



DISTRICT PLAN PROVISIONS  
RELATING TO INDIGENOUS  
BIODIVERSITY IN TAURANGA CITY

Part 1: A Review of District Plan  
Effectiveness

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## 1. INTRODUCTION

As part of the review of the Tauranga District Plan, Tauranga City Council (TCC) commissioned Wildland Consultants Ltd to provide an assessment of the effectiveness of the Tauranga District Plan in relation to indigenous biodiversity. The scope of the review includes District Plan objectives, policies, and rules pertaining to the sustainable management of indigenous biodiversity and Special Ecological Sites.

Tauranga City, located at the eastern end of Tauranga Harbour, is now one of the largest cities in New Zealand. Although heavily populated, the city includes harbour margins, dunelands, streams, vegetated gullies, Mauao, and many remnants of indigenous vegetation and habitats. Protection and enhancement of indigenous biodiversity is an important facet of the District Plan and this has been the subject of ongoing monitoring and implementation (e.g. Wildland Consultants 2000a,b,c; 2002; 2005).

The operative District Plan was released, as the proposed District Plan, in 1997. The Plan subsequently become operative in 2003 and is now under review over the period 2008-2010.

It is timely that a review is undertaken to assess the effectiveness of the District Plan in relation to indigenous biodiversity.

## 2. METHODS

### Legislative and Strategic Context Pre-1997

A summary was prepared of the legislative and strategic context that existed at the time of the preparation and prior to notification of the proposed district plan (1997). A systematic analysis of the provisions in the district plan was undertaken to assess provisions that can potentially affect the sustainable management of indigenous biodiversity.

### Current Legislative and Strategic Context

A summary was also prepared of the current legislative and strategic context (pre-notification of the review of the district plan) as there have been significant changes in the intervening period.

To assess the effectiveness of the plan, information regarding changes to biodiversity within Tauranga City was compared against the provisions in the district plan. Information included within 'Indigenous Biodiversity of Tauranga City - State of the Environment Reporting 2005' (Wildland Consultants 2005) details changes to indigenous biodiversity within Special Ecological Sites during the period 2000-2005. Tauranga City Council staff also provided information regarding protection/modification/loss of indigenous biodiversity through the consent process.

Assessment of the provisions in the operative district plan were analysed within the context of the current legislative and strategic context.

### 3. ECOLOGICAL CONTEXT

Tauranga District occurs almost entirely within the Tauranga Ecological District (a very small area is within Otanewainuku Ecological District). Tauranga Ecological District includes the harbours and estuaries (Tauranga, Maketu, Little Waihi), a long strip of dunelands, Matakana Island, coastal plains between Otamarakau and Tauranga, and low rounded hills and valleys in the vicinity of Tauranga Harbour. There are very few protected areas, and most are small. The total area of the ecological district is about 102,000 hectares and of this only *c.*1.12% has some formal protection for nature conservation. If Tauranga Harbour is excluded, only *c.*1.5% of the terrestrial and freshwater part of the ecological district has some formal protection. The protected areas are generally small with most less than 20 hectares, and only three are greater than 50 hectares (Shaw & Beadel 1997).

Most indigenous vegetation remnants left in Tauranga Ecological District are significant in terms of the Resource Management Act 1991, even though many are small and modified by weed invasion.

All wetlands of natural origins and examples of vegetation with a high proportion of indigenous species are probably worthy of protection. Many are small, weed infested, and in need of fencing and other active restoration management.

### 4. LEGISLATIVE AND STRATEGIC CONTEXT - PRE-NOTIFICATION OF THE PROPOSED DISTRICT PLAN (1997)

#### 4.1 Resource Management Act (1991)

The following sections of Part 2 of the Act are of particular relevance to natural heritage management by local authorities:

#### **“5. Purpose -**

- (1) The purpose of this Act is to promote the sustainable management of natural and physical resources.
- (2) In this Act “sustainable management” means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural well being and for their health and safety while -
  - (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
  - (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
  - (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

- 6. Matters of national importance** - In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance.
- (a) The preservation of the natural character of the coastal environment (including the coastal marine areas), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development;
  - (b) the protection of outstanding natural features and landscapes from inappropriate subdivision use and development;
  - (c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.
- 7. Other matters** - In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to:
- (d) intrinsic values of ecosystems;
  - (f) maintenance and enhancement of the quality of the environment;
  - (g) any finite characteristics of natural and physical resources.”

The Act includes duties and restrictions on the use of land:

No person may use any land in a manner that contravenes a rule in a district plan or proposed district plan unless the activity is---

- (a) Expressly allowed by a resource consent granted by the territorial authority responsible for the plan; or
- (b) An existing use allowed by section 10 (certain existing uses protected).

Territorial authorities have the following functions for the purpose of giving effect to the Act:

- (a) The establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district;
- (b) The control of any actual or potential effects of the use, development, or protection of land, including the implementation of rules for the avoidance or mitigation of natural hazards and the prevention and mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances;
- (c) The control of subdivision of land.

#### 4.2 Conservation Act (1987) and Reserves Act (1977)

The Conservation Act established the Department of Conservation with functions that include an advocacy role for the conservation of natural and historic resources generally as well as the provision of educational and promotional material relating to conservation.

The Department had prepared a draft Conservation Management Strategy for the Bay of Plenty Conservancy (1996) which established objectives for the integrated management of natural and historic resources.

The Department also administers the Reserves Act (1977) which includes the purpose of ensuring, as far as possible, the survival of all indigenous species of flora and fauna, both rare and commonplace, in their natural communities and habitats, and the preservation of representative samples of all classes of natural ecosystems and landscape which in the aggregate originally gave New Zealand its own recognisable character.

In order to fulfill its functions the Department of Conservation undertook the Protected Natural Areas Programme which surveyed New Zealand within ecological districts, identified natural areas that represented ecosystems and habitats that were not legally protected, and recommended their protection. Information from these surveys was widely used by district councils in determining the significant natural areas in their districts. However a survey of Tauranga District had not been carried out at the time of the preparation of the Tauranga District Plan.

#### 4.3 International Convention on Biodiversity

New Zealand is a signatory to the International Convention on Biodiversity, which seeks global solutions to the unprecedented loss of the earth's biodiversity (Anon. 1994). The conservation of biodiversity is defined as: the "conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings" (Anon 1994). Actions to achieve biodiversity protection include the establishment of protected areas, restoration of degraded ecosystems, control of alien species and genetically modified organisms, the promotion of environmentally sound and sustainable development adjacent to protected areas, and the protection of threatened species. The New Zealand government ratified the convention in September 1993, and New Zealand is now obliged to develop national strategies, plans and programmes to promote biodiversity (Anon 1994).

#### 4.4 Regional Plans

At the time of preparation of the Tauranga District Plan, the Bay of Plenty Transitional Regional Plan (1991) was still operative and had not been superseded by other plans. This transitional plan brought together any relevant resource management provisions that existed prior to the Resource Management Act 1991.

Work had begun on the Regional Policy Statement which became operative in December 1999 and there was a draft Regional Coastal Environment Plan (1995) which became operative in 2003.

The regional council had completed several background and information reports for the preparation of policy and plans. These included a survey of significant indigenous vegetation of the Bay of Plenty coastal zone (Beadel 1994), a scoping study of the vegetation and fauna habitats of Bay of Plenty Region (Beadel 1995) and a survey of Tauranga Harbour wetland vegetation (Beadel 1992).

