

2.1 NATURAL VALUES

2.1.1 INTRODUCTION

This chapter recognises and provides for several matters of national importance contained in Sections 6 (a) and (c) of the RMA. These are:

- (a) *The preservation of the natural character of ... wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development;*
- (b) *The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.*

Other Section 6 matters are addressed in Chapter 2.2: Use and Development.

While this chapter is structured around Section 6 matters, the implementation of its objectives and policies must occur with reference to the principal purpose of the RMA, namely the sustainable management of natural and physical resources as defined by Section 5. The factors contained in Chapter 2.1 are subordinate to Section 5 matters, but contribute to the evaluation of what constitutes the sustainable management of air, land and water resources in the Auckland Region.

Section 7 of the Act lists other matters to which there must be particular regard. Those which are directly relevant to the natural values of air, land and water resources include:

- (d) *Intrinsic values of ecosystems;*
- (f) *Maintenance and enhancement of the quality of the environment;*
- (g) *Any finite characteristics of natural and physical resources;*
- (h) *The protection of the habitat of trout and salmon.*

These “Other Matters” are given effect through the policies of this chapter and through the provisions of Chapters 4, 5, 6 and 7, although direct reference to the particular wording of Section 7 is not necessarily made.

The management of the Region’s natural values is also undertaken within a strategic growth framework set out in the Auckland Regional Policy Statement. This framework promotes intensification of development within **Urban Areas** and discourages urban development outside of these areas. It requires that protection be given to highly valued and sensitive natural environments. This Plan implements this strategic framework in the manner outlined in Issue 2.2.2.1 and through Objectives 2.2.3.2 to 2.2.3.6 and Policies 2.2.4.1, 2.2.4.2 and 2.2.4.5 (pages 2.2-3 and 2.2-9 to 2.2-11). The objectives and policies of this chapter reflect this strategic framework, by giving the highest protection to those areas or resources that have high natural character or ecological and habitat values consistent with Sections 6(a) and (c). Within **Urban Areas** the focus is on managing use and

2.1 – Natural Values

development in a way that maintains as far as practicable important remaining areas of natural value and mitigates adverse effects in other areas.

Chapter 3 Management Areas also contains information on the natural values of particular areas of the Auckland Region, while the Introductory sections to Chapter 4- Air Quality, 5 – Discharges to Land and Water and Land Management, 6 – Water Allocation and 7 – Beds of Lakes and Rivers and Diversion of Surface Water identify the particular resource management issues associated with these activities.

Section 1.3 of Chapter 1 outlines the ARC's functions under Section 30 of the RMA. In this chapter these functions are referred to generically as “use and development”, rather than listing all the matters separately. Use and development does not encompass the subdivision, use and development of land which is the responsibility of **territorial authorities**.

2.1.2 ISSUES

2.1.2.1 The **natural character** of wetlands, **lakes** and rivers and their margins is adversely affected by inappropriate use and development within the waterbodies themselves and on adjacent land.

Changes in the **natural character** of wetlands, **lakes**, rivers and streams occur through various activities. Degraded water quality from direct and indirect discharges of contaminants, the loss or reduction in riparian vegetation and in-stream habitats, changes to the quantity and seasonal flow patterns of water as well as development within the beds of the wetland, **lake**, river or stream all give rise to changes in the **natural character** of the water body itself and its margins.

All of the region's natural **lakes** and most of its rivers and streams have been modified to some degree. Areas of highest **natural character** are usually wetlands, rivers and streams in reserves and where large areas of indigenous riparian vegetation remain. However even here, upstream discharges or **takes** can affect the quality and quantity of water and ecosystem health.

Most pastoral streams have lost much of their original **natural character**, and original indigenous riparian vegetation may be replaced by pasture or **exotic plantings**. The loss of riparian vegetation in pastoral areas, and changes in adjacent land use are usually accompanied by a corresponding reduction in the quality and diversity of instream values. Water **take** and **waste** discharges also affect natural water quality and quantity.

However it is in the region's urban areas where the impacts on the **natural character** of streams have been the greatest. Not only has water quality and quantity been severely affected by urban development, with instream biota lost or reduced, but stream channels are often straightened or lined, or lost altogether by being piped. However urban development can also provide the opportunity to restore or enhance degraded streams and to increase the level of **natural character** of these **watercourses** and their margins.

This issue relates to Objectives 2.1.3.1; 2.1.3.2, Policies 2.1.4.1 to 2.1.4.4

See also Section 3.5: Urban Rivers and Streams of Chapter 3: Management Areas for guidance on the management of different categories of urban streams.

