

PART FOUR : SIGNIFICANT RESOURCE MANAGEMENT ISSUES

1. INTRODUCTION

Section 75(1)(a) of the *Resource Management Act 1991* requires district councils to identify the significant resource management issues of the district. The consultation process, including the preparation of Rotorua Tomorrow - Rotorua Te Ao Hou for public comment, and formal and informal meetings with people in the District, has helped Council identify the significant resource management issues facing Rotorua District (see **7.2 of Part One**). These issues are identified in this Part. They are addressed and further expanded upon in subsequent Parts.

These issues are not listed in order of priority. Similar issues have, however, been grouped together, where appropriate. The following issues are discussed:

- land use and management practices;
- cultural and tangata whenua issues;
- issues relating to amenity values;
- threats to natural and cultural resources;
- the effects of land management practices and use;
- the actual and potential environmental effects of business activities in the District; and
- the potential effects of natural and human generated hazards.

2. LAND USE AND MANAGEMENT PRACTICES

This Plan has been developed to assist Council in promoting the sustainable management of the District. Sustainable management is defined in Section 5 of the *Resource Management Act 1991* as a series of principles, with the Plan reflecting how those principles have been applied to the District. However, interpretation of these principles is an on-going process which will be developed through public debate, investigation, resource management decisions and monitoring the effects of those decisions throughout the life of the Plan. Sustainable management is not confined to natural and physical resources but extends to the wider environment (eg. cultural values, social values). At present, there are various interpretations of what sustainable management means to the community.

Despite the various interpretations of sustainable management and also of Section 5 of the *Resource Management Act 1991*, there are some uses and management practices that are clearly unsustainable. These include:

- Land uses resulting in accelerated erosion (ie. erosion at greater than natural rates) which destroys soils and their productive capacity;
- Earthworks resulting in sedimentation which can affect the cultural values and the habitats of waterways;
- The loss of indigenous forests and consequent destruction of ecosystems;
- Loss of productive potential of agricultural land and amenity values of rural areas as a result of lifestyle lot subdivisions;
- Subdivision changing the character of an area which may detract from amenity values; and
- The environmental effects of activities which impose a net cost on the community. The matter of cost recovery for service provision for those activities which generate adverse effects either individually or cumulatively also needs to be addressed.

There are a number of unsustainable practices in the Lake Rotorua Basin which are appropriately highlighted here. These practices are associated with continued urban expansion into the rural area around the Lake. These practices may result in:

- The loss of visual amenity particularly on the skyline;
- Change in rural character;
- The degradation of water quality;
- Loss of the productive potential of land; and

- Accelerated erosion of unstable land.

The same effects may also be experienced around other lakes in the Rotorua District. There is an increasing demand to use the land for a range of activities, including more intensive residential and tourism activities, which may be unsustainable.

Key aspects of sustainable management are addressed in this Part of the Plan and those that follow. By monitoring the effects of land management and resource use decisions, keeping up with the results of research and undertaking investigations where appropriate, changes will be able to be introduced to the Plan where they are required to better address the issue of sustainable management. This work will be undertaken in consultation with Environment BOP.

2.1 ISSUE

UNSUSTAINABLE LAND USE AND MANAGEMENT PRACTICES IN THE DISTRICT INCLUDING THOSE ASSOCIATED WITH CONTINUED DEVELOPMENT AROUND ROTORUA'S LAKES MAY CAUSE ADVERSE EFFECTS ON THE ENVIRONMENT

3. CULTURAL AND TANGATA WHENUA ISSUES

The history and settlement of this District by people from a wide range of ethnic groups, particularly Maori and European, has led to a rich diversity in culture, arts and heritage within the District. As the cultural diversity of the District continues to grow, it is important that the specific qualities and needs of all ethnic groups are recognised. In recognising ethnic diversity, it is also important to recognise and protect the heritage of the District.

Around thirty percent of Rotorua's population are of Maori descent compared with 12.8% of the population New Zealand wide. This is one of the highest proportions within New Zealand and recognition of tangata whenua issues is therefore of great significance in meeting the requirements of the *Resource Management Act 1991* to:

- recognise and provide for the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga (Section 6(e));
- have particular regard to kaitiakitanga (Section 7(a)); and

- take into account the principles of the Treaty of Waitangi (Section 8).

