared in our random sample and prices were obtained from dealers catalogs in these cases.

In this particular disaster, foreign volumes were not treated separately as they represented only a small number of the materials damaged and only three fell into the sample. If a significant number of volumes had been of foreign publication, it would have been important to calculate costs using the foreign price converted to U.S. dollars at the date of publication (conversion figures are available from major daily newspapers) and then to apply the appropriate Bowker Annual data depending on the country of publication. The Bowker Annual of Library and Book Trade Information covers average prices and price indexes for hardcover and paperback books, serials and periodicals by subject area for the United States and many foreign countries.

Replacement costs for the collection were calculated by adding the replacement cost for the unique portion of the collection to the replacement costs for the 200 sample survey multiplied by a factor of five (see Formula 2).

To arrive at a reasonable evaluation of damage to date and potential future damage owing to the increased risk of mold and mildew growth, it was necessary to determine what percentage of each volume's life span had been lost. Such an estimation is approximate and must be based on professional judgement. Many books become outdated with the passage of time and for these, the useful life of the book should be considered; other books become part of a library's permanent research col-

## FORMULA 1

| Adjusted cost <br> of volume to <br> current $\$$$=$ |
| :--- | :--- |$\quad$| Cost of volume |
| :--- |
| at date of |
| publication |$\quad \times \quad$| $\frac{\text { Price index (current) }}{\text { Price index (date of }}$ |
| :--- |
| publication) |

## FORMULA 2

Total
Replacement

Estimate $\quad$\begin{tabular}{l}
Unique title <br>
Replacement <br>
Costs

$\quad$

Replacement Costs of
\end{tabular}

## FORMULA 3

| Final $\$$ |
| :--- | :--- |
| Settle- |
| ment |$=$| Actual |
| :--- |
| Replace- |
| ment |
| Costs |$+$| Partial Loss |
| :--- |
| Calculation |
| (\% age of |
| Total Replace- |
| ment Costs $)$ |$+$| Labor |
| :--- |
| Costs |$+$| Process- |
| :--- |
| ing Costs |$+$| Lost |
| :--- |
| Oppor- |
| tunity |

lection and for these, the shelf life of the book should be considered. Based on our assessment as professional librarians and that of Philip Cronenwett, Dartmouth College Library preservation specialist, it was determined that the majority of titles suffered a $30 \%$ reduction in their useful shelf life. For example, if a book would have lasted ten years, but was now expected to last only seven years, it should be considered $30 \%$ damaged and $30 \%$ of its current replacement cost should be paid as compensation. This figure ( $30 \%$ of the total replacement costs calculated for the collection) was accepted by the insurance carrier as a reasonable estimate.

In assessing a $30 \%$ decrease in shelf life, it is useful to note that no processing costs were included. This would be an important consideration if replacement value were being considered in a total loss situation. It would also be of value to note that no costs were added for additional maintenance that the damaged volumes might require (i.e. annual visual inspection, rebinding at a later date, mildew preventive treatment, fumigation, etc.). To avoid reopening the claim at a later date if further treatment becomes necessary, it is suggested that a portion of the settlement funds be earmarked for these purposes.

The final settlement represented the summation of the actual replacement costs incurred, the partial loss calculation based on total replacement costs, associated labor costs and in some cases, processing costs (see Formula 3).

Lost opportunity and inconvenience costs may also be negotiated. To avoid a lengthy procedure to determine the cost of the inconvenience and of ad-

## WESS/Martinus Nijhoff grant awarded

Frederick C. Lynden, assistant university librarian for technical services at Brown University, has been selected as the first recipient of the Martinus Nijhoff International West European Specialist Study Grant. The purpose of the grant is to provide support for an ALA member to visit the Netherlands and then to spend ten consecutive working days visiting two other West European countries in order to study some aspect of West European librarianship or bibliography. Lynden will use the grant to visit vendors, book trade association officials, and librarians in the Netherlands, France and Germany in order to gather data on European book pricing and to encourage the production of academic book price indexes. The Martinus Nijhoff International West European Specialist Study Grant is an annual award funded by Martinus Nijhoff, Booksellers and Subscription Agents, The Hague, and is administered by ACRL's Western European Specialists Section.
ditional efforts to secure information during the disaster (staff time, interlibrary loan costs, online searching costs, etc.), we proposed to negotiate a flat rate figure ( $5 \%$ ) to cover lost opportunity. Although replacement costs are not proportional to, or in any way related to, lost opportunity and inconvenience, this fee might be a mutually agreed upon percentage of the total replacement settlement.

This study served as the basis for negotiating a settlement with the contractor's insurance company. The estimate prepared using this procedure, which we believe to be conservative, was paid in full by the insurance company. The negotiation experience was conducted in a productive atmosphere of mutual cooperation and the insurance carrier is to be commended for accepting the proposal without the independent review initially proposed. It is hoped that, with diligent preparation, all disaster-stricken libraries will be so fortunate. It is expected that the money received in the settlement will be used to maintain, repair and replace these titles as necessary in the coming years.

## Bibliography

Bookstein, Abraham. "How to Sample Badly." Library Quarterly 44 (1974):124-32.

The Bowker Annual of Library and Book Trade Information. New York: R.R. Bowker, 1969-1983.

Brown, Norman B., and Phillips, Jane. "Price Indexes for 1983: U.S. Periodicals and Serial Services." Library Journal 108 (1983):1659-62.

Ungarelli, D.L. "Insurance and Prevention: Why and How?" Library Trends 33 (1984):57-67.

## Letter

To the Editor:
I have arranged an exchange with a librarian in Australia as a result of the list published in $C \& R L$ News, February 1983, of Australian libraries with staff interested in exchanges. I wrote to the deputy librarian at the University of Queensland last fall. Correspondence followed, an agreement was reached, and on March 21 I left for Australia to spend six months in the Technical Services Department of the University of Queensland. Gillian Meteyard, of the University of Queensland, will be spending six months as a cataloger at Eastern Washington University. I hope that you will continue to foster exchanges by publishing the names of libraries interested.-Joan I. Tracy, Assistant Librarian for Technical Services, Eastern Washington University.

If you or your library is interested in participating in an exchange, write to Mary Ellen Davis, ACRL/ ALA, 50 E. Huron St., Chicago, IL 60611.GME.


