

## 2 VALUES

*(All appeals to this section have been resolved pursuant to the Environment Court decision ENV-2006-AKL-000054 (formerly A470/04) Haka International NZ Ltd v ARC - A097/2007, 29.11.07)*

*[E475/04 WFH Properties Ltd, E495/04 Transit New Zealand, E536/04 Horticulture New Zealand, E515/04 North Shore City Council, E532/04 Carter Holt Harvey Ltd, E503/04 Property Council of NZ (Inc.) & Ors – consent order 17.04.08 - Changes are outlined in blue font]*

*[E479/04 Contact Energy Ltd and E509/04 Watercare Services Ltd– consent order 17.07.09 resulting in changes as follows: **Abstraction Take/s** - Changes are outlined in black font]*

### 2.0 INTRODUCTION

The Values chapters address the use, development and protection of air, land and water resources that are valued by the Auckland regional community for a number of environmental, social, economic and cultural purposes. Some of these natural and physical resources are important for their high environmental values. Other resources are important for their contribution to the community's health and safety, while other resources are used for economic, social and cultural development.

Section 5 of the RMA requires that this Plan promote the sustainable management of natural and physical resources. The Values chapters implement this purpose by identifying how land, air and water resources that are within the ARC's responsibilities are to be sustainably managed in term of their use, development and protection. Section 1.3 of Chapter 1 explains the ARC's functions under Section 30 in more detail.

The Values part of the Plan is in three chapters. The first chapter (2.1) addresses the management of natural values and in particular those natural values that are specifically identified in Sections 6(a) and (c) of the RMA as being matters of national importance, which the Plan must address. It contains objectives and policies that outline how the activities that are within the ARC's jurisdiction are managed in terms of their effects on the natural character of waterbodies and their ecosystems. A major factor influencing the management approach to these natural values is whether they are located inside or outside **Urban Areas**. The chapter also contains policies relating the use of offset mitigation measures to compensate for adverse effects that cannot be avoided, remedied or mitigated directly.

The second chapter (2.2) sets out the broad strategy by which the Plan addresses the use and development of air, land and water in the Auckland Region. This second chapter recognises that management of air, land and water in the Region occurs within a framework of ongoing urban growth and its associated resource use requirements. The objectives and policies link to the regional policy framework within which growth is managed. Particular attention is given to managing the effects of growth inside **Urban Areas** and in rural parts of the Region, and the operation of physical infrastructure. The chapter also contains provisions relating to **public access** and cultural heritage **protection**, together with an indication of how effects of activities on these will be assessed.

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These provisions only deal with the management of the ARC's responsibilities under Section 30 and sections 9(3), 13, 14 and 15. These responsibilities relate to the control of the use of land for soil conservation and water quality and quantity purposes, control of the quality and quantity of freshwater, control of the discharge of contaminants into or onto land, air or water and activities in the beds of lakes and rivers. They do not control the subdivision and use of land which is the responsibility of district plans.

The third chapter (2.3) specifically addresses Matters of Significance to Tangata Whenua.

~~The Values chapter seeks to recognise and provide for the matters in Part II of the RMA, namely sections 5 – Purpose, 6 – Matters of national importance, 7 – Other matters and 8 – Treaty of Waitangi. These sections set out the purpose and principles of the RMA. The provisions of this chapter give effect to these Part II matters in terms of Regional Council responsibilities for the management of the air, land and freshwater resources of the Auckland Region.~~

~~The Values chapter is in three parts and contains~~

The Values chapters contain issues, objectives, policies and other methods, but not rules. The rules, which give effect to the Values chapters, are contained in Chapter 4: Air Quality, Chapter 5: Discharges to Land or Water and Land Management, Chapter 6: Water Allocation, and Chapter 7: Beds of Lakes and Rivers and Diversion of Surface Water. The objectives and policies of these chapters form one part of the assessment against which resource consent applications will be evaluated to determine whether they promote the sustainable management of natural and physical resources.