The Draft Regional Coastal Environment Plan included all of the coastal environment - the coastal marine area and the landward edge to this. Significant indigenous vegetation areas in the region (from Beadel 1994) were mapped and objectives, policies and methods of implementation included in the plan to address the key issues.

Chapter 4 of the Regional Coastal Environment Plan addresses the key issues of ongoing and often incremental loss of natural character through inappropriate subdivision, use, and development in the coastal environment.

Chapter 6 addresses the key issue of ongoing loss and degradation of significant vegetation and significant habitats of indigenous fauna within the coastal environment through inappropriate subdivision, use and development.

Policies include 6.2.3(a) “ to preserve the ecological values of the Coastal Habitat Preservation Zone by avoiding adverse effects on those values, and encouraging restoration and enhancement of those values where appropriate (a summary of those values is provided in the Sixth Schedule - Significant Marshbird Habitat Areas and the Seventh Schedule - Significant Indigenous Vegetation Areas)”;

6.2.3(d) “to afford an appropriate level of protection to significant indigenous vegetation and habitats of indigenous fauna which are not specifically identified in this plan”

The methods of implementation include provision of services and advocacy, including:

6.2.5(d) “ Encourage district councils to seek protection of the natural character of the coastal environment, and sites of ecological significance with the landward component of the coastal environment by way of:

- Appropriate provisions within district plans;
- The purchase of land for reserves;
- The acquisition of land through reserves contributions;
- The use of heritage protection orders;
- The use of conservation covenants or other voluntary agreements;
- Incentives (such as rating relief)
- The use of operational works (such as fencing);
- The inclusion of appropriate conditions on resource consents;
- Any other appropriate technique or mechanism;
- Reserve management plans.

## 5. CURRENT LEGISLATIVE AND STRATEGIC CONTEXT (2008)

### 5.1 Introduction

Since the Tauranga District Plan was notified in 1997 and became operative in 2003, there have been some major national and regional policy initiatives with regard to the protection/maintenance of indigenous biodiversity. These include:

## 5.2 Resource Management Act

In 2003, functions of regional councils were amended to include the following:

(1) Section 30(1)(c) of the principal Act is amended by inserting, after subparagraph (iii), the following subparagraph:

"(iiia) the maintenance and enhancement of ecosystems in water bodies and coastal water:".

(2) Section 30(1) of the principal Act is amended by inserting, after paragraph (g), the following paragraph:

"(ga) the establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biological diversity:".

## 5.3 New Zealand Biodiversity Strategy 2000

The New Zealand Biodiversity Strategy (Department of Conservation and Ministry for the Environment 2000) reflects New Zealand's commitment to the Convention on Biological Diversity. The purpose of the Strategy is to establish a strategic framework for action, to conserve and sustainably use and manage New Zealand's biodiversity. Overall responsibility for implementing the Strategy lies with the Minister of Conservation and Local Government.

Four goals are established for conserving and sustainably managing New Zealand's biodiversity, including:

“Goal Three: Halt the decline in New Zealand's indigenous biodiversity. Maintain and restore a full range of remaining natural habitats and ecosystems to a healthy functioning state, enhance critically scarce habitats, and sustain the more modified ecosystems in production and urban environments; and do what else is necessary to maintain and restore viable populations of all indigenous species and subspecies across their natural range and maintain their genetic diversity.”

## 5.4 National Priorities for Protecting Biodiversity on Private Land (2007)

Early drafts of a national policy statement on biodiversity did not find agreement amongst government and other agencies and was replaced by “Protecting Our Places” - a Statement of National Priorities for Protecting Rare and Threatened Biodiversity on Private Land (Ministry for the Environment 2007). The statement is part of a wider work programme by the Ministry for the Environment and the Department of Conservation to strengthen the biodiversity work on private land. It notes that the five-year review of the NZ Biodiversity Strategy (Green & Clarkson 2005) identified significant challenges, including:

- ongoing loss of rare and threatened biodiversity from private lands;
- dominance of economic drivers that favour the degradation of ecosystems (such as wetlands) rather than their active maintenance;
- adverse impacts of animal pests on threatened species and forest ecosystems;
- serious declines in the status of many acutely or chronically threatened species.

The four national priorities for protecting rare and threatened indigenous biodiversity on private land are:

**National Priority 1:**

To protect indigenous vegetation associated with land environments (defined by Land Environments of New Zealand at Level IV), that have 20% or less remaining in indigenous cover.

**National Priority 2:**

To protect indigenous vegetation associated with sand dunes and wetlands; ecosystem types that have become uncommon due to human activity.

**National Priority 3:**

To protect indigenous vegetation associated with ‘originally rare’ terrestrial ecosystem types not already covered by priorities 1 and 2.

**National Priority 4:**

To protect habitats of acutely and chronically threatened indigenous species.

## 5.5 Regional Policy Statement (1999)

The Regional Policy Statement (RPS) was prepared by Environment Bay of Plenty in accordance with the requirements of the Resource Management Act (1991). It provides the overall principles for the promotion of sustainable management in the region. District plans may not be inconsistent with the Regional Policy Statement.

Chapter 16 of the Regional Policy Statement deals with Natural Character and Indigenous Ecosystems. This chapter provides background, issues, objectives, policies and methods. The following objective and policies are important in addressing biodiversity and indigenous ecosystems in the Tauranga District Plan.

### “16.3 .1 Preservation and Protection

#### 16.3.1(a) Objective

The preservation of the natural character of the region, including the protection of significant indigenous habitats and ecosystems, having particular regard to intrinsic values of ecosystems.

#### 16.3.1(b) Policies

16.3.1(b)(i) To recognize and promote awareness of the life-supporting capacity and the intrinsic values of ecosystems and the importance of protecting indigenous biodiversity.

16.3.1(b)(ii) To ensure that intrinsic values of ecosystems are given particular regard to in resource management decisions and operations.

16.3.1(b)(iii) To protect the diversity of the region’s significant indigenous ecosystems, habitats and species including both representative and unique elements.

16.3.1(b)(iv) To manage resources in a manner that will ensure recognition of and provision for significant indigenous habitats and ecosystems.

- 16.3.1(b)(v) To avoid, remedy or mitigate any adverse effects of inappropriate subdivision, use and development on natural character, habitats and ecosystems.
- 16.3.1(b)(vi) To recognize indigenous marine, lowland forest, freshwater, wetland and geothermal habitats and ecosystems, in particular, as being underrepresented in the reserves network of the Bay of Plenty Region.
- .....
- 16.3.1(b)(viii) To assess whether areas of indigenous vegetation and habitats of indigenous fauna are significant, in relation to Section 6(c) of the Act, by the extent to which criteria not inconsistent with those in Appendix F set1: Indigenous Vegetation and Habitats of Indigenous Fauna are met.
- 16.3.1(b)(ix) To use criteria not inconsistent with those in sets 1 and 3 of Appendix F when preparing provisions relating to natural character and indigenous vegetation and habitats of indigenous fauna respectively for inclusion in regional and district plans for the purpose of Part V of the Act.
- 16.3.1(b)(x) To ensure an integrated inter-agency approach to the protection of natural character and indigenous vegetation and habitats of indigenous fauna.

Appendix F of the RPS was only finalised and became operative in 2008, following resolution of an Environment Court appeal.

## 5.6 Bay of Plenty Regional Coastal Environment Plan (2003)

The Draft Bay of Plenty Regional Coastal Environment Plan became operative in 2003, with no changes to the objectives, policies or methods of implementation for issues relating to indigenous biodiversity.

