IN THE MATTER of the Resource Management Act 1991

AND IN THE MATTER Of

#### PLAN CHANGE 9 TO THE BAY OF PLENTY NATURAL RESOURCES PLAN

## REPORT AND RECOMMENDATIONS OF THE HEARING COMMITTEE

Provided to Bay of Plenty Regional Council on 27 August 2018 and adopted by the Regional Direction and Delivery Committee on 18 September 2018

#### **Hearing Commissioners:**

- Antoine Coffin, Independent Hearing Commissioner (Chair)
- Andrew Fenemor, Independent Hearing Commissioner
- Rauru Kirikiri, Independent Hearing Commissioner
- Jane Nees, Councillor and Hearing Commissioner
- Paula Thompson, Councillor and Hearing Commissioner

### CONTENTS

| REPORT AND RECOMMENDATIONS OF THE HEARING COMMITTEE                             | 1  |
|---|----|
| CONTENTS  | 2  |
| INDEX   | 5  |
| APPENDICES  | 5  |
| INTRODUCTION  | 6  |
| Appointment of Hearing Panel  | 6  |
| Notification of Hearings and Council Officer Reports                            | 6  |
| Pre-hearings and Mediation  | 6  |
| Site Visit  | 6  |
| Hearing and Appearances   | 6  |
| Conflicts of Interest   | 7  |
| PLAN CHANGE 9 INTRODUCTION (CONTEXT)  | 8  |
| STATUTORY FRAMEWORK   | 9  |
| Resource Management Act 1991  | 9  |
| Local Government Act 2002   | 9  |
| Statutory acknowledgements  | 10 |
| National Policy Statement for Freshwater Management (NPSFM)                     | 10 |
| Te Mana o Te Wai  | 11 |
| National Policy Statement for Renewable Electricity Generation 2011             | 11 |
| National Policy Statement for Urban Development Capacity                        | 12 |
| National Environmental Standards (NES)  | 12 |
| Water Conservation Orders   | 13 |
| Resource Management (measurement and reporting of water takes) Regulations 2010 | 13 |
| Proposed National Environmental Standard on Ecological Flows and Water Levels   | 13 |
| Tarawera River Catchment Plan   | 14 |
| Regional Policy Statement   | 14 |
| The Kaituna River Document Kaituna he taonga tuku iho, a treasure handed down   | 15 |
| Te Ara Whānui ō Rangitaiki - Pathways of the Rangitaiki                         | 15 |
| lwi Management Plans  | 15 |
| PANEL RECOMMENDATIONS   | 17 |
| Purpose and Function of Proposed Plan Change 9                                  | 18 |
| Default or Interim Plan Change  | 18 |
| Information Data and Uncertainty  | 18 |
| Overarching and General Matters   | 19 |
| Matters of Concern to Māori Consultation  | 19 |
| Adequacy of Consultation  | 19 |
| Māori Values and Interests  | 20 |

|   | Treaty of Waitangi   | 21 |
|---|--|----|
|   | Motiti Island  | 21 |
|   | Mataatua Declaration   | 22 |
|   | Terminology  | 22 |
|   | Halt the PC9 Process   | 22 |
|   | Development of Māori Land  | 22 |
| D | ecision-making and Management of Over-Allocated Catchments               | 24 |
|   | Main Matters for Decision  | 24 |
|   | Accounts   | 24 |
|   | Definitions  | 24 |
|   | Limits vs Thresholds, Interim vs Default                                 | 25 |
|   | Over-abstraction Issue   | 25 |
|   | Precaution vs Certainty  | 26 |
|   | Stream Depleting Groundwater Takes                                       | 26 |
|   | Whether Permitted Activity takes are Included within an Allocation Limit | 27 |
|   | Water Harvesting and Secondary Allocation                                | 29 |
|   | Non-consumptive takes within allocation limits                           | 30 |
|   | "Generally decline" and "consider granting"                              | 30 |
|   | Phase out over-allocation  | 31 |
|   | Objectives relating to water takes                                       | 32 |
|   | Enforcing limits & pre - 1991 consents expiring 1 October 2026           | 32 |
| F | ows, Levels, limits and Resource Consent Considerations                  | 34 |
|   | WQ P18   | 36 |
|   | Minimum flows and allocation limits                                      | 36 |
|   | Low flows and aquifer levels   | 37 |
|   | Matters of Consideration and Conditions on Resource Consents             | 38 |
|   | Crop and rootstock survival water  | 39 |
|   | Stock drinking water   | 39 |
|   | Flows, levels, limits and resource consents                              | 39 |
|   | Consent terms  | 40 |
|   | Consent assessment and conditions  | 42 |
|   | Technical basis for allocation limits and minimum flows                  | 42 |
|   | Consent applications in relation to level of allocation                  | 45 |
|   | Low Flows  | 45 |
|   | Temporary allocations  | 46 |
|   | Temporary dewatering   | 46 |
|   | Fish screens   | 46 |
|   | Bore Construction WQ P22   | 46 |
|   |  |    |

| Fire fighting   | 47           |
|---|--------------|
| Water bodies, FMUs or WMAs  | 47           |
| Water Use Efficiency, Water Metering, Reporting and Information Requirements, Water Accou<br>Schedule 7 | nts, &<br>48 |
| Metering, use and efficiency  | 49           |
| Schedule 7  | 51           |
| Climate Change  | 51           |
| Water Management Areas  | 53           |
| Framework   | 53           |
| Water user groups   | 54           |
| Water Permit Transfers  | 55           |
| Limitations on transfer   | 56           |
| Recognising Existing Users  | 57           |
| First in, first served  | 57           |
| Registering permitted activities  | 57           |
| Additional Permitted Activities   | 59           |
| Well Testing  | 59           |
| Unauthorised Water Takes  | 60           |
| Issue   | 60           |
| Principles  | 61           |
| Unauthorised dairy farm water takes   | 61           |
| Municipal water Takes   | 63           |
| Definition of municipal water supply  | 64           |
| Other municipal uses  | 64           |
| Controlled renewal of municipal consents.   | 65           |
| Exempt smaller municipal supplies from a water management plan  | 66           |
| Availability of water for development and land use change   | 66           |
| Taking into account resource limitations and investigating water availability                           | 66           |
| Hydro-electric Power Schemes and Renewable Energy Generation  | 68           |
| Hydro-electric power schemes  | 68           |
| Extent of derogation of existing consents   | 68           |
| Effect of the Operation of this plan  | 69           |
| Recommendation  | 76           |

### INDEX

|                       | WQ I11, 25, 34, 39  | 46, 53, 57, 60, 64, | WQ P17, 25, 35, 40, |
|-----------------------|---------------------|---------------------|---------------------|
| Efficient allocation, | WQ M1, 49           | 68                  | 41                  |
| 24, 48, 50, 55        | WQ M2, 49           | WQ P2, 20, 21, 24,  | WQ P18, 36          |
| Efficient use, 9, 37, | WQ M3, 49           | 28, 32, 33, 36, 37, | WQ P19, 68          |
| 44, 51, 53, 56, 57,   | WQ M4, 49, 64, 67   | 38, 46, 47, 48, 49, | WQ P20, 68          |
| 64                    | WQ M5, 63           | 50, 52, 53, 55, 56, | WQ P21, 57, 63, 64, |
|                       | WQ M6, 36           | 57, 63, 64, 66, 67, | 68                  |
| Metering, 8, 13, 18,  | WQ M7, 49           | 68                  | WQ P22, 36, 46, 47  |
| 28, 43, 48, 49, 50,   | WQ M8, 25, 49, 54,  | WQ P3, 31, 32, 33,  | WQ P23, 55, 56, 57  |
| 51, 62, 63            | 64                  | 34, 38, 39, 47, 64  | WQ P24, 28, 49, 50  |
| Municipal water       | WQ M9, 21           | WQ P4, 36           | WQ P25, 24          |
| supply, 63, 64, 65    | WQ 01, 21, 39, 46,  | WQ P5, 29           | WQ P26, 48          |
|                       | 48, 51, 53          | WQ P6, 25, 28, 29,  | WQ P27, 66, 67      |
| Net take, 25, 30      | WQ 02, 51, 68       | 30, 34, 36, 37, 39, | WQ P28, 66, 67      |
|                       | WQ 03, 21, 32, 34,  | 41, 42              | WQ P29, 37, 38      |
| Rootstock, 24, 39     | 40, 51, 63          | WQ P7, 24, 26, 35   | WQ P30, 38          |
|                       | WQ 04, 21, 25, 32,  | WQ P8, 29, 30, 35   | WQ P31, 38, 39, 47, |
| Sustained decline,    | 34, 40, 46          | WQ P9, 24, 26, 27,  | 64                  |
| 40, 46                | WQ 05, 48, 66       | 29, 35              | WQ R1, 27, 28, 30,  |
|                       | WQ 06, 34           | WQ P10, 24, 30, 31, | 36, 57, 58          |
| Water User Group,     | WQ 07, 21, 24, 34   | 35, 37, 45          | WQ R2, 27, 28       |
| 54, 64                | WQ 08, 21, 25, 57,  | WQ P11, 24, 30, 31, | WQ R3, 27, 28, 46   |
| WQ I1, 21, 25, 26,    | 63, 64, 68          | 35                  | WQ R4, 6, 21, 57,   |
| 34, 39                | WQ 09, 21, 49       | WQ P12, 24, 26, 37, | 58, 60, 61, 62, 69  |
| WQ I2, 48, 51, 63     | WQ 010, 48          | 57                  | WQ R4A, 21          |
| WQ I3, 26, 48, 49     | WQ 011, 39, 46, 48, | WQ P13, 38, 42, 53  | WQ R5, 27, 57       |
| WQ I4, 34, 51         | 51, 53              | WQ P14, 6, 57, 60   | WQ R6, 21, 22, 40,  |
| WQ I5, 34, 36         | WQ 012, 21          | WQ P15, 21, 25, 29, | 63, 64, 65, 66, 69  |
| WQ I6, 34             | WQ P1, 6, 21, 24,   | 33, 35, 38, 39, 42, | WQ R7, 55, 56       |
| WQ I7, 48, 49, 51     | 25, 26, 29, 30, 31, | 64                  | WQ R8, 55           |
| WQ I8, 48             | 33, 35, 36, 37, 38, | WQ P16, 29, 35, 39, | WQ R9, 31, 37, 55   |
| WQ 19, 60             | 39, 40, 41, 42, 45, | 46                  | WQ R10, 30, 36      |
| WQ I10, 21            |                     |                     | WQ RX, 59           |
|                       |                     |                     |                     |

### **APPENDICES**

- Plan Change 9 Panel Recommendation Version with track changes to operative version
- Section 32AA evaluation of changes

### INTRODUCTION

This report and recommendations relate to Plan Change 9 (PC9) for the Bay of Plenty Regional Council's (BOPRC) Regional Natural Resources Plan.

This plan change relates specifically to water quantity provisions in the natural resources plan. It is part of a programme of changes needed for the National Policy Statement: Fresh water Management 2014 (NPSFM).

More than 110 submissions and further submissions were received between October 2016 and February 2018.

### **Appointment of Hearing Panel**

Acting under section 34A(1) of the Resource Management Act (RMA), the council appointed the undersigned panel as hearing committee members. The panel's role is to hear, consider, report and make recommendations on submissions on PC9 to the Regional Land and Water Plan. This includes seeking and receiving reports under section 42A of the RMA.

### **Notification of Hearings and Council Officer Reports**

PC9 was originally notified on 18 October 2016 with submissions closing on 14 December 2016. A total of 82 submissions were received, 16 of these were received late.

Further submissions were notified on 30 May 2017 and closed on 28 June. Due to an administrative error, part of the submissions of The Oil Companies and Fonterra Co-operative Group Limited were inadvertently omitted from the original submission and were separately notified on 27 June 2017. A total of 31 further submissions were received.

The section 42A council officer's report was circulated to submitters in February 2018.

### **Pre-hearings and Mediation**

In 2017, 24 pre-hearing meetings were held between Bay of Plenty Regional Council and submitters.

An independent mediator conducted mediation with submitters who were addressing unauthorised dairy shed water takes (Policy WQ P14 and rule WQ R4). It is understood that no formal agreement was reached.

### Site Visit

A site visit was undertaken on Tuesday 13 March 2018, to familiarise commissioners with water catchments and the diversity of land uses. A helicopter ride covered the area between Tauranga city to Mōtītī Island, Whakatāne, Ōpōtiki, Matahina dam, Rangitaiki catchment, Kawerau, Tarawera, Te Puke, Welcome Bay and the Wairoa River catchment.

### **Hearing and Appearances**

Two hearings of PC9 were held in mid-March 2018, at Bay of Plenty Regional Council Offices in Tauranga and at the Eastbay REAP Centre in Whakatāne.

An audio record has been made of the hearings and minutes prepared.

The minutes record appearances (pages 1-2), a record of evidence and information tabled by submitters or requested by the panel and key points raised by submitters, as well as the likely timing of council's recommendation and decision.

### **Conflicts of Interest**

Councillors Jane Nees and Paula Thompson raised a potential conflict of interest, relating to their being directors of Bay of Plenty Regional Council-owned company Quayside Holdings Ltd. Quayside Holdings Limited is a submitter to the municipal and water permit transfer provisions of PC9. It was determined that Cr Jane Nees and Paula Thompson have a conflict of interest and would not attend, discuss or be part of the deliberations and recommendation regarding these Quayside Holdings Limited submission points. Quayside Holdings Limited did not present evidence at the hearing.

