

## **7 LAND USE, CHANGES, AND THEIR EFFECTS ON NATURAL AND PHYSICAL RESOURCES**

### **7.1 RESOURCE MANAGEMENT ACT OBLIGATIONS**

- 7.1.1 Section 5 of the RMA requires Council to sustain the potential of natural resources to meet the reasonably foreseeable needs of future generations and safe guard the life supporting capacity of land, water, soil and ecosystems. The Act also requires Council to have particular regard to any finite characteristics of natural and physical resources and the maintenance and enhancement of the quality of the environment.

#### **NATURAL RESOURCES**

- 7.1.2 These sections of the Act require the Council to consider the effects (positive and negative) of existing and new land use activities within the District. The sustainable management of natural resources of Wairoa district is vital, not only for their intrinsic values but to allow people to provide for their economic, social and cultural well-being.

- 7.1.3 While the District Council is not responsible for effects of activities within water, Wairoa District Council has a responsibility under the Act to manage the effects of activities on the surface of lakes and rivers (Section 31(e)), and the effects of land use activities on water quality. Council has an obligation to sustainably manage the surface of lakes, rivers and wetlands. Also any policy in the District Plan must not be inconsistent with the policies and objectives of the Hawke's Bay Regional Council Regional Policy Statement and any relevant regional plans.

- 7.1.4 The Regional Policy Statement recognises riparian management is a significant resource management issue. The Regional Water Resources Plan deals with the management of riparian margins. The retention of riparian margins has considerable benefits for the qualities of water bodies including enhanced values for surface of water activities, terrestrial food sources, the habitat of waterfowl and game birds, recreational values, shading for aquatic ecosystems including provision of habitat for indigenous species.

- 7.1.5 The regional strategy relies on advocacy to encourage landowners to retain margins adjacent wetlands, lakes and rivers for conservation purposes. Rate relief is offered to landowners that adopt voluntary protective measures. The Regional Council and Federated Farmers have jointly developed a set of guidelines promoting sustainable land use practices that includes the need to protect water quality. The District Council supports these non-regulatory initiatives, but recognises that a mix of regulatory and non-regulatory methods will promote the most effective management of natural and physical resources in Wairoa District.

- 7.1.6 The Resource Management Act 1991 sets out that the preservation of the natural character of wetlands, lakes, rivers and their margins and protection from inappropriate subdivision, use and development is a matter of national importance.

#### **PHYSICAL RESOURCES**

- 7.1.7 Part II of the Act also requires the Council to consider the effects (positive and negative) of existing and new land use activities on the physical resources within the District.

- 7.1.8 The sustainable management of the physical resources of the Wairoa District is vital, as it promotes their efficient use and development and enables people to provide for their economic, social and cultural well-being.

## 7.2 DESCRIPTION OF EFFECTS ON NATURAL AND PHYSICAL RESOURCES

### SOIL RESOURCE

- 7.2.1 The natural resources of Wairoa District are vital to allow people to provide for their economic, social and cultural well-being. They sustain cultural identity, rural production activities, ecosystems and natural processes.
- 7.2.2 The District's soil resource is dominated by steep land soils that are susceptible to erosion. Erosion can cause harmful downstream effects including reduction in soil versatility, reduction in water quality, riverbed aggradation, and degradation of freshwater fisheries and loss of habitat. It can also threaten the safe use of the District's infrastructure, such as the roading network.
- 7.2.3 To stabilise the steep land soils, it is necessary to carry out land use practices that minimise erosion. Activities that help stabilise erosion should be promoted. This could be achieved by keeping disturbance of vegetation to a minimum and by promoting the protection of indigenous vegetation. The District Council acknowledges that it is the primary responsibility of the Hawke's Bay Regional Council to implement policies relating to soil conservation and erosion control.
- 7.2.4 To protect the life supporting capacity of soils it is necessary to avoid, remedy or mitigate the adverse effects of land use. For example, activities that involve toxic or hazardous substances have the potential to contaminate the land.
- 7.2.5 Gravel suitable for roading and construction is an important natural resource in the district. The Hawke's Bay Regional Council controls riverbed gravel extraction under the operative Regional River Bed Gravel Extraction Plan. Land based gravel extraction is a district council responsibility. Environmental effects that warrant consideration in terms of sustainable land management include vehicle access, dust and noise emissions, visual impacts, site rehabilitation, maintenance of public access to river margins and public safety.

