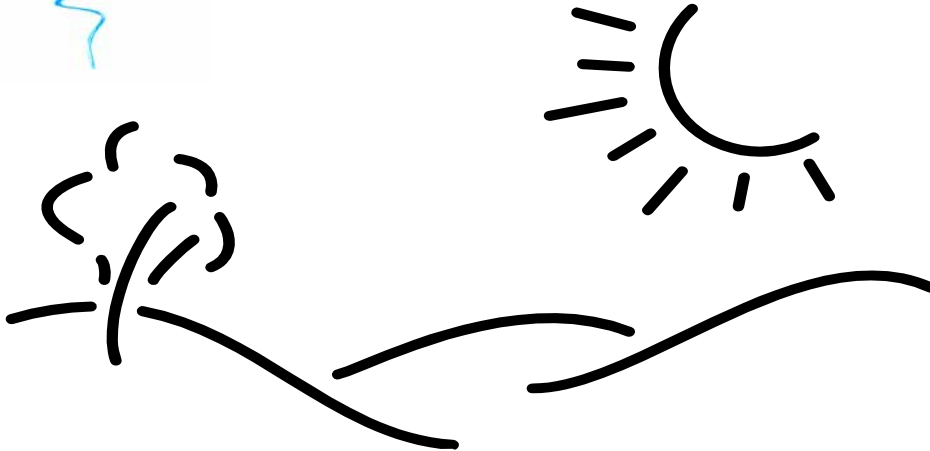


LAND MANAGEMENT



2.1 SOIL EROSION AND PROTECTION OF EROSION PRONE LAND

Explanation

Soil erosion is a major issue in the Gisborne region and closely related to other issues such as water quality and natural hazards. It causes environmental degradation through siltation, flooding, reduced water quality, decreased or lost productivity of land, threat to property and life, lowered amenity and intrinsic value of the environment, and cultural affront. Soil is a valuable resource which, unless managed in a sustainable manner, can be consumed like a finite resource

The soil erosion is due to extensive areas of soft and highly erodible rock types in the region, aggravated by large-scale clearance of the original native forest for pastoral farming. The main Raukumara Range consists of moderately hard sedimentary rocks from the

Cretaceous period that are relatively stable. In places these have been fractured or crushed by tectonic movement. They are highly erodible and the major cause of aggradation and river channel modification downstream, e.g. Upper Mangatu catchment.

Geologically young sedimentary rocks extend eastwards towards the coast, dominated by soft mudstones containing swelling and shrinking clay minerals such as montmorillonite and bentonite.

The East Cape peninsular is uplifting at about 4mm a year. Geologically this is very fast and results in rapid downcutting of river systems and erosion of the soft rocks.

The climate also contributes to rapid erosion. Occasionally very deep depressions of tropical origin carrying large quantities of water bring strong north-east or east winds and heavy rainfall.

These storms cause major pulses of erosion, e.g. in 1977, 1985 and 1988. As well, intense localised storms or long periods of intermittent rain saturate the soil and leave it vulnerable to erosion.

There are 359000 ha of eroded or erosion prone hill country in the district capable of sustained productive use. Of this total, 257000 ha can be used for (activities like) production forestry with minimal restraints on forest management and logging practices, or pastoral farming, provided that soil conservation measures are installed and maintained.

There are additionally, 89000 ha where the only sustainable productive use is forestry.

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Harvesting of these forests may possibly be subject to a consent process. In Council's judgement, the remaining 15000 ha is best left in indigenous or reverting vegetation. The 1992 Satellite mapping had insufficient resolution to detect spaced tree plantings, but other information available to Council suggests that soil conservation measures on the 257000 ha are about 22% complete.

Appendix 3 builds up an estimate of the total investment necessary in soil conservation in the District. On the assumption that the hill country is used for pastoral farming to the maximum extent possible, the total investment required to achieve sustainability is \$185m.

Tangata whenua have identified soil erosion and its consequence as an issue of major significance to them. These effects include loss of land productivity, sedimentation of waterways, aggradation of river beds, increased flood risk, siltation of land, impeded drainage of lands, loss of natural species and habitats. Impacts include inability of Maori to support themselves from traditional lands and food sources, destruction of sacred sites, destruction of natural features of the tribal rohe, and the loss of the Maori identity of the environment.

2.1.1 Objectives

1. Rehabilitation of eroded land and stabilisation of erosion prone land
2. To protect downstream natural and physical resources from the adverse effects of accelerated soil erosion.
3. To minimise the degradation of the soil and land resource caused by poor land management systems and unsuitable land uses.

2.1.2 Policies

1. To facilitate and encourage land uses and management practices, such as forestry, soil conservation works, riparian management techniques, retirement and regeneration that reduces the level of accelerated soil erosion;
2. To discourage land uses and management practices which cause or maintain accelerated soil erosion;
3. To promote methods to address soil erosion that are complementary and targeted to the more severely affected areas;
4. To promote and encourage resource user sectors to adopt voluntary measures and techniques such as self regulation and monitoring to achieve the purpose of the Act. See issue 9.1.1
5. To encourage responsibly-managed afforestation including harvesting, recognising that there may be temporary accelerated soil erosion associated with the activity;
6. To recognise that it is not always possible to practically or economically treat erosion on class 8 land, and that retirement of land may be the appropriate response.
7. To encourage the pastoral farming industry to adopt principles of sustainable management.
8. To provide for the maintenance and future development of essential public services such as network utility operations, where these activities meet section 5(2)(a)(b)&(c) of the RMA 1991.

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2.1.3 Methods

1. Develop and implement a Combined Regional Land and District Plan that will provide for sustainably managed activities while incorporating controls for accelerated soil erosion, preservation of significant natural vegetation and habitats (method 2.6.3.3), control of diffuse-source discharges to water, management of riparian margins, retirement of untreatable land and other aspects of sustainable land management. A proposed Plan was publicly notified in November 1997. Where possible Plan proposals were discussed and agreed with parties prior to public notification.

The Plan will be developed in consultation with Tangata Whenua, land user groups such as the farming, forestry sectors, the Department of Conservation and the NZ Defence Force and other interested parties. Through the Plan preparation and development process, the Council will consider appropriate methods and techniques to address the issues referred to in this Clause such as self regulation, education, advocacy, objectives policies, rules and other techniques to achieve the purposes of the Act.

2. Carry out a study which will identify whether it is feasible and appropriate to:
 - *Extend the existing controls which apply to vegetation removal and earthworks to require all landowners to avoid remedy or mitigate the effects of uses and uses and practices which cause soil erosion.*

- *Determine what classes of land should be the subject of such controls.*
- *Operate an "eroder pays" principle whereby those carrying out an activity contributing to accelerated soil erosion pay compensation towards ameliorating the effects.*

As part of this study Council will consult with tangata whenua, landowners, the farming and forestry sectors, central government and other interested parties. The outcomes of this study and consultation will be reported back to the Council and interested parties by mid 2002 and if necessary variations or changes to the Combined Regional Land and District Plan will be proposed during 2002.

4. Implement a concerted programme of education for the general community, interest groups and Government agencies with respect to soil erosion and rehabilitation.
5. Implement a programme of advocacy and education of landowners to encourage sustainable land uses.
6. Wherever possible Council will ensure its initiatives are complementary with Central Government initiatives such as the East Coast Forestry Project.
7. Where funding is available provide technical advice, material or financial soil conservation assistance to landholders.
8. Vigorously promote and encourage central government assistance to address the soil erosion issue.

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9. The Gisborne District Council will include in the District plan provisions providing for activities such as farming, forestry, temporary military training and search and rescue exercises, in appropriate areas and circumstances.

2.1.4 Reasons for Objectives, Policies and Methods

Reasons

The effects of erosion, including soil loss, productivity loss, siltation of water, river aggradation, landslip, flooding, loss of aquatic habitats, are serious and should be avoided or mitigated. This is a statutory duty.

The best means of addressing soil erosion is to encourage responsibly managed landuses and to bring about changes to land uses and practices which cause or contribute to erosion.

Changes will not occur unless landowners understand the need for them, and are encouraged to achieve them. There are several physical approaches possible, including change to land uses such as forestry, soil conservation works within pastoral farming, retirement and reversion, careful management of activities such as grazing, earthworks, vegetation removal, development of riparian vegetation.

The best options will vary with the characteristics of the site and the circumstances of the owners. There are also several processes available for achieving such land uses, ranging from direct works to education, advocacy, self regulation to regulation. All of these are relevant, and will be used.

In particular the importance of private sector forestry as a means of controlling soil erosion is recognised. This is suitable on all classes of eroding or erodible land and is particularly suitable for stabilising the more severely eroding land. However forestry will not be confined to only the more severely eroding land in order to protect the economic viability of the pastoral farming industry and its support services. Forestry is a legitimate land use in its own right. Council's analysis (Regional Policy Statement Issue Paper 2 shows that changes from farming to forestry are likely to result in similar or enhanced regional economic outcomes over time, and that forestry should produce at least as many jobs regionally, as farming. While recognising that there is an inherent window of environmental risk at the time of earthworks and harvesting, the Council is anxious to create a positive environment for forestry, (while addressing transport issues) because of the soil conservation benefits and considers that any attempt to restrict forestry to certain land classes will detract from the overall attractiveness of the Region to the industry and thus reduce the potential soil conservation benefits.

