

Introduction to the Guidelines
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Auckland Local Authority Hazard Liaison Group

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1 The Guidelines

This set of “Guidelines for Hazard Management” has been developed by various contributors representing the Regional, District and City councils in the Auckland region. The set consists of three guidelines, which mirror the main elements of the risk management process, namely:

- o Hazard Information Management
- o Hazard Identification and Risk Assessment
- o Risk Treatment and Monitoring for Hazards

The first guideline Hazard Information Management identifies sources of hazards information and looks at how this information is collected, sorted, recorded and stored within the Auckland setting. It is especially relevant to the development and maintenance of hazard registers.

The second guideline Hazard Identification and Risk Assessment provides guidance on establishing the context for risk analysis, identifying hazards and risks, and carrying out risk analysis and risk evaluation for hazards. Establishing a context for risk analysis involves evaluating strategic and organisational issues that will impact on the risk management process and developing a management plan to guide the rest of the risk management process. Identifying risks involves identifying the hazards that have the potential to affect communities within the city or district of interest, describing the characteristics of these hazards and assessing the community’s vulnerability to hazards. Risk analysis aims to assign levels of risk to hazards, based on their likelihood and potential

consequences. Risk evaluation uses the information

from the analysis step to rank risks from greatest to least and thus determine an order for treatment. Guideline No. 2 provides a framework, which enables territorial authorities to work through these processes.

The third guideline Risk Treatment and Monitoring for Hazards looks at selecting appropriate risk treatment options that will minimise the risk to the community from hazards. Guideline No. 3 provides guidance on treatment and monitoring of risks identified as requiring treatment. Risk treatment options that will help to mitigate or avoid risk (risk reduction) are identified and a process for selecting the appropriate option(s) is provided. Guidance on monitoring the progress of risk treatment implementation is also included.

The guidelines are inter-related. Guideline No. 1, which organises the hazards information held by local authorities in a systematic way, provides the necessary input information for the risk identification, assessment and evaluation outlined in Guideline No. 2. The evaluation of risks carried out in Guideline No. 2 provides a prioritised list of risks to be considered for the treatment options outlined in Guideline No. 3.

2 Reasons for the Guidelines

The initiative for developing the guidelines comes from the Local Authority (LA) Hazards Liaison Group, which was formed in 1997 to help co-ordinate the management of hazards between the district, city and regional councils within the Auckland Region. The LA Hazards Liaison Group’s interest

in putting together these guidelines arose from the group's commitment to:

- o Achieve consistency both within and between councils in the Auckland region in the way hazards information is collected, organised and used to influence decisions about hazards that place communities at risk;
- o Ensure risk management issues are appropriately addressed in land use and strategic planning;
- o Maximise the effective use of hazards information to manage risks from hazards, and promote greater public understanding of their hazardscape;
- o Encourage councils to reduce barriers to sound risk management and in particular encourage effective risk communication practices;
- o Minimise council liability through the effective capture and storage of hazards information.

The guidelines aim to achieve consistency both within and between councils in the way hazards and risk are managed, particularly with regard to the application of the Australian/New Zealand Risk Management Standard (4360:1999). The aim is to provide a selection of tools and methods that LA's can use to manage risk in their city or district. There will continue to be differences in the ways in which councils store and process information, and in the practices they adopt to fulfil the functions for which they have statutory responsibility, but applying this guideline to those practices should ensure that the outcomes achieved are consistent within and between councils.

Although the guidelines have been written based on Auckland experience with regard to natural hazards, it is

hoped that the principles established in these guidelines can be adopted for use in other regions. We recognise that councils are at different stages with respect to hazards information management, and that the applicability of the guidelines will vary accordingly.

The overarching goal of the Group in developing the guidelines is to:

Minimise the risks to communities and the environment from the effects of a range of hazards, including natural and technological hazards.

3 Who Are the Guidelines For?

These guidelines are for staff within regional and territorial (district and city) councils including planners, building technical staff, engineers, hazard analysts, emergency management/civil defence officers, information providers, and Geographic Information Systems (GIS) operators and analysts. It is expected that Guidelines No. 2 and 3 will be relevant for a wider group of people including risk insurance managers and elected representatives of councils.

