

ities need to be on the watch for signs of cholera and other water-borne diseases. Clean-up workers in particular will need antitetanus injections.

Furniture and other bulky objects damaged by the flood have to be disposed of. Again following the Christmas 1993 flood on the Rhine, municipalities reported that the volume of bulky refuse collected was about six months' collection of such items. Houses and buildings will have been damaged by the flood. Many will have to be demolished, others will require expensive repair. Services such as water supply, sewerage, electricity and telephone will need to be reinstated. In addition to the physical casualties of the flood there will also be many people affected psychologically. The general disaster response and relief system of the country will be responsible for coping with this human and material damage.

## Post-flood review

Following a major flood, a number of actions need to be taken to review how it was handled and to recommend improvements for the next time. All aspects of response to the flood emergency need to be reviewed.

Forecasting centres need to review their operations and check the accuracy and timeliness of their forecasts and how the public responded to them. Following the Great Flood on the Mississippi of 1993, the United States National Oceanic and Atmospheric Administration (NOAA) formed a Disaster Survey Team to report on how the National Weather Service (NWS) had responded. The NWS is a component of NOAA and issues both weather and river flow forecasts. The 310-page report covers all aspects of NWS operations from data collection through to forecast dissemination and public response during the several months long flood and makes some 106 recommendations for improvements.

The structures used for flood defence: dykes, reservoirs, flood walls, etc. will have suffered strain during the flood and, of course, some may have failed. All will need to be inspected and repaired. It may be decided that the dyke systems and other flood defences need to be modified and extended. The regulations controlling permitted developments on the flood plain should be reviewed and where necessary strengthened. The opportunity should be taken to remove non-conforming developments that have been damaged in the flood. The time after the flood is one for reminding people of proper flood plain and catchment management.

Many people will have views on why the flood occurred or was so damaging and will be making them known. Hydrologists, river engineers, disaster response experts and the other professionals involved need to join in this debate to take advantage of the public interest in flood prevention and disaster prevention generally and to learn more of how the public reacts to an emergency.