Government involvement is considered necessary in recognition that the huge scale of the problem is beyond the resources of landowners and the Council, past Government policies which have contributed to it, and potential benefits to the nation and to future generations. Carefully targeted financial assistance will both encourage landowner involvement and in some cases make commercial participation economically viable.

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Erosion of Class 8 land is not always able to be practically or economically treated. Such lands should be retired and allowed to regenerate naturally as far as possible but some sites are beyond the point of no return and erosion will continue to occur there. (Policy 4). Much of the Class 8 land is in indigenous vegetation and within the conservation estate. It should not be assumed that Class 8 land is automatically the land most severely affected by erosion.

The avoidance, remediation and mitigation of soil erosion is not the only component of sustainable land use. While farming and forestry are major land uses in the region, the promotion and encouragement of a diversification of uses will assist in the development of sustainable systems to ensure the needs of future generations are met. Areas throughout the region are suitable for a range of activities including tourism, recreation, temporary military training and search and rescue exercises. The emphasis is on encouraging appropriate land use activities while protecting and preserving the best and most versatile areas and controlling the adverse effects of activities on the most vulnerable areas. This will ensure that land use choices are kept open for future generations.

During 1992 Council introduced a regional plan dealing with vegetation removal and earthworks. This plan is focused entirely on soil erosion. It focuses also entirely on changes in activities affecting land and does not address existing unsustainable uses that simply continue.

There is a need to expand this plan to deal with other aspects of sustainable land management. This will require a study to establish

the feasibility and likely effectiveness of regulatory and economic techniques. The development of a sustainable Management Plan will enable all interested parties, including tangata whenua, the forest industry, the farming industry, and conservation groups to have input into developing a strategy for sustainable land management.

The Council recognises that land owners and land users have a long term interest in the resource and that some of these groups have expressed an interest in designing their own set of environmental standards and codes of practice to be incorporated into the sustainable land management plan. These initiatives, if properly conducted, are consistent with the principle of encouraging users to take responsibility for the effects that their activities may cause.

Alternatives considered

The following alternatives were considered:

Do Nothing

This would allow present unsustainable land uses and practices to continue creating the effects described. While saving money in the short term such an approach would result in major long-term environmental and economic costs. It would also be contrary to the Act.

Main Emphasis On Publicly Funded Works Project

One estimate is that the average cost of appropriate soil conservation works is \$518 per hectare. For 359,000 ha this would amount to over \$185 million, which is far beyond the ability of Council or Central Government to fund in the short term.

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If expenditure were spread over say 30 years then very considerable damage would occur and some lands would probably pass beyond the point of no return. There is a place for this type of activity but as part of a wider package rather than a total solution.

Regulatory Approach

This would involve Council requiring landowners to adopt sustainable land uses, perhaps over a period of time through rules in district or regional plans. Council has not ruled out this approach, and intends to study it further, but considers that unless landowners are well-informed about the issue and alternatives available the approach would have very high enforcement costs and might be less cost-effective than education and advocacy work.

Specific timelines

Specific numerical targets such as treating stated numbers of hectares per year or by stated times were considered but not adopted because Council lacks the ability to implement these by itself and must therefore rely on its ability to influence the decisions of other parties such as landowners and Government. Such targets would give a misleading impression.

2.1.5 Integrated Management

This issue relates to other issues discussed in Part 2 of this Regional Policy Statement, in particular:

2.3 Natural Hazards

2.6 Significant natural areas

3.0 Water Management

6.0 Coastal Management

8.0 Transport

9.1 Integrated Management of Natural and Physical Resources

2.1.6 Environmental Results Anticipated

1. Improved productivity from eroded and erosion prone land.
2. Reduction in unsustainable land use.
3. Reduction in soil erosion and soil degradation.
4. Reduction in storm induced soil erosion.
5. Reduction in downstream effects of soil erosion and enhancement of freshwater and marine habitats.
6. An improved habitat for wildlife.

2.1.7 Monitoring

1. Trends in soil erosion and soil degradation.
2. Trends in downstream aggradation and flooding.
3. Water quality and maintenance of suitable habitat for aquatic species.
4. Storm damage effects.
5. Land use changes and sustainable land use.

LAND MANAGEMENT

2.2 THE DETRIMENTAL EFFECTS OF PESTS ON INTEGRATED RESOURCE MANAGEMENT

Explanation

Weed and animal pests have many adverse effects on the environment. These include creating a threat to indigenous ecosystems and also to increasing erosion with all the concomitant environmental costs.

Although pest control is a Council function, it is not a specific role under the RMA. However because of the adverse effects pests have on the environment, Council can address pest issues in the RPS in the context of providing effective integrated resource management.

Council's specific pest control function comes from the Biosecurity Act 1993. Here, Council is responsible, in association with other agencies such as MAF and DOC, for the regional administration of legislation concerned with the control of different terrestrial and aquatic pests. The principal method of implementation will be Regional Pest Management Strategies which will supersede in 1996, the operational functions of such statutes as the Noxious Plant Act 1978. Pest Management Strategies will effect a partnership between Council, DOC, MAF, other agencies such as Transit NZ and DOSLI and land users.

2.2.1 Objective

1. Avoidance or mitigation of the adverse effects of pests on the environment such as, increased soil erosion and reduced indigenous ecosystem and species diversity.

2.2.2 Policies

1. To identify and co-ordinate responsibility for pest control between agencies and individuals on Crown, lease and freehold land.
2. To work with agencies in neighbouring regions to ensure compatible policies and to maximise the effectiveness of control programmes.
3. To ensure that soil conservation measures within regional/district plans confer responsibility for control of pests contributing to erosion.
4. To assess priorities for pest control and ensure that adequate resources are available for the effective implementation of Council's pest control programmes.

2.2.3 Methods

1. The Council will develop Regional Pest Strategies (in consultation with others) under the Biosecurity Act to establish and co-ordinate responsibilities for aquatic and terrestrial pest control and in the interim will continue to implement its existing Noxious Plants Programme and Rural Pests Programme.

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2. The Council will consider implementing rules to govern potential pests which are kept domestically or farmed. For example, minimum fencing requirements and land categories for goat farming.
3. The Council will support other agencies in their efforts to ensure they have adequate resources to meet their pest control obligations.
4. The Council will provide education and information to assist individual landholders to understand the significance of the pests issue and to carry out private pest control.

2.2.4 Reasons for Objectives, Policies and Methods

Weed and animal pests have a number of adverse environmental effects including causing erosion, damaging native vegetation and habitats, lowering the productivity of land and spreading health problems for people and stock. The objective seeks to minimise these effects.

The Crown, Councils and landowners all have roles under the Biosecurity Act. Co-ordination is required for maximum effectiveness. (Policy 1)

Weeds and animal pests spread across boundaries so it is important to ensure approaches in neighbouring regions are compatible. (Policy 2)

Soil conservation measures would be incomplete and less effective unless they are integrated with pest control. (Policy 3)

With limited resources available for this and other issues it is important that priorities be set and best use is made of available funding. Without some allocation of resources these objectives and policies could, not be implemented. (Policy 4)

The Biosecurity Act provides a clear framework for pest management that is expected to be adopted throughout New Zealand. It would be inconsistent and confusing to adopt other methods for administration and implementation. (Method 1)

Escaped farm animals can breed and spread rapidly in the wild, becoming pests. This has already occurred with goats and has the potential to occur with new species which may be introduced. However it is not clear at this time that a regulatory approach to this would be economically enforceable. (Method 2)

The Council is in a good position to observe the effectiveness of other agencies, identify shortcomings in their programmes and advocate for improved resources. (Method 3)

Education and information are critical to enable people to understand the issue, and accept and take part in pest management strategies. (Method 4)

Alternatives considered

Alternatives for pest control such as the provision of services or economic instruments have not been examined.

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This is because the framework for pest control is not provided by the RMA but instead by the Biosecurity Act 1993 through a Pest Management Strategy (PMS). The PMS must not be inconsistent with the RPS. As that strategy is still to be written, it would be inappropriate if the RPS prejudged consultation on pest management solutions by adopting other methods for administration and implementation.

Do Nothing

This would enable weeds and animal pests to spread widely through the region causing extensive environmental and economic damage. This is not consistent with sustainable management and was not considered further.

Complete Control

This would be consistent with sustainable management but be completely beyond the economic means of most landowners and the Council, and to attempt it would probably lead to the neglect of other important responsibilities.