Council has consulted with Maori during the development of this Plan and will continue to do so during the life of the Plan. In order to give effect to Section 8 of the *Resource Management Act 1991*, Council believes there should be a spirit of partnership between tangata whenua and Council, and a recognition of the special relationship of iwi, whanau and hapu and their ancestral land. This relationship will be recognised when Council is dealing with resource management issues. One of the ways in which this can be done is through the identification and protection of sites or areas of significance to tangata whenua.

3.1 ISSUES

- (a) RESOURCE MANAGEMENT PRACTICES DO NOT ALWAYS ADEQUATELY RECOGNISE THE PRINCIPLES OF THE TREATY OF WAITANGI**
- (b) SOME ACTIVITIES HAVE THE POTENTIAL TO ADVERSELY AFFECT MAORI CULTURAL AND SPIRITUAL VALUES**

4. AMENITY VALUES

Section 7(c) of the *Resource Management Act 1991* requires Council to have particular regard to the maintenance and enhancement of amenity values. Amenity values are defined as those natural qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence and cultural and recreational attributes. There are a wide number of factors that contribute to amenity including:

- noise levels;
- heritage features;
- odour;
- buildings (type, height, scale, density);
- the amount and type of open space;
- natural features such as trees, bush, gardens; and
- landscape features such as lakes, hills, geothermal activity;

The presence or absence of certain characteristics and qualities contribute to the

amenity of different parts of the District. For example, the Central Business District is dominated by buildings, people and vehicles, and intensive activity. It is also structured and compact. In contrast the rural area is dominated by openness, pasture, trees and bush, natural features such as lakes and hills, animals, few buildings, and odours associated with rural activities (eg. silage). The concept of amenity is complex, and on-going work in this area is required to ensure the development and use of resources in the district is consistent with what different groups of people value about it. Some work has begun in this area including a landscape study of the District, a rural character study, and the identification of significant natural features.

The issues identified here and elsewhere in the Plan, and the Objectives and Policies, Methods and Rules developed in response to these issues, influence the amenity of the district and parts of it. Changes in use, infill housing, and subdivision (particularly in rural areas) may affect the amenity of different parts of the District. Other contributing factors include street and road layout, the amount and quality of public open space, street trees and gardens, building height, landscaping, density of housing, noise, glare, sunlight and privacy. On-going monitoring, to assess the effectiveness of the Plan in maintaining and enhancing the values that contribute to the identity of the District and its different parts, and make Rotorua a pleasant place to live, will also be critical.

4.1 ISSUE

ACTIVITIES, CHANGES IN LAND USE, AND SUBDIVISION CAN ADVERSELY AFFECT AMENITY

Aircraft noise is identified as an environmental effect arising from airport operations with the potential to affect amenity values associated with people's enjoyment of their properties. At the same time the uncontrolled development of activities sensitive to aircraft noise around the environs of the Airport will exacerbate such effects without appropriate control.

4.2 ISSUE

AIRCRAFT NOISE CAN ADVERSELY AFFECT THE AMENITY OF THE SURROUNDING DISTRICT WHILE UNCONTROLLED DEVELOPMENT OF ACTIVITIES AROUND THE AIRPORT MAY ADVERSELY IMPACT ON AIRPORT OPERATIONS

5. HERITAGE

There are a number of matters set out in Sections 6 and 7 of the *Resource Management Act 1991* which relate to "natural heritage". Section 6 of the Act relates to natural character, features, indigenous vegetation and fauna, and landscapes identified as being of national importance. They must be recognised and provided for in managing the use, development and protection of natural and physical resources. In addition, the intrinsic value of ecosystems, the heritage value of sites, and the maintenance and enhancement of the quality of the environment are matters to which Council must have particular regard (Section 7).

All these matters are connected and contribute to the promotion of sustainable management. For example, the lakes are of great importance to the District. They are of significance as major elements in the landscape and are also an important resource. The potential adverse effects of inappropriate land use and management were highlighted in the first section of this Part. This type of activity not only affects the lakes themselves but also their margins. Similarly, wetlands and the margins of rivers in the District are also threatened by inappropriate activities. The amenity value of the lakes as a landscape feature is also recognised. An independent landscape assessment for the lakes has been carried out.