Councillor Thompson is a trustee of Toi EDA, a submitter on Creswell NZ Limited's application for resource consent. Therefore Cr Thompson did not deliberate on Creswell NZ Limited's submission on PC9.

Antoine Coffin raised a potential conflict of interest, as author of the Ngati Rangitihi Iwi Management Plan 2012. Ngāti Rangitihi is not a submitter to PC9.

### **PLAN CHANGE 9 INTRODUCTION (CONTEXT)**

PC9 is the first step in a two-stage approach to improving the rules for water quality and quantity management in the Bay of Plenty. It contains rules and policy changes that are designed to strengthen water allocation limits and management.

The plan change marks the beginning of the regional council's implementation of the NPSFM and addresses regional issues relating to water allocation. Council deems PC9 an important step forward in regional water management because it establishes a metering and reporting framework, strengthens the framework for decision-making based on clearer interim limits to allocation and it improves efficiency of allocation and use. PC9 identifies the region's Water Management Areas (WMA) and sets up a policy framework for working with tangata whenua and the community on local water quantity planning actions.

### STATUTORY FRAMEWORK

The RMA creates a hierarchy of planning instruments including national, regional and local documents. It directs the manner in which the provisions within these instruments must be considered in preparation of this proposed plan change.

PC9 seeks to give effect to or comply with all relevant statutory requirements as outlined below.

### **Resource Management Act 1991**

The RMA sets out the functions and duties of regional councils which, in relation to water quantity and quality, include establishing, implementing and reviewing objectives, policies and methods to achieve integrated management of the natural and physical resources of the region (s.30(1)(a)). Section 30(1)(b) and (c) gives regional councils the ability to control the use of land to maintain the quality and quantity of water in water bodies. The functions also include control of the taking, using, damming and diverting of water, as well as control of the quantity, level or flow in any water body  $(s.30(e) \text{ and, if appropriate, the establishment of rules in a regional plan to allocate the taking or use$ of water <math>(s30(fa)(i)).

The regional council must also ensure it carries out these functions in accordance with part 2 of the act - s5 (purpose), s6 (matters of national importance), s7 (other matters) and s8 (principles of the Treaty of Waitangi).

Pursuant to section 52(2) of the RMA, National Policy Statements (NPS) are instruments that state objectives and policies for matters of national significance relevant to achieving the purpose of the RMA. The National Policy Statement for Freshwater Management (NPSFM) 2017 is one such NPS that PC9 partially implements.

### Local Government Act 2002

The Local Government Act (LGA) provides for democratic and effective local government that recognises the diversity of New Zealand communities. It states the purpose of local government and provides a framework and powers for local authorities to decide which activities they undertake and the manner in which they will undertake them. Local authorities are legally required to play a broad role in meeting the current and future needs of their communities for good-quality local infrastructure, local public services, and performance of regulatory functions.

Sections 10 and 11 of the LGA states the purpose of local government and role of local authorities.

The High Court has held that the principles in sections 10 to 14 of the LGA (which state the role of local authorities and related matters) are consistent with the purpose of the RMA expressed in section 5, to promote the sustainable management of natural and physical resources. Regard must also be given to the efficient use of natural and physical resources in section 7 of the RMA. Council's primary task in considering a plan change is therefore confined to assessing matters under the RMA and relevant NPS.

In this context, the key statutory test in the RMA that must be considered when preparing PC9 is that council has regard to any management plans and strategies prepared under other acts if their content has a bearing on the region's resource management issues. This may include any relevant Long Term Plan and/or Annual Plan prepared under the LGA. A Long Term Plan and/or Annual Plan does not override the provisions of RMA plans (or other statutory documents), nor is there any legal requirement that any new plans must conform to a Long Term Plan and/or Annual Plan that is in force. The specific legislative requirements in the RMA override the general provisions contained in the LGA in relation to the council's planning and consenting functions under the RMA.

#### Sec 77(i)(c)

...if any of the options identified under paragraph (a) involves a significant decision in relation to land or a body of water, take into account the relationship of Māori and their culture and traditions with their ancestral land, water, sites, waahi tapu, valued flora and fauna, and other taonga.

### Statutory acknowledgements

The Ngā Whakaaetanga-ā-Ture ki Te Taiao ā Toi is a compendium document setting out statutory acknowledgements in the Bay of Plenty, available on the BOPRC website. In the Bay of Plenty, several statutory acknowledgements are likely to be particularly relevant to future water management areas and relevant to PC9 because they inform on tangata whenua's wider values and interests in freshwater.

### National Policy Statement for Freshwater Management (NPSFM)

The NPSFM recognises the national significance of freshwater for all New Zealanders and te mana o te wai, the mana of the water. It sets out objectives and policies that ensure local government manages water in an integrated and sustainable way, while providing for economic growth within specified water quantity and quality limits.

The main focus of the NPSFM is:

- setting freshwater objectives (goals that describe the desired state of freshwater now or in the future);
- setting limits (the maximum amount of the resource available for use)
- implementing methods to achieve the freshwater objectives and limits.

The NPSFM is divided into eight parts:

**Part A** and **Part B** give direction on what must be provided for or addressed in a regional plan, in terms of managing water quality and quantity. Part A is about water quality and Part B is about water quantity

**Part C** steers regional councils to manage freshwater in an integrated way. Councils must manage the relationship between land use and development, and freshwater. They must also manage the effects of land use and development, including cumulative effects on freshwater and coastal water

**Part CA** provides the process for setting freshwater objectives. This section has two appendices, which provide lists of national values (appendix 1) and attributes (appendix 2) that regional councils must use to set freshwater objectives

Part CB provides direction on how to monitor progress towards, and achievement of, freshwater objectives

**Part CC** gives direction to regional councils over the requirement to account for freshwater takes and discharges. This means that when it comes to setting freshwater objectives and limits, councils and the community know what water is being taken and what contaminants are being added

**Part D** provides direction on involving iwi and hapū and reflecting tāngata whenua values and interests in water management

Part E provides information on the timeframe for implementing the NPSFM 2014.

The NPSFM 2014 was gazetted on 4 July 2014 and came into force on 1 August 2014. This revoked the earlier NPSFM 2011 as from 1 August 2014. While the objectives of the NPSFM 2014 remain largely the same as the objectives in the NSP-FM 2011, the process regional councils must use to set

freshwater objectives - the intended environmental outcomes - is different. The NPSFM was further amended in August 2017.

PC9 (together with the RNRP) is required to give effect to the objectives of the NPSFM. However, NPSFM policies have been time-staged under Policy E1 to be implemented no later than 31 December 2030. The council may rely on subsequent plan changes, including the national objectives framework, to fully give effect to the NPSFM.

The NPSFM 2014 requires that every regional council fully implement the policies in the NPSFM 2014 by 31 December 2025 (or 31 December 2030 if certain requirements are met). If any policy in the NPSFM 2014 is not already fully implemented by the current plans, Policy E1 provides that the council may establish a progressive implementation policy to achieve full implementation of the policy by the required date (2025 or 2030). Policy E1 of the NPSFM provides for staged implementation of the policies of the NPSFM only (i.e. not the objectives).

The regional council adopted a progressive implementation policy (PIP) in October 2012 and a revised PIP in December 2015, to implement the NPSFM. This staged approach initially addresses interim objectives and water quantity allocation limits at the regional scale. Specific objectives, limits and rules that will override the regional defaults (by way of subsequent regional plans or plan changes) are then developed for each of the nine WMAs. BOPRC has indicated it will fully implement the NSPFM 2014 by 2025/2026.

PC9 must give effect to the relevant objectives of the NPSFM, particularly objectives AA1, B1 to B5, C1, CA1, CC1, and D1. Subsequent regional plans and/or plan changes to the RNRP can give effect to the remainder of the NPSFM (including the National Objectives Framework set out in policies CA1 to CA4), in accordance with its PIP and Policy E1 of the NPSFM.

### Te Mana o Te Wai

Te mana o te wai was introduced to the freshwater NPS in 2014. Te mana o te wai is a concept that considers the integrated and holistic health and well-being of a freshwater body. When te mana o te wai is given effect, the water body will sustain the full range of environmental, social, cultural and economic values held by iwi and the community. The concept is expressed in te reo Māori but applies to freshwater management for and on behalf of the whole community.

Each community - and this includes councils - will decide what te mana o te wai means to them at a freshwater management unit (FMU) scale, based on their unique relationship with the water in their area or rohe.

## National Policy Statement for Renewable Electricity Generation 2011

The National Policy Statement for Renewable Electricity Generation 2011 (NPS-REG) sets out an objective and policies for renewable electricity generation under the Resource Management Act 1991.

The matters of national significance to which the NPS-REG applies are:

- a) the need to develop, operate, maintain and upgrade renewable electricity generation activities throughout New Zealand; and
- b) the benefits of renewable electricity generation.

Its objective is "To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation."

The NPS-REG contains thirteen policies that include recognising the benefits of renewable electricity generation activities, managing reverse sensitivity effects, incorporating provisions in policy statements and plans and acknowledging practical constraints to develop, operate, maintain and upgrade new and existing renewable electricity generation activities.

The NPS-REG applies to renewable electricity generation activities at any scale. It covers the construction, operation and maintenance of structures associated with renewable electricity generation. This includes:

- 1. small and community-scale renewable generation activities
- 2. systems to convey electricity to the distribution network and/or the national grid
- 3. electricity storage technologies associated with renewable electricity storage.

The NPSREG covers all renewable electricity generation types including hydro, wind, geothermal, solar, biomass and marine.

### **National Policy Statement for Urban Development Capacity**

This national policy statement provides direction to decision-makers under the Resource Management Act 1991 (RMA) on planning for urban environments. It recognises the national significance of well-functioning urban environments and has a particular focus on ensuring that local authorities, through their planning:

- 1. enable urban environments to grow and change in response to the changing needs of communities and future generations;
- 2. provide enough space for their populations to happily live and work. This can include allowing development to go 'up' by intensifying existing urban areas, and 'out' by releasing land in greenfield areas.

The urban capacity development statement sets out the national significance of urban environments thus "..about recognising the *national significance of urban environments and the need to enable such environments to develop and change; and providing sufficient development capacity to meet the needs of people and communities and future generations in urban environments."* 

Much of the statement concerns mechanisms and requirements for councils to provide land for urban use ahead of need, according to responsive short or long term plans and strategies.

### National Environmental Standards (NES)

National Environmental Standards (NES) are regulations issued under Section 43 of the RMA, to provide a nationally consistent approach to decision-making processes. They may be prescribed technical standards, methods or other requirements for environmental matters. Each council must enforce the same standard and in some circumstances can impose stricter standards. Of particular relevance to the proposed PC9 are the:

- Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 (previously an NES).
- Proposed National Environmental Standard on Ecological Flows and Water Levels (not progressed since notification in 2008).
- National Environmental Standard for Sources of Drinking Water 2007.

### Water Conservation Orders

A Water Conservation Order (WCO) recognises the outstanding amenity or intrinsic values that a specific water body provides, in either a natural or modified state. The Bay of Plenty region only has one WCO – the National Water Conservation (Mōtu River) Order 1984.

### Resource Management (measurement and reporting of water takes) Regulations 2010

The national water metering regulations are covered by the Resource Management Measurement and Reporting of Water Takes Regulations 2010. These apply to resource consents that allow freshwater to be taken at a rate of 5 litres per second or more. The regulations do not apply to water takes that do not need resource consent, or to consented takes:

- allowing less than 5 litres per second to be taken
- for geothermal or coastal water, or
- that are non-consumptive.

The national water metering regulations require that consented water users measure and keep records of their water take. The regulations state that consented water users taking at a rate of 5 litres per second or greater, must:

- take continuous measurements
- keep daily records of cubic metres taken (regional councils may give written approval for weekly records)
- keep records specifying 'zero' when no water is taken
- keep records in an auditable format
- use a water measuring device or system that is:
  - o suited to the qualities of water it is measuring (e.g. its sediment content),
  - sealed and tamper-proof,
  - installed where water is taken (regional councils may give written approval for installation at an alternative location),
  - accurate to within plus or minus 5 percent for water taken by a full (pressurised) pipe, or plus or minus 10 percent for takes by open channels or partially full pipes,
  - $\circ$   $\,$  verified as accurate by a person who is qualified. Verification is required initially, and then every five years,
  - able to provide data in a form suitable for electronic storage.

Consented water users must provide annual records to the regional council:

- for each year of the resource consent,
- covering all water taken from 1 July to 30 June,
- in writing (or electronically if requested by the regional council) within one month after this period.

The regulations came into effect on 10 November 2010 and resource consents granted prior to that are now required to be compliant.

## Proposed National Environmental Standard on Ecological Flows and Water Levels

The intent of the proposed National Environmental Standard on Ecological Flows and Water Levels is to promote consistency in the way decisions are made to ensure sufficient variability and quantity of water flowing in rivers, groundwater systems, lakes and wetlands. It would do this by:

- Setting interim limits on the alteration to flows and/or water levels where limits have not been imposed through regional plans or water conservation orders.
- Providing a process for selecting the appropriate technical methods for evaluating the ecological component of environmental flows and water levels.

It is understood that the standards are on hold, pending decisions on the government's freshwater reform programme.

### **Tarawera River Catchment Plan**

The Operative Regional Plan for the Tarawera River Catchment was developed primarily to manage the effects of discharges from the large pulp and paper mills near Kawerau township, by managing water quantity and water quality in the river catchment. The plan is designed to manage abstraction from the Tarawera River and to maintain water quality standards in the Tarawera River and its tributaries and lakes.