- 2.1.2.2** The Region's natural **lakes**, its major rivers, the majority of its wetlands and much of the remaining indigenous vegetation are of local, regional or even national significance. Smaller rivers and streams are also the habitat of regionally rare or endangered aquatic fauna. A loss or reduction in the quality and quantity of water in the Region's **lakes**, rivers and streams, significant modification of the beds of **lakes**, rivers, streams and wetlands, and poor land management practices giving rise to sedimentation and loss of soil can adversely affect these significant habitat areas.

This issue relates to Objectives 2.1.3.1, 2.1.3.3, Policies 2.1.4.6 to 2.1.4.9.

See Sections 3.2, 3.3 and 3.4 of Chapter 3: Management Areas

- 2.1.2.3** The Region's **lakes**, rivers, streams and wetlands may be lost or their values significantly degraded by the adverse effects of individual and cumulative proposals for use and development. While individual activities may have localised environmental effects, the cumulative effect of small, incremental loss or reduction in natural values can give rise to significant cumulative effects on Auckland's natural environment.

This issue relates to Objectives 2.1.3.1 to 2.1.3.3 and Policies 2.1.4.1 to 2.1.4.12.

2.1.3 OBJECTIVES

- 2.1.3.1** To sustainably manage the quality and diversity of Auckland's natural values by:

- (a) Maintaining areas of high environmental quality;
- (b) Remediating or mitigating adverse effects on degraded natural and physical resources where these cannot be avoided;
- (c) Enhancing degraded areas where practicable.

This issue relates to Issues 2.1.2.1 to 2.1.2.5 And Policies 2.1.4.1 to 2.1.4.12.

- 2.1.3.2** To preserve the **natural character** of wetlands, **lakes** and rivers and their margins by protecting them from inappropriate use and development.

This issue relates to Issue 2.1.2.1 and Policies 2.1.4.1 to 2.1.4.5.

- 2.1.3.3** To protect significant indigenous terrestrial and aquatic vegetation and the significant habitats of indigenous fauna, both terrestrial and aquatic from inappropriate use and development.

This issue relates to Issues 2.1.2.2 and 2.1.2.3 and Policies 2.1.4.6 to 2.1.4.12.

- 2.1.3.4** To maintain and enhance the quality of the Region's **Permanent rivers and streams** where practicable.

2.1 – Natural Values

2.1.4 POLICIES

Natural Character

2.1.4.1 The *natural character* of wetlands, **lakes** and rivers and their margins shall be preserved and protected from inappropriate use and development by avoiding, remedying or mitigating adverse effects on the qualities, elements and features that contribute to the *natural character* of these areas.

(See also Introduction or Planting of Plants provisions in Chapter 7: Beds of Lakes and Rivers).

2.1.4.2 In assessing the actual or potential effects of use and development on the *natural character* of wetlands, **lakes**, rivers and their margins, particular regard shall be had to:

- (a) Maintaining high levels of natural character in Natural Lake, Natural Stream and Wetland Management Areas;
- (b) Maintaining appropriate remaining elements of natural character in:
 - i Other **Permanent rivers or streams** in rural areas;
 - ii **Permanent rivers and streams** in **Greenfield Areas** that have been assessed as having high ecological, habitat or water quality values; and
 - iii Urban Lake Management Areas.
- (c) Retaining as far as practicable remaining elements of natural character in other Type 2 and 3 Urban Streams, consistent with the management objectives for these streams in Section 3.5.
- (d) Protecting the natural character of wetlands and **Permanent rivers and streams** in **Water Supply Management Areas** as far as practicable, while providing for the use of these areas as water supply areas.

When determining the qualities, elements and features that contribute to *natural character* for the purposes of Policy 2.1.4.2 (a) and (b), regard should be had to Policy 2.1.4.8.

(See also Chapter 3: Management Areas, including Sections 3.2, 3.3 & 3.4)

2.1.4.3 When determining the qualities, elements and features that contribute to *natural character* for the purposes of Policy 2.1.4.1 and 2.1.4.2 a to d, regard should be had to the matters listed in Policy 2.1.4.9.

2.1.4.4 When use and development gives rise to actual or potential adverse effects on the *natural character* of wetlands, **lakes** and rivers and their margins, where appropriate these effects shall be remedied or mitigated by restoration or rehabilitation of the *natural character* of these areas.