2.2.5 Integrated Management

This issue relates to other issues discussed in Part 2 of this Regional Policy Statement, in particular

- 2.1 Soil Erosion;
- 2.3 Land Degradation;
- 2.6 Indigenous Vegetation and habitats;

2.2.6 Environmental Results Anticipated

1. A reduction in soil compaction and vegetation removal along with associated soil erosion.
2. Greater amenity and intrinsic value for the natural environment, including a reduction in adverse effects on indigenous vegetation and fauna.
3. Protection of soil resources and associated productivity.
4. Reduction in the adverse impacts on water quality and reduced flood damage.
5. Reduced “take-over” by pest species.
6. Reduced risk to stock and animal health.

2.2.7 Monitoring

1. The numbers of pest species present in the environment.
2. The impacts of pests on soil conservation and water quality objectives.
3. The impact of pests on human and stock health.
4. Changes in the extent of flora and fauna attributable to pests.

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2.3 AVOIDING OR MITIGATING THE EFFECTS OF NATURAL HAZARDS

Explanation

Natural hazards are naturally occurring events in the atmosphere, earth or water which adversely affect or may adversely affect human life, property or other aspects of the environment. The Council is obliged under the Resource Management Act 1991 and the Building Act 1991 to take steps to avoid or mitigate natural hazards.

The impact of natural processes however may be accelerated or worsened by human activities in vulnerable areas, for example clearance of vegetation, earthworks, building on unstable lands.

The type of natural hazards which are of significance in the Gisborne Region include:-

Landslip and slope erosion.

Flooding.

Coastal erosion and storms.

Tsunami.

Earthquakes.

Volcanic eruption.

Fire

These are all natural physical processes, and hazardous only when they have adverse effects upon human life, property or other

important environmental assets. The coastal environment is particularly susceptible to the effects of these natural hazards.

This regional policy statement outlines the measures that should be adopted to avoid/mitigate such hazards.

Landslip And Slope Erosion

Most parts of the Gisborne Region consist of hill country which is susceptible to landslip and erosion of various types. These can be regarded as hazards because of:-

1. Risk of damage to life and property.
2. Loss of the soil resource.
3. Effects on the natural environment, e.g. loss of water quality, damage to habitats or ecological values, visual degradation.

As parts (b) and (c) are extensively dealt with in other parts of the regional policy statement, this discussion will focus on part (a), risk and damage to life and property.

The most commonly affected situation is with development of hill slopes for either buildings, or roading and other access. Developments that are unsuitably located or designed could either be affected by erosion or slippage, e.g. a house or road affected by slips arising up slope, or could cause or worsen slipping and erosion, to the detriment of themselves and perhaps others.

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Flooding

Flooding is a significant hazard in the Gisborne region, due to the rugged terrain, extensive river systems, large floodplains which support human settlement and intensive farming, and regular heavy rainfall events.

The Poverty Bay Flats including parts of Gisborne City is the area most intensively settled and developed, and at risk from flooding. The rivers concerned are the Waipaoa River and its tributaries and also the Waimata/Taruheru systems. Other significant areas at risk are the Tolaga Bay Flats and the Waiapu River Valley. Flood risk exists in many other flat or low lying areas.

The effects of flooding include:

- *Injury or loss of life in floods.*
- *Damage or destruction of buildings, equipment, roading, services.*
- *Damage or destruction of crops, stock, fences and other productive assets, by water damage and sedimentation.*
- *Aggradation of river beds, reducing their capacities to carry floodwaters and increasing the impact of flooding.*
- *Loss or damage to aquatic and marine ecosystems.*
- *Damage to sites of special cultural, historic, or scientific value.*

Coastal Erosion

Erosion of the coastline by the sea is common throughout the region. In some cases erosion is episodic and alternates with accretion of the

coastline at the same location. Areas where development are known to be at risk from coastal erosion include Wainui Beach, Tolaga Bay, Anaura Bay, Tokomaru Bay. Roading is also vulnerable to erosion in some locations.

Erosion can be severe, with many metres of land lost in a single storm, sometimes followed by long periods of little or no erosion.

Associated with coastal erosion is flooding by the sea in major storms which has the potential to damage buildings and other developments even if actual erosion does not result. Examples of such events have been recorded at various locations where large logs and debris have been washed ashore by heavy seas up to 80 metres. The return period for such storms has been estimated at less than 30 years (in "Gibb v Coastal Hazard Mapping as a planning technique for Waiapu County 1981"). Depending on the track such a storm takes, temporary flooding or significant erosion could take place anywhere along the regions coastline.

Future factors to take into account include the possibilities of sea level rise, and increased storminess due to climate change, both of which could lead to increases in coastal erosion or sea flooding.

Tsunami

Tsunamis are ocean waves generated by processes such as earthquakes, either close to the coastline of New Zealand or sometimes in very distant parts of the world.

Occasionally very large waves can be generated, with the potential to create significant damage in low lying coastal areas.

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There have been up to 37 tsunami events recorded in New Zealand between 1840 and 1980 (not all can be identified with certainty as tsunamis), several of which were observed in the Gisborne region. Perhaps the best known are the tsunamis in 1947 which produced waves estimated at 15 metres in height in the vicinity of Tatapouri and Whangara, damaging houses and bridges. The wave almost crested the sand dune at Wainui Beach between the houses and the sea.

The great majority of the tsunamis recorded produced waves less than 4 metres in height. Damaging tsunamis are therefore low-probability but high impact events. Parts of the coastline would be considerably more at risk today than in 1947 because of the extra development which has occurred.

It is considered that the areas at risk are largely the same as those areas which could be affected by major storms, which can produce waves of similar size and more frequently. Special responses directed towards purely tsunami are not therefore appropriate.

The appropriate responses therefore are the same as for the coastal hazards discussed above. An additional response is Civil Defence planning. The Council's Civil Defence organisation is linked to the international tsunami warning system, which is able to give warnings about tsunamis generated around the Pacific. This is helpful for events originating far from New Zealand but is not helpful for events originating on the New Zealand continental shelf, where warning time of only a few minutes can be achieved.

Volcanoes

There are no active volcanoes in the Gisborne region, although there is geological evidence of volcanic activity in the past. The region however could be affected by major eruptions of the volcanoes in the Bay of Plenty and Central North Island. The effects which could be created could include blanketing with dust and ash, pyrolytic flows, earthquakes and tsunamis. Related consequences could include destruction of buildings, crop and stock losses, loss or spoiling of water supplies.

Such events are considered very low risk, because of infrequency. They are certain to occur over periods of thousands of years but unlikely in individual lifetimes. The effects of such events are beyond the scope of landuse controls to deal with. The appropriate responses are considered to be all in the Civil Defence field, and include understanding and making people aware of the likely consequences of such events, as well as maintaining warning systems and having systems in place to deal with the consequences of events.

Earthquakes

Gisborne is situated in a seismically active part of New Zealand where there is significant risk of earthquake activity. Moderate or severe earthquakes, although rare, are unforeseeable and could occur at any time.

The effects of earthquakes could include damage to buildings and services, injury or loss of life, disruption of essential services such as electricity, water supply, sewerage, roading and communications.

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Damage could occur because of general ground shaking, land-slides, and fault displacement.

Ground shaking would be by far the most widespread effect and could affect all or most of a region in any major event. Because the effect could be so general, landuse planning cannot identify particular hazard zones.

The appropriate response here is with design construction techniques to ensure new buildings can withstand the type of shaking which can be expected, and with strengthening or demolishing older buildings.

Landslides are not only caused by earthquakes. The appropriate response here lies with landuse and building restrictions to ensure that development does not occur in areas at risk from landsliding.

Damage due to surface movement of active faults is much rarer, and this effect can only be mitigated by not developing at all over or close to such faults, where these are known. No design or construction technique could prevent major damage or destruction of any building or development in such areas.

The correct response here is with identifying such faults on planning maps with associated rules. Unfortunately such faults can be undetectable on floodplains when surface traces of past movements are lost, for example the Edgecumbe earthquake of 1987 which occurred on a previously unknown fault.

Another response to earthquakes is in Civil Defence Planning, to cope with the aftermath of earthquakes.

Fire

Rural fires are a potential hazard in the Gisborne District. Frequent hot dry summers create a regular fire risk in areas of plantation forest, indigenous vegetation and on farmland. Some areas of exotic forest are close to the urban areas of Gisborne and Ruatoria.

- *The effects of rural fires include:*
- *Danger to people and property*
- *Destruction of indigenous vegetation and ecosystems*
- *Destruction of vegetation cover on fragile lands leaving them vulnerable to severe erosion*
- *Economic loss where production forests are damaged*

The Gisborne District Council is a territorial fire authority under the Forest and Rural Fires Act 1977 and controls fires in areas not covered by either urban fire districts administered by the New Zealand Fire Service, State Areas controlled by the Department of Conservation or rural fire districts such as Waiapu, Eastland and Timberlands New Zealand.

The Council maintains a rural fire plan under the Forest and Rural Fires Act and has a fire-fighting capability for events within its jurisdiction.