## 5.7 SmartGrowth

The SmartGrowth Strategy and Implementation Plan is an initiative of the three councils in the Western Bay of Plenty - Tauranga City Council, Western Bay of Plenty District Council and Environment Bay of Plenty. The Strategy was developed in 2004 and revised in 2007 with a vision centred on sustainable development, accommodating rapid growth and emphasizing the quality of outcomes.

Wildland Consultants (2003) mapped ecological constraints to urban development within the SmartGrowth project area, including Tauranga City.

Chapter 7.1.1 of the Strategy - Natural Environment and Biodiversity details the issues, includes principles and specific project actions.

The principles are:

- 1 Significant indigenous habitats and ecosystems are maintained and enhanced.
- 2 Significant indigenous habitats and ecosystems are restored.
- 3 Recognise the importance of matauranga Maori in relation to indigenous fauna and flora.
- 4 Environmental improvements are provided through community groups being cooperated with and supported by key agencies, (including Councils).

5 Biodiversity which is a key ecological indicator is actively promoted.

Specific project actions that are relevant to the Tauranga District Plan, with Tauranga City Council as a lead agency include:

“Take into account the areas of significant indigenous habitat and ecosystems in developing Structure Plans.

Protect, and restore, remaining areas of natural environment within urban areas.”

Tauranga City Council also has a support role in the following ongoing approaches;

“Develop and implement Environment Action Plans in partnership with Community Action Groups.

Raise awareness and understanding of the importance of ecosystems through education and advocacy. “

Chapter 7.1.2 of the Strategy - Open Coast includes the following principles:

- 1 The natural character of the coast is preserved, and
- 3 Significant indigenous habitats are protected.

Specific project actions include:

- (3) Protect the ecological values of significant indigenous habitats through regional and district plan regulation, and land acquisition and management.

## 5.8 Ecological surveys

Environment Bay of Plenty has reviewed the Significant Indigenous Vegetation and Significant Habitats of Fauna in the Coastal Environment of the Bay of Plenty Region (Wildland Consultants 2006).

A natural areas survey of Tauranga Ecological District has also recently been completed by Wildland Consultants for Environment Bay of Plenty (Wildland Consultants 2008).

## 6. OBJECTIVES AND POLICIES IN THE OPERATIVE DISTRICT PLAN

### 6.1 Introduction

Tauranga District Council, in carrying out its functions under the Resource Management Act, prepared the Tauranga District Plan which included objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district.

To assist with the preparation of a strategic plan (Project 2020) for the District Tauranga District Council (TDC) commissioned Wildland Consultants Ltd to prepare a preliminary report on the natural heritage of the District (Wildland Consultants 1997). This report addressed a fundamental issue for the preparation of the plan: the past, present, and likely future state of natural heritage and indigenous biodiversity in

the District and was also provided a basis for the preparation of the objectives and policies in the District Plan.

Each chapter of the Tauranga District Plan has matters to consider with relation to protection of the environment, however the majority of biodiversity protection/sustainable management occurs through the Objectives/Policy section of Chapters 4 and 14.

## 6.2 Chapter 4: Natural resources

The sustainable management of indigenous biodiversity is addressed in Chapter 4: Natural Resources of the Tauranga District Plan. Objectives for the protection of landscape values and natural character complement the objectives for sustainable management of indigenous biodiversity, and are also included in this chapter.

A description of ecological values and issues relevant to the District is included in Chapter 4. These are summarised as:

- Tauranga Harbour, wetlands (siltation and loss of wetlands);
- dunes (loss to residential development and modification of indigenous vegetation); and
- Kaituna alluvial plains; and
- other river flats (Kaitemako, Kopurererua, Waimapu, Wairoa, Waitao) - loss of wetlands; undulating hills and terraces in various parts of the District (highly modified and infested with invasive weed species).

These issues are included in the plan as:

- Issue 4.1 Effects on Landscapes;
- Issue 4.2 Coastal Margins and Sensitive Habitats;
- Issue 4.3 Aquatic Ecosystems.

## 6.3 Issue 4.1 - Effects on landscape

### 6.3.1 Objective 4.1.2: General landscape and natural feature protection

This objective relates to the protection and enhancement of landscape qualities, but the policies also include reference to the significance of indigenous vegetation, wetlands, and dominant landforms.

#### Policy 4.1.2.1: Landscape Character

*“The significance of indigenous vegetation, wetlands, dominant landforms and open spaces to the District’s landscape character.....should be recognized in subdivision, use and development and adverse effects to these be avoided as far as practicable.”*

#### Policy 4.1.2.2: Coastal Environment - Landscape Qualities

*“Use and development should ensure that the unique landscape and visual qualities of dunelands, Tauranga Harbour, estuarine edges, headlands, embayments, scarps and islands are protected. In particular, the following qualities should be protected:*

- (a) *the landform of dune systems, particularly foredunes*
- (b) *Natural backdrops (landforms and indigenous vegetation) to estuarine edges*
- (c) *Established native vegetation...*
- (d) *The integrity of ecosystems on or adjacent to the interface between land and sea”*

### 6.3.2 Comments/discussion

These two policies effectively address the issue of retention of natural landforms and native vegetation as it relates to landscape character.

## 6.4 Issue 4.2 - Coastal margins and sensitive habitats

*“Population growth puts pressures on ecologically sensitive coastal and harbour margins and remaining indigenous habitats elsewhere. Further loss of these values is not sustainable”. This section principally deals with the issue of loss of natural character of the coast and “sustaining ecosystems to function in perpetuity.”* The discussion notes that less than two percent of Tauranga District now remains in native cover.

### 6.4.1 Objective 4.2.1: Preservation of the natural character of the coastal environment and riparian areas

*“To preserve the intrinsic values found within, and the functioning of, natural areas located within the coastal environment and alongside rivers, streams and wetlands.”*

#### Policy 4.2.1.1: Effects on Coastal Environment and Riparian Areas

*“Subdivision, use and development in the coastal environment and riparian areas with natural character should not compromise:*

- (a) *The ability of plants and animals to move to and from the coastal environment and riparian areas*
- (b) *The natural processes of seed drop/germination/birth, death decomposition within coastal environment and riparian areas*
- (c) *The natural defences against predators and plant pests (such as reserve shape, adjacent waterbodies and compatible land uses) of coastal environment and riparian areas*
- (d) *The movement of energy (sunlight, organic material)”*

#### Policy 4.2.1.2: Effects on Coastal Environment and Riparian Areas

*“Subdivision, use and development in the coastal environment and riparian areas with natural character should preserve vegetation, topography, landforms, physical characteristics and habitats representative of present or past coastal ecosystems, wetlands or landforms.”*

#### Policy 4.2.1.3: Effects on Aquatic Ecosystems and Habitats

*“Particular regard shall be paid to the effects of land use adjacent to rivers, streams, wetlands and the Coastal Marine Area on the health of aquatic ecosystems, the continuity of riparian habitats and the natural character of marginal areas.”*

#### 6.4.2 Objective 4.2.2: To sustain natural resources by protecting the functioning and integrity of ecosystems.

*“To protect coastal and freshwater and wetlands ecosystems, native flora and fauna and physical landforms and their associated natural processes from the adverse effects of use and development within, and adjacent to, the coastal environment. To maintain and enhance levels of native biodiversity found in Tauranga District.”*

