

8.6 NATURAL HAZARDS

8.6.1 BACKGROUND

The presence of natural hazards places a constraint on development through factors such as likely damage to property, and loss of livestock and human life. Natural hazards are defined in the Act as being:

"... 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."

The regional councils are given the function under Section 30(1)(c)(iv) of the Act to:

"... control the use of land for the purpose of the avoidance or mitigation of natural hazards";

while the district councils have been given the function under Section 31(b) of the Act for:

"The control of any actual or potential effects of the use, development, or protection of land, including for the purpose of the avoidance or mitigation of natural hazards ..."

With respect to meeting the purpose of the Act, the identification and development of a range of methods to avoid or mitigate the effects of hazardous events is a key element. In Hauraki District, there are natural and human made hazards to be considered, even though the Act only refers to natural hazards. Many hazards that are considered to be "natural" (eg flooding) are only hazards due to the actions of humankind (eg clearing of vegetation, covering surfaces in impermeable layers or locating buildings in supposedly "safe" areas). As such, the differentiation of hazards into natural and human induced is rather arbitrary.

The hazards that are applicable to the Hauraki District include the following:

Natural Hazards

~~EE~~ Flooding and Flood Ponding.
~~EE~~ Wind.
~~EE~~ Erosion.
~~EE~~ Earthquake.
~~EE~~ Land stability.
~~EE~~ Land subsidence.
~~EE~~ Tsunamis.
~~EE~~ Tornadoes.
~~EE~~ Rising sea level.
~~EE~~ Fire.

Human Made Hazards

~~EE~~ Land subsidence due to mining, excavation or other actions.
~~EE~~ Land instability due to uncontrolled fill.
~~EE~~ Contaminated water and contaminated soil related to previous land uses.
~~EE~~ Fire.

There is a range of methods available to inform and educate people about natural hazards and action that can be undertaken to avoid the effects of natural hazards. Many of the hazards are "site specific" or are really building constraints, which are not matters that need to be addressed through the District Plan. There are other mechanisms available to achieve this.

The natural hazards that the District Plan does seek to address are flooding and erosion. The effects are avoided, remedied or mitigated through the use of zones and rules (performance standards). The Flood Ponding zone in Paeroa is primarily designed to preserve those areas required to be maintained for ponding purposes, thereby protecting adjacent areas from the effects of flooding. The Conservation (Indigenous Forest) zone has a similar function, amongst other functions of the zone. Rules relating to minimum floor levels, setback from the coast (Whiritoa), and setback from streams, rivers and other water bodies are all designed to protect buildings and people from the effects of natural hazards.

Many of the natural hazards in the District can be addressed through the provisions of the Building Act 1991. The primary role of this Act is to provide controls on buildings to ensure the safety and health of the building users is protected. Matters such as the structural design of buildings in areas of peat, uncontrolled fill or previous mining can all be handled through the building consent process. The Project Information Memorandum and the Land Information Memorandum systems, as well as the provisions of Sections 36 and 64-66 of the Building Act 1991, are methods that enable Council to:

1. advise people of known hazards; and
2. control and in some circumstances refuse the issue of building consent applications.

Council's role as a Rural Fire Authority enables it to deal with the fire hazard potential that is associated with types of land (peat), types of land use activities (forestry, storing of hay, recreation) and climate. The use of fire bans is the main method of avoiding the risks due to fire. Other methods of education and advice are also available.

Council holds a variety of information on natural and human made hazards that will be collated into a "Hazards Register (Natural and Human Made)". Much of the information is already contained in the Project and Land Information Memorandum (PIM and LIM) systems. The Hazards Register will be continually updated as a result of information obtained from building, subdivision and other developments. This will provide a valuable method of public education and information dissemination, as well as being a resource for Council's own use. The information contained in the Register is both general and specific.