The guidelines are expected to be of use to:

Staff	Roles
<ul style="list-style-type: none"> o Planners and technical staff 	<ul style="list-style-type: none"> o Processing consent applications o Preparing strategic, regional, district, catchment and structure plans o Policy development. o Policy implementation o State of the Environment

Staff	Roles	Staff	Roles
	<ul style="list-style-type: none"> monitoring Property information management including the hazard register Communicating hazards information to Councils and to end-users 		
<ul style="list-style-type: none"> Dangerous Goods Officers, Field Officers and Hazardous Substances Officers 	<ul style="list-style-type: none"> Compliance monitoring, and enforcement of HSNO Regulations¹ 	<ul style="list-style-type: none"> Asset / Property Managers Risk Insurance Managers 	<ul style="list-style-type: none"> Risk assessment for facilities Community needs assessments Risk assessment
<ul style="list-style-type: none"> Engineers Rural Fire Officers 	<ul style="list-style-type: none"> Consent condition enforcement/monitoring Assessing building permit applications Wildfire risk analysis Fire mitigation and hazard reduction measures Preparing Rural Fire Plans Issuing rural fire permits 	<ul style="list-style-type: none"> Elected Representatives / Councillors 	<ul style="list-style-type: none"> Policy setting Resource consent decision making Risk management decision making
<ul style="list-style-type: none"> GIS operators/analysts and Property Information staff 	<ul style="list-style-type: none"> Data capture/entry. Software development Property information maintenance 		
<ul style="list-style-type: none"> Hazard Analysts 	<ul style="list-style-type: none"> Hazard assessment and risk analysis Hazard management policy development and implementation 		
<ul style="list-style-type: none"> Emergency management / 	<ul style="list-style-type: none"> Emergency management 		

In addition to the specific roles mentioned above, most of those listed also have general roles, which include the following:

- Informing councils, the public, and end users of hazard information about hazards and hazard information processes;
- Ensuring that known information about hazards is utilised in the context of consent and licensing processes, as and when appropriate.

The Guidelines are also potentially useful to the hazard information sector (e.g. IGNS, NIWA) so that these agencies can see how Councils use the hazards information, and adjust or develop the information, research and advice that they provide.

¹ The Hazardous Substances and New Organisms Act and regulations have superseded the Dangerous Goods legislation. The transition to the HSNO regulations is currently underway.

4 Relationship to the Risk Management Standard

The Australian/New Zealand Standard for Risk Management (AS/NZS 4360:1999) sets out a series of steps designed to reduce unwanted consequences of hazards, that is, to reduce risks. This Standard is applicable to most public and private activities and, as a result, it is very general in nature. Its application to a particular practice, such as the management of hazards by local government, requires a degree of interpretation that could lead to significant variations between users.

The Risk Management Standard provides a generic guide for the establishment and implementation of the risk management process involving the identification, analysis, evaluation, treatment and ongoing monitoring of risks.

(1.1. AS/NZS 4360:1999).

The development of this set of Guidelines for Hazard Management is intended to provide consistency in the application of the Standard to the task of managing the risk of hazards to communities. This guideline should therefore be read in conjunction with the Risk Management Standard. Reference to relevant sections of the Standard appear throughout the three guidelines (with the permission of Standards New Zealand), as illustrated in the box above. Figure 1 outlines the relationship between the Guidelines and the Risk Management Process defined in the Standard.