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2.3.1 Objectives

1. A pattern of human settlement that:
 - *provides a high level of personal safety from natural hazards for its inhabitants;*
 - *avoids or mitigates the risk to property and infrastructure from natural hazards;*
 - *does not accelerate or worsen the effects of natural hazards upon the natural and physical environment.*
2. Rehabilitation, where practicable, of aspects of the environment degraded by natural processes that were induced or accelerated by human activities.

2.3.2 Policies

1. To encourage and facilitate changes, over time, to patterns of human settlement, development and activities which are not affected by natural hazards and which do not induce or worsen the impacts of natural processes, and which recognise and allow for some natural features to migrate inland as a result of dynamic coastal processes.
2. To recognise the limitations of attempts to control natural processes by physical work and limit such attempts to appropriate situations where they are:
 - a) needed to protect existing development, or waahi tapu or new public infrastructure such as ports, roads, bridges; and
 - b) have a favourable benefit to cost ratio; and

- c) will not have significant adverse effects on the natural character of the coastal environment, or other adverse environmental effects; and
 - d) will not cause or worsen hazards to other lands/waters; and
 - e) can be designed with confidence of long-term effective performance; and
 - f) are the only practical alternative.
3. To maintain a strong commitment to researching, recording and publicising information about natural hazards.
4. To recognise that natural systems and features may provide a defence against natural hazards and that the integrity of such natural systems should be protected and enhanced where appropriate.
5. To recognise the possibility of sea level rise and the likelihood of changes to the frequency and impacts of some natural hazards due to climate change and sea-level rise
6. To encourage participation by the affected communities in managing the risks of natural hazards

2.3.3 Methods

1. Maintain accurate and accessible records and information about natural hazards, both generally and in respect of particular sites or localities.

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2. Incorporate natural hazard information in Council's property databases.
3. Identify sites and topics where further knowledge is required and undertake appropriate research.
4. Identify areas subject to natural hazards, and natural features and systems which provide a defence against natural hazards, and publish information about them in Regional and District Plans.
5. Adopt methods, including rules, in district and regional plans controlling development in areas affected or potentially affected by natural hazards that prevent, restrict or require special design or precautions, as appropriate.
6. Maintain stopbanks on the Waipaoa River to protect lands on the Poverty Bay Flats and within Gisborne City from flooding, to a design standard of 5000 cumecs.
7. Maintain existing river and coastal protection works for highways and bridges.
8. Adopt rules in regional and district plans regarding protection works in accordance with policy 2 limiting these to appropriate situations.
9. Adopt methods in regional and district plans to prevent or reduce soil erosion, including rules that control activities which promote soil erosion.
10. Develop and maintain an active warning system for such hazards as tsunamis, volcanic eruptions and floods.

11. Develop and maintain a Civil Defence organisation including up-to-date forward planning and operational response capability to emergencies.
12. Impose requirements under the Building Act to require upgrading of earthquake risk buildings.
13. Perform the functions of a territorial fire authority under the Forests and Rural Fires Act 1977, and co-operate to the maximum with other authorities with functions under that Act.
14. Encourage communities to develop their own emergency response plans complementary to Civil Defence.
15. Provide insurance for major community assets by subscribing to schemes for assistance with major disasters and by providing contingency funds for smaller events.

2.3.4 Reasons for Objectives, Policies and Methods

Reasons for objectives

These objectives are seen as what is necessary to achieve the requirements of the Act and the needs of the people of the region. They are expressed largely in terms of human settlement and activities, because without these the concerns would be purely natural processes, rather than natural hazards, and therefore require no action.

Alternative Objectives

No alternative sets of objectives are considered possible within the requirements of the Act.

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Reasons for Policies

These policies recognise that development has occurred in the past which can now be seen to be unsustainable in the long term. It is not economically possible to remedy all such cases immediately and improvements can only occur over time. The policies also recognise the difficulties and expenses in trying to control natural processes over time by physical works, but that there may be occasions when such works are appropriate because the impacts would be economically and environmentally sustainable. This would include both low cost, low impact works, and situations where the value or importance of the asset to be protected justifies greater spending, both on the works and consequential environmental protection.

Policies 3.4.2 and 3.4.3 of the New Zealand Coastal Policy Statement state that Regional Policy Statements should recognise that natural systems and features provide a natural resilience to natural hazards and should be maintained or enhanced. This Policy is required to ensure consistency with the New Zealand Coastal Policy Statement.

Alternative Policies Considered

Two other approaches are seen as possible. These are:-

- a) Withdrawal from protection works. Not constructing anything new or maintaining existing works. The immediate and long-term impact of this would be the need to progressively abandon or relocate housing, roading and other assets at a number of locations around the district. The cost to public organisations and private owners would be very considerable.

In particular, much of Gisborne City, Wainui and the Poverty Bay Flats would be put at risk of flooding and significant urban development and roading would be placed at risk from coastal erosion. The benefits from such an approach would be preservation or restoration of natural character but to achieve that in full would require actual removal of some protective works. The costs of such a policy have not been quantified but are clearly very considerable.

- b) A strong commitment to enabling and providing and maintaining protection works against natural hazards. The main benefit of this approach would be maximum development of land. The main costs would be environmental, such as loss of natural character, habitats etc, and the actual construction/maintenance costs. It is not considered that this approach meets the requirements of sustainable management and it is not considered further.

Common to the selected approach, or to either of the alternatives discussed above is the need for research and monitoring on natural hazards, in order to assess the need for feasibility of, and costs of, protection works, or to establish the timing of any withdrawal or relocation of assets.

Reasons for Methods

Accurate information, readily available over time is essential for wise decision-making by Council, property owners and potential developers. (Methods 1 - 4)

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Method 5 enables the correct response to identified hazards. It is necessary to implement the Act's requirements to control land use to avoid or mitigate natural hazards.

Existing investment and development in Gisborne City, on the Poverty Bay Flats, and in the district's roading network rely on protection works from flooding, river and sea erosion. Without the protection, these improvements could not continue to exist. The costs, in human and economic terms of discontinuing such protection have not been quantified but would be enormous. The Council is satisfied that such costs would far exceed the financial and environmental benefits of discontinuing the works. (Methods 6-7.)

Protection works against natural hazards should not be a routine response but should be confined to the situations listed. The costs and environmental effects of protection works such as loss of natural character, modification or destruction of habitats, and the past ineffectiveness of such works means a new and more targeted attitude is required. Method 8)

Soil erosion is a major contributor to natural hazards. It causes aggradation of river-beds which increases their potential to flood. It also causes siltation of land in times of flood. The effects of flooding will not be adequately dealt with until soil erosion is substantially under control.(Method 9)

Methods 10-13 are matters not arising out of the Resource Management Act.

They are functions and powers under other legislation which Council can call on to assist it in avoiding or mitigating natural hazards.

They include contingency planning and response preparations such as warning systems and Civil Defence and rural fires, and use of powers under the Building Act to reduce the effects of earthquake.

2.3.5 Integrated Management

This subject relates to other subjects discussed in Section 5 of this Regional Policy Statement, in particular:

2.1 Soil Erosion

2.4 Culture and Heritage

3.0 Water Resources

6.1 The Coastal Environment

All persons exercising powers or carrying out functions under the Resource Management Act relevant to natural hazards should have regard to these provisions.

2.3.6 Anticipated Environmental Effects

The environmental results anticipated are the achievement, over time, of the Council's objectives producing safety for the inhabitants of the region, protection for individual and community investments and a natural environment not affected by man-induced natural hazards.

2.3.7 Review and Monitoring

Council will monitor:

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1. Changes in:
 - a) Coastal erosion, both generally and at specific locations such as Wainui Beach by regular surveys.
 - b) Aggradation of the major rivers by regular surveys.
 - c) Sea level.
 - d) The area of land affected by erosion.
2. The rate at which structures and development are affected by natural hazards.
3. The rate at which earthquake risk buildings are upgraded or demolished.
4. Meteorological events for the purposes of managing the impacts of the events, and for future planning.
5. The effectiveness of specific protection works in managing the impacts of natural hazards.

2.4 RECOGNITION AND PROTECTION OF THE HISTORICAL AND CULTURAL VALUE ASSOCIATED WITH SITES, INCLUDING HISTORIC PLACES AND WAAHI TAPU

Explanation

The Gisborne District is rich in Maori and European heritage, a good deal of which remains known and obvious.

As it represents the earliest of the country's history there is an obligation to record and protect it.

This responsibility is embodied in the Treaty of Waitangi and the Resource Management Act 1991. It should therefore underpin the process which promotes sustainability and the management of effects on the natural and physical resources.

Recognition and protection of heritage values is important for the welfare of the people of the region. This is particularly so in the Gisborne region (including the Coastal Marine Area) which is rich in Maori heritage and is the location of the earliest European contact. However protection and preservation cannot be achieved by regulation alone but also requires resources and commitment by the community. A successful strategy of heritage protection will therefore require an integrated approach that covers the whole region including the coastal marine area.

