A – Introduction

1 Background

1.1 Introduction

The Kaipara River catchment is the third largest river system in the Auckland Region. In places, there are competing demands for the water resources of the river and its tributaries.

The Auckland Regional Policy Statement (ARC, July 1999) provides for the preparation of Water Resource Assessment Reports (WRARs) to determine water availability on a catchment basis. This water allocation strategy is a WRAR for the Kaipara River catchment.

The aims of the Kaipara River Catchment Water Allocation Strategy are:

- to investigate, review, assess and document the characteristics and values of the river and its tributaries;
- to determine the ways in which the water resource should be managed to reflect these characteristics and values;
- to identify conflicts and issues which might compromise the management of the water resource; and
- to determine and implement a strategy for resolving these conflicts.

The long term goal of the strategy is to ensure that the management of the water resource is consistent with the purpose and principles of the Resource Management Act (1991) and that any adverse effects resulting from the taking, use and damming of surface water are avoided, remedied or mitigated.

In parts of the catchment, abstractions from the river and its tributaries can significantly reduce summer stream flows. Flows are also influenced by the presence of a large number of dams within the catchment. Depending on the scale of these activities, the taking and damming of water can require a resource consent under Section 14 of the Resource Management Act (1991).

The majority of consents (or 'water rights' issued under previous legislation) expired during 1998. The water allocation strategy will guide the processing of applications for replacement resource consents and any future water permit applications. It also provides a framework for implementing a range of other measures which may contribute to ensuring that the values of the river and its tributaries are not compromised by the activities of taking, using and damming surface water.

1.2 Previous Water Allocation Strategies

Two previous water allocation and management plans for the Kaipara River were published during the 1980s (Auckland Regional Water Board, 1984 and 1989) in response to a high demand for water rights to abstract surface water.

The 1989 management plan provided an assessment of water use and availability within the catchment and recommended water management policies to guide the processing of water right applications. In summary, the key policies were:

- no further permits be granted to take water directly from streams during the main irrigation season;
- no new dams on the main rivers in the catchment;
- offstream dams encouraged; and
- low flow bypasses required on irrigation dams constructed on streams with year-round flow.

In the plan, water availability was estimated as being a fixed proportion (70%) of the one in five year return period summer low flow. Throughout much of the southern and western parts of the catchment, the estimated available water was fully allocated to existing permit holders. In other parts of the catchment summer flows were less affected by abstractions, but it was determined that no further permits be granted to take water from these streams because they were considered important in maintaining the water quality in the main river. Further permits were only to be granted in the light of contrary information on water availability and water quality.

The policies on the damming of water reflected the fact that through storing and using winter runoff rather than abstracting directly from the stream, flows during summer are less likely to fall to levels at which the ecology of the stream is compromised. In particular, the policies of encouraging off stream storage and the requirement of flow bypasses under certain circumstances aimed to ensure acceptable low flows were maintained.

Other policies contained in the 1989 management plan, relating to irrigation allocations for different crop types and the recording of water use, are implemented through conditions of consent not just in the Kaipara River catchment, but throughout the Auckland Region.

2 Statutory Context

2.1 Introduction

The development of a water allocation strategy for the Kaipara River catchment follows the generic process for developing Water Resource Assessment Reports (WRAR), which are one of a number of non-statutory methods used in the allocation of water in the Auckland Region. The policy for developing WRARs is set out in the Auckland Regional Policy Statement (ARC, 1999a) in Chapter 9, Sections 9.4.5.4 and 9.4.5.5 (see Section 2.3 below).

This section provides a brief summary of the legislation and associated policy and planning documents that guide the development of WRARs in general, and of this strategy in particular. Appendix I provides more detailed analysis of the relationship between the water allocation strategy and relevant statutory considerations.

2.2 Resource Management Act 1991

The Resource Management Act 1991 (RMA) is the principal Act covering a broad range of resource management and planning issues and activities. The Act was the outcome of an extensive process designed to restate and reform the law relating to the use of land, air and water.

One of the significant changes that has been incorporated into the RMA is the focus on controlling the <u>effects</u> of activities on natural and physical resources rather than on controlling activities themselves as was the case with the Town and Country Planning Act, for example. Effects can include positive, adverse, temporary, permanent, past, present, future and, very importantly, **cumulative effects**. Other categories of effect include any potential effect of high probability or one of low probability which has a high potential impact (Section 3, RMA).

The following sections are relevant to the development of a WRAR.

Section 5 - Purpose. The underlying purpose of the RMA is the sustainable management of natural and physical resources. 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."

Section 6 - Matters of national importance. Those who exercise functions and powers under the RMA are required to recognise and provide for the following matters :

(a) preservation of natural character of rivers and their margins, and protection of them from inappropriate use and development

(b) protection of outstanding natural features and landscapes from inappropriate use and development

(c) protection of significant habitats of indigenous fauna

(e) relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.