5. Legislation Relating to Hazards and the Guidelines

5.1 Civil Defence and Emergency Management Act 2002

The main purposes of the Civil Defence and Emergency Management (CDEM) Act 2002 are to:

- o Improve and promote the sustainable management of hazards in a way that contributes to the social, economic, cultural and environmental well-being and safety of the public and also the protection of property;
- o Encourage and enable communities to achieve acceptable levels of risk, including:
 - identifying, assessing and managing risks;
 - consulting and communicating about risks;
 - identifying and implementing cost-effective risk reduction, and;
 - monitoring and reviewing the process.
- o Provide for the planning and preparation for emergencies and for response and recovery in the event of an emergency;
- o Require local authorities to co-ordinate, through regional groups, planning programmes, and activities related to civil defence emergency management across the areas of reduction, readiness, response, and recovery, and encourage co-operation and joint action within those regional groups;

- o Provide a basis for the integration of national and local civil defence emergency management planning and activity through the alignment of local planning with a national strategy and national plan; and
- o Encourage the co-ordination of emergency management, planning, and activities related to civil defence emergency management across a wide range of agencies and organisation preventing to managing emergencies under the CDEM Act and other relevant legislation.

Under this legislation, each regional council and every territorial authority within that region must unite to form Civil Defence Emergency Management Groups. Each group is statutorily required to generate a Civil Defence Emergency Management Plan. In Auckland, the plan will address the 4 R's of Emergency Management (Reduction, Readiness, Response and Recovery) but will also have an emphasis on:

1. Working together - ensuring emergency management agencies co-operate with each other and co-ordinate their activities;
2. Reducing the risk to the community so that the potential impacts of hazards such as earthquakes or major infrastructure failure are lessened;
3. Ensuring that when we do have to respond to a major emergency, we are as prepared as possible, and that our response and recovery is fast and effective;
4. Involving the community and ensuring individuals, families, businesses, schools etc understand the risks and know what part they

can play in ensuring we are all as prepared as possible.

These Guidelines provide a mechanism to help achieve 1 and 2 listed above. The CDEM Group Plan recognises this and identifies the Hazard Guidelines Project as a mechanism to reduce risk, and incorporate risk reduction measures into District Plans for example.

The scope of Guidelines No. 1 and 2 is broad, covering aspects such as gathering of hazards information, establishing the risk management context, identifying hazards and risks, risk assessment and risk evaluation. Like the CDEMG Plan, Guidelines No. 1 and 2 deal with all the 4 R's of risk management.

Guideline No. 3 has however been tailored to provide treatment options related to risk reduction and not the other 3 R's. Risk treatment in terms of readiness, response and recovery will be primarily be identified through the CDEMG Plan.

5.2 Other Relevant Legislation

In addition to working under the CDEM Act, local authorities have hazard management responsibilities under legislation such as the Resource Management Act 1991, the Building Act 1991, and the Local Government Official Information and Meetings Act 1987. An overview of this legislation is provided in Appendix 4 to the guidelines.

This legislation places responsibilities on regional and territorial authorities in relation to how they manage hazards and the risks hazards pose to communities. Some of these responsibilities can lead to litigation in situations where damage occurs to

people or property from hazard events, the potential for which councils knew, or should have known about. The ways in which councils carry out their statutory responsibilities can therefore be important for avoiding or mitigating foreseeable damage from hazards, and as an element of defence against legal actions.

6 Definitions

6.1 What is a Hazard?

Hazards are natural or technological events that have the potential to have harmful effects – upon people (physically or socially), the economy, property and infrastructure. The nature of both the hazard event and the potential impact it could have must be examined to understand the risks posed by hazards.

For the purpose of this guideline 'hazards' include all those hazards for which local authorities have responsibility for under the Resource Management Act 1991, the Building Act 1991 and the Local Government Official Information and Meetings Act 1987. It also includes the responsibilities placed on Councils by the Hazardous Substances and New Organisms Act 1996, the Dangerous Goods Act 1974, and the Forests and Rural Fires Act 1977.

Definitions:

Hazard:

"a source of potential harm or a situation with a potential to cause loss." (1.3.8 AS/NZS 4360:1999).

"any natural or human made event that may potentially have disruptive consequences for the physical, social or economic environment of one or more communities" (Civil Defence Emergency Management Bill, 2000).

Natural Hazard:

"any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment" (Section 2, Resource Management Act 1991).

"potential erosion, avulsion, falling debris, subsidence, slippage, alluvion, or inundation, or the likely presence of hazardous contaminants" (Section 31(2) Building Act 1991).