The provisions of Chapter 2: Values are relevant to the activities in Chapters 4 to 7 which require a resource consent. This means that reference should be made to the objectives and policies of Chapters 2.1, 2.2 and 2.3 in assessing any activity for which a resource consent is required under Chapters 4 to 7, where the Chapter 2 matters are relevant to the activity. Where an activity is a controlled or restricted discretionary activity, reference to Chapters 2.1, 2.2 and 2.3 will not always be necessary. The relevance of the Values chapters to controlled and restricted discretionary activities is dependent on the matters over which the ARC has exercised its control or discretion. These are listed in the relevant rules in Chapters 4 to 7. Where an activity is a discretionary or non-complying activity, then reference to the relevant objectives and policies of the three Values chapters is required. Reference to Chapters 2.1, 2.2 and 2.3 is not required for any permitted activity.

The Auckland Region's air, land and water resources are complex and interrelated. Managing these resources requires a good understanding of them, their current state (pristine or degraded), their interrelated nature and the effects that use and development has on them.

The following is a brief overview of the region's resources, particularly air, land and water, to provide the context for the more specific objectives, policies and methods to promote the sustainable management of these resources. More detailed descriptions of these resources are provided in

Chapter 3 – Management Areas. Statements of the Management Issues and Objectives, Policies and Other Methods to address these resources are contained in separate parts which deal with Natural Values (2.1), Use and Development (2.2) and Matters of Significance to Tangata Whenua (2.3).

## 2.0.1 URBAN SUSTAINABILITY

The Auckland Region contains this country's largest metropolitan area and this area continues to accommodate an increasing population. The Auckland Region has 2 per cent of New Zealand's land area, but it accommodates approximately one third of the total population, 35 percent of the national workforce, and 38 percent of business enterprises. The region's sea and airports are New Zealand's major overseas trade gateways handling the majority of the nation's imports and exports by value. ~~while 73 percent of the nation's imports and 40 percent of exports arrive and depart from its ports.~~ In addition to the metropolitan area there are a number of towns and urban settlements which contribute to the urban nature of the region.

The nature of the Auckland metropolitan area, mostly in a low-density land use pattern, has significant implications for the sustainable management of the air, land and water resources of the Region. Significant levels of contaminants are generated and discharged into the air, land and water from industrial, commercial and household activities. The use of motor-vehicles releases pollutants into air and water, while our urban and rural land uses displace natural ecosystems and also impact upon nearby and downstream ecosystems. However people and communities need to be able to live and work in the Region. Enabling people and communities to provide for their social, economic and cultural wellbeing and their health and safety, while still ensuring the **protection** of natural ecosystems and environmental **amenity** is fundamental to sustainable management. **Urban sustainability is a significant issue addressed by this plan.**

*See also Chapter 2.2: Use and Development, Issues 2.2.2.1 and 2.2.2.2, Objectives 2.2.3.2 to 2.2.3.4, and Policies 2.2.4.1 ~~to~~ and 2.2.4.4.*

## 2.0.2 RURAL LAND MANAGEMENT

The greatest proportion of the Region's land area consists of rural, semi-rural and coastal areas. These areas, mainly pasture and forest/bush, are used for a range of activities, including industrial, farming of animals and plants, recreational and household purposes. These activities all contribute to the social and cultural identity of Auckland and are important for its economy. However they also to a greater or lesser degree, discharge contaminants into the air, land and water bodies, or undertake activities in the beds of **lakes** and rivers. **The management of discharges in rural areas and the management of activities in the beds of lakes and rivers are significant issues addressed by this Plan.**

Soil resources are vital for a number of reasons. Soil provides the medium for plant growth as well as being able to absorb and filter runoff and some discharges of contaminants. For all practical purposes soil is a non-renewable resource due to the thousands of years it takes for soil to form. It is therefore

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of key importance to prevent soil loss and contamination. **Soil conservation and soil health are significant issues addressed by this Plan.**

*See also Chapter 2.2: Use and Development, Issue 2.2.2.5 4, Objective 2.2.3.6 & Policy 2.2.4.7 5, Chapter 4: Air Quality; Chapter 5: Discharges to Land and Water and Land Management, Chapter 6: Water Allocation and Chapter 7: Beds of Lakes and Rivers and Diversion of Surface Water.*

### 2.0.3 AIR

Clean air is not visible, has no odour and contains no pollutants that may change its composition. Although air quality in the Auckland Region is generally acceptable, at times air can be visible, have an odour or contain pollutants, all of which can cause adverse effects on human health, **amenity** and the environment. The greatest single contributor to degraded air quality in the Auckland Region is emissions from motor vehicles.