Policies and Rules have also been included in this Plan which enable landscapes to be protected from inappropriate subdivision, use, and development. An example is the protection of the landscape features associated with the Rotorua Caldera such as the rim and surrounding hills through the establishment of an "urban fence". Further work will be undertaken on the identification of outstanding landscapes in the rest of the District during the Plan period.

Within the Rotorua District there are many other outstanding natural features and landscapes, including geothermal features, wetlands, and significant indigenous ecosystems. Geothermal features are under threat from their use for heat and energy and also from being filled in. While the potential loss of geothermal features through their use is a major concern, primary responsibility for the use of this resource rests with Environment BOP and Environment Waikato. Significant indigenous vegetation and the habitats of indigenous fauna can be destroyed or damaged by grazing stock. Fragmentation of remnant habitats further reduces their viability. Inappropriate land use on riparian margins can not only affect the indigenous ecosystems, but also affect public access to lakes and rivers.

There are a number of possible mechanisms that can be used to protect natural features including:

- requiring resource consent applications for their modification; and
- the use of voluntary Environmental Plans for the protection of outstanding features by retiring and fencing off land.

Council has established a list of natural features, buildings, trees, objects and sites including historic and archaeological sites for protection. Further work will be undertaken in the identification of natural character, indigenous vegetation and habitats, ecosystems and natural heritage during the Plan period. Changes to the Plan will be introduced as required. Other mechanisms outside the scope of the Plan such as the Tasman Accord may also be used.

5.1 ISSUE

THE NATURAL AND CULTURAL HERITAGE OF THE DISTRICT (INCLUDING OUTSTANDING NATURAL FEATURES AND LANDSCAPES, NATURAL CHARACTER OF WETLANDS, LAKES AND RIVERS AND THEIR MARGINS, SIGNIFICANT INDIGENOUS VEGETATION AND FAUNA, HABITATS, AND HERITAGE SITES, BUILDINGS AND AREAS) MAY BE THREATENED BY SOME ACTIVITIES (EG. EARTHWORKS, BUILDINGS, VEGETATION REMOVAL, POOR LAND USE MANAGEMENT PRACTICES, SUBDIVISION AND DEVELOPMENT)

6. NUTRIENT ENRICHMENT OF WATER BODIES

The water bodies of the District are some of the District's greatest natural assets. They provide a range of recreational opportunities for both residents and visitors. In addition to recreational values there are a number of other values including cultural, historic and natural values which are also affected by the management of water bodies in the District.

Adverse effects of nutrient inputs, such as phosphorus and nitrogen, include an acceleration in the process of eutrophication or a deterioration of water quality and the growth of nuisance weeds. Past management and uses of land and water have affected the quality of the lakes and these effects are still evident. The value of the lakes to the District means that everybody in the District has a stake in their remedy. There are two main sources of nutrients - those that occur naturally and those which are introduced through human activities. While the level of natural nutrient inputs cannot be controlled, the level of nutrients introduced through human activities can. Limiting the entry of nutrients into the lakes will have positive effects on eutrophication and will help limit the growth of lake weeds.

Water quality and the effects of land use are inter-related. Research has shown that the major contributor to nutrient enrichment is run-off from pastoral activities and stormwater from roads and other activities. However,

intensification or change in land use may result in increased nutrient and sediment loadings. Increased stocking rates, earthworks, or residential activities reliant on septic tanks, for example, have the potential to lower water quality. This continuing pressure being placed on the development of land around Lake Rotorua, including rural subdivision, in particular, has the potential to exacerbate the problems of nutrient enrichment. Options for dealing with the problem include placing controls on the effects of activities and education.