### SURFACE OF WATER

- 7.2.6 The lakes and rivers of Wairoa District are important for their habitat values, recreational values and also for their values as a source of water and energy, both within the District as well as the region as a whole. Their natural values are also important, in that they provide habitat for native fish such as eels and whitebait (and their adult form), brown and rainbow trout, and act as migratory corridors between the sea and the hill country for animals such as native fish and waterfowl. Water bodies also have cultural values to tangata whenua (refer [Chapter 4](#)).
- 7.2.7 Activities that occur on the surface of water bodies include boating for commercial and or recreational purposes. In many cases these recreational activities have only minor effects.
- 7.2.8 The use of rivers, lakes and wetlands can threaten their intrinsic natural values or reduce the enjoyment of those areas by changes to the cultural and spiritual values for both the tangata whenua and people of the District. Adverse actual and potential effects from the use of the surface of water include:
- erosion of river and lake banks;
  - alterations in water flows, e.g. reducing flood storage capacity of a river terrace;
  - damaging conservation values, e.g. removing riparian vegetation;
  - recreational conflicts;

- public safety conflicts;
- lowering cultural values; and
- endangering the populations of indigenous species.

7.2.9 If structures are built on or out over water (pontoons, jetties) there may be improved public access, but issues of public safety, and impacts on landscape values, natural character values and amenity values, may arise.

### **Exploration for Mineral and Oil Resources**

7.2.10 “Mineral” as defined in the Crown Minerals Act 1991 means:

*A naturally occurring inorganic substances beneath or at the surface of the earth, whether or not under the water; and includes all metallic minerals, non-metallic minerals, fuel minerals, precious stones, industrial rocks and building stones, and a prescribed substance within the meaning of the Atomic Energy Act 1954.*

Fuel minerals are defined to include coal, gas and petroleum. “Mineral extraction” is intended to mean prospecting, exploration, mining and processing of minerals.

7.2.11 Mineral extraction by the petroleum industry, if not properly managed, has the potential to result in adverse effects on the environment which may be significant depending on the location and proximity to settlements and housing and impacts on the natural environment.

7.2.12 Some activities are relatively short-term and have little physical impact. Examples include geophysical survey, exploration drilling and well testing activities. Potential effects may include excavation, earthworks associated with site preparation, construction of access tracks and roads, some additional traffic, noise and operational night lighting for safety purposes.

7.2.13 Some activities can have longer-term impacts. Production facilities operate so long as oil extraction is occurring. Rural amenity values can be affected, in addition to visual impact, noise, glare and heavy vehicle movements.

7.2.14 Pipelines can also have impacts, most noticeably during the preparation and construction phase. However, once placed underground and with ground rehabilitation, there can be little ongoing impact on the natural environment.

### **PHYSICAL RESOURCES**

7.2.15 The development and use of buildings or structures are an essential part of meeting the needs of people and communities. However, this development should avoid adversely affecting identified areas of natural, amenity, cultural and heritage values in the locality.

## **7.3 RESOURCE MANAGEMENT ISSUES**

7.3.1 Reduction in the life supporting capacity of soils in the district due to clearance of vegetation in erosion-prone areas and river margins, earthworks, gravel extraction and exploration activities.

7.3.2 Loss of natural character and reduction in terrestrial and aquatic habitat values resulting from the removal of indigenous vegetation.

7.3.3 Activities on adjacent land and water can adversely affect activities on the surface of rivers, lakes, estuaries and wetlands.

- 7.3.4 Activities on land and water can adversely affect the wild, scenic, recreational, cultural, spiritual or ecological values of the surface of rivers and lakes, and wetlands, and their margins.
- 7.3.5 Noise associated with water-based activities can adversely affect the amenity values of land users and adversely affect habitat values.
- 7.3.6 The potential to compromise the development, use and maintenance of existing activities, buildings and structures, and identified areas of natural, amenity, cultural and heritage values.