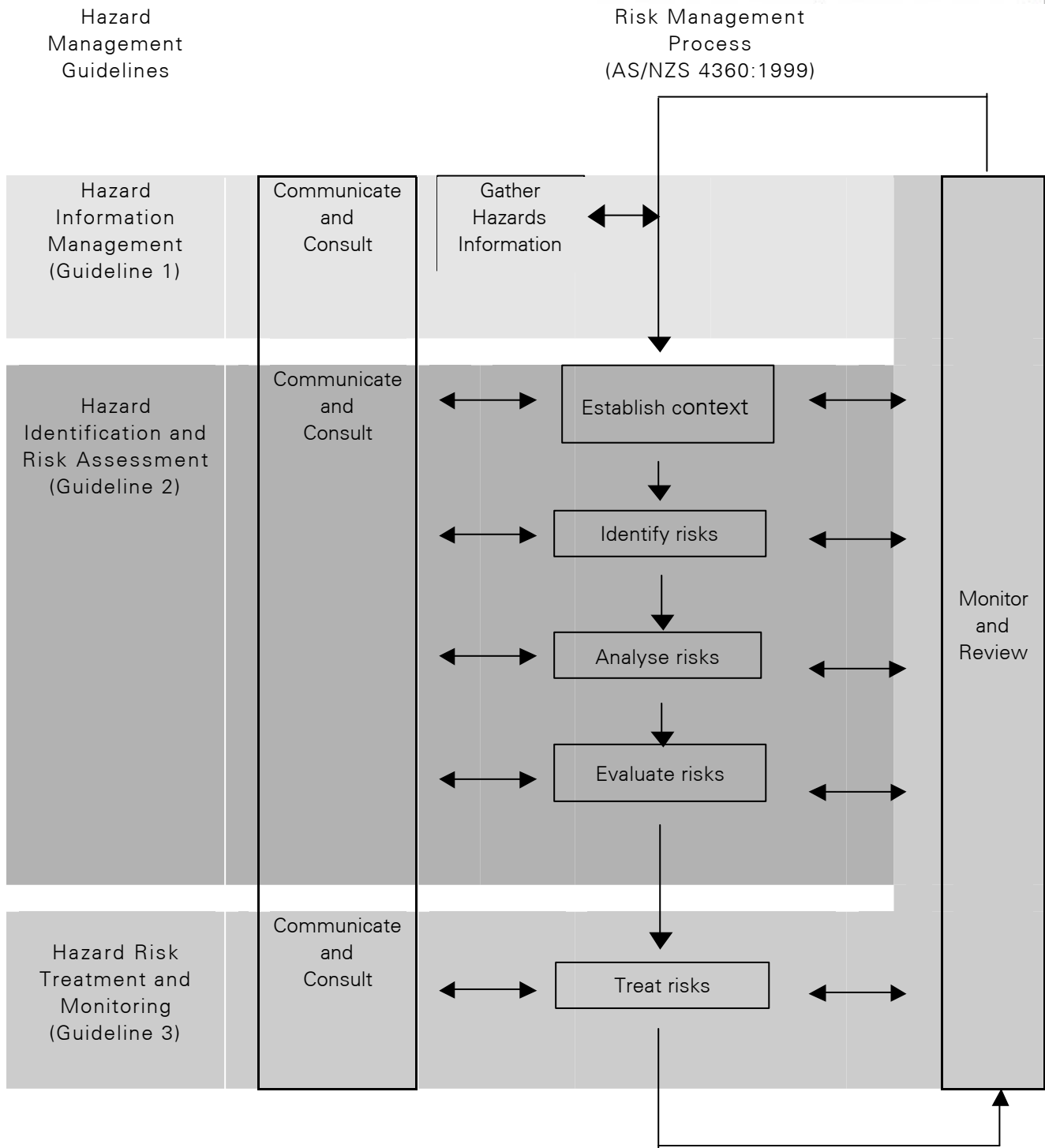


Figure 1 Relationship of the Hazard Guidelines to the Risk Management Process

Diagram adapted from Figure 3.1 in the Australian/New Zealand Risk Management Standard (AS/NZ 4360:1999).