The Tarawera River plan covers the river catchment, including all its sub-catchments, as well as the upper Tarawera Lakes and their catchments. It excludes Lake Rerewhakaaitu and its catchment.

The river plan contains a section on surface water quantity that outlines the primary causes and effects of changing river flows as well as lake and wetland levels in the catchment. Rules affecting water quantity in the Tarawera River Catchment Plan have not generally been affected by PC9, meaning that any activities requiring resource consent in the area covered by the Tarawera River Catchment plan must do so under that plan.

The river plan became operative in 2004 and was reviewed in 2014. While it is due for review in 2019/2020, a Water Management Area Plan Change will probably replace this plan at the appropriate time in council's work programme.

### **Regional Policy Statement**

The second generation Regional Policy Statement (RPS) became operative on 1 October 2014.

The RPS provides a framework for sustainably managing the region's natural and physical resources. It highlights regionally significant issues with our land, air, fresh and coastal water, infrastructure and biodiversity, including issues of significance to iwi. It sets out what needs to be achieved (objectives) and how it will be achieved (policies and methods).

It does not contain rules. Instead, it explains how regional, city and district councils, need to manage these resources. It is a directive policy document in relation to regional and district plans and the consideration of resource consents. It must be given effect by the region's city and district councils when developing their district plans.

In respect of freshwater, the RPS sets out a number of issues including:

- Increasing pressure on finite water resources
- Competing demands
- Over-abstraction
- Inefficient use
- Understanding water use

The RPS contains a section on water quality objectives, policies, and methods. All of these are identified as the responsibility of regional council.

## The Kaituna River Document Kaituna he taonga tuku iho, a treasure handed down

The Te Maru o Kaituna River Authority established by the Tapuika Claims Settlement Act 2014 is a co-governance partnership created to manage the Kaituna River. It comprises iwi representatives from *Tapuika lwi Authority Trust, Te Kapu Ō Waitaha, Te Pumautanga o Te Arawa Trust, Te Tāhuhu o Tawakeheimoa Trust* and *Te Komiti Nui o Ngāti Whakaue*. It also includes council representatives from *Bay of Plenty Regional Council, Rotorua Lakes Council, Western Bay of Plenty District Council* and *Tauranga City Council* and is a permanent joint committee of the four councils.

Their document - *the Kaituna River Document* - aims to promote the restoration, protection and enhancement of the well-being of the Kaituna River and its tributaries. The document contains eight proposed objectives and 21 desired outcomes, which build on the Kaituna River and Ōngātoro/Maketū Estuary Strategy (2009). Broadly, these objectives seek to enhance the quality of the Kaituna river.

### Te Ara Whānui ō Rangitaiki - Pathways of the Rangitaiki

The Ngāti Manawa Claims Settlement Act 2012 and Ngaāi Whare Claims Settlement Act 2012 established the Rangitāiki River Forum, with representation from local authorities *Whakatāne District Council, Bay of Plenty Regional Council and Taupo District Council,* as well as *Ngāti Whare, Ngāti Manawa, Ngāti Awa and Ngāti Tūwharetoa (Bay of Plenty) iwi.* 

Their document, *Te Ara Whānui ōRangitāiki – Pathways of the Rangitāiki*, was prepared to guide management of the river into the future. Its vision is "A healthy Rangitāiki River, valued by the community, protected for future generations. Tīhei Mauri Ora." Its stated outcomes - *mauri, he tangata, he taia(o), he awa* - speak clearly of a desire to improve the river quality. RPS change 3 incorporates the Rangitaiki River Document into the Bay of Plenty RPS.

### Iwi Management Plans

Under section 61(2A)(a) of the RMA, when a regional council is preparing a plan change it must take into account any relevant planning documents recognised by an iwi authority. These documents, generally known as iwi management plans, need to be recognised by an iwi authority, are relevant to the resource management issues of the region/district and have been formally lodged with the relevant council(s).

Council has prepared a 'Review of Iwi and Hapū Management Plans' report that is included in Appendix 8 of the information supporting PC9. The panel understands 23 iwi management plans contain provisions directly relevant to PC9, including

- Matakana and Rangiwāea islands Hapū Management Plan (2012)
- Nga Aukati Taonga o Tapuika me Waitaha (1993)
- Ngā Taonga Tuku Iho: Pirirākau Hapū Environmental Management Plan (2004)
- Ngāi Te Ahi Hapū Management Plan (2013)
- Ngāi Tamawhariua Hapū Management Plan (2015)
- Ngāti Pūkenga Iwi ki Tauranga Trust Iwi Management Plan (2013)
- Ngāti Tapu Ngāi Tukairangi Hapū Management Plan (2014)
- Ngāti Whakaue ki Maketū Iwi Resource Management Plan Phase 2 (2011)
- Tapuika Environmental Management Plan (2014)
- Tauranga Moana Iwi Management Plan (2016)
- Te Mahere a Rohe mo Ngāti Rangitihi Ngāti Rangitihi Iwi Environmental Management Plan (2012)
- Te Awanui Tauranga Harbour Iwi Management Plan (2008)
- Te Awaroa Ngāti Kahu Hapū Environmental Management Plan (2011)

- Te Mana Taiao ōNgāi Tamarāwaho Hapū Management Plan (2014)
- Te Whatu Natural Resources Environment Management Manual (2002)
- Waitaha Iwi Management Plan (2014)
- Ngāti Manawa Environmental Scoping Report (April 2007)
- Ngāti Whare Iwi Management Plan (19 March 2011)
- Tawharau o Ngā Hapū o Whakatōhea (1993)
- Ngāti Rangiwewehi Iwi Management Plan (2008)
- Te Taiao o Te Whatuoranganuku. Ngāti Tamateatutahi-Ngāti Kawiti Hapū Environmental Management Plan (2015)
- Te Rautaki Taiao a Raukawa Raukawa Environmental Management Plan (2015)
- Te Tūāpapa o ngā wai o Te Arawa / Te Arawa Lakes Trust Cultural Values Framework (2015)
- Tuhourangi Tribal Authority Enhanced Iwi Environment Resource Management Plan (2011)

The panel has also reviewed the Mataatua Declaration, which asks that tāngata whenua retain exclusive possession of ancestral waters. The declaration recognises water is vitally important to sustaining life and that present generations have a sacred duty to ensure water is available to sustain the lives of future generations.

The declaration also asserts that indigenous people have special rights based on the Treaty of Waitangi and on aboriginal title to the use of their waters. It also says mataatua signatories will share water and manage it for the long term benefit of all peoples. The declaration says that people wanting to use water resources must seek consent from those with mana whenua.

### PANEL RECOMMENDATIONS

In making its recommendations, the panel considered written submissions and further submissions, the council summary report of these submissions, verbal submissions, the staff-produced section 42A report and evidence presented at the hearing.

In terms of "reasons" for its decisions, the panel has considered the Section 42A discussion and recommendations and, where appropriate, made reference to that report. Where changes to the section 42A recommendations have been made, the panel's report notes both the change and reason. Where no change to PC9 is recommended over the notified version and no comment is provided the panel relied on Council's section 42A report.

The panel has considered and supports the section 32AA report prepared by staff in relation to the more significant changes recommended by the panel.

The following recommendations are made by topic as detailed below.

### **Purpose and Function of Proposed Plan Change 9**

### **Default or Interim Plan Change**

The panel expects some provisions of PC9 will be replaced on completion of proposed WMA processes and associated plan changes, though the extent of these changes is unknown. Any changes will be informed by new research and more detailed community engagement.

If the whole of PC9 were to be superseded, PC9 could be regarded as an "interim" plan. This could for instance occur if a particular WMA discarded PC9 water allocation metrics, considered new metering provisions and found the proposed issues and objectives unsuitable. However, some of the proposed regional scale provisions (objectives, policies, rules, methods) are unlikely to be replaced. Policy that aims to reduce over-allocation or covers metering requirements and many of the permitted activities appear likely to remain, regardless of WMA work. The panel understands WMA processes and consequential plan changes will focus on resource availability, allocation and limit setting and will refine PC9.

It appears parts of PC9 will remain 'default' for water quantity management, while parts addressed through WMA processes will eventually be superseded and can be considered 'interim'. This affects wording such as 'interim limits' and 'thresholds' discussed below. It also helps explain the overarching purpose of PC9; to impose conservative water allocation limits that "hold the line" pending later (WMA) review.

### **Information Data and Uncertainty**

The panel was advised council's approach in PC9 relied on incomplete but developing data.

Several submitters e.g. *Noble 35-1* commented on the opportunity council has to supply better data to inform better water management decisions. The panel agreed that further work is needed to ensure council, industry, the public and iwi can access the best possible information to support improved decision-making.

The NPSFM includes requirements for council to produce freshwater accounts showing the cumulative allocations of water against limits. The panel heard council is pursuing several data initiatives, including interim accounts, data cleansing, automated information processing and improved access to data. Had this been available before now, PC9 may have been a much simpler change. However the panel acknowledges that scientific knowledge and data supporting it is continually improving, and lack of science or data should not be used as an excuse to delay the setting of water body limits.

Whakatāne District Council (12-5) asked BOPRC to record and maintain good quality information about the water resources of the region. Further submissions including *Horticulture New Zealand* supported and linked this to other submissions on climate change, future demand, values and risks. NPSFM Policy B1 requires council to have regard to the reasonably foreseeable impacts of climate change. The panel agreed to include a new objective directing focus on good data and science acquisition.

### **Overarching and General Matters**

Several submitters raised matters that affect a range of specific topics addressed throughout the rest of this report. These include:

1.1, 1.6,8.42 (F14.1,F15.1,F18.1,F19.1,F23.13), 8.46 (F12.1,F14.2,F15.2,F22.1,F23.14,F26.11,F27.1, F5.1,F6.1,F7.1), 9.1 (F28.335,F29.283),14.1,15.11,15.13 (F12.2), 17.1,19.12 (F12.3), 19.9 (F15.3,F23.15), 21.10 (F19.2), 23.1,24.1, 25.1 (F1.1,F18.2,F19.3,F28.130,F29.135), 25.13 (F28.142,F29.147), 25.2 (F1.2,F18.3,F19.4,F27.2,F28.131,F29.136,F8.11), 25.9 (F1.9,F27.3,F28.138,F29.143), 26.1, 28.1, 29.1, 31.53, 34.1, 35.1, 38.1 (F10.27,F14.8), 40.1,42.1,44.1 (F12.4,F22.2), 46.1,47.1 (F19.5,F28.197,F29.155), 48.1 (F14.10,F15.4,F23.16), 48.40 (F14.173), 49.1 (F14.13), 49.2 (F14.14), 49.3 (F14.174), 49.4 (F14.175), 51.1, 54.17, 56.1 (F22.3), 57.1,57.2, 57.3, 60.1 (F12.5,F20.1,F22.4,F23.9), 60.17 (F23.11), 60.18 (F23.12,F27.4), 60.2 (F20.2,F22.5,F23.10), 62.1, 64.1 (F28.328,F29.276), 67.1 (F16.9,F29.104), 67.10 (F16.17,F29.113), 67.11 (F16.18,F29.114), 67.12 (F16.10,F19.5,F19.8,F29.115), 67.13 (F16.20,F29.116), 67.44 (F16.21,F29.107), 67.5 (F16.13,F29.108), 67.6 (F16.14,F29.109), 67.7 (F19.7,F29.110), 67.8 (F16.15,F29.111), 67.9 (F16.16,F29.112), 69.1, 70.1,72.1, 72.3, 73.1 (F14.415), 76.3 (F28.152), 76.4 (F19.9,F28.153), 76.5 (F28.154), 76.6 (F28.155), 78.1, 80.2 (F19.10,F28.389,F29.338), 80.3 (F28.390,F29.339), 82.1

### Matters of Concern to Māori Consultation

Broad concerns: 25.12 (F1.12,F19.13,F28.141,F29.146), 25.3 (F1.3,F28.132,F29.137), 25.4 (F1.4,F18.4,F19.11,F28.133,F29.138), 25.5 (F1.5,F18.5,F28.134,F29.139), 25.7 (F1.7,F19.12,F28.136,F29.141), 25.8 (F1.8,F28.137,F29.142), 47.20 (F18.6,F19.14,F21.18,F28.216,F29.174), 52.1 (F28.343,F29.291), 52.10 (F28.352,F29.300), 52.11 (F28.353,F29.301), 52.2 (F19.15,F28.344,F29.292), 52.3 (F28.345,F29.293), 52.4 (F28.346,F29.294), 52.5 (F28.347,F29.295), 52.6 (F19.16,F21.37,F28.348,F29.296), 52.7 (F28.349,F29.297), 52.8 (F28.350,F29.298), 52.9 (F28.351,F29.299), 53.1 (F21.38,F28.477,F29.426), 53.2 (F28.478,F29.427), 55.1, 55.14, 58.1 (F19.17,F28.243,F29.205), 58.2 (F18.7,F19.18,F28.244,F29.192), 58.3 (F18.8,F19.19,F28.245,F29.193), 61.1 (F16.37,F20.3,F22.6,F23.5), 63.1 (F21.47,F28.434,F29.383), 63.2 (F28.435,F29.384), 67.15 (F16.22,F21.56,F23.6,F24.8,F29.118), 67.16 (F16.23,F19.20,F29.119), 67.18 (F16.25,F19.21,F23.7,F29.121), 74.1 (F23.8,F24.1,F28.143,F29.348), 76.2 (F28.151), 76.7 (F28.156), 79.1 (F10.178,F15.5,F16.1,F18.9,F19.22,F23.1,F24.3,F28.376,F29.325), 79.3 (F16.3,F23.3,F24.5,F28.377,F29.326), 79.4 (F15.7,F16.4,F23.4,F28.378,F29.327), 80.4 (F28.391,F29.340), 80.5 (F28.392,F29.341)

Role of Iwi and Hapu: 14.31,27.30 (F10.96),47.36 (F19.186,F28.232),50.82 (F10.148,F14.321,F28.52,F29.52), 53.33 (F28.509,F29.459), 54.16, 58.21 (F28.263,F29.212), 62.31, 63.34 (F28.467,F29.416), 65.81, 67.23 (F16.30,F18.97,F19.187,F29.126), 71.59 (F16.85,F18.98,F19.188,F21.61), 76.38 (F28.187), 80.37 (F28.424,F29.373)

### Adequacy of Consultation

The section 42A report summarises the regional council's consultation process and engagement with Māori. This includes a pre-draft plan engagement, 34 meetings between 28 August 2017 and 1 December 2017 and information about other meetings, workshops and correspondence not included in the section 42A report.