Insufficient resources have been applied to the identification of places and items of historical significance. While much research and recording has been carried out coverage of the region is not total. There is not total agreement about the appropriateness of recording information about heritage sites in a public form. There is also a lack of understanding of those items that have heritage value. A comprehensive study should be undertaken to fully appreciate the extent of the resource and to establish priority for future work.

There is an urgent need for a planning document that establishes a strategy to ensure that the heritage values of the region are recognised and provided for.

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At present there is little guidance on what is considered important to the region, the management of effects or the processes which are important to protect places and items of historical significance.

Treaty of Waitangi

As with all other aspects of resource management, the Treaty of Waitangi shall be taken into account in promoting sustainability and in the managing of effects.

Historic Places Act 1993

The categories ascribed to different historic places are a means of classifying these places in the register established under Section 22 of the Historic Places Act 1993. Category I are “places of special or outstanding historical or cultural significance or value” while Category II are “places of historical or cultural heritage significance or value”+. Classification by itself does not provide any protection or affect the rights of the owners.

The Act proposes to establish a register of waahi tapu areas, historic places and historic areas. Recognition and protection will then take place through the provisions of the Resource Management Act and regional and district plans.

An historic place is defined as a site, building or object which is historic by reason of an association with the past, which demonstrates or provides evidence of any cultural, traditional, aesthetic or other value of the past and includes archaeological and traditional sites.

Historic areas comprise a group of items which collectively rather than individually have historic value.

A traditional site is defined as a place or site that is important by reason of its historical significance or spiritual or emotional association with the Maori. A number of these have been recorded on a national register.

Other Acts

Other Acts which contain responsibilities for heritage protection are the Building Act 1991 and the Conservation Act 1987. The Building Act requires that records be maintained of registered buildings and areas. In the event of information being sought by the public in respect of development affecting such items, appropriate advice must be given. Likewise the Act places a responsibility on a local authority when development approval is sought that might affect a recorded item.

The Conservation Act 1987 established the Department of Conservation with a number of functions. These include:

- *Management of historic resources on lands administered by the Department;*
- *Advocacy for the conservation of natural and historic resources generally.*

Responsibilities

The Resource Management Act and other legislation, make it clear that Parliament expects heritage values to have a high profile in the management of effects on the natural and physical resources of the region. This will require an understanding of heritage values, recognition of heritage items, rules for protection and resources for preservation and enhancement.

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Heritage Values

In addition to the responsibilities imposed by legislation there are strong cultural, social and economic reasons for protecting New Zealand's heritage.

Heritage items such as buildings and places, have values in their own right and are increasingly becoming a rare and unique resource as time passes.

They are part of the natural and physical resources of New Zealand that should be managed in a sustainable manner. Historic items are visual aspects of New Zealand's development and should be protected as a record of the country's history.

The manner in which previous generations lived, worked and played is a window of society and portrays the influences that have shaped the emerging culture of the community. It can also demonstrate reasons for decisions taken in the past that have had both positive and adverse effects on the environment.

There is a responsibility to record the past for the benefit of future generations. It cannot be achieved alone but will require consultation with the community, and special interest groups. The benefits can be considerable and long term, in respect of education, cultural and spiritual stability, social well-being, community identity, efficient use of resources and economic returns.

Waahi Tapu

Section 6 of the Act makes it a matter of national importance to recognise and provide for the relationship of Maori people and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga.

Waahi tapu has been deliberately left undefined in the Act. This is because it should be left up to iwi/hapu to both define and disclose to resource management agencies the existence and extent of waahi tapu in their areas.

The duty of the resource management agencies is to recognise and provide for such places. If information is produced at any hearing, an application may be made by iwi/hapu to have it treated as sensitive information (Section 42). It would then only be available to authorised persons.

Reference is specifically made to protection of waahi tapu in Section 58. This is in respect of the New Zealand Coastal Policy Statement. There are further references in the Eighth Schedule of the Act in respect of subdivision of Maori land (pp 326-331 of the Act). Where the Maori Land Court certifies land to be of particular spiritual or cultural significance, this land or any part of it cannot be taken by territorial authorities for reserves purposes.

Means

How to apply the sparse resources available to heritage protection is a matter of concern nationally, as well as in the Gisborne region.

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As a result, priority needs to be accorded to the most important items with other measures implemented to encourage voluntary action by the community.

Competing with protection is the demand for new development which often unwittingly destroys heritage values.

The ravages of time also hastens the demise of historical items, as fabric wears out and nature changes the landform. The first priority therefore becomes the raising of public awareness of historical items and heritage values and the importance of identifying and recording places, objects, buildings and events. Then as resources permit, the priorities would be legal protection, preservation, restoration and conservation. The means of achieving these goals ranges from acquisition, subsidies, incentives, education and rules.

Records

The largest collection of items and data is at the Gisborne Museum and Arts Centre. In addition to being the display space for historical items it is also the repository of archives and historical references. It is now housed in a relatively new building but requires resources for the purposes of conserving and promoting the historical collections and maintaining an effective register. The second most important and probably the largest collection of historical data is the minutes and reports of the local authorities that have been constituted in the region since the first provincial government ceased in the late 1870's.

The preservation of significant records from these sources is also important. This would include not only City and County Councils but

also authorities such as hospital boards and harbour boards. Valuable information is also held in private hands such as early or influential families, and private companies such as the meat processing industry. Resources are required to collect the data, and catalogue it for safe keeping.

A further important source of information is the New Zealand Archaeological Association Site Record file. This holds detailed information on archaeological sites in the Region.

Agencies

Most of the agencies involved in heritage promotion are founded on a community basis. Funding comes from either grants or donations with considerable voluntary input. The District Council and Government are the principal providers. The major players in promotion of heritage are:

Gisborne Museum and Arts Centre
New Zealand Historic Places Trust
Archaeological Association
East Coast Museum of Technology
Founders Society
Te Runanga o Ngati Porou
Te Runanga o Turanganui-A-Kiwa
Te Runanga o Paikea
Maori Women's Welfare League
Tairāwhiti District Maori Council

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Tairāwhiti Federation of Māori Incorporation
Hapu and Marae Groups
Tairāwhiti Heritage Trails Committee
Department of Conservation

A regional archivist and historian is employed by the Gisborne Museum and Arts Centre. The District Council have just recently appointed an archivist of Council records. The Department of Conservation provide an archaeologist. However there are insufficient funds and people employed to adequately record the wealth of material available. There are even fewer funds available to protect the physical remains of our heritage.

2.4.1 Objectives

To recognise and protect heritage values including those of the Māori people whenever these are affected by the use or development of natural and physical resources.

2.4.2 Policies

1. To ensure the effects of development proposals on significant heritage values in the region are avoided, remedied or mitigated. A heritage value should be considered significant if:
 - a) It is particularly old, rare or unique within the district;
 - b) It is found only within the district or contributes to the distinctive or unique character of the district;
 - c) It is used, valued or appreciated by the district community as well as the local community;

- d) It is considered by Iwi to require a district approach;
 - e) It relates to land owned or managed by the Gisborne District Council;
 - f) It is of national significance.
2. To further the understanding of matters that have historical and cultural significance to New Zealand and the region.
 3. To consult with landowners and recognise the rights of landowners to reasonable use of their land.
 4. Establish links between the government, local authority and special interest groups to ensure the integrated management of heritage understanding and protection.
 5. Involve the Māori people in the recording and understanding of Māori heritage.
 6. Seek assistance of people and agencies who have special knowledge in Māori history and culture.
 7. Devise appropriate means of recording knowledge of Māori heritage while respecting the spiritual and cultural relationship with significant places and items.
 8. Recognise that some groups within Māoridom do not favour public recording of cultural and heritage sites and that other approaches may be required in such cases.
 9. Involve the Māori people in the protection and preservation of places and items of historical significance.

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10. Involve the Maori people in the decision making process relating to the management of effects as they relate to heritage values.
11. To recognise and use the conservation principals contained within the ICOMOS New Zealand charter for the conservation of places of Cultural Heritage Values when making decisions that might affect heritage resources of the region.
12. To promote the protection and conservation of heritage sites by the use of incentives and regulatory mechanisms in district and regional plans.
13. To recognise and promote as appropriate Councils heritage protection authority status as a method of conserving the regions heritage.
14. To ensure that heritage matters are adequately assessed as part of the resource consent process.

