

**4.9.7. Intended Environmental Outcomes**

- 4.9.7.1. Identification and recognition of important landscapes and natural features.
- 4.9.7.2. Protection and enhancement of the character of different landscapes.

**4.9.8. Monitoring**

- 4.9.8.1. The Council may require, as a condition on any resource consent with the potential to adversely affect important landscapes or natural features, the provision of monitoring information such as photos in order to assess whether the Plan or practice of granting resource consents for similar activities needs to be changed.

**4.10. Natural Hazards****4.10.1. Key Issue**

4.10.1.1. Risks to human life and natural and physical resources within natural hazard prone areas and means of avoiding or mitigating any actual or potential effects of activities which increase the likelihood of natural hazards occurring.

- 4.10.2. Significant areas of the District are potentially at risk from natural hazards. Existing settlement patterns exacerbate the potential effects of these hazards, for example, Westport's location on the banks of the Buller River makes it particularly susceptible to severe flooding. The dredging or gravel extraction from the bed of the river reduces the risk of flooding. The coastline between Hector and Miko is affected by debris flow. Aside from the risk to individual safety, natural hazards can also result in damage to natural and physical resources, including the rural land resource, infrastructure and the built environment.
- 4.10.3. Significant natural hazard risks occur along the Buller Coast. Mokihiui is susceptible to flooding, and active coastal erosion is occurring along most of the coast. In addition, there is the risk of impacts from rising sea levels or inundation from storm events in coastal locations.
- 4.10.4. Faultlines which cross the Buller District make it susceptible to earthquakes. While earthquakes are not predictable, the impacts on property or health can be reduced by directing development away from locating on faultlines, and requiring buildings to meet earthquake standards.

4.10.5. Buildings and infrastructure elements are also affected by slope stability. Many areas of the District could be affected by slumping or falling rocks especially if the land surface was disturbed by building works. Two settlements are particularly affected in this regard; Punakaiki where some of the settlement is threatened by rock fall and Little Wanganui Subdivision which is affected by rock fall and debris flow. In the case of Little Wanganui Subdivision, existing residents and landowners have indicated a willingness to accept the risks associated with continued residence in a hazard prone area.

#### 4.10.6. Objective

**4.10.6.1. Taking into account community views, to reduce the risks to people and communities from natural hazards, and to avoid the establishment of activities which increase the likelihood of natural hazards occurring.**

#### 4.10.7. Policies

4.10.7.1. *Areas where natural hazards represent a significant threat to the health and safety of individuals and communities and/or to buildings or structures shall be identified as information becomes available and used in the consideration of applications for resource consent.*

4.10.7.2. *An assessment of natural hazard risk shall be provided where appropriate with all applications for resource consents.*

4.10.7.3. *Increased public awareness of causes of natural hazards and their potential impacts in specific areas of the District shall be promoted.*

4.10.7.4. *Mitigation works to minimise the risks of natural hazards to the safety of people and communities shall be assessed according to the degree of risk.*

4.10.7.5. *Subject to the relevant statutory provisions in the Resource Management Act and Building Act, further development in identified hazard prone locations will be restricted.*

#### 4.10.8. Methods of Implementation

4.10.8.1. Include known hazard areas including coastal hazard zones identified in the Regional Coastal Plan in the GIS database.

4.10.8.2. Enforce Sections 71-74 of the Building Act 2004 relating to hazard prone land.

4.10.8.3. Encourage the Regional Council to produce and update detailed hazard risk maps.

- 4.10.8.4. Encourage and support Regional Council monitoring and research on natural hazards in the District.
- 4.10.8.5. Maintain and test civil defence procedures.
- 4.10.8.6. Encourage the maintenance and improvement of the District's flood warning systems by making provision where practicable for preventative works regarding flood hazards.
- 4.10.8.7. Promote public awareness of potential hazard areas, through the provision of information and advice, especially where there is a potential risk to buildings and human life.
- 4.10.8.8. Develop criteria for identifying hazard prone areas and assessing the degree of hazard risk through consultation with the Regional Council.

#### **4.10.9. Explanation/Reasons**

- 4.10.9.1. The policies and implementation methods for natural hazards aim to minimise, avoid and mitigate where practical the impacts of natural hazards by managing activities within hazard prone areas and managing activities which increase the likelihood of natural hazards occurring. Applications for development must include full details and assessment of hazard risk. In some situations where a resource consent is required, it may be that particular land use activities are unsuitable. Even in the case of permitted activities, any proposal to erect a building will need to be assessed in terms of Sections 71-74 of the Building Act and the building code.
- 4.10.9.2. Policies and other management tools aim at controlling the siting, extent and type of activities permitted in hazard prone areas. Specific hazard areas have been identified at Punakaiki (rock fall), Little Wanganui Subdivision (rock fall and debris flow), Mokihinui (flooding) and Hector-Miko coastline (debris flow). These areas are to be identified on the planning maps because development proposals are likely in these areas and it is necessary to make it clear that they are particularly susceptible to natural hazards. It is acknowledged however, that there are many other areas in the District which are susceptible to natural hazards and therefore any resource consent application, including outside identified hazard areas, must provide to Council an assessment of the hazard risk for the site.
- 4.10.9.3. The Council will gather information on natural hazards in conjunction with the Regional Council which also has a responsibility for natural hazard management. It is envisaged that public information, public works and civil defence testing will play a significant role in making people aware of natural hazards in the area and will help to encourage development to locate away from particularly hazard prone areas.

**4.10.10. Intended Environmental Outcomes**

- 4.10.10.1. Increased public awareness of natural hazard risks and their impacts.
- 4.10.10.2. A reduction in the magnitude and scale of the impacts of natural hazards on people and on natural and physical resources.

**4.10.11. Monitoring**

- 4.10.11.1. The Council will keep a record of reported instances where natural hazards detrimentally affect property or health, and mutually exchange such information with the Regional Council.
- 4.10.11.2. The Council may send out a questionnaire to a sample of ratepayers at appropriate intervals asking for comments on the Council's environmental performance. This questionnaire will include a question on awareness of natural hazard risks and their impacts.

**4.11. Hazardous Substances****4.11.1. Key Issue**

4.11.1.1. Management of the potentially adverse effects of hazardous substances on natural and physical resources.

- 4.11.2. The storage, use and transport of hazardous substances is an integral part of some land use activities in Buller. Control is undertaken under various legislation and by both the Regional Council and the District Council. The Regional Council has implemented recommendations for the upgrading and closure of landfill sites which are identified as contaminated in co-operation with the District Council. The District Council is primarily concerned with preventing or mitigating any adverse effects of any use of land involving these substances. Emphasis in management should concentrate on safety and prevention of accidents or spills but also provide appropriate contingency planning.
- 4.11.3. The disposal of hazardous substances on the West Coast is of particular concern. Current disposal practices are inadequate in Buller. Hazardous substances cannot be disposed of in landfills. The public are advised to store wastes privately until a regional hazardous substance management strategy and collection or treatment facility is developed. It is acknowledged that private storage of hazardous waste is an unsatisfactory short-term measure, and creates the potential for adverse environmental effects to occur from illegal dumping of hazardous wastes.
- 4.11.4. Poor siting and lack of leachate containment are particular problems with old refuse disposal sites.