6.1 ISSUES

- (a) THE WATER QUALITY IN THE DISTRICT'S LAKES AND RIVERS HAS BEEN DEGRADED BY INAPPROPRIATE LAND USE ACTIVITIES AND MANAGEMENT PRACTICES**
- (b) LAND USE ACTIVITIES MAY LOWER THE QUALITY OF WATER BODIES BY INCREASING NUTRIENT AND SEDIMENT LOADING**

7. RURAL SUBDIVISION

In the consultation process for this Plan it became obvious that rural subdivision is a contentious issue in the Rotorua District. Depending on land use and management practices, the environmental effects from subdivision may be positive or negative. Where smaller lots are created, the options to deal with the potential adverse effects resulting from this type of activity are reduced. The effect of more intensive land use practices on water quality has been highlighted previously. More intensive activity may also lead to increased demand for new or extended services (eg. sealed roads, separate sewerage systems or water supply systems). Increasing the number of houses dependent on septic tanks may also result in adverse environmental effects, such as the enrichment of groundwater. The visual appearance of an area may also change as a result of subdivision and changes in land use. Rural subdivision may have positive effects, for example, by resulting in the protection of significant features.

7.1 ISSUE

RURAL SUBDIVISION AND DEVELOPMENT HAS THE POTENTIAL TO GENERATE ADVERSE ENVIRONMENTAL EFFECTS SUCH AS DETERIORATION OF WATER QUALITY, DEPLETION OF WATER RESOURCES, DEGRADATION OF RURAL CHARACTER, GENERATION OF DUST FROM ROADS AND LOSS OF THE PRODUCTIVE POTENTIAL OF SOIL

8. CENTRAL BUSINESS DISTRICT ISSUES

Under the provisions of the *Resource Management Act 1991* the efficient use of resources and sensitivity towards amenity and heritage values are of particular relevance in the Central Business District. While amenity has been discussed previously in this Part, it is an issue of particular concern to both Council and the community. Integration of the CBD has been addressed through streetscaping works which provide a coherent sense of where the CBD starts and ends. Some parts of the CBD have increased in vitality, such as the café strip in the Streat end of Tutanekai Street, whilst other parts have declined. This is a result of changing business, consumer and retailer patterns, which in turn affects the viability of some types of shops and businesses.

Other amenity matters of particular relevance to the Central Business District include:

- The preservation and enhancement of heritage values including Maori culture and Edwardian architecture;
- The integration of the lakefront and the Central Business District;
- Encouraging development which is uniquely and identifiably Rotorua;
- Providing a pleasant pedestrian environment; and
- Aesthetic coherence.

Apart from addressing amenity values in this area through the implementation of the Plan, Council has been involved in separate initiatives which also make an important contribution to enhancing linkages with the lakefront and improving aesthetic coherence in the Central Business District. The redevelopment of the Streat on Tutanekai Street and the redevelopment of the Lakefront Reserve have enhanced links with the lakefront. Council has established design themes based on Maori culture and Edwardian architecture for the development of public land and infrastructure including street furniture and paving. The incorporation of '*Rotorua City Design Principles*' in the District Plan will ensure that developers consider the context of their proposed building development, including both the Rotorua context and the context of the particular environs or streetscape. It encourages developers to adopt appropriate themes for new or altered buildings.

The extent to which the efficient use and development of buildings and other physical resources in the Central Business District (eg. streets, roads, and parks) should be a focus of District Plans continues to be a matter of debate. It is argued by some people that the retention of existing structures which have exceeded their engineering or design life is not desirable. They also argue that the market should be allowed to decide whether it is appropriate to refurbish, retain, or reuse the resource. However, others argue that because of existing levels of investment, an approach which encourages the continued maintenance and enhancement of existing physical resources in the Central Business District is consistent with the principles of sustainable resource management.

While there is scope for market led decision-making, the Plan provides a framework within which decisions are made dependent on the potential effects of proposals. Thus, the second argument, combined with an overriding concern to maintain and enhance amenity values in the area, many of which are associated with its physical resources, provides the basis for decision-making in this Plan. There is considerable public and private sector investment in physical resources in the Central Business District including buildings, paving, roading and utility services. In 2003 the capital value of properties alone (Commercial A and B Zones in the City Centre) was \$309,736,000. Accompanying this considerable investment has been the development of the area as a focus for a range of activities including retailing, tourism, business, and employment. The activities associated with these physical resources contribute to the well-being of people in the District as well as the amenity of the area.