#### Policy 4.2.2.1: Value of Ecosystems

*“Use and development should recognize the intrinsic value of indigenous ecosystems, particularly those that traverse environmental gradients and those that exist in association with special physical processes.”*

#### Policy 4.2.2.1: Effects of Stormwater Discharge

*Avoidance of the adverse effects of stormwater discharge will be accorded priority in the assessment of activities on:*

(a) *Intrinsic values of aquatic ecosystems ...”*

#### Policy 4.2.2.5: Indigenous Fauna and Flora

*“It should be recognized that intact areas of indigenous flora and fauna are underrepresented in the District, and use and development should provide for their maintenance and enhancement”*

#### Policy 4.2.2.6: Sensitive Ecological Areas

*Particular regard shall be had of the potential for land use adjacent to sensitive ecological areas to result in adverse effects, and measures should be taken to avoid, remedy or mitigate these adverse effects when considering subdivision, use and development”.*

#### Policy 4.2.2.7: Habitat Corridors

*“Subdivision, use and development should provide natural corridors between significant habitats, especially where their provision is likely to:*

- (a) *Improve the natural character of riparian areas*
- (b) *Improve the viability of a habitat or its dependent species*
- (c) *Maintain or enhance the quality of habitats that exist across environmental gradients”*

### 6.4.3 Objective 4.2.3: Protecting Special Ecological Sites

*“To protect in their natural state and sustainably manage all significant habitats of indigenous flora and fauna of the District.”*

#### Policy 4.2.3.1: Significant Ecological Habitats

*“Habitats of significant indigenous flora and fauna (as listed in Appendix 16A: Heritage Register) should be managed and activities carried out within and adjacent to the habitats so ecological values are protected and enhanced.”*

#### Policy 4.2.3.2: Special Ecological Sites

*“Subdivision, use and development within or adjacent to sites identified in Appendix 14A: Special Ecological Site Register or within or adjacent to other areas of significant indigenous vegetation and significant habitats of indigenous fauna, as defined by Policy 4.2.3.3, must be carried out in a way that does not result in a reduction in the health, viability or ecological values of those sites.”*

#### Policy 4.2.3.3: Other Ecological Sites or Habitats

*“Sites that contain any of the following should be recognized as significant and their protection or enhancement accorded priority in the sustainable management of natural and physical resources.*

- (a) Native vegetation or habitats of native species set aside by statute or covenant for purposes that include habitat protection.*
- (b) Indigenous vegetation or habitats of indigenous species recommended in a report for protection by the Forest Heritage Fund, Nga Whenua Rahui committees or Department of Conservation, including areas identified as recommended for protection in a Protected Natural Areas Programme (DOC) report.*
- (c) Indigenous vegetation or habitats that support indigenous populations of species recognized as being uncommon or declining in abundance within the Tauranga Ecological District.*
- (d) Indigenous vegetation or habitats of indigenous species recognized as being depleted at a District or ecological district level.*
- (e) Vegetation or habitats important in the recovery of indigenous species uncommon or declining in abundance within the Tauranga Ecological District*
- (f) Native forests*
- (g) Indigenous vegetation containing an actual or emerging predominance of indigenous trees (50 stems/hectare or more of tree species of 50cm height or more) and is of an area of 5 hectares or more.*

### 6.4.4 Comments/discussion

Coastal margins and sensitive habitats are an important feature of Tauranga District as there are so few remaining natural areas and the policies reflect the importance of this issue. The three objectives encapsulate the issue. There is, however, some duplication and lack of clarity in the policies. Policy 4.2.1.1: Effects on Coastal

Environment and Riparian Areas is difficult to interpret, manage and enforce. The principle of maintaining function processes is an important one but is included within Objective 4.2.2, particularly Policy 4.2.2.1. It is therefore recommended that Policy 4.2.1.1 could be deleted. The following addition to Policy 4.2.1.2 could be considered to further strengthen the objective of preserving the functioning of natural areas:

“Subdivision, use and development.....physical characteristics, **natural processes**, and habitats representative of....”

There are policies that deal with **Sensitive Ecological Areas, Significant Ecological Habitats, Special Ecological Sites, and Habitat Corridors and Other Ecological Sites or Habitats**. These categories should be simplified. If significant ecological sites are also significant heritage sites they should be on both registers and mapped such that this is apparent. An addition to Policy 4.2.3.3 could read:

(h) Habitats of significant indigenous flora and fauna as listed in Appendix 16A: Heritage Register. Policy 4.2.3.1 could then be deleted.

Sensitive Ecological Areas could be deleted as all remaining natural areas are ‘sensitive’ to some degree.

## 6.5 Issue 4.3 - Aquatic ecosystems

*“Land-use activities can have adverse effects off-site, particularly in adjacent waterways and waterbodies. Large scale modification of catchment areas can alter considerably the nature and quantity of runoff entering streams, rivers, wetlands and the Coastal Marine Area and can adversely affect water quality and ecosystems.”*

### 6.5.1 Objective 4.3.1: Water Quality and Quantity - Stormwater and Wastewater

*“To achieve...*

- *The protection of wetland, estuarine, stream and river habitats - particularly those in the margins of these areas.”*

#### Policy 4.3.1.5: Stormwater Discharges in the Coastal Environment

*“The loss of natural character of the coastal environment from the discharge of stormwater across the foreshore or through dunes ....should be avoided or where avoidance is not practicable, substantially mitigated”*

#### Policy 4.3.1.6: Stormwater Discharges to the Coastal Environment

*“Land use activities that involve discharge of stormwater to the coastal environment, wetlands and rivers should include measures to avoid, remedy or mitigate any adverse effects...”*

## 6.5.2 Comments/discussion

These policies effectively address the issue of effects on aquatic ecosystems.

# 7. IMPLEMENTATION METHODS IN THE OPERATIVE DISTRICT PLAN

## 7.1 Regulatory methods

Regulatory methods in the Plan restrict activities that may potentially adversely affect indigenous biodiversity.

### 7.1.1 General natural resource rules

#### Section 14.1: Maintaining Biodiversity and Protecting Ecosystems

- (a) *Notwithstanding any rule to the contrary in the Plan, any activity that involves the clearance from any native forest in any 12 month period of an area equal to or greater than 20m<sup>2</sup> of predominantly native vegetation is a non-complying activity.*
- (b) *Notwithstanding any rule to the contrary in the Plan, any activity that involves the removal, deposition, movement or disturbance in any 12-month period from within or adjacent (within 20m) to any Special Ecological Site of more than 10m<sup>3</sup> earth/soil is a non-complying activity*
- (c) *Notwithstanding any rule to the contrary in the Plan, any activity that involves the removal or loss in any 12-month period from within or adjacent to any Special Ecological Site of more than 20m<sup>2</sup> of indigenous vegetation is a non-complying activity.*

### 7.1.2 Conservation zone

This zone applies to coastal and esplanade reserves under management by the Tauranga City Council

Within this zone, the following applies (Section 22.2.2.1):

*“Within 15m inland of MHWS, 10m of the banks of any perennially flowing stream  
No activity shall result in:*

- (d) *the clearance of >20 m<sup>2</sup> of indigenous vegetation in any 12month period*
- (f) *the removal, deposition or disturbance of >20 m<sup>3</sup> of earth in any 12 month period*
- (g) *the removal of any native tree”*

### 7.1.3 Rural activity zone rules

#### Section 21.2.2.1: Natural Character: Coastal Environment, Natural Waterways and Wetlands

*Within:*

- (a) 60 m inland of mean high water springs (MHWS) in a Rural Zone
- (b) 175 m inland of MHWS in the Kaituna rural land at Papamoa East
- (c) 20 m of any perennially flowing stream or river
- ....
- (f) Any wetland greater than 10 m<sup>2</sup>

*No activity shall result in:*

- (h) The clearance of more than 20 m<sup>2</sup> of any indigenous vegetation in any 12 month period
- (i) The removal, deposition or disturbance of more than 50 m<sup>3</sup> of earth in any 12 month period
- (j) The removal of a native tree greater than 6 m in height

*Notwithstanding any other rule in the Plan, any permitted activity that does not meet these conditions shall be a non-complying activity.*

#### 21.2.2.2: Indigenous Vegetation

*Notwithstanding any other permitted activity condition, no activity located within a native forest shall in any 12month period result in the clearance of more than 100m<sup>2</sup> of indigenous vegetation.*

### 7.1.4 Section 21.3.1.7 Heritage protection or indigenous vegetation protection lots

As a controlled activity an allotment may be created in conjunction with the legal protection of indigenous vegetation (>2 ha) achieved by a condition of subdivision consent (MOU or similar registered on title).