2.4.3 Methods

1. Prepare a Regional Heritage Plan as the principal means to ensure the integrated management of natural and physical resources as they impact on heritage values. The plan to:
 - *Identify all the agencies and special interest groups that have an interest in heritage.*
 - *Establish guidelines and rules for the recognition, protection and preservation of significant historical places and items.*
 - *Identify and record places and items that have heritage values to New Zealand and the region.*

- *Investigate the role of conservation plans in protecting individual heritage sites.*
 - *Investigate the role of use incentives and contributions in achieving Heritage protection.*
2. Complete a comprehensive study of all places, items and events of historical and cultural significance which relate to particular places in the region, involving appropriate people and agencies.
 3. Incorporate the findings of the study as information becomes available, in the Regional Heritage Plan and publish the findings of the study widely to improve public awareness of the heritage values in the region.
 4. Convene a forum of all interested people and agencies to co-ordinate efforts in identification and recording of significant historical places and items.
 5. Utilise existing agencies and funding in an integrated manner to start a comprehensive study.
 6. Seek further funding to extend existing efforts.
 7. Seek assistance from people or agencies that have special knowledge in the various areas of heritage and cultural values relating to the region.
 8. Utilise an agreed method of identification and recording to ensure consistency and accuracy.
 9. Involve the Maori people in the proposed heritage study.

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10. Establish dialogue with the appropriate Maori people to devise methods of identifying and recording Maori heritage.
11. Develop databases, including if necessary "Silent Files" to be held by hapu and disclosed at their discretion, of waahi tapu and other sites of cultural significance, for use in the assessment of proposed plans, resource consents or other development proposals.
12. Ensure consultation with appropriate iwi or hapu groups on all proposed plans or resource consents which have the potential to affect Maori cultural or heritage values or waahi tapu.

2.4.4 Reasons for Objectives, Policies and Methods

The protection and preservation of the regions heritage is important for education, cultural and spiritual stability, social well-being, community identity, efficient use of resources and economic benefit. (Objective, Policy 1.)

It is only through a proper understanding of the heritage values that exist in the region, will an effective protection process be achieved. (Policy 2.)

The involvement of the Maori people in the identification and recording of places and items of historical significance is important to gain a proper understanding of the significance and value. Likewise they should be involved in the statutory process in the management of effects if meaningful decisions are to be made. (Policies 5-10.)

The ICOMOS New Zealand charter for the conservation of places of Cultural Heritage Values contains important principals that should be applied to decisions on the region's heritage resources.

The Council has a number of regulatory and non-regulatory options to achieve the protection of heritage values. Policies 11-14 reflect the main options and tools available.

A plan is required to establish a strategic framework for the promotion and protection of heritage values and co-ordinate the efforts and resources of those involved. This will provide the forum for submission and when adopted will create the legal framework for the required processes.

It is unlikely that a major one-off study could be funded nor is it necessarily desirable. The first priority should be to integrate existing efforts, and seek further resources. The diverse nature of the heritage resource, particularly that relating to Maori culture, will require the assistance of those knowledgeable in the subject. Unless this is achieved the value of information will be limited. (Methods 1-8).

Involvement of the Maori people is essential for a proper understanding of the issues that are likely to affect Maori heritage. (Methods 7-10)

2.4.5 Integrated Management

This issue relates to other issues discussed in this Regional Policy Statement, in particular:

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Part I - 4.0 Tangata whenua and Resource Management

Part II - 9.2 - 9.4 Treaty of Waitangi, Kaitiakitanga Consultation with Tangata Whenua

That section has been prepared and will be implemented in the light of this issue.

All persons or organisations carrying out any functions under the Resource Management Act 1991 relating to heritage or cultural matters should take into account the provisions of those sections.

2.4.6 Anticipated Results

- *A plan that specifically relates to heritage values that has the approval of the community.*
- *A closer working relationship with all interested parties.*
- *More effective and earlier protection of heritage values.*
- *An understanding of the value and extent of the heritage resource in the region.*
- *A reliable information base on which to apply rules and resources.*
- *A better understanding of the value and extent of Maori heritage.*
- *A decision making process that is acceptable to the total community.*
- *Protection of places and items of historical significance.*
- *Preservation of places and items of historical significance.*

- *An intact and responsive Maori Community, positively contributing to the development of the region.*

2.4.7 Matters to be Monitored

1. The statutory process in the preparation of the Regional Heritage Plan.
2. The progress and funding of the study should be part of the Annual Plan process.
3. The extent of the resources needed to complete the study in respect of the Maori heritage.
4. The outcome of resource consents which are likely to affect Maori heritage.
5. Resource consents and plans provision as they affect heritage values.
6. Effectiveness of preservation techniques for places and items of historical significance.

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2.5 LOSS OF HIGHLY PRODUCTIVE AND VERSATILE SOILS THROUGH CLOSER SUBDIVISION AND SETTLEMENT, PARTICULARLY AROUND THE URBAN AREA OF GISBORNE AND LOSS OF HIGHLY PRODUCTIVE AND VERSATILE SOILS THROUGH UNSUSTAINABLE MANAGEMENT PRACTICES

Explanation

Highly productive and versatile soils play a major role in the economy of the region. In 1991 cropping and horticulture supported 1256 jobs (full and part time including working owners) and contributed over \$110 million to the region's economy. The great majority of this activity takes place on the Poverty Bay and Tolaga Bay Flats. Poverty Bay has approximately 17000 ha of land suitable for this purpose while Tolaga Bay has approximately 5000 ha. These soils are among the most fertile and productive in the country, but are a very finite resource, representing only 5% of the region. The soils referred to are the series described as Waipaoa, Matawhero, Waihirere, Makaraka and Makauri. The Resource Management Act requires the Council to safeguard the life supporting capacity of soils and to sustain their potential to meet reasonably foreseeable needs of future generations. In this region the main issues that have been identified are the loss of such soils through subdivision for housing and the potential for losses due to management practices that deplete soil fertility and structure.

The Gisborne District Council and its predecessors have traditionally kept tight controls on subdivision of rural lands, to carry out the requirements of the former Town and Country Planning Act 1977.

Since 1990 controls on subdivision have been relaxed and remain restrictive only on those parts of the Poverty Bay Flats most suited to intensive production.

These lands are also attractive for low-density residential ("lifestyle") , and to a lesser extent commercial or industrial use.

A significant demand exists for new lifestyle subdivisions. Between November 1989 and November 1993 137 such subdivisions occurred involving 210 hectares of land. The property market will pay considerably more for lifestyle use than for economic productive use.

The adverse effects of such use include direct loss of the soil resource and also constraints on the operations of growers because of concerns by new residents about matters such as noise, dust and spraying. The Council's policy has been to divert such uses onto less versatile parts of the Poverty Bay Flats close to Gisborne City and the townships.

2.5.1 Objectives

1. To protect soils which are highly fertile and versatile from the effects of subdivision and land use which are likely to result in their permanent or long-term loss.

2.5.2 Policies

1. To recognise the importance of highly productive soils to the economic and social well being of the community.
2. Enable low-density residential development to take place on sites where its effects would not conflict with Objective 1.

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3. Recognise the need for all activities on highly productive soils to avoid adverse environmental effects and unsustainable practices.

2.5.3 Methods

1. Maintain rules in the district plan generally preserving highly versatile and productive lands for that use on the Poverty Bay flats.
2. Provide in the District Plan for lifestyle rural development in areas located on less versatile soils and close to Gisborne City.
3. Adopt a Regional Air Quality Plan to control adverse effects such as dust and spray drift.
4. Consider the adoption of measures to protect soil fertility and structure if evidence develops that these are being adversely affected by cropping practices.

2.5.4 Reasons for Objectives, Policies and Methods

Reasons

The economic use of the limited stocks of these soils is important to the economic and social well-being of the Gisborne District. If lifestyle subdivision continued to occur at past rates over the medium to long term on the versatile soils then there would be a significant loss of economic potential in the region. The district plan is the appropriate place to control the effects of rural land use and subdivision. Controls are only considered necessary on the Poverty Bay flats as there is little evidence of encroachment of lifestyle blocks or impacts on production in other areas such as Tolaga Bay or Waiapu.

The district plan is the appropriate place to control the effects of rural land use and subdivision. (Objective, Policy 1, Method 1).

Lifestyle subdivision is a legitimate land use which should be provided for. The Council has previously identified suitable locations immediately to the north and west of the Gisborne Urban Area, in a sector from Makaraka to Hexton on the Flats and in the hill country from Hexton to Makarori. These are soils of lesser versatility that are conveniently located to minimise commuting, (Policy 2, Method 2).

There is some potential for productive land uses to create adverse effects, such as noise, dust, spray drift, loss of soil structure and nutrients, soil compaction, long term contamination and depletion of soil life and soil structure from spray residue and these should be avoided. Air quality is a regional responsibility although the Council, as a unitary authority intends to achieve a close integration of district and regional plans. It is considered that these objectives and policies are necessary to achieve the Act's purpose and principles relating to sustainable management, preservation of life-supporting capacity, efficient use and development of natural resources, and finite characteristics of resources, (policy 3, Methods 3-4)

The Council is not aware of significant or permanent adverse effects on the soil resource itself from cropping activities. The soils concerned are generally very deep, very fertile and versatile. Loss of structure such as compaction can sometimes be restored simply, but may in some cases require the cessation of arable uses. The matter should be reviewed if evidence of this develops, (Policy 3, Method 4)

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Alternatives considered

Do Nothing

This would lead to a decline in the economic base of the district due to the loss of the soil resource itself and the constraints that would be placed upon producers. This strategy would also lead to an increase in energy use and greenhouse gas emissions due to commuting over longer distances. There would be no corresponding benefits because the need for lifestyle subdivisions can be met on less fertile soils. These areas can also provide for very small economic uses such as glasshouses that rely less on the inherent fertility of the soil.