Several submitters, including Combined Tangata Whenua Forum (CTWF) (53 - 1), Motiti Rohe Moana Trust (MRMT) (25 - 13), Ngai Te Rangi (47 - 20), Ngati Ranginui (76 - 1), Pirirakau (80 - 1) were critical of council's consultation process and level of engagement for PC9, whilst others considered it adequate.

The panel learned a range of expectations existed amongst various Māori groups regarding the depth and diversity of consultation. However, the panel recommends no change to PC9 be made because council had exceeded the minimum statutory requirements established under Schedule 1 Clause (3) of the RMA. However, the panel did note if council had invested more time working with iwi and hapū, it may have avoided the level of concern raised.

It was noted part D of the NPSFM relates to iwi and hapū involvement in the management of freshwater and in decision-making regarding freshwater planning. This section requires councils to 'involve' iwi and hapū, and to 'reflect' tangata whenua values and interests in the management of freshwater.

The panel understands PC9 is the first of a suite of plan changes and programmes that will give effect to the NPSFM, including NPSFM Part D. Given the involvement of iwi and hapu to date, expectations regionally and nationally in regard to iwi involvement in freshwater management and the fact that tangata whenua values and interests are within the scope of PC9, the panel has given considerable attention to this matter. The panel understands iwi and hapū are expected to be much more involved in consultation concerning subsequent plan changes. This is particularly true with the Water Management Area ('WMA') processes, which the panel understands will be less generic and more site-specific. The panel acknowledges that tangata whenua submitters to PC9 have high expectations of consultation, collaboration and involvement in future WMA processes.

Given that consultation is ongoing and that council is at the beginning of its NPSFM implementation programme, the panel is of the opinion that Council staff have undertaken sufficient engagement, for the purposes of PC9, to give effect to their duties under the RMA and NPSFM, so far as required for PC9. We acknowledge that Council staff communicated to the hearing panel that PC9 was the overarching framework and greater detail and engagement would occur through the WMA process. But, for unknown reasons, this was not adequately communicated effectively to all tangata whenua. We reiterate that the NPSFM sets out clear expectations around iwi and hapū engagement and there are other examples of good engagement in other councils that Bay of Plenty Regional Council may look to draw from in the future.

The panel considers that provisions in policy WQ P2 (i.e. 2(b), 2(e)ii, 2(h)), combined with the directive requirements of NPSFM Part D, now clarify engagement processes required. This should ensure council meets its obligations in relation o Part D of the NPSFM by 2026.

### Māori Values and Interests

45.3 (F28.387,F29.336), 47.2 (F19.24,F21.12,F28.198,F29.156), 76.1 (F28.150), 80.1 (F28.388,F29.337), 13.10 (F14.239,F21.9), 30.11 (F28.285,F29.233), 47.11 (F21.14,F28.207,F29.165), 50.9 (F10.73,F14.261,F21.24,F28.8,F29.8), 53.9 (F28.485,F29.435), 58.6 (F28.248,F29.196), 63.10 (F21.50,F28.443,F29.392), 65.5, 71.11 (F16.52), 76.14 (F28.163), 80.13 (F28.400,F29.349)

Several submissions i.e. *CTWF (53 – 3), Ngai Te Ahi (63 – 3), Ngati Pikiao (71 – 3)* consider PC9 does not adequately provide for tangata whenua values and interests. A number of submitters requested that PC9 more explicitly and completely address iwi values, including te mana o te wai i.e. *MRMT (25 – 9)*.

The panel heard that council conducted a review of 24 iwi and hapū management plans and engaged directly with many iwi and hapū. This is outlined in Appendix 8 of the section 42A report. The panel received further information from council, outlining other engagement not detailed in the section 42A report. Council staff explained that tāngata whenua values and interests will emerge more clearly during the WMA process. This includes the recognition of the mauri of water, which is understood to be a near-universally held value. Accordingly, council staff have recommended the following changes:

- 1) Amend objective WQ O3 to recognise the role of tangata whenua as kaitiaki is an important consideration, particularly in relation to resource management decisions that affect the relationship of Māori with their taonga.
- 2) Amend policy WQ P2 to require WMA processes to explore options to set limits that have particular regard to the iwi role as kaitiaki and to explicitly consider "tangata whenua values and interests" in the WMA process.
- 3) Add recognition of tangata whenua values and interests including the mauri of water at WQ O4, WQ O7, WQ O8, WQ I10, WQ O9, WQ P2, WQ I10, WQ O12, WQ P15, WQ M9, WQ R4, WQ R6,

Council will connect with submitters when updating engagement plans for the Kaituna and Rangitāiki WMAs. It will also seek their involvement in establishing engagement plans for the Tauranga and Rotorua WMAs to meet additional requests. The panel supports this approach and considers it consistent with the NPSFM that requires plans to reflect the values and interests of tangata whenua. In addition, the panel recommends a line be added to WQ P2 to include *Consider how to recognise and provide for te mana o te wai in freshwater management* which more directly obliges council to operationalise *te mana of te wai* as per NPSFM requirements. Several amendments throughout the document have included these recommendations, including new objective WQ 012.

### **Treaty of Waitangi**

Several submitters i.e. Ngati Pikiao (71 – 60), MRMT (25 – 5), Ngai Te Rangi (47 – 2) questioned the adequacy of PC9 in recognising the Treaty of Waitangi and/or its principles. For instance, MRMT said council has neither followed an appropriate treaty process nor adequately provided for tāngata whenua values, including kaitiakitangā and the application of matauranga Māori.

Some Māori submitters requested an explicit 'cultural allocation' of water to tangata whenua, over and above the limits proposed within PC9. Some submitters proposed there should be a percentage of flow allocated to iwi for their future use.

The panel understands many of these submissions seek to link rights set out in the Treaty of Waitangi, ownership claims and preferential use for tangata whenua in an NPSFM/RMA context. No evidence was received describing the rationale, framework or allocation model supporting 'cultural allocation'.

Council staff recommended no change to PC9 arising from these submissions, noting the WMA process must be aware of these matters (para 49, page 35).

The hearing panel view is that setting aside a cultural flow in PC9 is premature. First, a clear and definitive direction is required in higher order planning documents, along with a technical basis upon which to determine the quantum of such an allocation. Further, the panel received no evidence to support this proposition. That said, council staff have recommended policy WQ P2 in the section 42A report be amended. This amendment would require WMA processes to explore options that set limits with particular regard to iwi's role as kaitiaki and to explicitly consider "tangata whenua values and interests relating to freshwater" in the WMA process. The panel supports this being a matter for WMA processes to consider. Otherwise, the panel considers the matter of freshwater ownership beyond the scope of this plan change because it is a national issue yet to be addressed.

### Motiti Island

In the section 42A report, council staff confirmed an unintended anomaly whereby Map WQ1 (labelled "Map WQ 1 Water Management Areas") - which shows the extent of the WMAs - was supposed to show Motiti Island as part of the Tauranga WMA. The shading for Motiti Island was unintentionally omitted, so this populated offshore Island was shown belonging to no WMA. The

panel understands that other unpopulated offshore islands, which have no anticipated demand for freshwater resources, are unshaded because they will not be specifically addressed in WMA work.

The panel recommends the inclusion of Motiti Island in the Tauranga WMA and asks that the map be shaded to show this. It notes that although Motiti Island has distinct cultural, social and environmental features, its inclusion in the Tauranga WMA means it will be considered now, ahead of other WMAs. The panel understands this move is strongly supported by some older island residents and kaumatua.

### **Mataatua Declaration**

The Mataatua Declaration on Fresh Water has been referred to in the submissions of *Te Rūnanga o* Ngāti Awa. The declaration outlines the principles Mataatua tribes have signed up to and sets out recommendations on freshwater decision-making. The declaration contains broad statements that reflect tribal principles and aspirations regarding freshwater ownership, management and use, many of which are national issues beyond the jurisdiction of this panel. The panel has therefore made no specific recommendations on this matter.

### Terminology

In considering more broadly how PC9 address matters of significance to Māori, the hearing panel considers that PC9 should utilise the term 'tangata whenua' or 'iwi and hapū' rather than 'Māori' when considering issues that relate to Māori groups within a geographic area. Tangata whenua provides for a more relevant consideration, specifically in relation to consultation obligations. It is also more consistent with the NPSFM. There will be exceptions to this where the term Māori is being used in the context of section 6(e) of the RMA.

The hearing panel has reviewed the use of Māori terms throughout the PC9 document checking for spelling, grammar and use of macrons.

The hearing panel believes the amendment to WQ R6(e) is appropriate. The term 'tangata whenua' implies a broader approach/wider group of people should be consulted and considered as would be the case should the term "iwi" or "hapū" be used.

An advice note at WQ R6 implies that Māori landowners are tangata whenua. This advice note is ambiguous and unhelpful and has been deleted by the panel.

### Halt the PC9 Process

Several submissions have requested that PC9 be paused, restarted or rejected. Reasons given include awaiting the outcomes of Wai 2358 National Fresh Water and Geothermal Resources Claim and halting decisions until water ownership has been determined. Other reasons are identified on page 37 of the section 42A report. The panel considers these matters beyond the scope or decision-making power of the panel. Additionally, the panel notes that if council were to pause or halt its NPSFM implementation programme, it would run the risk of being unable to meet the deadlines it is required to meet under the NPSFM. Furthermore, reversion to the pre-existing plan provisions would mean no allocation limits or minimum flows are set, inviting largely unfettered exploitation of water resources.

### **Development of Māori Land**

Several submitters noted that in some circumstances Māori land can be disadvantaged by lack of access to water. In part, this stems from some land being alienated from past, relatively easy access to water. It is also allied to the socio-economic and legal issues relating to Māori land, including multiple owners and difficulty raising investment capital.

The panel considers that future WMA plans provide an opportunity to consider setting specific water allocations to address this concern. The panel also notes that some groundwater and surface water resources appear at or beyond their allocation limit. It therefore recommends WMA processes or later plan changes carefully consider the unique relationship tangata whenua have with their land and resources, then consider ways plan provisions might provide for this within a sustainable management framework. The panel is also mindful that this matter may also be addressed by central government.

### Decision-making and Management of Over-Allocated Catchments

### Main Matters for Decision

In addition to submissions, further submissions and material tabled at hearings or presented verbally, the panel has reviewed several documents concerning the PC9 approach to surface and groundwater allocation status. These were all referenced on Council's website on the PC9 page. Chief amongst these reports, a 2008 Opus International Consultants assessment looked at the effectiveness of the operative Bay of Plenty Regional Water and Land Plan as a part-catalyst for PC9 and made specific recommendations around the need to provide a more robust consent decision-making framework.

The panel recognises that proposed policies WQ P10 and WQ P11 are key parts of council's response to the Opus recommendations. As notified, WQ P10 states that council will **generally decline** applications to take and use water in over allocated catchments. This replaces the previous policy 68 in the NRRP which sought "To **consider granting** an application for a resource consent to take water from a river or stream ...".

The panel is also aware of council's 2016 "Assessment of Water Availability and estiamtes of current allocation levels October 2016" report (AWA), which determined the allocation status of surface and groundwater resources at that time. The AWA report determines the level of under or overallocation in catchments and water bodies and is driving substantial progress to automate and improve council's 'interim' water accounts. The panel recommends council provide clear guidance as to where and how to obtain information on levels of allocation in relation to PC9 and WMA water quantity limits.

Key decisions regarding over-allocated catchments centre on the level of precaution needed versus the level of certainty required when setting allocation limits (policies WQ P7 and WQ P12). Decisions must also address the integrated management of surface water and groundwater (WQ P9). This issue also covers the way consent applications will be dealt with in relation to allocation levels in a catchment or Freshwater Management Unit (policies WQ P10, WQ P11). And it looks at whether/how the council should review the large number of pre-1991 water permits that make many catchments theoretically over-allocated but not necessarily overused.

### Accounts

Many submissions sought a wide range of changes to the way council accounts for water. The section 42A report discusses some of these, as well as requirements of the NPSFM.

The panel supported recommendations in the section 42A report, noting it may be preferable to move much of this non decision-making text into an external guidance document similar to the AWA report. The report recommended WQ P25 (policy for freshwater accounting) be supported with a proviso that listed items are inclusive, not a complete list.