The Auckland Region's unpredictable weather and variable topography means that the level of pollutants varies significantly around the region and can hang in valleys such as Henderson and Albany. There are localised areas, such as near roads, where contaminants exceed international health guidelines and hence air quality falls below acceptable levels.

The Auckland Region's population is continuing to grow. As a consequence there are more motor vehicles on the roads, more people to undertake activities that discharge contaminants into air and more people to be affected by discharges of contaminants into air. Although the air shed is large, it is finite resource and can only absorb a certain level of contaminants. The production of air contaminants in the region also contributes to increasing **greenhouse gas** concentrations.

The Auckland Region's air quality is inextricably linked to land use activities and in particular those activities within urban Auckland. These activities include industrial processes and household activities, such as open-burning and **domestic fires** which may discharge various contaminants into the air such as **hazardous air pollutants**, odour and dust. This has implications for human health and **amenity**. **Declining air quality is a significant issue addressed by this Plan.**

*See also Chapter 3: Management Areas , Section 3.10- Industrial Air Quality Management Area, Section 3.11 – Urban Area Quality Management Area, Section 3.12 – Rural Air Quality Management Area and Section 3.13 – Coastal Marine Air Quality Management Area and Chapter 4: Air Quality*

### 2.0.4 RIVERS AND STREAMS

[Compared to other parts of New Zealand, Auckland is a region of small rivers and streams. The characteristics of these water bodies are hugely variable, depending on variables such as geology, topography and, land use.](#)

[The character of a stream in any one location also reflects its position in the catchment. A stream system can be thought of as a continuum, with the head of the stream at one end and the river mouth at the other. In reality, distinguishing the exact location where a stream starts can be extremely](#)

difficult. Zones of flowing water, standing water or simply moist ground vary both seasonally and from year to year. This variability presents difficulties for consistently managing the use, development and protection of the region's river and stream resources.

This Plan resolves this uncertainty by defining and managing rivers and streams as one of two types, depending on the permanence of their hydrology or year-round existence. **Permanent rivers or streams** are those rivers or streams which provide year round habitat for fish and other freshwater biota. They also provide other instream values, notably in regulating water quality and providing pathways for the migratory lifecycle of native fish. **Permanent rivers or streams** are distinguished by the presence of permanent habitat in the form of continual flow or standing water through the summer, (see definition of **Permanent rivers or streams** in Chapter 12).

There are approximately 10,000 km of **Category 1 Permanent rivers or streams** in the Auckland Region. Approximately 90 per cent are headwater streams with no more than one tributary and generally less than two metres wide. Even the largest rivers, the Kaipara and Hotoe in Rodney District and the Wairoa River in Manukau City and Franklin District, are small compared to those in other parts of New Zealand. Small streams meandering through numerous short and steep catchments are characteristic of the narrow (30 - 60 km wide) Auckland Region. Whilst the values of such streams may not always be immediately apparent, particularly where streams have been modified or are degraded, on a cumulative basis they comprise the major part of the region's freshwater environment. Each **Permanent river or stream** therefore plays an important role in contributing to the overall habitat, water quality and connectivity of freshwater bodies at the regional scale.

**Intermittent streams** are those streams which do not provide permanent or year-round freshwater habitat. The Plan simply defines these as any stream which does not meet the **Permanent river or stream** definition. However **Intermittent streams** also contribute to catchment hydrology and instream values. The extent of this contribution is uncertain and the Plan therefore sets out as another Method, the ARC's intention to further investigate the values of **Intermittent streams**. A policy response

The Plan deliberately adopts the terms 'Permanent' and 'Intermittent' rather than "perennial" and "ephemeral" because, whilst these latter terms are in common usage, their use technically only relates to stream flow characteristics. The common usage often does not reflect the hydrological meanings of the terms. In contrast, the management approach distinguishes streams on the basis of habitat performance, of which continual flow is not an exclusive indicator. The use of the terms 'Permanent' and 'Intermittent' leads the Plan user to make an assessment of habitat permanence, rather than making a judgement solely based on stream flow characteristics.