### 7.1.5 Section 21.5.2: Subdivision consents

Subdivision consents are a discretionary activity in the rural and greenbelt zones and the following standards and terms are included:

*b) Property Environmental Plan to be submitted with every application shall:*

- ii) *Outline the environmental characteristics and natural and physical resources to be found on the property and its environs.*
- iii) *Outline the proposed environmental measures and land and/or water management practices that will promote sustainable management of the natural and physical resources of the property or adjacent affected ecosystems or enhancement of the area's rural character.*

Conditions such as fencing of land that should be retired, retention of vegetation/trees may be imposed on the consent.

#### 7.1.6 Coastal Hazard Protection Area

Chapter 17 of the District Plan deals with natural hazard policy area rules and includes the following rules regarding activities undertaken on land other than land zoned Conservation or Recreation within the Coastal Hazard Erosion Policy Area (CHEPA), i.e. that land identified on the planning maps, between Mean High Water Springs (MHWS) and the landward extent of the 100 year Erosion Risk Zone:

- a) Excavation or movement of sand or soil shall not exceed 5 m<sup>3</sup> per site in any six month period;
- b) Removal of vegetation shall not exceed 30 m<sup>2</sup> per site in any six month period;
- c) Activities shall ensure that the site is reinstated so that the natural buffering effect of the foredune is not compromised. All excavated materials shall be respread within the Coastal Erosion Risk Zone and be revegetated with native dune plants. Revegetation planting shall be established within six months of the respreading of the sand material. Other excavation material (i.e. ash, topsoil, organic matter) may be removed from site.

#### 7.1.7 Comments/discussion

Planning maps should include all relevant zones on maps with SES to ensure clarity as to the rules that may apply to any particular parcel of land.

Note that Section 21.2.2.1: Natural Character: Coastal Environment, Natural Waterways and Wetlands, covers activities within several 'zones' including any wetland greater than 10 m<sup>2</sup>, however the allowance for clearance of indigenous vegetation in any 12-month period is 20 m<sup>2</sup>. This would effectively mean that the vegetation in any wetland of 20 m<sup>2</sup> can be cleared within 12 months and therefore a wetland of 10 m<sup>2</sup> could be completely lost within 12 months.

Indigenous vegetation is defined in the district plan as "A species of flora which occurs naturally in New Zealand or has arrived in New Zealand without human interference." This definition is for an indigenous species or an indigenous plant, rather than indigenous vegetation. 'Vegetation' is used to refer to an assemblage of plants. The rules do reflect the use of a correct definition of indigenous vegetation as they include minimum areas for clearance.

Alternative definitions are set out below:

- Indigenous plant species - Means any plant found naturally in New Zealand.
- Indigenous vegetation - Means any plant community containing indigenous species (which may include a canopy, subcanopy, understorey, and ground cover as structural elements). It includes vegetation that has regenerated naturally or vegetation established with human assistance following disturbance or as mitigation for another activity.

Currently the rules allow the clearance of up to 20 m<sup>2</sup> of any indigenous vegetation in any 12 month period, even within SES. This potentially allows for significant clearance over time, even of heavily-reduced ecosystems such as dunelands or wetlands. The provisions, however, also restrict the felling of a single native tree greater than 6 metres in height. Given that the key issues described in Chapter 4 include the protection of Tauranga Harbour, wetlands, and dunes, these provisions appear inadequate. It is recommended that in the review of the Plan consideration be given to inclusion of a provision that requires consent for any vegetation clearance or activity within SES, so that the effects of that activity can be assessed. Exceptions such as clearance for utilities such as power and telephone lines, or safety of property could be included.

The main purpose of the coastal protection zone is to address issues around building and development in the hazard zone but effectively protects biodiversity and ecosystem processes by default. The limits on vegetation clearance are stricter than those in Section 21.2.2.1 which deals with natural character of the coastal environment including within 60 m of MHWS and 175 m inland of MHWS in Kaituna rural land at Papamoa East. The coastal protection zone is mapped on planning maps, but the scale is not particularly useful for individual landowners. The correlation between this zone and other zones should be clearly delineated on planning maps.

## 7.2 Non-regulatory methods

### 7.2.1 Provisions in Plan

These methods (Other Methods) are included in Sections 4.1.4, 4.2.5, 4.3.3, and include:

- (a) Management of reserves to maintain heritage features (4.2.5 (1))
- (b) Environmental education
  - Education and facilitation of involvement in resource consent process (4.1.4.(2))
  - Improving knowledge of ecological principles and raising awareness of land-use alternatives (4.1.4.(2))
- (c) Provision of information
  - Community encouragement through joint initiatives
  - Initiation of a District Planting Guide providing information to assist restoration of the historical pattern of the native vegetation (4.1.4 (1)).
  - Include known heritage information on LIMs and PIMs. (4.2.5 (3))
- (d) Financial incentives
  - rates relief for registered items (4.2.5 (4))
  - annual plan process for special heritage projects (4.2.5(5))

(e) Liaison with other authorities and interest groups (4.2.5(2))

- Recognise Proposed Regional Land Management Plan rules as a means to control the extent and location of major earthworks and vegetation clearance near, or adjacent to, waterways or the coast.

#### 7.2.2 Comments/discussion

These non-regulatory provisions provide a potentially useful range of programmes to assist in the protection and enhancement of indigenous biodiversity.

## 8. MAPS AND REGISTERS IN THE OPERATIVE DISTRICT PLAN

Special Ecological Sites (SES) are mapped individually on aerial photographs in Section 6 of the Tauranga District Plan, with an index/overview of the maps.

At the time that the plan was prepared, the following areas in the Regional Coastal Environment Plan were used to define SES:

- Coastal Habitat Preservation Zone;
- Site of District or Local Significance (in the Coastal Marine Area);
- Site of Significance (on land).

The maps clearly delineate the boundaries of SES. It would be even more helpful if other zones and boundaries were also clearly marked on the same maps, e.g. 60 m inland of mean high water springs (MHWS) in the Rural Zone and 175 m inland of MHWS in the Kaituna rural land at Papamoa East, and the coastal protection zone. SES 18, for example, may have different rules applicable to different parts of the site, depending on the location of the coastal protection zone. Also, any areas of significance for protection of indigenous vegetation in Appendix 16A should be included on the relevant maps.