### Definitions

Several submissions addressed definitions – listed below:

Adaptive management conditions: WQ P7 - 73.6 (F14.60, F19.203) Crop and rootstock survival water: - 14.43, 27.42, 37.5 (F12.105,F14.414), 50.97 (F10.162,F12.106,F14.44), 62.43, 73.19 (F12.107,F14.429) Efficient allocation: - 65.92 (F15.80,F19.202,F27.240) Fire fighter training: - 5.1 (F30.1) Fully allocated in permitted activity rules: - 73.18 (F14.62,F15.83,F18.113,F19.204,F27.242,F4.31) Instream minimum flow requirement: WQ O7 - 13.28

```
(F14.26,F15.82,F17.50,F18.112,F20.57,F27.241,F4.29)
Net take: 73.27 (F13.7,F14.437,F14.79,F18.117,F27.248,F8.28)
Regionally significant infrastructure/industry: WQ P17 - 8.43 (F14.133,F15.81,F26.56), 48.38
(F14.171,F20.58,F26.58), 73.25 (F14.435,F14.77,F18.116,F27.246,F8.26)
Reasonable domestic needs: WQ O8 - 19.13 (F26.57)
Sustained decline in groundwater level: WQ O4 - 13.13 (F13.10,F14.241)
Water user group: WQ M8 - 30.52 (F28.326,F29.274,F4.30)
Values: - 41.4
```

The panel has considered the need for additional definitions throughout this report. These are discussed in this report in relation to the particular plan provision where they occur.

### Limits vs Thresholds, Interim vs Default

Before considering recommendations on over-allocation, the panel needs some clarity on definitions of allocation limits, thresholds and interim limits. The notified version of PC9 described the proposed allocation limits in this overarching regional plan as 'interim <u>limits</u>'. The section 42A report proposed the use of the term 'interim allocation <u>threshold</u>' in response to a submission from *Horticulture NZ* (27 - 9). However, that report only made the change in WQ I11, WQ P5 and WQ P15.

The term 'limit' is defined in the NPSFM 2014 as 'the maximum amount of resource use available, which allows a freshwater objective to be met'. As each WMA plan change comes into force, the panel understands more refined allocation 'limits' for each water body or FMU will be provided. However, as noted earlier, an absence of further science or lack of priority for limit-setting in some water bodies, may mean some water bodies retain the limits provided through PC9.

Consideration was given to a staff recommendation that a new undefined term 'threshold' be utilised to distinguish fully compliant NPSFM objective-meeting limits from interim, precautionary measures included in PC9. However, the panel considered use of 'threshold' could diminish the weight given to PC9 limits so does not support this staff recommendation. Instead, the panel recommends that limits set under PC9 continue to be referred to as 'interim limits' and 'interim allocation limits' because most interim limits are intended to be superseded through plan changes following each WMA process.

### **Over-abstraction Issue**

3.1, 8.1 (F12.8,F14.97,F17.2,F22.10,F26.5,F5.4,F6.4,F7.4), 12.2 (F14.335), 13.1 (F14.233), 30.2 (F28.276,F29.224,F4.4), 47.4 (F17.3,F18.20,F28.200,F29.159), 48.2 (F12.9,F14.136), 49.67 (F10.93), 50.1 (F10.67,F14.255,F19.38,F28.1,F29.1), 52.12 (F17.4,F18.21,F19.39,F28.354,F29.302), 53.4 (F17.5,F18.22,F28.480,F29.431), 58.4 (F28.246,F29.194), 63.5 (F17.6,F18.23,F28.438,F29.387), 67.19 (F16.26,F29.122), 71.4 (F16.47), 76.9 (F17.7,F18.24,F28.158), 77.1, 80.8 (F17.8,F18.25,F28.395,F29.344)

Several submitters suggested revision to the description of proposed issue WQ I1. They sought amendment of the reference to municipal water takes (48-2), ensuring consistent terminology (50-1) and avoiding generalisations (67-19).

Tāngata whenua submitters sought a revision of the order of adverse effects, to bring tāngata whenua values forward and to delete reference to existing uses. *Ngāti Pikiao Environmental Society* (71- 4) noted an important distinction between tāngata whenua values and their cultural values and asked that the term 'cultural values' be used. This was supported by staff. The panel agreed the description could be more concise but the reference to existing uses should be retained because WQ I1 is a statement of fact, not a judgement or solution.

On balance, the panel considers WQ I1 an adequate statement of the issue with very limited statutory purpose beyond framing the objectives and policies that follow. It is recommended no other changes be made to this provision.

### **Precaution vs Certainty**

4.8 (F10.4,F17.24,F18.72,F20.31), 6.21, 7.4, 8.17 (F14.110,F15.51,F18.73,F22.36,F26.16,F27.68), 17.5, 21.4, 30.53 (F28.327,F29.275), 31.23 (F14.390,F18.74), 39.14 (F18.75,F27.69), 43.9 (F13.3), 46.5, 47.25 (F28.221,F29.179), 48.19 (F14.152,F20.32), 49.30 (F14.196,F28.119), 50.49 (F10.86,F14.287,F19.142,F20.33,F25.39,F28.26,F29.26), 51.5, 53.22 (F28.498,F29.448), 63.23 (F28.456,F29.405), 65.48 (F18.76), 69.5, 70.5, 71.29 (F16.61), 73.5 (F10.169,F14.419,F17.25,F18.77,F28.83,F29.83), 76.27 (F28.176), 78.5, 80.26 (F28.413,F29.362)

Several submissions touched directly or indirectly on data confidence and certainty. Noble (35-1) said: The council has a challenge and an obligation to the region to give certainty to users and protection to our natural environment. Much information has been gathered over years and it will only be of value if it is explained and used to make good decisions. The precautionary principle should apply so that a natural resource is not over-allocated but it is wisely used.

As noted earlier, the panel had some difficulty addressing questions of certainty given the relatively uncertain science and data presented to it. In particular, the panel noted that the precautionary approach to allocating water, reflected in Policy WQ P7, contrasts with the certainty sought for water users, reflected in WQ P12.

In view of the pending detailed catchment-by-catchment reviews of allocations and limits in the WMA processes, the panel agreed it made sense to take a precautionary approach at this initial regional scale. An alternative, more generous allocation regime could later need to be clawed back if WMA assessments find reasons for more precautionary allocation limits. And claw-back is difficult. For this reason, no changes in relation to the precautionary tenor of WQ P7 are recommended.

Notwithstanding a need for caution, the panel agrees that existing water users should have certainty to continue their lawful use pending the outcome of WMA investigations. This includes legitimate permitted activity and non-consumptive users who, in most cases, have invested significantly and depend on water for their own wellbeing and that of their community. However, because many applicants have historically been allocated more water than is either used or justifiable (see WQ I3), that certainty should be limited to justifiable need. Allocations could also be fettered if WMA investigations support this as a suitable management option. The panel noted that consents issued under transitional arrangements prior to 1991 are likely to have been issued under much more generous conditions than is now the norm.

The panel discusses below what scope exists to review pre-1991 water take permits.

### **Stream Depleting Groundwater Takes**

6.3 (F19.42), 13.6 (F14.235), 30.7 (F28.281,F29.229), 49.9 (F10.42,F14.179), 50.5 (F10.70,F14.257,F28.5,F29.5), 66.1, 71.9, 6.23 (F19.144), 8.19 (F14.112,F15.52,F22.39), 10.18, 30.31 (F28.305,F29.253), 36.4, 39.15, 47.27 (F28.223,F29.181), 49.32 (F10.60,F14.198,F18.80,F28.121), 50.51 (F10.88,F14.289,F28.28,F29.28), 65.50,71.31 (F16.63), 76.28 (F28.177), 80.27 (F28.414,F29.363)

The panel agrees with staff and submitters who are seeking integrated management between groundwater and surface water within each catchment, especially where those waters are hydraulically connected.

Policy WQ P9 promotes integration between groundwater and surface water and seeks to reinforce *te mana o te wai* when setting groundwater allocation limits. Submissions generally supported this

conjunctive management of surface water and hydraulically connected groundwaters. While some submitters supported this, some noted council needs to to better understand the relationship between surface and groundwater e.g. Ngāti Manawa (6-23), Tauranga City Council (8-19), Irricon (36-4), Federated Farmers (50-51).

The *Department of Conservation (DOC) (13 - 28)* proposed incorporating a detailed definition for the degree of hydraulic connection, to ensure that stream depleting groundwater was considered in each surface water allocation block. The section 42A report recommended delaying incorporating this level of detail until it could be considered within each WMA planning process.

The panel saw some merit in including a default definition in PC9, as hydraulic interconnections are unlikely to vary significantly between WMAs. However, the panel had insufficient geohydrological evidence (e.g. scale of groundwater takes within specified distances of rivers) to justify making a decision which might significantly affect the allocation limit setting methodology and outcomes summarised in the AWA report. The hearing panel does not consider it possible to provide a detailed definition for the degree of hydraulic connection in this plan change. The staff recommendation in the section 42A report is therefore supported and the panel concurs that this level of detail can be addressed in the WMA process.

The panel agrees with *Trustpower's (49 - 32)* submission to change 'impacts' to 'effects' in WQ P9 as 'effect' is already clearly defined in s3 of the RMA.

## Whether Permitted Activity takes are Included within an Allocation Limit

WQ R1 Rule groundwater <5ha: 1.7, 11.14, 11.15, 12.29 (F14.362,F27.178), 14.32, 15.2, 16.5 (F14.50,F27.179), 27.31 (F10.97), 30.42 (F28.316,F29.264), 31.42 (F14.407,F18.104,F27.180), 33.11, 39.30 (F8.18), 47.37 (F12.79,F28.233), 49.57 (F10.64,F14.223,F27.181), 50.84 (F10.149,F14.42,F19.193,F21.30,F25.53,F28.54,F29.54), 52.24 (F28.366,F29.314), 53.34 (F12.80,F27.182,F28.510,F29.460), 58.22 (F28.264,F29.213), 59.6, 61.3 (F16.38,F21.45),62.32,63.35 (F12.81,F27.183,F28.468,F29.417), 65.82,68.3 (F27.184), 71.60, 76.39 (F12.82,F27.185,F28.188), 79.9 (F28.383,F29.332), 80.38 (F12.83,F27.186,F28.425,F29.374)

WQ R2 Pule PA Groundwater >5ha: 1.8, 7.6, 11.16, 11.17, 14.33, 16.6 (F14.51,F27.188), 17.7, 20.1, 20.5, 20.6, 21.6, 27.32 (F10.98), 30.43 (F28.317,F29.265), 31.43 (F14.408,F18.105,F27.189), 33.12, 39.31 (F27.190,F8.19), 46.7, 47.38 (F12.84,F28.234), 49.58 (F10.65,F14.224,F27.191), 50.85 (F10.150,F14.323,F14.46,F19.194,F21.31,F25.54,F28.55,F29.55), 51.7, 52.25 (F28.367,F29.315), 53.35 (F12.85,F28.511,F29.461,F8.23), 58.23 (F28.265,F29.214), 59.7, 61.4 (F16.39,F21.46), 62.33, 63.36 (F12.86,F28.469,F29.418), 65.83, 66.11, 69.7, 70.7, 71.61, 73.13 (F14.424,F27.192), 76.40 (F12.87,F27.193,F28.189), 78.7, 80.39 (F12.88,F28.426,F29.375)

**WQ R3 Rule permitted activity surface water**: 1.9, 7.7, 11.18, 11.19, 14.34, 16.7 (F14.52,F27.194), 17.8, 20.2, 20.7, 20.8, 21.7, 27.33 (F10.23), 30.44 (F28.318,F29.266), 31.44 (F14.409,F27.195), 33.13, 38.13 (F10.38,F14.92,F27.196), 38.16 (F14.9), 39.32 (F12.89), 46.8, 47.39 (F27.187,F28.235), 48.32 (F14.166),49.59 (F10.66,F14.225,F27.197), 50.86

(F10.151,F14.43,F19.195,F21.32,F25.55,F28.56,F29.56,F31.1), 51.8, 52.26 (F28.368,F29.316), 53.36 (F28.512,F29.462), 58.24 (F28.266,F29.215), 59.8, 60.14, 62.34, 63.37 (F28.470,F29.419), 65.84, 66.12 (F14.66), 69.8, 70.8, 71.62, 73.14 (F10.176,F14.425,F28.89,F29.89), 76.41 (F28.190), 78.8, 80.40 (F28.427,F29.376)

WQ R5 Rule controlled activity (previously permitted groundwater): 1.11, 14.36 (F27.214), 16.8 (F14.53,F27.215), 17.10,27.35 (F10.25,F27.216), 30.46 (F28.320,F29.268), 31.46 (F14.57,F18.106,F27.217), 39.34 (F19.197,F27.218), 47.41 (F27.219,F28.237), 48.33 (F14.167), 49.61 (F14.228,F27.220,F3.13,F31.6,F9.32), 50.90 (F10.155,F14.327,F14.47,F21.34,F28.60,F29.60), 52.28 (F28.370,F29.318), 53.38 (F28.514,F29.464), 58.26 (F28.268,F29.217), 61.6 (F16.40,F27.222), 62.36

(F27.223), 63.39 (F27.224,F28.472,F29.421), 64.7 (F28.334,F29.282), 65.86, 66.13, 71.64, 73.16 (F10.177,F12.94,F14.427,F28.91,F29.91), 76.43 (F27.225,F28.192), 80.42 (F27.226,F28.429,F29.378)

Proposed rules WQ R1 and R2 (groundwater) and WQ R3 (surface water) set conditions for permitted activity takes.