~~These figures do not include **Category 2 streams** which contribute further to catchment hydrology and in-stream values.~~

The small scale of river and stream resources puts them at risk from land activities. Small streams are easy to physically modify through channelisation, removal of riparian vegetation, and burying in **culverts** and

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pipes. Stream channels in urban areas are often modified and designed to facilitate the for a single purpose **drainage** of stormwater from roads, houses and buildings. In rural areas, the removal of native riparian vegetation, the introduction of unwanted weed and pest species, unrestricted access for stock and water extractions have degraded streams. The construction of **dams** provides water supply benefits to rural and urban users, and enables the restoration, creation or maintenance of natural wetlands, but results in the modification of the natural flow regime and habitat values upstream and downstream of **dams**, as well as the area flooded by the **dam** itself. **Dams** and **culverts** can also be insurmountable barriers to the movement of native fish, while degraded water quality can reduce the habitats for freshwater fauna.

Although these modifications have social and economic benefits, the ecological values of streams are important in terms of biodiversity and ensuring the health and wellbeing of ecosystems. Water quality is also important for recreational activities as well as stock and human consumption.

Land based activities can also compromise the ways in which Tangata Whenua value water in rivers and streams, The mixing of different types of water through discharges, or by the diversion of these water bodies is contrary to Maori views on how water should be managed.

There are many opportunities for restoring the quality of streams in the region. These include restoration of riparian buffer strips, restricting stock from streams and **lakes**, designing **culverts** to provide for **fish passage**, designing urban areas that preserve wetlands and natural stream channels, managing stormwater discharges and minimising contaminant inputs. However it is recognised that opportunities are limited in existing urban areas and a framework is provided in Chapter 3.5 to guide the management of urban rivers and streams. ~~controlling **stormwater**, and correction of leaky sewerage systems.~~ **Declining water quality and quantity in rivers and streams and a reduction in their *natural character* is a significant issue addressed by this Plan.**

*See Chapter 5: Discharges to Land and Water and Land Management, Chapter 6: Water Allocation and Chapter 7: Beds of Lakes and Rivers and Diversion of Surface Water.*

### 2.0.5 LAKES

There are a number of naturally created **lakes** in the Region. Most of these are 'dune lakes' formed by the impoundment of water behind sand dunes blown in from coastal beaches. Many, but not all of these **lakes** have been identified as Natural Lake Management Areas. Lake Pupuke is unique as the only **lake** formed by volcanic action. It is identified as an Urban Lake Management Area. There are also a number of water supply reservoirs in the Waitakere and Hunua Ranges. The maintenance of their water quality is important for public health. This is achieved through the reservoirs being in forested catchments and by restrictions on **public access** to activities in these catchments. However as the water supply reservoirs were artificially created, they are not classified as natural lakes by this Plan.

Water quality in the naturally created **lakes** ranges from high quality to severely degraded. However all of the **lakes** show signs of a gradual deterioration in quality. These **lakes** are sensitive aquatic environments because they have little or no outflow, and thus are poorly flushed, accumulate contaminants, and are prone to nutrient enrichment. They reflect the cumulative effects of many years of human activity in their catchments. Their ecology is also complicated by the introduction, both lawfully and unlawfully, of **exotic plants** and fish over the last 150 years. Lake Pupuke has the largest number of different exotic fish in New Zealand.