## 9. ANTICIPATED ENVIRONMENTAL RESULTS IN THE OPERATIVE DISTRICT PLAN

### 9.1 Section 4.1.6

*“Design, development and land use within rural areas which recognizes the importance of vegetation, physical landform and open space....”*

*“A greater awareness within the community of landscape assets, particularly those identified as outstanding and those associated with the coastal environment....”*

*A high level of satisfaction expressed by the community with the District landscape.”*

## 9.2 Section 4.2.7

*“The retention, enhancement and conservation of significant natural or heritage features....*

*Maintenance and enhancement of the natural character of the coastal environment, rivers, stream and wetlands.*

*The sustainable management of ecosystem processes and remaining indigenous vegetation, species and habitat resources.”*

## 9.3 Section 4.3.5

*“Preservation of natural drainage ways and ecosystems adjacent to new residential development*

*..*

*Preservation of natural drainage ways and ecosystems adjacent to residential development in Urban Growth Areas*

*Protection and improvement of aquatic habitats and the natural character of District waterways*

*Preservation of natural and modified dune systems along the District’s coast.”*

## 9.4 Comment/discussion

Anticipated Environmental Results clearly reflect the objectives in the Plan. However, the implementation methods used cannot deliver the anticipated results. The Plan permits the clearance of up to 20 m<sup>2</sup> of indigenous vegetation and/or the removal, deposition, movement or disturbance of up to 10 m<sup>3</sup> of soil in any one year (in and within 20 m of SES, in the coastal environment, and wetlands. In dune systems and wetlands this can be a significant impact, particularly if clearance/disturbance is carried out for several years. The following results can therefore not be achieved:

- *“Maintenance and enhancement of the natural character of the coastal environment, rivers, stream and wetlands.”*
- *“The sustainable management of ecosystem processes and remaining indigenous vegetation, species and habitat resources.”.*

## 10. OVERALL EFFECTIVENESS OF THE OPERATIVE DISTRICT PLAN IN RELATION TO CONTEXT AT THE TIME OF NOTIFICATION

Objectives and policies in the Plan are consistent with a high level of protection of natural values and indigenous biodiversity. Policies effectively address the issue of retention of natural landforms and indigenous vegetation as it relates to landscape character.

Coastal margins and sensitive habitats are an important feature of Tauranga District as there are so few remaining natural areas, and the policies reflect the importance of this issue. The three objectives encapsulate the issue. However, there is some duplication and lack of clarity in the policies and recommendations are provided above for specific changes to Section 4.4.4.

The objectives and policies regarding effects on aquatic ecosystems effectively address this issue.

Regulatory provisions in the Plan control the clearance of indigenous vegetation and earthworks within defined zones and significant sites (mapped and scheduled). Clearance of indigenous vegetation up to 20 m<sup>2</sup> is permitted in any 12 month period. The cumulative effects of this activity could result in significant impacts, particularly in dune and wetland ecosystems. In addition the removal, deposition, movement or disturbance of up to 10 m<sup>3</sup> earth/soil is allowed in SES and up to 50 m<sup>3</sup> in the coastal environment, natural waterways and wetlands as defined in Section 21.2.2.1 of the Plan.

The maps clearly delineate the boundaries of SES. It would be even more helpful if other zones and boundaries were clearly marked on the same maps, e.g. 60 m inland of mean high water springs (MHWS) in the Rural Zone and 175 m inland of MHWS in the Kaituna rural land at Papamoa East. Also any areas of significance for protection of indigenous vegetation in Appendix 16A should be included in Appendix 14A and the maps as well.

The Draft Regional Coastal Environment Plan addressed the issue of ongoing and often incremental loss of natural character and significant indigenous vegetation and habitats of indigenous fauna within the coastal environment through inappropriate subdivision, use and development. The District Plan does not effectively address the cumulative effects of loss, given that the limits of development are within a 12-month period. Within five years, 100 m<sup>2</sup> of indigenous vegetation could be cleared within a significant site and this could have a major impact on natural character and ecosystem processes.

The following anticipated environmental results can therefore not be achieved by the current provisions in the Plan

- *“Maintenance and enhancement of the natural character of the coastal environment, rivers, stream and wetlands.”*
- *“The sustainable management of ecosystem processes and remaining indigenous vegetation, species and habitat resources.”*

## 11. INDIGENOUS BIODIVERSITY OF TAURANGA CITY - STATE OF THE ENVIRONMENT REPORT 2005

Wildland Consultants (2005) prepared a major report on the state of indigenous biodiversity in Tauranga District for Tauranga City Council. This report provides detailed vegetation maps, a review of Special Ecological Sites, a review of potential restoration sites and corridors, and analysis of eight biodiversity indicators (area of indigenous vegetation removed; habitat fragmentation and isolation; land use and development; biodiversity condition and trend; number and distribution of threatened species; area legally protected; and location, area, and type of pest and weed control).

This section provides a comparison of provisions in the operation District Plan (including Plan maps) with findings presented in the 2005 State of the Environment Report.

### 11.1 Maps

In 2000 the Tauranga City Council (then the Tauranga District Council) developed a suite of environmental indicators and methods for measuring them, as Section 35 of the Resource Management Act (1991) requires territorial authorities to monitor and report on environmental performance. Wildland Consultants Ltd was commissioned to develop indicators, methods and baseline maps (Wildland Consultants 2000a, 2000b, 2000c) and subsequently in 2005 to review and re-evaluate the state of the natural environment in the district.

Some objectives and policies in the Plan are specific to SES (Section 14.1 (b)(c). Comparison between the Wildland Consultants monitoring report (2005) and the Tauranga District Plan indicates major differences between the SES, boundaries and descriptions shown in the Plan and the 2005 report.

The maps prepared by Wildlands included additional SES sites, but these have not yet been carried through into the District Plan. SES are described in Appendix 14A of the Tauranga District Plan and are mapped on planning maps. Nineteen SES included in the monitoring report (Wildland Consultants 2005) are not included in Appendix 14A of the Plan. SES in the monitoring report (Wildland Consultants 2005) not included in the District Plan include Sites 7, 8, 11, 12, 13, 14, 16, 17, 18, 20, 22, 26, 29, 30, 32, 33, 34, 35, and 36.

Most of those sites included in both the District Plan and the Wildlands monitoring report have different boundaries.

The numbering of SES in the Wildland Consultants report does not always correlate to the numbering of SES in the District Plan.

Table 1 provides a comparison between SES identified in Wildland Consultants 2005 and those currently listed in the District Plan.

Table 1: Comparison between Special Ecological Sites (SES) listed in the District Plan and documented in Wildland Consultants (2005).

District Plan SES No.	Wildlands 2005 SES No.	SES Location
1	1	Wairoa Estuary/freshwater wetland and Wairoa River channel wetland.
2	2	Matua wetlands.
3	3	Waikareao estuarine vegetation and contiguous freshwater wetland.
4	4, part 15	Estuarine vegetation along the western side of Waimapu estuary.
5	5	Waimapu Estuary - estuarine vegetation with small areas of mangrove, also wetland vegetation types, dune and sandspit vegetation.
7, 8	19	Welcome Bay on eastern edge of Maungatapu, Kaitemako Stream mouth.
9	27, 28	Estuarine vegetation along the northern edge of Matapihi Peninsula.
10	31	Estuarine vegetation adjacent to airport lands.
11	Part 25	Estuarine vegetation on seaward side of Te Maunga causeway.
12	Part 25	Head of Rangataua Bay, north-west of sewage treatment plant.
13	24	Head of Rangataua Bay, south-east of sewage treatment plant.
14	21	Small tidal inlet adjacent to Tye Park.
15	23	Narrow tidal arms east and west of Ngapeke Road.
16	6	Estuarine vegetation spanning the Waitao Stream and adjacent areas.
17	10	Dunes along the Papamoa foreshore between Domain Road and Wairakei.
18	Part 9	Dunes east of Papamoa.