Several submitters asked that the allocation status referred to in the rules should either specifically reference WQ P5 (the interim limit) or state how allocation status is determined. Others asked that the reference to allocation status be deleted. The Assessment of Water Availability and Estimates of Allocation Levels October 2016 Report has highlighted the fact that many streams are allocated above their theoretical limit.

The panel agrees that clarity is important, and that the interim allocation limits identified in WQ P5 are based on limited data. The document listing current allocation status (AWA) sits outside the Plan. Allocation status will change over time as new water is allocated and better data becomes available.

The panel recommends inclusion of a detailed definition of the term 'fully allocated', including a narrative for its calculation.

The question has been raised by *Trustpower (49 - 57 to 59)* and others on whether an allocation limit includes provision for some assessed level of permitted activity and s14(3) takes, which do not require consent. The *Federated Farmers* submission (50:86) sought deletion of clauses that disqualify takes in fully allocated streams. They proposed production of a table that determined limits based on stream size.

The relative uncertainty of AWA limits means that the panel supports that water taken under permitted activity rules WQ R1, WQ R2 and WQ R3 are not included in water accounts at this stage. The panel was concerned about exacerbating over-allocation in surface waters under permitted activity rule WQ R3.

Submitters on this subject, including *Royal Forest and Bird Protection Society NZ*, were concerned the potential for take from small streams could cumulatively deplete the resource beyond its sustainable limit. Consistent with the "hold the line" approach of PC9 the panel recommends that WQ R3(d) that disqualifies new takes from establishing in fully or over allocated resources be retained. Once information regarding permitted activity water takes is gathered through the registration process, and final WMA limits are established, Council will be in a strong position to determine if further action is needed to address effects of permitted takes and those drinking water takes provided for under s14(3)(b) of the Act.

WQ R1 to WQ R3 require that permitted takes must be registered with the council within one year of PC9 becoming operative, which will assist council to develop an accurate and effective set of water accounts. The panel supports this requirement.

The revision of metering requirements that relate to stock drinking water has been explained under WQ P24. Because the requirement to meter stock drinking water has been removed, an additional clause, requiring a report on the location of all water takes on a property has been added. *DairyNZ submission 38-11* sought to replace metering requirements for stock drinking water with modelling. The submission is accepted in part. In order to model water allocation/use it is necessary to know where the water is being taken in a stream or aquifer.

Section 12.1.10 of the 42A report a recommends delaying inclusion of permitted takes within allocation limits rather than adding an estimate of these takes to the totals of consented allocations. Instead, the report suggested including permitted takes in the allocation quota when each WMA plan change is drafted. The panel agrees with this approach, noting that council currently lacks sufficient data or the required technical basis to include a numerical value for permitted and

s14(3)(b) takes. Council is, however, working towards developing a more complete and accurate picture of freshwater use.

### Water Harvesting and Secondary Allocation

6.20, 10.16, 13.20 (F14.247), 14.11, 27.10, 30.29 (F28.303,F29.251), 31.22 (F14.388), 32.13 (F19.140), 36.1, 36.2 (F12.48), 48.18 (F14.151,F20.30), 49.29 (F10.58,F14.195,F28.118,F9.11), 50.48 (F10.85,F12.49,F14.286), 62.11, 65.47, 71.27, 71.28, 81.2 (F12.50,F19.141,F20.28,F28.69,F29.69)

Policy WQ P6 encourages water harvesting during periods of high river or stream flow. The panel understands that this policy would enable the intermittent taking of water, when the flow exceeds the median flow. Any application to take water under this policy would be considered in accordance with relevant plan provisions as be processed as a discretionary activity under WQ R10.

Policy WQ P8 which provides for secondary allocation of surface water is considered redundant and has been deleted, because revised WQ P5 now specifically identifies secondary allocation. The panel has added additional matters to WQ P15 and WQ P16 to ensure cumulative effects, flow variability and compliance with the conditions of take are addressed in any consents for water taken under this policy or as flood harvesting.

The panel also considered the impact of secondary allocation or harvesting takes on primary allocation status, noting these are generally distinct allocation blocks. WQ P5 provides for secondary allocation and WQ P6 for flood harvesting. Water for flood harvesting or secondary allocation could be taken for either storage or, directly used where applicants were able to cope with low reliability of the water supply. Secondary flow would be switched off when particular environmental triggers such as low flows occur. The panel has recommended inclusion of additional advice in an advice note beneath WQ P5 to assist understanding of secondary allocation. The panel considers that the default allocation limit for a particular water body refers to primary allocation and does not take into account secondary allocation. Policies include several limits including that the combined total of primary and secondary allocation does not exceed 50% of the Q<sub>5</sub>7 day low river flow. Amendments to WQ P16 seek to ensure consents maintain flow variability by considering take relative to the median flow.

The panel noted an *Oji Fibre (10 - 16)* submission requesting water harvesting does not adversely affect existing consented takes. *Ngāti Pikiao (71 - 28 e.g.)* requested a clause in WQ P6 aimed at achieving a sustainable balance between social, cultural, economic and environmental well-beings.

The panel has provided for amendments addressing these matters, with changes sought by *Trustpower* addressed in the section on hydroelectricity generation. The panel's general recommendation is that issues relating to specific catchments and existing consents are best addressed within the WMA and consents processes. Current, largely discretionary rules require consideration of effects on existing users via policy WQ P9.

Submissions sought to better define periods of high flow in WQ P6 and pointed out the need for flow fluctuation. The panel noted flow variation requirements and the definition of a high-flow period need to be based on scientific evidence and community - including tāngata whenua - feedback for specific water bodies. Refinement of water take limits will occur in the WMA processes. For example, it may be acceptable to take water from a stream into a storage dam for short periods at higher secondary take rates if that stream has no significant ecological values.

As noted by *DOC* and others, secondary allocation must maintain flow variability because it plays an important role in river and stream health. *DOC (13-21)* also pointed out secondary flow should only be taken from the main stem of streams larger than 1000 l/s because they are more resilient to abstraction. They also noted that lake or spring fed rivers should not be used because they are much

less variable, with secondary allocations potentially seriously affecting flow variability. For those reasons, the panel has adopted the section 42A recommendation to provide for limits for secondary water harvesting in WQ P5: *minimum flow of 100% of Q<sub>s</sub>7day low flow for streams with a mean flow of greater than 5 m3/s, and a secondary allocation limit for rivers for streams with a mean flow of greater than 5 m3/s of 40% of the Q<sub>s</sub>7 day low flow, providing that the combined total of primary and secondary allocation does not exceed 50% of the Q<sub>s</sub>7 day low flow. All applications to take water that exceeds the primary allocable limits identified in WQ P5(b) or WQ P5(e) will be processed as discretionary activities under WQ R10.* 

*Tauranga City Council* (8 -18) has asked that WQ P8 apply to new applications and not to renewals of existing consents. This is not considered a significant issue as existing municipal takes are renewed as a controlled activity and the applicant will determine whether they are applying for primary or secondary allocation. In any case, WQ P8 is now deleted.

### Non-consumptive takes within allocation limits

Several submitters including *Federated Farmers (50-13), DOC (13-23), Fonterra (73-26)* asked that non-consumptive 'zero net' takes be more explicitly addressed within PC9.

The panel considered advice in the section 42A report that PC9 is concerned solely with consumptive uses of water (s4.1.3). It agreed with staff that damming and diversion provisions in the Natural Resources Management Plan (i.e. rules 44 to 48 in particular) are sufficiently broad to accommodate changes to the water quantity provisions proposed in PC9.

The panel notes that 'zero net take' activities such as dewatering (e.g. *Oil Companies 18-10*) are also non-consumptive takes and some takes (for example process water) have almost immediate discharges of water. For example, the Tasman Mill takes then returns water to the Tarawera River, but is not treated as net takes in the AWA accounts. This has the effect of causing a downstream over-allocation status when this non-consumed water could be used for a range of downstream purposes. The panel therefore recommends that the definition of allocation status exempts non-consumptive takes when they are deemed a 'zero net take'. The intention is not to allow debate about takes where a portion of water is returned but simply to allow for genuine net zero takes and discharges to be exempt from allocation limits when the net effect on river flows and/or groundwater levels is *de minimus*.

Fonterra sought a definition of net take. The panel agrees that clarity about how water allocation status is determined is important. Amendments to the definitions section and a new schedule have been proposed to address this concern.

### "Generally decline" and "consider granting"

WQ P10 Generally decline applications: 6.24, 8.20 (F12.53,F14.113,F18.81,F19.145,F26.19,F27.82), 10.19, 12.16 (F14.348), 13.22 (F12.54,F14.249,F19.146,F27.83), 14.13, 18.4 (F10.12,F27.84,F28.95,F29.95,F8.6), 22.3 (F12.55,F27.85,F9.37), 27.12, 30.32 (F28.306,F29.254), 31.25 (F14.392,F27.86), 33.6, 37.3 (F14.412,F17.27,F19.147), 38.6 (F10.32,F14.85,F27.87), 38.7 (F10.33,F12.56,F14.86,F25.41), 39.16, 40.3 (F27.88), 43.11 (F27.89), 48.20 (F12.57,F14.153,F15.53,F20.37,F26.20,F27.90), 49.33 (F14.199,F27.91,F28.122,F9.13), 50.52 (F10.89,F14.290,F14.291,F25.40,F28.29,F29.29), 52.19 (F27.92,F28.361,F29.309), 53.24 (F28.500,F29.450), 55.4, 58.14 (F28.256,F29.204), 60.5 (F20.36,F23.19,F26.18,F27.81), 62.13, 63.25 (F28.458,F29.407), 65.51 (F27.93), 71.32 (F16.64,F27.94), 73.7 (F10.170,F14.59,F27.95,F28.84,F29.84), 76.29 (F28.178), 80.28 (F28.415,F29.364)

**WQ P11 Generally grant applications:** 5.6 (F30.6),6.25,8.21 (F12.59,F14.114,F18.82),14.14,27.13,30.33 (F28.307,F29.255),39.17,43.12 (F27.96),48.21 (F12.60,F14.154,F18.83,F20.38),49.34 (F14.200,F9.14),50.53

(F10.90,F14.292,F25.43,F28.30,F29.30),52.20 (F18.84,F19.148,F27.97,F28.362,F29.310),58.15 (F18.85,F19.149,F27.98,F28.257,F29.206), 62.14, 65.52, 71.33 (F18.86,F27.99), 75.5 (F27.100,F28.149,F29.154)

Policies WQ P10 and WQ P11 set the expectations of the limit-setting process being initiated under PC9. WQ P10 indicates that council will 'generally decline' water permit applications to take and/or use water where this would result in an interim allocation limit being exceeded. Policy WQ P11 is the converse, indicating that council will 'generally grant' applications that do not result in the relevant allocation limit being exceeded.

The panel reviewed whether a more proactive approach was needed in the wording of these policies, perhaps rewording Policy WQ P10 to a more positive 'generally grant' except in specified circumstances. The section 42A report identified a third option provided by water management consultant Rob van Voorthuysen, namely 'consider granting but as B-class' permits, i.e. akin to secondary allocations provided for in PC9.

On balance, the panel considers the current approach is needed to strongly signal to water users and stakeholders that council will manage water resources within limits as required under the NPSFM. The NPSFM Objective B2 states: *To avoid any further over-allocation of freshwater and phase out existing over-allocation.* WQ P10 achieves this. Accordingly, we recommend 'generally decline' be retained in WQ P10, while in WQ P11 the wording is modified to 'generally grant'.

The panel also considered the special case of application renewals facing a 'generally decline' policy framework. While agreeing with the PC9 approach to discourage further allocation within overallocated resources, the panel recognises this puts existing investment at undue risk given the relatively cautious and interim nature of the current accounts. The panel therefore recommends clarifying that renewals do not face the same presumption in WQ P10 and are exempt from the policy. In addition the panel recommends that WQ R9 is amended to specifically include certain renewal applications as a Restricted Discretionary Activity.

The text beneath WQ R10 that refers to the potential review of resource consents was opposed by a number of submitters (8-39, 10-34, 48-36, 50-96). The panel agree with these submitters and consider that the paragraph should be deleted. Matters relating to review of resource consents are addressed in WQ P3.

### Phase out over-allocation

**WQ P3: Phase out over-allocation:** 6.17 (F12.40), 7.2, 8.15

(F12.41,F14.108,F15.44,F22.34,F26.12,F27.67), 10.13 (F25.26,F26.13),13.17 (F14.244), 14.9 (F25.27), 17.3, 21.2, 27.8 (F10.18,F18.66,F25.28),30.26 (F12.42,F28.300,F29.248), 31.20 (F14.386,F26.14), 34.2, 38.5 (F10.31,F12.43,F14.84,F25.29,F8.14), 39.11, 46.3, 47.23 (F28.219,F29.177), 48.16 (F14.149), 49.25 (F10.55,F14.192,F28.114,F9.7), 50.36 (F10.111,F12.44,F14.274,F15.45,F25.30,F28.23,F29.23), 50.37 (F10.112,F14.275,F25.31), 50.38 (F10.113,F14.276,F25.32), 51.3, 53.21 (F28.497,F29.447), 54.11, 54.12, 62.9, 63.22 (F28.455,F29.404), 65.44, 69.3, 70.3, 71.24 (F16.60), 73.3 (F10.167,F12.45,F14.417,F17.18,F18.67,F20.20,F28.81,F29.81), 76.26 (F28.175), 78.3, 80.25 (F28.412,F29.361), 81.5 (F12.46,F28.72,F29.72)

Policy WQ P3 seeks to phase out water over-allocation by 1 October 2027. It supports NPSFM Objective B2. The policy has been subject to a variety of submissions commenting that it is too ambitious, insufficiently ambitious, should not apply to municipal water suppliers or is not explicit enough.