## **7.4 OBJECTIVES**

- 7.4.1 To promote enhanced management of soil resources so as to maintain their capacity to enable communities to provide for their social, economic and cultural well-being.
- 7.4.2 To promote enhancement of the soil resource where these have been historically degraded.
- 7.4.3 To manage activities on the surface of water to ensure that cultural values, recreational values and amenity values, water quality and the natural values associated with water bodies are sustained.
- 7.4.4 To preserve the natural character of rivers, lakes and wetlands and their margins.
- 7.4.5 To maintain an acceptable noise environment for water-based activities and adjoining land users.
- 7.4.6 To ensure that the adverse effects of structures on the natural character, ecological values, recreational and amenity values of water bodies are avoided, remedied or mitigated, and that they do not restrict the range of potential uses for those rivers, lakes and wetlands.
- 7.4.7 To ensure that the use of the surface waters of rivers, lakes and wetlands does not create adverse effects on native fish (particularly eel), other indigenous species (especially birds) and trout habitat.
- 7.4.8 To ensure that the use of the surface water of rivers, lakes and wetlands does not endanger public safety.
- 7.4.9 To ensure that adverse environmental effects on existing activities, buildings and structures, and identified areas are avoided, remedied or mitigated.

## **7.5 POLICIES**

- 7.5.1 Require measures to address degradation of soil including loss of soil stability, erosion and contamination, and promote rehabilitation and enhancement of degraded land where this is practicable.
- 7.5.2 Ensure that the adverse effects of earthworks and vegetation removal on soil erosion or land instability, are avoided, remedied or mitigated.
- 7.5.3 Ensure that adverse effects of land use, development and subdivision on amenity values, and ecological and landscape values of an area, are avoided, remedied or mitigated.

- 7.5.4 Encourage and where appropriate require retention of indigenous vegetation in areas sensitive to and threatened by clearance including headwaters, riparian margins and coastal areas.
- 7.5.5 Identify and protect the natural character, recreational and amenity values, cultural values, and ecological values associated with significant rivers, lakes and wetlands and their margins within the District.
- 7.5.6 Maintain and enhance public access and recreational use of significant rivers, lakes and wetlands, which contribute to people's enjoyment and recreational use, while avoiding, remedying or mitigating any associated adverse environmental effects and maintaining the health and safety of all users.
- 7.5.7 Develop an agreed management regime for the surface of water in the Wairoa River and other water bodies where there is pressure for increased recreational use.
- 7.5.8 Ensure structures attached to the land avoid, remedy or mitigate any adverse effects on amenity values and public safety for land users and users of water bodies, contribute to changes in the natural qualities of the water body, or adversely affect cultural values.
- 7.5.9 Enable the prospecting for, exploration and processing of minerals including petroleum - related activities in a manner that avoids, remedies or mitigates any actual or potential adverse effects on the environment.
- 7.5.10 Ensure the scale, location and design of new activities, buildings and structures safeguard the elements that contribute to the natural character and the amenity values of the locality.

## **7.6 METHODS AVAILABLE USING THE PROVISIONS OF THE DISTRICT PLAN**

- 7.6.1 Develop standards in the District Plan for permitted earthworks, indigenous vegetation removal, and utilities, in addition to controls in the relevant regional plans, to avoid or minimise soil erosion and the adverse effects of gravel extraction, and protect water quality and values associated with water bodies.
- 7.6.2 Regular liaison with the Regional Council, the Department of Conservation, Federated Farmers, Fish and Game New Zealand, and key land management groups, to review the overall effectiveness of regional and district plan methods adopted for earthworks, vegetation removal, riparian management and gravel extraction.
- 7.6.3 In conjunction with the Hawke's Bay Regional Council, the Department of Conservation and other groups or individuals, identify the margins of water bodies where existing riparian vegetation should be maintained or enhanced, or new vegetation plantings encouraged, to promote the sustainable management of the environment.
- 7.6.4 Education programmes that encourage land managers to adopt practices that conserve the life supporting capacity of soils and minimise erosion.
- 7.6.5 Use the Petroleum Industry Codes of Practice as a guide to determining the adequacy of proposed management of any adverse environmental effects associated with the operation of petroleum-related activities.
- 7.6.6 Schedule significant rivers, lakes and wetlands in the District Plan.