Section 7 - Other matters that decision makers must have particular regard to are:

- (a) kaitiakitanga
- (b) efficient use and development of natural and physical resources
- (c) maintenance and enhancement of amenity values
- (d) intrinsic values of ecosystems
- (e) recognition and protection of the heritage values of sites,
- (f) maintenance and enhancement of the quality of the environment
- (*h*) protection of the habitat of trout and salmon.

Section 8 - Treaty of Waitangi. All persons who exercise functions and powers under the RMA are also required to take into account the principles of the Treaty of Waitangi.

Section 14 - Restrictions relating to water. Under this section no person may take, use, dam or divert freshwater unless:

- the taking, use, damming, or diversion is allowed by a rule in a regional plan or resource consent; or
- the water is required to be taken or used for an individual's reasonable domestic needs or the reasonable needs of an individual's animals for drinking water, and the taking or use does not, or is not likely to, have an adverse effect on the environment; or
- the water is required to be taken or used for fire-fighting purposes.

Section 30 - Functions of regional councils. Regional councils control the taking, use, damming, and diversion of water, and the control of the quantity, level, and flow of water in any water body.

Section 104 – Matters to be considered. Under this section, when considering an application for a resource consent and any submissions received a consent authority is required to have regard to a range of matters. Sub-section 104(1)(i) requires consent authorities to have regard to "any other matters the consent authority considers relevant and reasonably necessary to determine the application." When considering applications for consents to take, use or dam water in areas for which WRARs have been prepared, they are relevant 'other matters' which are taken into account by the ARC in determining applications.

When considering consent applications to take, use or dam surface water in the Kaipara River catchment, the ARC will therefore have regard to this WRAR, along with the range of matters required under sub-sections (1)(a) to (h) of section 104.

2.3 Auckland Regional Policy Statement

Regional Councils prepare policy statements as to how they propose to manage the natural and physical resources of their region. The Auckland Regional Policy Statement (ARPS) includes chapters on (amongst others):

- Chapter 2 Strategic direction and regional development
- Chapter 3 Matters of significance to Iwi
- Chapter 9 Water allocation and use

Chapter 9 describes the procedure for the preparation of WRARs and indicates the information that they should contain. Method 9.4.5.5 states that:

"Water Resource Assessment Reports will, as appropriate:

i) describe the area and water resource to which the assessment report applies;

ii) identify issues that affect the use, development or protection of the natural and physical resources;

iii) provide information on quantities of water available for abstraction including the setting of any minimum water levels or flow regimes.

iv) Evaluate alternative strategies of addressing the issues including priorities of allocation, economic instruments, and assessment of efficient use.

v) Propose ongoing monitoring or investigation of the water resource.

vi) Have a review or expiry date of the assessment report."

2.4 Regional Plans

2.2.1 Transitional Regional Plan (TRP)

At present, the Transitional Regional Plan 1991 is the only regional plan providing any guidance for the allocation of water in the Auckland Region. The TRP describes certain permitted activities relating to the taking of water for dairy shed use, domestic supply, minor water use, road construction/maintenance, drilling bores, frost protection and to the damming of water with small low risk dams.

2.2.2 Proposed Regional Plan: Coastal 1995

The Proposed Regional Plan: Coastal (PRP:C) is mandatory and must be consistent with the N.Z. Coastal Policy Statement. It controls use of and development in the coastal marine area and also addresses issues relating to the boundary between land and the coastal marine area. The Proposed RP:C also contains objectives, policies and rules relating to impacts on areas identified as Coastal Protection Areas. Values associated with the Auckland coastal environment include: natural character, landscape, natural features and ecosystems, coastal works of significance to tangata whenua, public access and cultural heritage.

2.2.3 Proposed Regional Plan: Sediment Control 1995

The Proposed Regional Plan: Sediment Control (PRP:SC) focuses on the control of the use of land for the purpose of maintaining and enhancing water quality and on the control of discharges of contaminants into or onto land or water. The scope of the PRP:SC is limited to addressing issues associated with "elevated sediment generation and discharge from areas which are cleared of vegetation, and/or subject to land disturbance" in the Auckland Region (PRPSC, 1995, p.11).

2.2.4 Regional Plan: Farm Dairy Discharges, May 1999

The Regional Plan: Farm Dairy Discharges (RP:FDD) regulates discharges of contaminants from farm dairies onto land and into water (excluding the coastal marine area). The rules in the plan will become operative by way of a staged process to enable discharge permit applications within each catchment to be assessed together in order to consider cumulative effects. The plan will become operative in the Kaipara catchment eighteen months from the date that the plan itself became operative (May 1999).

2.2.5 Air, Land and Water Regional Plan (under preparation)

The ARC is currently involved in the preparation of a Air, Land and Water Regional Plan. The Plan will describe objectives, policies, rules and other methods which will govern the sustainable management of these natural resources within the Auckland Region. The ARC hopes to notify the proposed plan in late 2001, with continued development up until that time.

The provisions of the Air, Land and Water Regional Plan will include rules on the taking, use, damming and diversion of the Region's water resources. It will describe which activities are permitted and which require resource consent, along with the information required to assess consent applications and the types of conditions which will be imposed on consent holders.