For provisions in the plan that relate to specific sites to be effective, all relevant up-to-date information regarding the sites that meet the criteria for significance should be included. These sites, and other areas/zones that specific provisions relate to, must be clearly identified on the plan maps.

More recent information is also available on significant natural areas in the district (Wildland Consultants 2005, 2006, 2008). Maps in the District Plan should be updated to include additional significant areas. This would ensure that the District Plan is not inconsistent with the Regional Policy Statement, Bay of Plenty Regional Coastal Environment Plan (2003), National Priorities for Protecting Biodiversity, and the principles contained within the SmartGrowth Strategy.

## 11.2 Areas protected or restored

### 11.2.1 Community projects

Wildland Consultants (2005) identified 29 sites where restoration projects had been undertaken during the period 2000-2005. These include projects undertaken by Coastcare, three landcare groups, other community groups, and Tauranga City Council. Eleven restoration projects are at least partially funded by the Environmental Enhancement Fund of Environment Bay of Plenty.

It is difficult to assess the contribution that any education or facilitation by Tauranga City Council may have had to this outcome but TCC is a member of Coastcare and is also known to provide active support to other groups operating within the city.

#### 11.2.2 Sites administered by Tauranga City Council

Tauranga City Council planted 52,000 indigenous plants each year over the period 2002-2005, in addition to those used in stormwater management plantings and in the Kopurererua Valley project. In 2005, 9.3 hectares was revegetated for stormwater management purposes and a further 5 hectares was revegetated for other purposes.

#### 11.2.3 Sites protected/restored through consent processes

No sites have been protected as a result of resource consent conditions and no protection lots have been established (Tauranga City Council staff pers. comm. 2008).

### 11.3 Areas lost

Monitoring showed that approx 59 hectares of indigenous vegetation or wetland was removed from SES during the five year period 2000-2005 (Wildland Consultants 2005). As discussed above, there are additional SES in the Wildland Consultants monitoring report and the boundaries of most of the sites differ. Assessment of the effectiveness of the plan in this regard is therefore somewhat difficult. However, it is apparent that most of the loss has occurred in SES that are not included/mapped in the district plan. Of those sites that are included in the District Plan, the main losses appear to be due to urban encroachment or roading and drainage activities.

Eight Special Ecological Sites (SES) decreased in size due to habitat destruction. Losses were due to conversion to exotic plantation forest, agriculture, urban encroachment, drainage and infilling, and road construction. Only four of these sites are included in the District Plan.

The vegetation type that sustained the greatest loss was pohuehue-spinifex vineland on sand dunes in SES 9, 11, and 35 (SES numbers referred to here correspond to those in the Wildland Consultants 2005 monitoring report). This included conversion to pine forest (33 ha of SES 35), conversion to agriculture and farm road (5.3 ha of SES 11), and urban encroachment (0.75 ha of SES 9). Sites 9, 11 and 35 are not included in the District Plan. SES 9 is comparable to SES 18 in the District Plan - Otira Dunes or Dunes east of Papamoa - which contains a large example of rare vegetation types, representative of Tauranga Ecological District. However, the site in the Wildland Consultants report is much more extensive than that in the District Plan (the area that has been converted to pines is not shown as a SES in the Plan).

It should be noted that even if SES 35 had been included in the District Plan, the planting of pines does not require clearance of vegetation or earthworks and so would not have required a resource consent. Inclusion of the site in the register would have highlighted its values, such that non-regulatory methods of information and advice may have prevented modification of the site. However, consideration should be given to amending regulatory provisions in the plan to manage land use changes.

While the sand dunes in SES 9 are also not included Register 14A in the District Plan, other provisions could have been helpful in avoiding this loss due to urban encroachment. This includes non-regulatory methods (Section 4.1.4) of education, “community encouragement through joint initiation and development of techniques and initiatives in response to issues.” The proposed City Council guide to provide information on restoration based on the historical pattern of indigenous vegetation could also have highlighted the significance of the vegetation.

Kopurererua Stream and Wetland (SES 14), which is not currently included in the District Plan, lost 15.59 ha of indigenous vegetation due to road construction. This new road was an existing designation in the Plan and therefore the development was permitted. There is a public process for the establishment of individual designations, and protection of indigenous vegetation and habitats was considered at that stage. Designations should therefore be mapped in relation to SES. However any development should also be carried out as sensitively as possible given the SES status of the site and surrounding land.

#### 11.4 Biodiversity condition of special ecological sites

The Wildland Consultants (2005) report includes an assessment of biodiversity condition and trend in eleven Category 1 Special Ecological Sites. The report notes that biodiversity condition has trended downwards at eight Category 1 sites, improved at two sites, and was not assessed at one site. Negative impacts included pedestrian and vehicle tracks, vegetation clearance, rubbish dumping, drainage, and erosion. Positive impacts were evident at five sites, including planting, restoration works, and weed control.

The report concludes that the state of the natural environment in Tauranga City has deteriorated during the period 2000-2005, but that there are numerous opportunities to protect and enhance natural areas by implementing weed control plans for invasive ecological weeds, carrying out planting programmes, and initiating education and enforcement to prevent some of the negative impacts that are continuing to occur. This requires effective management of lands administered by Tauranaga City Council and a combination of non-regulatory approaches for both lands administered by Tauranga City Council and on private lands.

#### 11.5 Comments/discussion

Monitoring has shown that the following anticipated environmental results have not been achieved:

“The retention, enhancement and conservation of significant natural or heritage features....

*Maintenance and enhancement of the natural character of the coastal environment, rivers, stream and wetlands.*

*The sustainable management of ecosystem processes and remaining indigenous vegetation, species and habitat resources.”*

*Preservation of natural and modified dune systems along the District’s coast.”*

This has been due to:

- incomplete information in the district plan regarding the significant natural areas in the district;
- activities that are a threat to natural values not being controlled by provisions in the plan (e.g. planting of exotic species);
- not fully utilizing the opportunities associated with non-regulatory methods (education regarding values and threats of rubbish dumping, vehicles, and other relevant activities to natural areas).

## 11.6 Awareness

### 11.6.1 Surveys

Reference was made to the survey by Environment Bay of Plenty of community environmental perceptions as part of their Community Outcomes Survey (EBOP 2006) in order to assess the effectiveness of the anticipated outcome in the Tauranga District Plan:

*“A greater awareness within the community of landscape assets, particularly those identified as outstanding and those associated with the coastal environment....  
A high level of satisfaction expressed by the community with the District landscape”*

In this survey, respondents were asked how they would rate the overall state of the natural environment on the Bay of Plenty. Results were collated within District Council boundaries. Seventy-nine percent of Tauranga City residents rated the state of the natural environment as good or very good. However, when further questioned as to the changes to the overall state of the environment, Tauranga residents were more likely to state that the natural environment was becoming worse (30%) than respondents from the Eastern Bay (18%), and even Western Bay of Plenty District (25%).

Reference was also made to the Tauranga City Council’s 2005 State of the Environment Survey (TCC 2005), which indicated particular aspects of the landscape which respondents thought had become better, stayed the same, or become worse over the last two years (Table 2).