2.1.4.5 In determining whether any adverse effects on *natural character* can be remedied or mitigated by restoration and rehabilitation that is to be carried out, regard shall be had to:

- (a) the extent to which the qualities and features of **natural character** in the area of the proposed use and development will be adversely affected, and the ability to restore or rehabilitate **natural character** in the area subject to the proposal;
- (b) where restoration or rehabilitation is not practicable in the area subject to the proposal, the potential to mitigate any adverse effects by the rehabilitation or restoration of **natural character** in another area of wetland, **lake** or river and their margins;
- (c) Where restoration plantings are carried out, preference shall be given to the use of indigenous species with a further preference for local genetic stock.

When determining how rehabilitation or restoration of **natural character** should be carried out, regard should be had to Policy 2.1.4.9.

(See also Introduction or Planting of Plant provisions in Chapter 7: Beds of Lakes and Rivers).

Ecosystems and Habitats

2.1.4.6 The values of ecosystems and habitats shall be managed by:

- a Outside **Urban Areas**:
 - i Avoiding inappropriate use and development in Natural Lake, Natural Stream and Wetland Management Areas which will result in more than minor modification of their values and ecological and physical processes;
 - ii Ensuring that as far as practicable, change in the extent, quality and diversity of habitats in these areas arise only from the functioning of natural processes;
 - iii Avoiding, remedying or mitigating adverse effects on the ecological, habitat and water quality values of rivers and streams in rural areas that are classified as **Permanent rivers and streams**;
 - iv Maintaining and enhancing the high ecological, habitat and water quality values of the Waitakere and Hunua Ranges while recognising their regional importance for water supply purposes by their inclusion in Water Supply Management Areas.
- b Inside **Urban Areas**
 - i Maintaining as far as practicable **Permanent rivers and streams** in **Greenfield Areas** where these rivers and streams are assessed as having significant ecological, water quality and habitat values, or are identified for protection in structure plans or appropriate catchment based planning processes;

2.1 – Natural Values

- ii implementing the provisions for Urban Lakes and Urban River and Stream Management Areas in accordance with Chapter 3 of this Plan.

and

- c Enhancing degraded ecosystems and habitats and water quality both outside and inside **Urban Areas** where this is practicable;
- d Providing for fish passage between **Permanent rivers and streams** and the coastal marine area as far as practicable.

2.1.4.7 The provision of fish passage under Policy 2.1.4.6(d) above shall be assessed against the following matters:

- a the extent to which there are natural physical barriers (eg waterfalls) along **Permanent rivers and streams** and between **Permanent rivers and streams** and the coastal marine area that provide natural barriers to fish passage;
- b the extent to which there are existing artificial barriers (eg dams, weirs or culverts) that currently prevent the passage of fish and for which it is impracticable to modify to provide for fish passage;
- c the environmental benefit to be obtained from the provision of fish passage along **Permanent rivers and streams**. Benefits shall be considered to be high where the passage of migratory aquatic fauna is enabled between:
 - i Wetland Management Areas, Natural Lake Management Areas and Natural Stream Management Areas;
 - ii Type 2 Urban Streams and the Coastal Marine Area;
 - iii **Permanent rivers and streams** in rural areas having regard to the location of the stream within the catchment and the availability of actual or potential upstream habitat.

2.1.4.8 Where areas of terrestrial indigenous vegetation and habitats of terrestrial indigenous fauna have been identified as being significant, the ARC will have regard to the adverse effects on the ecological values and significance of these areas, of land disturbance, the discharges of contaminants or other activities affecting water quality or quantity.

Explanation:

See Policy 2.1.4.9 (n) for the determination of the significance of indigenous vegetation and habitats of indigenous fauna.

2.1.4.9 In assessing the effects of use and development on **natural character** and terrestrial and aquatic ecosystems in terms of Policies 2.1.4.1 to 2.1.4.8, regard shall be had to maintaining and where practicable enhancing the matters listed in clauses (a) to (n) below, or preventing or minimising the

adverse effects of any discharge of contaminants where a Best Practicable Option approach is used, where these are relevant:

- (a) The physical or ecological integrity of the ecosystem and the continuation of the physical, biological or chemical processes necessary to ensure its proper functioning;
- (b) Vegetation patterns (ecotones) and connections between habitats;
- (c) Riparian vegetation bordering **lakes**, rivers and wetlands;
- (d) Natural biodiversity, productivity and biotic patterns;
- (e) Access, migratory and dispersal pathways for terrestrial and aquatic fauna;
- (f) The physical characteristics of the **lake** or wetland, including its shape, size and natural substrate composition;
- (g) The physical characteristics of a stream channel, including dimension (width, depth), pattern (meander wavelength) and profile (slope);
- (h) Aquatic habitat structure, including in the case of rivers and streams, pools, riffles and runs;
- (i) Flow regimes, water levels and hydraulic processes of a wetland, **lake** or river;
- (j) The natural sediment processes in a river channel, including bank erosion, sediment transport and sediment deposition;
- (k) The natural substrate composition in **lakes**, rivers and wetlands, by:
 - i avoiding the addition of material not found naturally in the area;
 - ii maintaining natural processes of erosion, movement and deposition of substrate;
 - iii avoiding disturbance and deposition that could have significant or irreversible effects on substrate composition;
- (l) The physical characteristics of the floodplain of a stream or river;
- (m) Water and air quality necessary to protect human and ecological health.
- (n) The significance of the ecosystem, having regard to:
 - i whether it is listed in the Schedules of this plan;
 - ii whether it is identified in Appendix B of the Auckland Regional Policy Statement, the Department of Conservation's Auckland Conservation Management Strategy or as a significant area in any district plan;
 - iii whether it has been identified in any published Protected Natural Area report;
 - iv whether it is the habitat of any nationally or regionally threatened rare or endangered species.

2.1 – Natural Values

Environmental Compensation

2.1.4.10 The adverse effects of use and development in one area or on one type of resource may, having regard to the benefits and adverse effects of the activity and Part 2 of the RMA be offset by mitigation measures elsewhere within the Region, to compensate for adverse effects that cannot be avoided, or directly remedied or mitigated. However, any adverse effects on areas of high **natural character** or significant ecosystems identified in Policy 2.1.4 9(n) should be avoided to the fullest extent practicable in the first instance, with offset mitigation being implemented where adverse effects on those resources are unavoidable.

2.1.4.11 Where offset mitigation measures referred to in Policy 2.1.4.10 are to be implemented by way of works or services, the scope of any necessary works or services and associated conditions of consent imposed under section 108(2)(c) of the RMA, shall be determined having regard to the following matters:

- (a) that as far as practicable off set mitigation should be of the same kind or scale as and should remedy or mitigate effects caused at least in part by the activity being granted consent;
- (b) any mitigation shall restore, create or enhance natural or physical resources in order to compensate the adverse effects created by the activity at the original location; or
- (c) the offset mitigation should be applied as close as possible to the site where the adverse effects occur; and where this is not practicable, the ARC will work with the applicant to identify an alternative site, preferably in the same catchment or receiving environment as the consented activity, having regard to the nature of the environment including the community adversely affected by the consented activity;
- (d) whether the activity is located inside or outside of **Urban Areas** and is an existing or new activity;
- (e) the extent to which the works or services are practicable and effective to remedy or mitigate adverse effects.

2.1.4.12 Where the offset mitigation measures determined by Policy 2.1.4.10 are to be implemented by way of a financial contribution paid to the ARC, then the actual level of financial contribution shall be determined in accordance with the provisions of Chapter 8 of this Plan.

Explanation

For the purposes of this Plan offset mitigation is that designed to enhance lost or diminished values in a particular location to compensate for adverse effects that occur as a result of another activity elsewhere.

2.1.5 OTHER METHODS

- 2.1.5.1 The ARC will prepare guidelines to assist resource users in assessing the value of ***Permanent rivers or streams*** when applying for a resource consent.
- 2.1.5.2 The ARC will develop and maintain a database recording the locations and results of stream assessments, including stream category, throughout the Auckland Region.
- 2.1.5.3 The ARC will undertake investigations into:
- a) the intrinsic value (ecology and biodiversity) of a representative cross section of ***Permanent rivers or streams***;
 - b) the contribution to catchment hydrology of ***Permanent rivers or streams***;
 - c) hydrological and ecological functions of ***Intermittent streams***.
- 2.1.5.4 The ARC will review the form and extent of future controls on the clearance of riparian vegetation under Section 9(3) of the RMA as part of its review of the Auckland Regional Plan: Sediment Control.

2.1.6 ANTICIPATED ENVIRONMENTAL RESULTS

Natural Character

- 2.1.6.1 Appropriate use and development of air, land and water resources is enabled, areas of high natural character are protected, and adverse effects on natural character elements in other areas are minimised.

Ecosystems and Habitats

- 2.1.6.2 The ***protection*** of areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate use and development.
- 2.1.6.3 The maintenance and enhancement of indigenous biological diversity, integrity, form, functioning and resilience of land and water ecosystems within the region as a whole.
- 2.1.6.4 The life supporting capacity of the region's air, land and water resources is safeguarded.
- 2.1.6.5 The enhancement of the overall quality of the Region's natural environment.
- 2.1.6.6 ***Permanent rivers or streams*** are generally retained in rural areas and their loss is minimised in ***Urban Areas***.