Other methods of managing and controlling natural hazards that Council has a role in administering, include:

~~EE~~ Preparing and administering non statutory documents (eg Flood Hazard Management Plans).
~~EE~~ Conditions on resource consents.
~~EE~~ Works and services carried out by Council and other agencies.
~~EE~~ Preparation of evacuation and other plans to deal with emergencies created by a natural hazard.
~~EE~~ An early warning and monitoring systems.
~~EE~~ Interagency cooperation (eg the management of clearing vegetation in steep areas which are subject to high intensity rainfall).
~~EE~~ Lobbying of agencies to ensure that natural hazard protection works and services are maintained and improved over time.

8.6.2 RESOURCE MANAGEMENT ISSUES

The effects of natural hazards need to be addressed in a manner that appropriately assesses the degree of risk associated with the hazard, and puts in place the mechanisms to manage and control them. In particular, the respective roles of the District Plan and other mechanisms need to be correctly linked and duplication avoided. This will ensure that an efficient and effective system is produced.

8.6.3 ANTICIPATED ENVIRONMENTAL RESULTS

The health, safety and investment of the community is to be protected from natural and human made hazards, by identifying those hazards and ensuring that the necessary controls and management of developments are in place to achieve that outcome.

That information on the type, location and extent of hazards is collected, collated and updated on a regular basis, and is readily available to the general public. The information should be included in a Register of Hazards, on the PIM and LIM systems and where appropriate within the District Plan.

Raising the awareness of the public as to the location and types of hazard in the District, in order that the potential effects from hazards can be avoided.

8.6.4 OBJECTIVES AND POLICIES

Objective 1

To protect the community's safety, health and wellbeing from the effects of natural hazards.

Policies

Objective 1 will be achieved by the implementation of the following policies:

1. Identifying natural hazards and providing the appropriate zoning and rules to control and manage the effects of natural hazards in the District Plan.
2. Establishing and continually updating on a regular basis, a Register of Hazards (Natural and Human Made). Such information is to be readily available to the public in a useable form.
3. Ensuring that the information held by other agencies (eg Waikato Regional Council, Civil Defence) is also included on the Register and that other organisations are aware of the information that is on the Register.
4. Linking the information on the Register of Hazards to the Property and Land Information Memorandum systems under the Building Act 1991 and Local Government Official Information and Meetings Act 1987.
5. Where development is proposed in an area with an identified hazard, then assessment of the development is required as set out in either the zone requirements or the performance standard.
6. Providing for activities designed to avoid or mitigate the effects of natural hazards (eg river control and water and soil conservation management) through the designation and permitted/discretionary activity status.
7. Using the Flood Ponding zone in Paeroa as one of the methods to control and manage flooding in the town.
8. Providing specific rules in the District Plan to avoid development establishing in areas of natural hazards (eg setback from the coast, streams, rivers and other water bodies).

Reasons for Objectives and Policies

1. The matter of natural hazards needs to be addressed through a number of mechanisms, with the District Plan being only one of them.
2. It is "sustainable management" to avoid development in known hazard areas, rather than using resources on an ongoing basis to protect developments from hazards.

3. The provisions and requirements of the Building Act 1991 have a significant role to play in the area of natural hazards.

8.6.5 METHODS TO IMPLEMENT OBJECTIVES AND POLICIES

The principal method by which Council will implement the above objectives and policies through the District Plan is by the use of zones and rules to control and manage development in areas of known hazard.

Council recognises that other functions and responsibilities of Council and other organisations have a greater role to play in the area of natural hazards, and that the methods they use to control and manage development within hazard areas lie outside the District Plan, particularly the Building Act 1991.

The Hazards Register is considered to be the document which will act as the focus or coordinating method for providing information and for managing and controlling development where natural hazards are known to exist. Much of the information on hazards is site specific and is properly dealt with under the requirements of the Building Act 1991. The Register is a flexible document that is able to be readily updated as new information is made available.

Reasons

1. Refer to Section 2.0 which sets out Council's main reasons for adopting a zone and rule based approach to the achievement of objectives and policies.
2. Preventing a problem arising due to the presence of a natural hazard is best achieved through methods such as education, information and ensuring that development does not occur in areas of natural hazard.

8.6.6 RULES

There are no specific rules for this section on Natural Hazards. Rather, the rules are contained within the specific zone or under a performance standard.