8.1 ISSUES

- (a) INAPPROPRIATE EXTENSIONS TO THE CENTRAL BUSINESS DISTRICT MAY RESULT IN A LOSS OF AMENITY ARISING FROM FRAGMENTATION AND LOSS OF INTEGRATION**
- (b) ACTIVITIES MAY THREATEN THE MAINTENANCE AND ENHANCEMENT OF AMENITY VALUES IN THE CENTRAL BUSINESS DISTRICT RELATING TO ITS CHARACTER, IN PARTICULAR, A PEDESTRIAN ENVIRONMENT, TOURISM RESORT IDENTITY, LINKS WITH GEOTHERMAL FEATURES AND LAKE ROTORUA, AND THE AESTHETIC COHERENCE OF THESE AND OTHER FEATURES**
- (c) ACTIVITIES MAY DOWNGRADE EXISTING AMENITY VALUES RELATING TO ITS CHARACTER INCLUDING MAORI HERITAGE VALUES AND EDWARDIAN ARCHITECTURE**

9. EFFECTS OF INDUSTRY

While industrial activities are important to the Rotorua District's economy, their adverse effects on the environment also have the potential to be substantial. It is therefore important that the short to medium term effects of industrial activities on the environment do not detract from the long term sustainability of the natural and physical environment.

Since 1990, it has become apparent that there are limited sites in the District which can accommodate the adverse effects of heavy industry. Such sites need to be flat to avoid large scale earthworks, and in close enough proximity to each other for efficient and planned provision of services such as industrial sewers, trade waste disposal, and arterial roading. Associated with these requirements, is a recognition that heavy industry often has greater potential to generate adverse effects than other industries.

In the past, adverse environmental effects such as noise and heavy traffic movements in industrial areas have caused some problems, particularly where industrial activity is located adjacent to residential areas. It is important to ensure that land continues to be available for heavy industry, which potentially generate adverse environmental effects. It is important to ensure there is sufficient flexibility in the plan to allow for other types of industry to be located elsewhere, where the environmental effects of the activity can be avoided, remedied, or mitigated.

9.1 ISSUE

CERTAIN INDUSTRIES, IN PARTICULAR, HEAVY INDUSTRIES, HAVE THE POTENTIAL TO GENERATE ADVERSE ENVIRONMENTAL EFFECTS (EG. NOISE, TRAFFIC, ODOUR)

10. EFFECTS OF COMMERCIAL FORESTRY

The commercial forestry sector is well established in and around Rotorua. The strength of the industry in the District is reflected by the strong presence of research, education, processing, and other supporting activities associated with forestry in the District. Much of the demand for industrial sites (discussed in 9 of this Part) is generated by forest processing and associated industries.

The presence of commercial forestry in the district contributes to the District's physical identity. Increasingly, small scale forestry is an attractive option for farmers and also for those with small rural lots. Associated with the development of forestry are concerns about changes to the existing character of some parts of the District if the expansion of forestry continues. There are also concerns about the perceived loss of visual amenity associated with harvesting and changes in land use from pasture to forestry and the heavy traffic generated at harvesting time. There is also a need to ensure the values associated with identified significant landscapes in the District are maintained.

10.1 ISSUE

THE CONTINUED DEVELOPMENT OF FORESTRY IN THE DISTRICT MAY AFFECT THE AMENITY AND CHARACTER OF THE DISTRICT AS WELL AS LEADING TO ADVERSE TRAFFIC EFFECTS

11. EFFECTS OF TOURISM

It has been projected by the New Zealand Tourism Board that visitors to New Zealand will increase to 3 million annually by the year 2000. Currently (1995), Rotorua has around 40% of the market share of international visitors. This figure is expected to remain the same or increase slightly. The money expended by visitors on goods and services together with accommodation and attractions provides a substantial source of income and employment in the District. With expected increases in tourist numbers, it is important that the potential adverse effects of increased tourist accommodation, transport and other attractions by visitors are recognised in the Plan. It is also important that the long term sustainability of the natural and physical resources is not compromised by these activities. The cumulative effects of increasing tourism activities include:

- increasing pressure on existing infrastructure including roads, the airport and utilities such as sewerage and water;
- increasing pressure to develop the natural resources of the District including water bodies and geothermal features; and
- increasing demands for land for accommodation, attractions, food and retail outlets, and other associated tourism activities.