2.5.5 Integrated Management

This issue relates to other issues discussed in Part 2 of this Statement, in particular:

4.0 Air Quality Management

2.5.6 Anticipated Results

1. A stock of rural land available for intensive cropping and horticulture.
2. Minimal loss of versatile soils to non-productive uses.
3. A rural economy carrying out its activities sustainably and without adverse environmental effects but not constrained due to the close proximity of lifestyle residents.
4. Reasonable opportunity for lifestyle subdivision and development without constraining the rural productive economy.

2.5.7 Monitoring

1. The demand and supply of sections for lifestyle subdivision and development.
2. The effects of cropping on air quality, noise, soil fertility and structure.

2.6 NATURAL VALUES, OUTSTANDING NATURAL FEATURES, SIGNIFICANT INDIGENOUS VEGETATION, SIGNIFICANT HABITAT OF INDIGENOUS FAUNA, NATURAL CHARACTER OF THE COASTAL ENVIRONMENT, LAKES, RIVERS, WETLANDS AND THEIR MARGINS, HAVE BEEN, OR MAY BE DEGRADED BY INAPPROPRIATE SUBDIVISION, USE AND DEVELOPMENT

Explanation

There exist in the district numerous areas that are either in a substantially unmodified natural state, or in a modified state which still possess considerable natural character and conservation value. These include areas of the coastline, rivers, wetlands and their margins, remnants of native forest, areas of regenerating native forest and in places substantial areas of native forest in the Raukumara Ranges. However these are only a small part of the original coverage of such features and there has been in the past a very high loss of indigenous ecosystems especially in lowland areas. The protection of remaining areas is clearly a requirement of sustainable management where their value is significant. However such areas are threatened from time to time by development for productive or economic use such as farming, forestry or housing.

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The most significant conflict in this region is likely to be over land with a cover of reverting native vegetation. Once cleared for pastoral farming, and now reverting in Kanuka, Manuka and other species, such land is often seen as suitable for conversion to forestry. It is often close to established roads and settlements, and has a former history of economic use. Contours and soil fertility are suitable for forestry. Much of this land is in the north of the district which is in a particularly severe state of economic depression.

Much of the land is owned by Tangata Whenua whose representatives have already stated their own intention to avoid the clearance of established indigenous forest, although not Kanuka or Manuka. These reverting lands are seen by them as a valuable opportunity for economic development, in some cases virtually the only opportunity.

On the other hand, such vegetation is also valuable for its landscapes, habitat, soil conservation and intrinsic values.

The major areas of substantially unmodified native vegetation, e.g. in the Raukumara Ranges, are less likely to be attractive for exotic forest conversion because of their remoteness, steepness and erodibility.

The region has no major lakes. Numerous small lakes and tarns exist such as the Tiniroto Lakes, which have value as wildlife habitats and for their scenery.

Rivers with significant conservation or scenic value in the region include the Waipaoa, Waiapu, Mata, Tupaeroa, Awatere, Uawa, Hikuwai, Mangatokerau, Wharekopae, Waikohu, Te Arai and their tributaries. The headwaters of the Motu, Hangaroa (Wairoa), Waioeka and Waikura rivers arise in the region before flowing out through neighbouring regions. High sediment loading from soil erosion limits the habitat, recreational and scenic values of some of these rivers.

In many cases it is smaller rivers such as the Te Arai, and Wharekopae which have the highest value, because of better water quality or the existence of small remnants of indigenous vegetation along the banks. Significant wetlands are scarce but numerous small examples exist.

Coastal features are described in Chapter 6.

Public access to these water bodies is provided by various reserves and formed or unformed legal roads. In many cases access is insufficient or rights of access unknown.

There are numerous dramatic landscapes in the region. Many of these, and most of the more accessible ones are on the coast. Others are associated with the Raukumara Ranges and the major river systems.

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The major threats to landscape arise from unsympathetic developments in the coastal environment, clearance of native vegetation and development works on skylines. Adverse effects on landscape are likely to be localised.

2.6.1 Objectives

1. The preservation of the natural character of the coastal environment, lakes, rivers, wetlands and their margins, and the protection of outstanding natural features and landscapes from inappropriate subdivision, use and development.
2. The protection and rehabilitation where appropriate, of areas of significant indigenous vegetation and significant habitats of indigenous fauna, including their genetic and biological diversity.
3. The sustainable management of natural and physical resources.

2.6.2 Policies

1. Where there is a public conservation interest in private land, owners should not be denied reasonable use of their land without consultation.
2. Enable interested persons to have the opportunity to consider options for conservation of significant natural areas.
3. Recognise and provide for kaitiakitanga and rangatiratanga in dealing with conservation issues on Maori land. See methods 9.2.3 (1) to (6) to support this policy.

4. In order to recognise the national importance of maintaining or enhancing public access to and along the coastal marine area, lakes and rivers, management restricting access should only be imposed where such management is necessary:
 - *to preserve the natural character of the coastal environment, wetlands, lakes, rivers and their margins, such as keeping access to boardwalks over sensitive dunes or restricting motorised recreation in sites more appropriately used for passive recreation; or*
 - *to protect areas of significant indigenous vegetation and habitats of indigenous fauna such as sensitive vegetation or breeding and roosting sites.*
5. Promote increased knowledge and understanding of the extent and value of significant natural areas in the region and promote their protection by landowners.
6. Promote the protection or re-establishment of indigenous vegetation in riparian margins, and priority should be given to indigenous species.
7. Promote where appropriate, the sustainable management of indigenous forest land in accordance with the indigenous provisions of the Forests Act 1949, as inserted by the Forests Amendment Act 1993.
8. To protect areas of significant native vegetation and areas of significant habitats of indigenous fauna within the region, including the coastal marine area.

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Where significant areas are degraded, to rehabilitate them, where appropriate, as a matter of priority. Recognise that any other areas of indigenous vegetation should be disturbed only to the extent reasonably necessary to carry out permitted or approved activities.

9. To preserve the natural character of the coastal environment, wetlands and lakes and rivers and their margins in the region and protect them from inappropriate subdivision, use and development. To protect significant landscapes and outstanding natural features, such as those defined as being nationally, regionally or internationally significant, from inappropriate subdivision, use and development.
10. To promote sustainable management of indigenous vegetation, including regenerating indigenous forest, and habitats of indigenous fauna.

2.6.3 Methods

The Gisborne District Council will:

1. Provide information in district and regional planning documents to increase awareness of significant sites and areas along with any obligations pertaining to them.
2. Compile in consultation with the Department of Conservation, land owners and other interested parties, a register of significant natural areas in the region. This register is for use in promoting awareness and landowner participation in preservation and developing plan provisions, including the proposed regional

sustainable land plan. It will also enable the range of management options to be explored.

Significant natural terrestrial, freshwater and marine areas include the following;

- *areas of significant indigenous vegetation & significant habitat of indigenous fauna,*
- *significant landscape and outstanding natural features,*
- *areas of significant natural character.*

Criteria to aid determination of significant natural areas could include;

- a) areas that have been especially set aside under statute (this includes covenants) for preservation or protection purposes.
- b) areas recommended for protection under the Protected Natural Areas Programme or in reports to the Forest Heritage Fund and the Nga Whenua Rahui Committee.
- c) landscapes that have been identified as regionally, nationally or internationally significant.
- d) visually or scientifically significant geological features, including those identified in the New Zealand Geopreservation Inventory compiled by the Joint Earth Sciences Working Group

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- e) areas where the adverse effects of any activity should be avoided or remedied because they are areas and habitats important to the continued survival of any indigenous species or,
 - f) areas containing nationally or regionally vulnerable species or nationally or regionally outstanding examples of indigenous community types or,
 - g) outstanding or rare indigenous community types within an ecological region or district or,
 - h) habitat that is important for regionally rare or threatened species and ecological corridors connecting such areas or,
 - i) areas important to migratory species and to vulnerable stages of common indigenous species.
3. Develop policies and methods in regional and district plans that require resource consents to be obtained before significant natural areas, landscapes and indigenous ecosystems in the register outlined in method 2 can be modified. The consents would have appropriate terms and standards that enable options for preservation to be considered.
4. Develop rules requiring retention of vegetation in riparian margins from inappropriate subdivision, use and development. Where retention is not practical, rules should encourage re-establishment. Re-established vegetation should be the most appropriate to the site and priority should be given to indigenous species.