The panel considers that the target date of 2027 is likely to be optimistic given the number of WMA processes that must be completed or under way by then. The panel also recognises that there may

be situations arising out of WMA-focussed investigations that warrant a more immediate response to over-allocation concerns. For example, it may be that in working with industry an agreement is reached supporting a fast-track approach. For this reason, the panel has made changes to WQ P3 signalling an earlier date may be agreed in WMA processes.

The panel is aware council is constrained by the need to implement a process for renewing some 500 pre-1991 water permits expiring on 1 October 2026 (approximately 45% of all BOPRC water permits), as well as abiding by the timeframes in the NPSFM. In practice, this means the bulk of council's phase-out gains are unlikely to be achieved until these consents are reviewed. No change to the 2027 date is therefore recommended.

The panel has recommended changes to WQ P3 to set agreed methods and timeframes that phase out over-allocation. These additions will also set limits, manage allocation and provide for flow variability to ensure phase-out efforts are conducted in a way that provides for these additional matters. A new clause is recommended that identifies ss168(7) and 130(5) of the Act to provide broader scope to review consents in over allocated water bodies.

Policy WQ P2(i) requires the identification of methods to address over-allocation and has been slightly reworded, along with WQ P3, to clarify its intent. The phasing out of over allocation is to start by 1 October 2027 unless Council or a WMA plan change deems an earlier date appropriate.

The panel was concerned about the potential for timeframe slippage for limit setting in WMA processes, which could affect the effectiveness of the renewal processes for expiring pre-1991 consents.

### **Objectives relating to water takes**

WQ O3 Manage abstraction of surface water: 6.6 (F19.72), 8.7

(F12.25,F14.101,F15.21,F19.73,F22.21,F26.9,F27.36,F5.7,F6.7,F7.7), 10.4 (F25.5), 11.1 (F18.55,F19.74), 12.10 (F14.48,F15.27,F17.11,F22.22), 13.12 (F14.22), 26.3, 28.3, 29.3, 30.15 (F19.75,F28.289,F29.237), 31.7 (F11.6,F11.7,F14.373,F27.37,F4.13), 32.7 (F15.22,F19.76), 43.2, 47.16 (F15.23,F18.56,F19.77,F28.212,F29.170), 49.14

WQ O4 Manage abstraction of ground water: 6.7, 12.11 (F14.343,F22.23), 30.16 (F28.290,F29.238), 31.8 (F14.374,F27.38,F4.15), 32.8, 39.2, 43.3, 49.15 (F10.48,F14.184,F28.105), 50.18 (F10.77,F14.35,F28.15,F29.15), 52.15 (F28.357,F29.305), 58.8 (F28.250,F29.198), 60.4 (F22.24,F23.17), 65.14, 65.15 (F18.57), 65.16, 65.17

Objective WQ O3 relates to the abstraction of surface water, while Objective WQ O4 relates to groundwater.

A number of submitters 32-7, 49-14, 50-13, 64-3, 67-28 sought to incorporate additional matters relating to damming and diversion. The panel does not support these submissions for reasons outlined earlier in relation to the non-consumptive uses that are addressed elsewhere in the RNRP.

The section 42A report describes a range of amendments to wording at 7.1.3. These have been accepted by the panel for the reasons provided in the section 42A report. Some, e.g. adding 'mauri' in WQ O3(a), are described elsewhere in this report.

### Enforcing limits & pre - 1991 consents expiring 1 October 2026

A large number of submitters raised issues relating to enforcement within submissions classified to other topics. A fundamental aim of PC9 is to set interim water allocation limits that establish clear standards for consent holders and applicants pending decisions from WMA processes, while slowing the potential degradation of water body values caused by incremental increases in allocations. The panel considers this an important matter for consideration. For example, *Federated Farmers of New* 

Zealand (50-29), CNI Iwi Land Management Ltd (65-43), Ballance Agri-Nutrients Limited (4 - 8) suggested the possible use of the RMA consent review processes, to review existing consents. DOC (13-17) suggested amending WQ P3 to refer to s68(7).

Almost half the region's permits to take water were granted prior to 1991. These are deemed under the RMA to expire 35 years after the RMA came into force, i.e. on 1 October 2026. The section 42A report at para 107 states that "Until NPSFM compliant limits are set under policy WQ P2 of PC9, Council has limited ability to review these resource consents."

The panel understand this statement was made because water permits cannot be reviewed under s68(7) or s128 of the RMA for the purpose of re-allocating water to another person. That would not be the rationale for review; the rationale would be to phase out over-allocation as required under NPSFM Objective B2. The panel acknowledges that in the Aoraki court case, which pre-dated the NPSFM, the High Court said that where parliament gave consent authorities the power to interfere with an existing consent, it has acted expressly and for very limited purposes. However, those purposes include the application of s68(7), s128 reviews and s329 water shortage directions. Critically, in the Aoraki case, the court noted the Act was forward looking and only in very special cases, such as where adverse effects were occurring, did it envisage a review of consents that predated the new rule.

To paraphrase, s68(7) of the RMA, in conjunction with s130(5), allows a regional plan to include a rule relating to flows or rates of use of water (e.g. an allocation limit) and to state whether the rule shall affect the exercise of existing consents, such as water permits. It can also require consent holders to comply, which would normally happen through s128 reviews of consents, including reviews of the rates of water use allocated under that consent. Given that NPSFM Objective B2 requires councils to phase out over-allocation, it appears a provision aimed at phasing out over-allocation in a staged manner up to 2027 would be useful within PC9. Some submitters (e.g. *CNIF, Timberlands and Ngati Tamawera*) were concerned about the level of protection afforded existing consents while others (e.g. *Mathis, the Oil Companies and Oji Fibre*) wanted the investment in existing consents to be recognised, for example in WQ P15.

The panel understands that many of these pre-1991 consents include a condition enabling cancellation within 12 months of council giving notice. Council can also cancel a resource consent by written notice if the consent has been exercised in the past but has not been exercised in the preceding 5 years (s126 RMA).

A number of submitters (*i.e. Ngati Makino 28-23, Ngati Ranginui Incorporated Society 29-23*) oppose delays in council addressing over-allocation that they consider to be an issue now. The panel has some sympathy with these submissions and notes paper over-allocation can dramatically over-complicate consent administration by portraying a situation that may not be the case in reality. The panel also considers that the Council needs the ability to stage renewals of the pre-1991 consents, and s68(7) reviews are a mechanism to avoid what may otherwise be a massive job when 500+ consents expire at one time.

The panel has considered the applicability of s68(7) of the RMA to this situation and acknowledges there is scope to consider amendments that enable a review of consent conditions to achieve the proposed plan change limits.

The panel therefore wishes to signal that consent reviews may occur. To this end, the panel recommends a new sub clause (c) in policy WQ P3 referring to the potential for s68(7) reviews. WQ P3 could also provide an incentive for users within over-allocated water bodies to work together to lower their allocations. Water will also be clawed back via the reconsenting of consents and there is nothing to stop council proactively assessing consents in anticipation of their upcoming review.

# Flows, Levels, limits and Resource Consent Considerations

A large number of submissions touched on this broad topic and are listed below. Where appropriate, those specific to particular topics are also listed beneath the relevant topic.

#### WQ I4 + WQ I5 Over abstraction of ground and surface water: 13.4 (F14.21), 30.5

(F28.279,F29.227), 47.7 (F28.203,F29.161), 8.3 (F12.15,F14.98,F15.10,F22.14,F26.7), 13.5 (F14.234), 30.6 (F28.280,F29.228), 47.8 (F18.30,F28.204,F29.162), 48.4 (F12.16,F14.137), 50.4 (F10.69,F14.256,F28.4,F29.4), 52.14 (F18.31,F28.356,F29.304), 58.5 (F18.32,F28.247,F29.195), 71.7 (F16.50,F18.33)

**WQ I6 Abstraction reduces stream variability:** 6.3 (F19.42),13.6 (F14.235), 30.7 (F28.281,F29.229), 49.9 (F10.42,F14.179), 50.5 (F10.70,F14.257,F28.5,F29.5), 66.1, 71.9

WQ I11 The taking of water in over allocated rivers or aquifers: 8.5

(F14.100,F15.15,F18.40,F19.47,F22.18), 12.7 (F14.340), 13.11 (F14.240), 30.12 (F28.286,F29.234), 31.13 (F14.379,F8.12), 38.2 (F10.28,F14.81), 48.8 (F14.141,F17.10,F18.41,F20.10), 49.12

(F14.182,F28.103,F29.103,F4.10,F9.1), 50.10 (F10.74,F14.262)

WQ O3 Manage abstraction of surface water: 6.6 (F19.72), 8.7

(F12.25,F14.101,F15.21,F19.73,F22.21,F26.9,F27.36,F5.7,F6.7,F7.7), 10.4 (F25.5), 11.1

(F18.55,F19.74), 12.10 (F14.48,F15.27,F17.11,F22.22), 13.12 (F14.22),26.3,28.3,29.3,30.15

(F19.75,F28.289,F29.237), 31.7 (F11.6,F11.7,F14.373,F27.37,F4.13), 32.7 (F15.22,F19.76), 43.2, 47.16 (F15.23,F18.56,F19.77,F28.212,F29.170), 49.14

WQ O4 Manage abstraction of ground water: 6.7, 12.11 (F14.343,F22.23), 30.16 (F28.290,F29.238), 31.8 (F14.374,F27.38,F4.15), 32.8, 39.2, 43.3, 49.15 (F10.48,F14.184,F28.105), 50.18 (F10.77,F14.35,F28.15,F29.15), 52.15 (F28.357,F29.305), 58.8 (F28.250,F29.198), 60.4 (F22.24,F23.17), 65.14, 65.15 (F18.57), 65.16, 65.17

WQ O6 Adverse effects of water abstraction: 3.4, 6.9, 8.9 (F12.28,F14.102,F15.31,F22.27), 10.6, 30.18 (F28.292,F29.240), 39.5 (F12.29), 43.4 (F13.1), 48.10 (F12.30,F14.143,F15.32,F17.12,F20.13), 49.65 (F10.101,F12.31,F14.232,F9.4), 50.20 (F10.78,F12.58,F14.264,F28.16,F29.16), 53.15 (F28.491,F29.441), 54.8, 63.16 (F28.449,F29.398), 65.19, 67.29 (F16.36,F29.132), 71.15, 76.20 (F28.169), 77.4, 80.19 (F28.406,F29.355)

WQ O7 Setting of limits: 6.10 (F19.87), 8.10 (F14.103,F15.33,F22.28), 10.7, 11.2 (F19.88), 18.2 (F10.10,F28.93,F29.93,F8.4), 30.19 (F28.293,F29.241), 31.9 (F14.375,F4.16), 37.2 (F14.58,F19.89,F27.42), 43.5, 47.46 (F19.90,F28.242,F29.190), 49.17 (F10.102,F14.17,F28.107), 50.21 (F10.79,F14.37,F28.17,F29.17), 52.16 (F28.358,F29.306), 53.16 (F19.91,F28.492,F29.442), 58.9 (F28.251,F29.199), 63.17

#### WQ P3: Phase out over-allocation: 6.17 (F12.40), 7.2 ,8.15

(F12.41,F14.108,F15.44,F22.34,F26.12,F27.67), 10.13 (F25.26,F26.13), 13.17 (F14.244), 14.9 (F25.27), 17.3, 21.2, 27.8 (F10.18,F18.66,F25.28), 30.26 (F12.42,F28.300,F29.248), 31.20 (F14.386,F26.14), 34.2, 38.5 (F10.31,F12.43,F14.84,F25.29,F8.14), 39.11, 46.3, 47.23 (F28.219,F29.177), 48.16 (F14.149), 49.25 (F10.55,F14.192,F28.114,F9.7), 50.36

(F10.111,F12.44,F14.274,F15.45,F25.30,F28.23,F29.23), 50.37 (F10.112,F14.275,F25.31), 50.38

(F10.113,F14.276,F25.32), 51.3, 53.21 (F28.497,F29.447), 54.11, 54.12, 62.9, 63.22

(F28.455,F29.404), 65.44, 69.3, 70.3, 71.24 (F16.60), 73.3

(F10.167,F12.45,F14.417,F17.18,F18.67,F20.20,F28.81,F29.81), 76.26 (F28.175), 78.3, 80.25 (F28.412,F29.361), 81.5 (F12.46,F28.72,F29.72)

**WQ P6 Water harvesting**: 6.20, 10.16, 13.20 (F14.247), 14.11, 27.10, 30.29 (F28.303,F29.251),31.22 (F14.388), 32.13 (F19.140), 36.1, 36.2 (F12.48), 48.18 (F14.151,F20.30), 49.29

(F10.58,F14.195,F28.118,F9.11), 50.48 (F10.85,F12.49,F14.286), 62.11, 65.47, 71.27, 71.28, 81.2 (F12.50,F19.141,F20.28,F28.69,F29.69)

**WQ P7 Precautionary approach:** 4.8 (F10.4,F17.24,F18.72,F20.31), 6.21, 7.4, 8.17 (F14.110,F15.51,F18.73,F22.36,F26.16,F27.68), 17.5, 21.4, 30.53 (F28.327,F29.275), 31.23 (F14.390,F18.74), 39.14 (F18.75,F27.69), 43.9 (F13.3), 46.5, 47.25 (F28.221,F29.179), 48.19 (F14.152,F20.32), 49.30 (F14.196,F28.119), 50.49