It would be near impossible to fully restore these natural **lakes** because of the ecological changes that have already occurred. The highest priority is to keep the **lakes** from deteriorating further, especially those of high quality which are most at risk. Opportunities to maintain and possibly even improve **lake** quality include **protection** of the **lake** fringe, riparian buffer strips along tributaries, fencing of stock and restricting access. **Declining water quality in the lakes and a reduction in or loss of natural character are significant issues addressed by this Plan.**

*See also Chapter 3: Management Areas – Section 3.3 – Natural Lake Management Areas; Section 3.6 – Urban Lakes Management Areas; Schedule 4: Natural Lakes and the policies and rules in Chapters 5, 6 and 7 relating specifically to Natural Lake Management Areas and Urban Lake Management Areas.*

## 2.0.6 WETLANDS

Wetlands include permanently and intermittently wet areas, shallow water and land/water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions. Generally these include areas of marsh, fen, peat land or brackish water. Freshwater wetlands now cover less than 0.4 per cent of the region's land area and are now one of the rarest and at risk ecosystems. The largest and probably best-known natural wetland is the Te Henga wetland in Waitakere City and Rodney District.

Internationally, wetlands are considered to be under threat. The Ramsar Convention on wetlands of which New Zealand is a part signatory, seeks to preserve and protect the world's remaining wetlands. The large wetland in the Firth of Thames (within the Auckland and Waikato Regions) is a 'Ramsar wetland site' administered by the Department of Conservation. Section 6 of the RMA requires that provision be made for the preservation of the **natural character** of wetlands and their **protection** from inappropriate subdivision, use and development. **The loss of the natural character of wetlands from inappropriate subdivision, use and development is a significant issue addressed by this Plan.**

*See also Chapter 3: Management Areas – Section 3.2 – Wetland Management Areas, Schedule 1: Wetland Management Areas and the policies and rules in Chapter 5, 6 and 7 relating to Wetland Management Areas.*

## 2.0.7 GROUNDWATER

The Auckland Region has a number of significant **aquifers** both within the urban and rural parts of the Auckland Region. **Aquifers** are important as direct sources of water supply for domestic and commercial use. They are

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also major contributors to the base flow of many streams, particularly in the southern parts of the region.

**Aquifers** are susceptible to contamination from **stormwater** and **wastewater**, as well as the application of **fertiliser**. Also, due to the level of abstraction **take** some of these **aquifers** are under threat. The rate of abstraction **take** can reduce the amount of water available to feed rivers and streams, thereby affecting their life-supporting capacity, and also reducing the amount of water available for other activities including stock, domestic and recreational use. **Salt-water intrusion** is another threat from over abstraction **take**, which will affect the ability to use the water from that **aquifer**. **Declining water quality and quantity in aquifers is a significant issue addressed by this Plan.**

*See also Chapter 3: Management Areas, Sections 3.8 – High Use Aquifer Management Areas and 3.9 – Quality Sensitive Aquifer Management Areas, Chapter 5: Discharges to Land and Water – Industrial or Trade Processes provisions and Chapter 6: Water Allocation.*

### 2.0.8 GEOTHERMAL RESOURCES

Known geothermal fields are located at Parakai, Waiwera, Whitford and Great Barrier Island. It is important to protect the geothermal **aquifers** from the ingress of cold ground water or seawater that could result in the reduction in **bore** production temperatures. The **bore** production temperatures, of up to 65<sup>0</sup>C, result from hot water rising rapidly from depth through fractures in the rocks. **Sustainably managing geothermal water resources is a significant issue addressed by this plan.**

*See also Chapter 5: Discharges to Land and Water and Land Management – Other Discharges of Contaminants to Land and Water provisions and Chapter 6: Water Allocation.*

### 2.0.9 ~~STRUCTURE OF VALUES CHAPTER~~

~~The Values chapter is divided into three main sections:~~

#### ~~2.1 Natural Values~~

~~This section contains objectives and policies relating to **natural character** and terrestrial and aquatic ecosystems, together with an indication of how effects of activities on these will be assessed.~~

#### ~~2.2 Use and Development~~

~~This section contains objectives and policies relating to the appropriate use and development of air, land and freshwater bodies within the context of an urban region experiencing rapid growth. These objectives and policies link to the regional policy framework within which growth is managed. Particular attention is given to growth both inside **Urban Areas** and in rural parts of the Region, and the operation of physical infrastructure. The section also contains provisions relating to **public access** and cultural heritage **protection**, together with an indication of how effects of activities on these will be assessed.~~

#### ~~2.3 Tangata Whenua Values~~

~~This section contains objectives and policies relating to matters of significance to Tangata Whenua.~~