The development of the Air, Land and Water Regional Plan will have implications for the long term implementation of this water allocation strategy. It may give statutory weight to the direction taken here and/or provide new or alternative methods for managing the water resources not just of the Kaipara River catchment, but of the Auckland Region as a whole.

3 Strategy Development

3.1 Process

The process followed in developing this water allocation strategy for the Kaipara River Catchment is represented diagrammatically in figures 3.1 and 3.2. The process comprises two stages, each with a number of components.

Stage 1 – Collation of the Resource Statement

Stage 1 involved gathering and assessing information in order to identify characteristics and values of the surface water resources of the catchment. The key components of this process, presented in figure 3.1, were:

- Consultation with the local community, water users and Tangata Whenua to identify key values and concerns in relation to the management of the water resources of the catchment. Community consultation was undertaken through public meetings, surveys and newsletters.
- Investigations and research, including the review of existing information described in the previous management plan and further research, for instance into catchment hydrology (river flows) and stream water quality. In addition, a catchment wide land and water use survey has been conducted to identify present and future water demand in the catchment.
- Collation of the results of this consultation and research in the Resource Statement, presented in Part B of this document. The resource statement identifies key resource characteristics, values and knowledge gaps and provides the basis for the development of the water allocation strategy for the catchment.



Figure 3.1 Stage 1 of the development of the water allocation strategy

Stage 2 – Development and Implementation of the Strategy



Stage 2 aims to develop and give effect to the water allocation strategy as follows (see figure 3.2):

Figure 3.2 – Stage 2 of the development and implementation of the water allocation strategy

• Undertake further information gathering to fill the knowledge gaps identified in the resource statement. These areas become priorities for further monitoring and investigations to allow for the implementation of the strategy in the long term.

- Determine water resource management objectives from the information collated in the resource statement Management objectives are proposed which reflect both instream values, such as stream ecology, and the value of water for out of stream (abstractive) uses, or a combination of both. It may be appropriate to vary the proposed management objectives as a result of further monitoring and analysis.
- Identify issues and conflicts which may prevent these objectives from being met, for instance where there is competing demand for instream and abstractive uses of water.
- Identify interim actions which can implemented as of now to address issues identified as a result of the collation of information in the resource statement.
- Determine longer term management solutions to resolve these conflicts (beyond the period during which interim actions are implemented); for instance the setting of minimum flows, restrictions on water abstractions and dams, and appropriate mitigation measures. Consult on these solutions, and review the results of interim actions prior to implementation which may, in part, be through the inclusion of relevant policies and rules in the Air, Land and Water Regional Plan.

3.2 Structure and Content

This report comprises two main parts, reflecting the process outlined in section 3.1, with additional information held in a series of appendices and maps. Part B is the Resource Statement, comprising of the following chapters.

Chapter 4: Physical Characteristics describes the major characteristics of the geography, geology, soils of the climate. This information, together with that in **Chapter 5: Heritage** provides the context for the more focused examination of the catchment's water resources in subsequent chapters.

Chapter 6: The Surface Water Resource reviews both quantity and quality aspects of the Kaipara River and its tributaries. It also examines the relationship between flows and water quality, this being of central importance for understanding the way on which streams can be adversely affected by water abstractions and dams.

Chapter 7: Instream Values of the Resource follows on from Chapter 6 to document the ways in which the river and its tributaries are valued. These include the values of stream ecosystems, the values of tangata whenua, and amenity, landscape and recreational values identified by the community.

Chapter 8: Demand for the Resource documents the spatial variation in the demand for water in different parts of the Kaipara River catchment and highlights ways in which water demand and availability may be affected in the future. The strategy aims to ensure that any conflicts between these demands and the values identified in Chapter 7 are resolved.

Chapter 9: Summary describes the key resource characteristics and values identified in the previous chapters which guide the development of the water allocation strategy. It also

identifies the important gaps in our understanding of the relationship between flows, water quality and ecology which drive later recommendations for further investigations.

Part C of the report is the Water Resource Management Guidelines, comprising the following chapters:

Chapter 10: Management Objectives describes the way in which the characteristics and values of the river and its tributaries determine the purposes for which streams in different parts of the catchment should be managed. On the basis of current knowledge, it is proposed that different parts of the catchment be managed to meet one of three different objectives.

Chapter 11: Issues, Conflicts and Management Solutions identifies they way in which the ability to meet the proposed management objectives can be compromised by the effects of taking and damming water and other activities. It describes and discusses preferred options to address these issues in order to meet the management objectives proposed in the previous chapter.

Chapter 12: Actions and Timeframes describes the further development of the water allocation strategy to 2003. It identifies investigations required to fill knowledge gaps and to allow the confirmation and implementation of management objectives and solutions. Interim actions are also described, some of which are guidelines for the processing of resource consent applications and others which relate to complementary functions of the ARC.

Chapter 13: Implications for Water Users explains the way in which resource consent holders and other water users may be affected if certain management solutions are adopted in the future.

Part D of the report contains supporting information in a series of appendices.