- 7.6.7 Protection mechanisms may include providing for the acquisition of esplanade reserves of esplanade strips on subdivision, road closure or land use consents, and conditions requiring retention of existing indigenous riparian vegetation.
- 7.6.8 Initiate the establishment of a working group to identify the detailed issues to be addressed and management processes to be adopted relating to activities on the surface of water.
- 7.6.9 Develop a register of current and proposed activities undertaken on the surface of water within the District, and a calendar of events on a yearly basis.
- 7.6.10 Monitor the effects of surface water activities and noise generation to enable a review of plan provisions on a regular basis and as additional information becomes available.

## **7.7 EXPLANATION AND REASONS**

- 7.7.1 Council has an obligation to safeguard the life supporting capacity of soils within the Wairoa District. The soil resource in the Wairoa District is particularly susceptible to erosion. Earthwork and land disturbance activities need to be managed to reflect these issues. Council is also aware of the value of the soil resource to the District, both in terms of agriculture and horticulture, but also in terms of the minerals contained below the surface.
- 7.7.2 Council has taken a minimalist approach to regulating earthworks given the role of the Hawke's Bay Regional Council in soil conservation, with only minimum earthwork volume standards in each zone, beyond which such activities will require assessment on a case-by-case basis in terms of their effect on land stability, visual effects and effects on amenity values.
- 7.7.3 Council also recognise the value of retaining vegetation cover and carrying out planting schemes to stabilise erosion-prone areas, and will encourage this approach in partnership with the Regional Council. Minimum standards for the clearance of significant indigenous vegetation within the District Plan will also assist in land stability.
- 7.7.4 Council is also obliged to sustainably manage the surface of lakes, rivers and wetlands. This includes the need to manage recreational use and public access to the surface of water where there is competing demand or sensitive activities alongside, including identification of what those competing interests are. This is particularly relevant for the lower reaches of the Wairoa River where there is pressure for increased recreational use. Monitoring of the effects of surface water activities will also enable review of the relevant District Plan provisions to ensure the objectives, policies and methods for the management of the surface of water bodies are being met.
- 7.7.5 In association with other agencies, Council is also supportive of identifying those margins of water bodies that should be protected, or new plantings encouraged.

## **7.8 ANTICIPATED ENVIRONMENTAL RESULTS**

- 7.8.1 Land uses that sustain the life-supporting capacity of soils.
- 7.8.2 Maintenance and where appropriate, the enhancement of the potential of the soil resource to provide for the needs of the community now and in the future.
- 7.8.3 The degradation of the soil resource, habitat and amenity values by activities involving earthworks and vegetation removal is avoided, remedied or mitigated.
- 7.8.4 A reduction in river and lake bank erosion caused by human activities.

- 7.8.5 The values associated with water bodies and their margins are preserved for future generations.
- 7.8.6 Structures are limited to those that avoid, remedy or mitigate against any adverse effects they may have on the natural character and intrinsic values of rivers and lakes, and/or on associated amenity values.
- 7.8.7 Increased public appreciation of the District's water bodies, their riparian margins, and the values associated with them.
- 7.8.8 Conflicts between users and nuisances to residents arising from activities on the surface of water are avoided or mitigated.
- 7.8.9 Adverse effects on the environment from mineral exploration and resource development/processing are avoided, remedied or mitigated.
- 7.8.10 Adverse effects on existing physical resources are avoided, remedied or mitigated.

**Cross References:**

Part C – Land Management Zones and Rules

- [Chapter 16](#) – Rural Zone

Part D – District Wide Rules

- [Chapter 23](#) – Indigenous Vegetation and Habitats of Indigenous Fauna
- [Chapter 25](#) – Surface of Water
- [Chapter 26](#) – Utilities
- [Chapter 27](#) – Subdivision
- [Chapter 12](#) – Designations

[Schedule 5](#) – Significant Rivers and Lakes  
Planning Maps