5. Provide incentives for the protection of areas of undeveloped or unused land containing significant indigenous vegetation or habitats.
6. Consider acquisition of land to improve access to natural areas or protect natural values, where appropriate and feasible.
- Advocate to landowners with natural areas of value, that they use formal protection methods such as reserves and covenants under the Conservation Act and the Queen Elizabeth II National Trust Act.
7. Encourage and where possible assist with survey and research projects with other agencies.
8. To develop policies and methods in regional and district plans which promote sustainable management in relation to the clearance and modification of areas of indigenous vegetation.

2.6.4 Reasons for Objectives, Policies and Methods

Reasons

The objectives meet basic requirements of the Resource Management Act.

The policies recognise that the public interest in the conservation of natural areas must be balanced against the rights of individual landowners to make reasonable use of property. Where these interests conflict then opportunity should be provided for options to be considered. The policies also recognise the Treaty rights of Maori owners. There can be conflicts of interest between the use and enjoyment of natural areas and their conservation.

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The methods are chosen to achieve a balance between conservation of natural areas, provision of access, protection of landscapes, and the rights of landowners to reasonable use of their land. They provide a means for identifying significant areas and the opportunity to explore options for their conservation prior to consent being given for their modification. Riparian margins are specified because these margins, although small have many values and can often be preserved or allowed to regenerate without impacting on reasonable use.

Alternatives considered

Do Nothing

Allow The Conversion Of Natural Areas To Other Uses Without Restriction

This option would allow economic returns to be made from currently unproductive land. It would generate employment and stimulate economic activity. However, it is contrary to the purposes and principles of the Act. It would lead to gradual loss of native vegetation and habitat, modification of landscapes and no improvements to access. It is unlikely to be acceptable to major environmental organisations and to a large sector of the national and local population.

Rules to Prevent all Modification of Natural Areas, and to Maximise Public Access

This is legally possible. It might be justified in terms of an extreme view of the Act. It would be difficult to monitor and enforce. Socially and economically it would be extremely harsh on a sector of the region's land owners.

2.6.5 Integrated Management

This issue relates to other issues discussed in Part 2 of this statement, in particular:

- 2.1 Eroded land
- 2.4 Culture and heritage
- 2.7 Provision of public access.
- 3.0 Water management
- 3.3 Point source discharges.
- 3.5 Water allocation.
- 6.0 Coastal Management

2.6.6 Environmental Results Anticipated

1. Preservation of sites and areas having significant natural character or cultural value.
2. The maintenance and enhancement of genetic, biological and landscape diversity within the region.
3. Greater amenity value associated with the region's natural environment.
4. Sufficient public access to significant natural areas.
5. Protection of important landscapes.
6. Provision for appropriate use and development of natural and physical resources.

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2.6.7 Monitoring

1. Changes in the extent and coverage of flora and fauna.
2. The creation of new and improved registers of protected and significant sites.
3. The degree of protection of significant indigenous vegetation and habitats of indigenous fauna.
4. The adequacy of public access to important natural areas including lakes, rivers and the coast.

2.7 PUBLIC ACCESS TO AND ALONG THE MARGINS OF RIVERS, LAKES AND THE COASTAL MARINE AREA IS REQUIRED TO BE MAINTAINED AND WHERE PRACTICAL ENHANCED, BUT THIS CAN CONFLICT WITH ECOLOGICAL VALUES, CULTURAL VALUES, NATURAL CHARACTER AND PRIVATE PROPERTY RIGHTS

Explanation

The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers is considered a matter of national importance to be recognised and provided for under section 6(d) of the Act. Public access includes tracks or road access and its recognition and provision may involve the provision of facilities and structures such as tracks and launching ramps.

The New Zealand Coastal Policy Statement amplifies this requirement of the Act in respect of the coastal marine area by stating in principle 5, that, "People and communities expect that lands of the

Crown in the coastal marine area shall generally be available for free public use and enjoyment.

While public access is a matter of national importance, there can be a conflict of interest where access needs to be discouraged because areas have sensitive cultural values, natural character, ecological values or safety concerns such as seasonal fire risks.

2.7.1 Objective

1. Maintenance or enhancement of public access to and along rivers, lakes and the coastal marine area.

2.7.2 Policies

1. In order to recognise the national importance of maintaining and enhancing public access to and along the coastal marine area, lakes and rivers, management restricting access should only be imposed where such management is necessary:
 - a) to preserve the natural character of the coastal environment, wetlands, lakes, rivers and their margins, such as keeping access to boardwalks over sensitive dunes or restricting motorised recreation in sites more appropriately used for passive recreation; or
 - b) to protect areas of significant indigenous vegetation and habitats of indigenous fauna such as sensitive vegetation or breeding and roosting sites; or
 - c) to protect Maori cultural values such as urupa; or

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- d) to protect public health and safety; such as diversion away from areas of danger like land subsidence, river control construction sites, Port operational areas and areas used for Defence purposes; or
 - e) to ensure a level of security consistent with the purpose of a resource consent; or
 - f) in other exceptional circumstances sufficient to justify the restriction notwithstanding the national importance of maintaining that access.
2. To ensure, when planning for and making decisions on new subdivision, use, and development, that:
- a) There is no reduction in the quality of existing legal access to and along water bodies, unless that reduction is consistent with policy 2.7.2(1) above and
 - b) Opportunities for access to and along water bodies, or parts of water bodies, not restricted by policy 2.7.2(1) above, which are considered by Council to be of benefit to the local community for their conservation, recreational, cultural, scenic, spiritual or other amenity values are recognised and provided for.

Criteria that could be considered by Council to achieve this include;

- *access to and along water body margins will be a priority for all the coast and rivers that connect the coast to Crown or Council reserves, or rivers that connect residential*

development to the coast, or main roads following the coast to the coast.

For waterbodies outside those provided by 2 (b) above, Council will, in general, give priority to public access provisions to the more substantial streams and rivers, such as those whose bed width averages 3 metres or more at that point.

2.7.3 Methods of Implementation

The Gisborne District Council will:

1. Develop schedules in the District Plan of areas where maintained or improved public access to and along rivers, lakes and the coastal marine area is needed. Where schedules are developed in the District Plan or any other plan, the schedules will be compiled in consultation with landowners and users, having regard to current landuse and operations.
2. Include in Regional Plans, including the Regional Coastal Environment Plan and the District Plan, policies and methods that ensure that, where appropriate, esplanade reserves and strips will be used to protect and enhance riparian and aquatic habitat values, water quality and public access.
3. Examine the issue of maintaining or improving public access to the coastal marine area in more detail in Regional Plans, the Regional Coastal Environment Plan and the District Plan.
4. Attach conditions to resource consents, aimed at maintaining or enhancing public access to and along rivers, lakes and the coastal marine area.

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5. Where riparian management is adopted as a method [section 3.4], encourage its dual use for public access.
6. Designate and acquire reserves, as appropriate.
7. Council may consult with landowners and advocate to them, where possible, for the inclusion of public access provisions to covenanted land under such acts as the Conservation Act, the NZ Walkways Act and the QE II National Trust Act.
8. Include in the District Plan and Regional Coastal Environment Plan, provisions identifying those areas and circumstances where public access may need to be restricted.

2.7.4 Reasons for Objectives, Policies and Methods

The objective reflects a statutory responsibility.

The maintenance and enhancement of public access to and along lakes and rivers will provide for use and enjoyment of the amenity, scenic and recreational values of rivers and lakes and for the cultural and spiritual values and customary uses of tangata whenua. It will also assist in public monitoring of water use and water quality.

Under some circumstances, restrictions on public access to and along rivers and lakes may be necessary. These circumstances are listed in the policy and can be provided for within each of the methods indicated [policies 1, 2].

Public access to fresh water access strips [method 2].

The preparation of the Regional Coastal Plan is the appropriate vehicle to develop more detailed policy for public access, having regard to uses of coastal water. The District Plan will implement any such policy [method 3].

Methods 4, 5, 6 7 & 8 are self explanatory and are considered by Council to be appropriate, cost-effective, measures.

Alternatives

As the maintenance and enhancement of public access to and along rivers and lakes must be recognised and provided for, there are no alternative policies.

The principal alternative means of implementing the policy would be to rely only on the mandatory district plan and on resource consents relating to the use and development of land including the beds of rivers and lakes. This would overlook the value of the other methods.

2.7.5 Integrated Management

This issue relates to other issues discussed in Part 2 of this Statement, in particular:

- 3.4 Diffuse source contamination (riparian management).
- 2.6 Preservation of natural character.
- 6.0 Coastal management.

2.7.6 Environmental Results Anticipated

Improved recreational opportunities and amenity value.



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2.7.7 Monitoring

Council will monitor the adequacy of public access to important natural areas including rivers, lakes and the coast.

1. This policy is linked to proposed new policy 9.1.2.5 as follows:

Co-ordination between Council and Resource Users

To promote co-ordination between the resource management activities of Council and the resource management requirements of users under the RMA. And

Glossary definition of self regulation

Voluntary acceptance by resource users of defined management practices and operational standards, which include duties and obligations by all those undertaking prescribed activities.