Many tourist attractions in Rotorua are focused on the District's natural resources like the lakes and geothermal activity. With ecotourism (where visitors like to actively discover the local natural environment) becoming increasingly popular with visitors to New Zealand, Rotorua is likely to become an increasingly popular tourist destination. While the importance of natural resources to the future of the tourism industry is recognised, they also have heritage, cultural and amenity values for the people living in the District. The management of these valuable natural resources in a way that meet the needs of future generations is central to this.

11.1 ISSUES

(a) THERE ARE POTENTIAL ADVERSE ENVIRONMENTAL EFFECTS ASSOCIATED WITH THE CONTINUED USE AND DEVELOPMENT OF NATURAL AND PHYSICAL RESOURCES TO ACCOMMODATE INCREASES IN TOURIST NUMBERS

(b) TOURISM ACTIVITIES MAY ADVERSELY AFFECT NATURAL RESOURCES WHICH HAVE CULTURAL, AMENITY AND NATURAL VALUES

12. HAZARDS

Rotorua is at risk from a number of natural hazards including vulcanism, earthquakes, geothermal and hydrothermal eruptions, erosion, local flooding, storm events and fire. There is increasing knowledge about the degree and nature of risks associated with natural hazards. Commissioning research on natural hazards in the Rotorua District is one way of increasing knowledge about hazards locally. The outcomes of this research will help towards the development of appropriate Rules and other mechanisms to avoid or mitigate the effects of natural events.

Education is an effective way by which natural hazards can be mitigated. A good example of the effect that education can have is through Civil Defence exercises involving the community and relevant agencies. Other ways in which natural hazards can be avoided or mitigated are discussed in **Part Thirteen** of this Plan.

Managing hazardous substances also needs to be addressed. These materials present significant risks to people and the environment. Their management includes their use, storage, transport and disposal to mitigate or avoid any actual or potential adverse effects that may arise from inappropriate practices. There are sites within the district that have become contaminated as a result of inappropriate handling of hazardous substances or from spillages. There are likely to be other sites which are not yet known of in the District. Council's strategy for dealing with hazardous substances and contaminated sites is presented in **Part Fourteen**.

12.1 ISSUES

- (a) NATURAL HAZARDS THREATEN NATURAL AND PHYSICAL RESOURCES AND PEOPLE'S WELL-BEING AND SAFETY**
- (b) INAPPROPRIATE PRACTICES IN RELATION TO THE USE, TRANSPORT, OR STORAGE OF HAZARDOUS SUBSTANCES IN THE DISTRICT MAY THREATEN THE NATURAL AND PHYSICAL ENVIRONMENT AND PEOPLE'S WELL-BEING AND SAFETY BY CAUSING SPILLS, SEEPAGE, SPRAY AND FUME DRIFT AND CONTAMINATED SITES**

13. SUMMARY OF SIGNIFICANT RESOURCE MANAGEMENT ISSUES IN THE DISTRICT

This Part of the Plan identifies some of the significant resource management issues in the District. The following matrix provides a guideline for identifying those Parts of the Plan that address the significant resource management issues introduced here. The Parts of the Plan that follow integrate and expand on these issues as well as discussing other issues facing the district.

TABLE: LINKS TO OTHER PARTS OF THE PLAN

PART	Maori Development	Tourism	Residential	Commercial	Industrial	Rural Resources	Reserves, Water Bodies and Heritage	Transportation	Natural Hazards	Hazardous Substances	Utility Services	Subdivision and Development
	5	6	7	8	9	10	11	12	13	14	15	16
Land use and Management practices	✓		✓			✓	✓	✓			✓	✓
Cultural and Tangata Whenua Issues	✓	✓	✓			✓	✓					
Amenity Values	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓
Natural Heritage	✓	✓				✓	✓				✓	✓
Nutrient Enrichment of Water Bodies	✓					✓	✓					✓
Rural Subdivision						✓						✓
CBD issues		✓		✓				✓				
Effects of Industry					✓		✓	✓		✓		
Effects of Forestry						✓						
Effects of Tourism	✓	✓	✓				✓					
Hazards					✓				✓	✓	✓	✓