Table 2: Tauranga City Council survey of attitudes in relation to natural landscapes undertaken in 2005.

Aspects of Natural Landscape	% of Respondents					
	A Lot Better	Better	The Same	Worse	A Lot Worse	Don't Know/ Not Sure
General views/scenery	5	26	41	22	1	5
Harbour	2	23	46	18	2	9
Beaches	5	31	45	12	1	6
Bush, trees, wetlands	4	33	29	15	1	18

Generally, more respondents perceive that the landscape (all categories) is the same or better than two years before. The greatest improvement appears to be in the bush, trees, and wetlands category.

## 11.6.2 Comments/discussion

It is hard to judge whether *there is “a greater awareness within the community of landscape assets, particularly those identified as outstanding and those associated with the coastal environment”*. Neither survey provides this information

However it can be seen from the results that there is a “*high level of satisfaction expressed by the community with the District landscape*” as most respondents think that the landscape is the same or better than two years before. Seventy-nine percent rated the natural environment as good or very good. However there appears to be room for improvement as the Environment Bay of Plenty survey showed almost one third of the respondents thought the natural environment was becoming worse.

## 12. DISTRICT PLAN AND PLANNING MAPS EFFECTIVENESS IN RELATION TO CURRENT LEGISLATIVE AND STRATEGIC CONTEXT

As described in Section 5 above, there have been major changes in the legislative and strategic frameworks since 1997 that relate to the protection and sustainable management of indigenous biodiversity. The Regional Policy Statement and Regional Coastal Environment Plan have become operative and there has been additional national guidance in the New Zealand Biodiversity Strategy and the National Priorities for Protecting Biodiversity on Private Land. SmartGrowth, an initiative of the three councils and tangata whenua in the Western Bay of Plenty, includes principles and project actions for the protection of ecological values of significant indigenous habitats.

Within this framework, the loss of significant indigenous vegetation, particularly vegetation associated with sand dunes and wetlands, is not acceptable. National Priority for Protection 2 specifically addresses the protection of indigenous vegetation associated with sand dunes and wetlands; ecosystem types that have become uncommon due to human activity.

The Regional Policy Statement now includes criteria for the assessment of significance. Many sites of significant indigenous vegetation in Tauranga District are not included as SES in the district plan.

The Regional Coastal Environment Plan addresses the issue of ongoing and often incremental loss of natural character and significant indigenous vegetation and habitats of indigenous fauna within the coastal environment through inappropriate subdivision, use and development. The District Plan does not effectively address the cumulative effects of loss, given that the limits of development are within a 12-month period. Within a five-year period, under current Plan provisions, 100 m<sup>2</sup> of indigenous vegetation could be cleared within a significant site and this could have a major impact on natural character and ecosystem processes.

The following anticipated environmental results cannot therefore be achieved by the current provisions in the Plan:

- *“Maintenance and enhancement of the natural character of the coastal environment, rivers, stream and wetlands.”*
- *“The sustainable management of ecosystem processes and remaining indigenous vegetation, species and habitat resources.”*

It is, therefore, recommended that:

- SES in the plan should be updated to include all sites considered significant in recent survey reports (Wildland Consultants 2005, 2006, 2008).
- Regulatory provisions relating to SES should be strengthened to require resource consents (discretionary) for any activity in order that any effects can be properly assessed. Consideration could be given to waiving or reducing the application fee for minor activities.

It is widely recognised that the maintenance and enhancement of natural areas where they occur on private land is, however, dependent on activities of the landowner which cannot be addressed through regulatory provisions, e.g. excluding grazing, and control of pest plants and animals.

The provision of information to landowners regarding the values of the sites - so that they understand management issues relating to indigenous biodiversity - is important, and preferably assistance should be provided to manage sites for those values. Environment Bay of Plenty carries out environmental education and may provide assistance to landowners to manage significant natural areas. Tauranga District Council collaborates with Environment Bay of Plenty in the Coastcare programme. Continued and strengthened liaison with Environment Bay of Plenty and other authorities is important to achieve the desired environmental outcomes.

## 13. CONCLUSIONS

### 13.1 Overview

The operative Tauranga District Plan includes a range of objectives and policies aimed at protecting and enhancing the District’s remaining indigenous biodiversity and natural landscapes. To achieve this, the Plan includes regulatory provisions to reduce the effects of activities on Special Ecological Sites and other areas of indigenous vegetation or habitats of indigenous fauna. The Plan also includes non-regulatory provisions to assist in achieving the anticipated environmental outcomes. However, monitoring shows that there have, nevertheless, been losses of indigenous vegetation in significant sites.

The effectiveness of the District Plan can be improved by:

- clarifying the objectives, policies and terminology in the Plan;
- updating the register of Special Ecological Sites and maps to include all known sites of significant indigenous vegetation and habitats;

- strengthening the regulatory provisions;
- greater focus on implementing non-regulatory provisions in the Plan.

### 13.2 Clarifying provisions in the Plan

As discussed in previous sections, some of the policies appear to duplicate each other and there is lack of clarity about the terminology used for significant sites. Rewording of these sections will assist in allowing greater understanding of the intent of the Plan.

### 13.3 Information

All relevant information regarding significant habitats of indigenous vegetation and habitats of indigenous fauna that is now available from recent surveys should be included in the Plan as Sites of Special Ecological Significance. These should also be accurately mapped and described in the Appendix (current Appendix 14A). These should be consistent with the maps and descriptions in the Wildland Consultants 2005 report on Indigenous Biodiversity of Tauranga City, Natural Areas in Tauranga District (Wildland Consultants 2008), the Regional Coastal Environment Plan, and/or other relevant information held by Environment Bay of Plenty.

If sites have both natural (Appendix 14A) and cultural heritage values (Appendix 16A) they should be included on both registers and mapped as such.

Existing designations should be mapped in SES where they intersect and it would be helpful to have zones important for protection of indigenous biodiversity included on the same maps.

### 13.4 Regulatory provisions

Given the changes to the current legislative and strategic framework for the protection of indigenous biodiversity since the Plan was prepared, and given the loss of indigenous vegetation and habitats recorded (Wildland Consultants 2005) it is appropriate to review and strengthen the regulatory provisions for the protection of indigenous ecosystems, particularly with regard to SES, dune systems, and wetlands.

Rather than including limits on vegetation clearance/earthworks within any 12-month period, (which is difficult to monitor and has cumulative effects), it is recommended that consideration be given to providing rules in the Plan which require any works (including planting of exotic species) within a Special Ecological Site to be the subject of a resource consent. Impacts of any proposed activity can then be assessed on its particular merits and consent conditions applied accordingly. Exceptions such as clearance for the maintenance of existing utilities such as power and telephone lines, and for safety, could be included.

### 13.5 Non-regulatory provisions

Non-regulatory methods in the Plan appear adequate but it is difficult to assess the effectiveness of the implementation of these methods as they often include working collaboratively with other groups. Therefore the contribution of Tauranga City Council itself cannot be assessed. Also, the provision of information and educational

projects may not have immediate effects but are long term measures. The Planting Guide has not yet been completed and will be a useful advocacy tool.

Maintenance and enhancement of natural areas (control of pest plants and animals, exclusion of grazing) where they occur on private land is dependent on the activities of the landowner. Non-regulatory provisions, including the provision of information, advice, and assistance to landowners, and liaison with other authorities, particularly Environment Bay of Plenty, are important components of the Plan in relation to achieving the desired environmental outcomes.

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