(F10.86,F14.287,F19.142,F20.33,F25.39,F28.26,F29.26), 51.5, 53.22 (F28.498,F29.448), 63.23 (F28.456,F29.405), 65.48 (F18.76), 69.5, 70.5, 71.29 (F16.61), 73.5

(F10.169,F14.419,F17.25,F18.77,F28.83,F29.83), 76.27 (F28.176), 78.5, 80.26 (F28.413,F29.362) **WQ P8 Secondary allocable flow:** 6.22, 8.18 (F14.111,F22.37,F26.17), 10.17 (F27.70), 11.5, 11.6 (F27.71), 11.7 (F27.72), 13.21 (F12.51,F14.248,F17.26,F18.78,F19.143,F20.34,F27.73,F3.5), 14.12, 27.11, 30.30 (F28.304,F29.252), 31.24 (F14.391,F27.74), 36.3 (F27.75,F27.79), 43.10 (F27.76), 47.26 (F28.222,F29.180), 49.31 (F10.59,F14.197,F27.77,F28.120,F3.6,F9.12), 50.50

(F10.87,F14.288,F28.27,F29.27), 55.3, 60.11 (F20.35,F22.38,F27.78), 62.12, 65.49, 71.30 (F16.62), 81.3 (F12.52,F18.79,F27.80,F28.70,F29.70)

**WQ P9 Integrate ground and surface water management**: 6.23 (F19.144), 8.19 (F14.112,F15.52,F22.39), 10.18, 30.31 (F28.305,F29.253), 36.4, 39.15, 47.27 (F28.223,F29.181), 49.32 (F10.60,F14.198,F18.80,F28.121), 50.51 (F10.88,F14.289,F28.28,F29.28), 65.50, 71.31 (F16.63), 76.28 (F28.177), 80.27 (F28.414,F29.363)

**WQ P10 Generally decline applications:** 6.24, 8.20 (F12.53,F14.113,F18.81,F19.145,F26.19,F27.82), 10.19, 12.16 (F14.348), 13.22 (F12.54,F14.249,F19.146,F27.83), 14.13, 18.4

(F10.12,F27.84,F28.95,F29.95,F8.6), 22.3 (F12.55,F27.85,F9.37), 27.12, 30.32 (F28.306,F29.254), 31.25 (F14.392,F27.86), 33.6, 37.3 (F14.412,F17.27,F19.147), 38.6 (F10.32,F14.85,F27.87), 38.7 (F10.33,F12.56,F14.86,F25.41), 39.16, 40.3 (F27.88), 43.11 (F27.89), 48.20

(F12.57,F14.153,F15.53,F20.37,F26.20,F27.90), 49.33 (F14.199,F27.91,F28.122,F9.13), 50.52 (F10.89,F14.290,F14.291,F25.40,F28.29,F29.29), 52.19 (F27.92,F28.361,F29.309), 53.24 (F28.500,F29.450), 55.4, 58.14 (F28.256,F29.204), 60.5 (F20.36,F23.19,F26.18,F27.81), 62.13, 63.25 (F28.458,F29.407), 65.51 (F27.93), 71.32 (F16.64,F27.94), 73.7

(F10.170,F14.59,F27.95,F28.84,F29.84), 76.29 (F28.178), 80.28 (F28.415,F29.364)

**WQ P11 Generally grant applications:** 5.6 (F30.6), 6.25, 8.21 (F12.59,F14.114,F18.82), 14.14, 27.13, 30.33 (F28.307,F29.255), 39.17, 43.12 (F27.96),48.21 (F12.60,F14.154,F18.83,F20.38), 49.34 (F14.200,F9.14), 50.53 (F10.90,F14.292,F25.43,F28.30,F29.30), 52.20

(F18.84,F19.148,F27.97,F28.362,F29.310), 58.15 (F18.85,F19.149,F27.98,F28.257,F29.206), 62.14, 65.52, 71.33 (F18.86,F27.99), 75.5 (F27.100,F28.149,F29.154)

WQ P15 Considering applications to take and use water: 4.10 (F10.6), 6.29, 8.24 (F12.63,F14.117,F15.58,F22.42,F26.24,F27.115,F5.9,F6.9,F7.9), 10.23 (F17.38), 14.18, 18.5 (F28.96,F29.96), 18.6 (F28.97,F29.97,F8.7), 26.5, 27.17, 28.5, 29.5,30.37 (F28.311,F29.259), 31.29 (F14.395,F27.116), 32.15 (F19.156), 33.8, 36.5, 39.20 (F13.9,F27.117,F3.7,F8.17), 43.15, 49.39 (F14.205,F18.88,F27.118,F28.125,F9.16), 50.57 (F10.123,F14.296,F28.34,F29.34), 50.58 (F10.124,F14.297,F28.35,F29.35), 50.59 (F10.125,F14.298,F28.36,F29.36), 50.60 (F10.126,F14.299,F19.157,F25.45,F28.37,F29.37,F8.21), 56.5, 58.17 (F27.119,F28.259,F29.208), 62.18, 65.56, 71.37 (F16.68,F17.39,F19.158,F27.120), 73.23 (F14.433,F14.75), 77.6, 81.7 (F28.74,F29.74)

WQ P16 Conditions on resource consents: 8.25 (F12.64,F14.118,F15.59,F22.43,F26.23), 10.24, 12.19 (F14.352), 13.23 (F12.65,F14.250,F3.8), 14.19, 18.7 (F10.8,F28.98,F29.98), 27.18, 31.30 (F14.396,F20.43), 39.21 (F19.159,F3.9), 49.40 (F10.61,F14.206,F28.126,F9.18), 50.61 (F10.127,F14.300,F25.47,F28.38,F29.38), 53.25 (F28.501,F29.451), 62.19, 63.26 (F28.459,F29.408), 65.57, 65.58, 66.8, 71.38, 73.9 (F10.172,F14.421,F28.86,F29.86), 76.30 (F28.179), 77.7, 80.29 (F28.416,F29.365)

WQ P17 Duration of a resource consent: 2.1 (F17.40), 6.30 (F12.66), 8.26 (F12.67,F14.119,F17.41,F22.44,F27.122,F5.10,F6.10,F7.10), 10.25 (F27.123), 12.20 (F12.68,F14.353,F22.45,F27.124), 14.20, 26.6, 27.19, 28.6, 29.6, 30.38 (F27.125,F28.312,F29.260), 31.31 (F14.397,F2.4), 32.16,39.22 (F27.126), 40.5, 43.16, 47.29 (F27.127,F28.225,F29.183), 48.23

(F12.69,F14.156,F14.157,F20.44,F26.25,F27.128), 49.41 (F14.207,F27.129,F28.127,F9.19), 50.62 (F10.128,F14.301,F25.46,F28.39,F29.39,F8.22), 53.26 (F27.130,F28.502,F29.452), 55.10 (F27.131), 55.12 (F17.42,F27.132), 56.6, 60.6 (F12.70,F23.20,F26.26,F27.133), 61.2 (F19.160,F27.134), 62.20, 63.27 (F27.135,F28.460,F29.409), 64.5 (F17.43,F19.161,F27.136,F28.332,F29.280), 65.59 (F27.137), 68.1 (F12.71,F26.27,F27.138), 71.39 (F16.69,F17.44,F19.162), 73.24

(F10.173,F14.434,F14.76,F18.115,F8.25), 76.31 (F27.139,F28.180), 80.30 (F27.140,F28.417,F29.366) **WQ P18 NPSFM requirement:** 47.30 (F19.163,F28.226,F29.184), 50.63 (F10.129,F14.302,F18.89), 53.27 (F19.164,F28.503,F29.453), 63.28 (F19.165,F28.461,F29.410), 65.60, 71.40, 76.32 (F19.166,F28.181), 80.31 (F19.167,F28.418,F29.367)

**WQ P22 Groundwater bore construction:** 48.25 (F14.159), 50.67 (F10.133,F14.306), 65.64, 71.43 **WQ M6 Connection ground and surface water:** 39.28 (F12.104), 48.29 (F14.163), 50.79 (F10.145,F14.318), 65.78, 71.56 (F16.82)

WQ R10 RDA take and use water: 1.16, 7.8, 8.38 (F14.130,F22.55,F26.49), 10.33, 14.41, 16.9 (F14.54,F27.238), 18.9 (F10.13,F14.70,F27.249,F8.9), 21.9, 27.40, 30.51 (F28.325,F29.273), 31.51 (F18.109), 33.17, 33.18, 39.37, 43.20 (F14.67), 46.10, 47.45 (F28.241,F29.189), 50.95 (F10.160,F14.332,F28.65,F29.65), 51.10, 52.32 (F29.322),53.42 (F28.518,F29.468), 58.31

WQ R11 DA take and use water: 1.17, 8.39 (F12.103,F14.131,F15.71,F18.110,F26.50), 10.34 (F14.68,F15.72,F17.48), 14.42, 18.10 (F14.71,F8.10), 27.41, 39.38 (F15.73,F17.49,F3.15,F8.20), 43.21, 48.36 (F14.12,F20.55,F26.51), 50.96 (F10.161,F14.333,F18.111,F28.66,F29.66), 62.42, 71.70

### WQ P18

WQ P18 was inserted by the NPSFM 2014 and as such the panel has recommended no changes be made to it.

### Minimum flows and allocation limits

**WQ P4: Maintain flow variation in streams:** 6.18 (F19.134), 10.14 (F15.46), 13.18 (F14.245,F15.47,F17.19,F18.68,F19.135,F20.21,F3.3), 30.27 (F19.136,F28.301,F29.249), 39.12, 47.24 (F18.69,F28.220,F29.178), 49.27 (F10.56,F11.11,F14.193,F28.116,F9.9), 50.39 (F10.84,F14.277), 65.45, 71.25

WQ P5: Interim allocation limits: 6.19, 7.3, 8.16 (F14.109,F15.50,F18.70,F22.35,F26.15), 10.15 (F17.20), 11.3 (F15.49), 11.4 (F15.48,F20.22), 12.15 (F14.347,F17.21), 13.19 (F12.47,F14.246,F17.22,F19.137,F20.23,F3.4), 14.10, 17.4, 21.3, 22.2 (F18.71,F9.36), 27.9 (F10.19), 30.28 (F28.302,F29.250), 31.21 (F14.387), 34.3, 39.13, 43.8, 46.4, 48.17 (F14.150,F20.24), 49.28 (F10.57,F14.194,F28.117,F9.10), 50.40 (F10.114,F14.278,F17.23,F20.25), 50.41 (F10.115,F14.279,F20.26,F25.33), 50.42 (F10.116,F14.280,F20.27,F25.34,F28.24,F29.24), 50.43 (F10.117,F14.281,F25.35), 50.44 (F10.118,F14.282,F25.36,F28.25,F29.25), 50.45 (F10.119,F14.283,F19.138,F25.37), 50.46 (F10.120,F14.284,F25.38), 50.47 (F10.121,F14.285), 51.4, 62.10, 65.46, 69.4, 70.4, 71.26, 73.4 (F10.168,F14.418,F28.82,F29.82), 78.4, 81.1 (F19.139,F20.29,F28.68,F29.68)

The panel has made minor editorial changes to WQ I5 intended to improve readability.

Policy WQ P4 provides for consideration of flow variability, while WQ P5 sets interim (default) primary allocation limits and potentially secondary allocation limits pending establishment of locally specific limits under WMA plan changes. Minor changes were sought by *Trustpower (49 - 27)* to replace "setting limits" with "setting environmental flows and/or levels" to ensure consistency with NPSFM terminology. The panel supports this change. Some submissions sought to either include or limit this policy to damming and diversion activities, which are covered by the RNRP and therefore not within the scope of PC9. The panel concurs with the section 42a responses to other submissions on WQ P4.
Policy WQ P5 sets interim water allocation "limits" until locally specific limits are set via a WMA process. Submissions were balanced both for and against calling these interim "limits". The panel discussed whether PC9 should be regarded as an interim plan or a default plan, as documented earlier in this report.

The panel notes that policy WQ P5 is largely technical and provides for a primary surface water allocation limit of 10% of the Q<sub>6</sub>7 day low flow and 35% of residual average annual aquifer recharge for groundwater. The interim limits are intended to "roll over" existing water and land plan practices (Q<sub>6</sub>7 Day, 35% RAAR) and to support clearer decision-making through more directive policy. While several amendments are proposed, the panel generally supports the roll over and use of the proposed metrics.

#### $Q_{{}_{5}}7$ day vs MALF as basis for setting allocation limits and minimum flows

The panel makes some detailed observations below, in relation to the AWA report about the technical metrics used to set allocation limits and minimum flows. The discussion also looks at ways to provide certainty to users and stakeholders about the calculation of those limits and existing allocation status.

The panel supports basing PC9 surface water allocation limits on the five-year seven-day low flow ( $Q_s$  7-day). This is the historic metric used in the Bay of Plenty. MALF is widely used, including in the draft NES on Ecological Flows. But  $Q_s$  7day is used in neighbouring regions Gisborne and Waikato. The critical factor is the percentage of  $Q_s$  7-day used to set an allocation limit (10% is proposed in WQ P5) and minimum flow (90% in WQ P5). Both are conservative, necessarily broad in scope and are not tailored to the specific values of specific rivers or streams, which will occur in the WMA process. Water permit applications can still be made above these limits, although WQ P10 puts the onus on applicants to provide a thorough assessment.

*Federated Farmers (50 - 43)* has suggested inclusion of an additional clause recognising existing allocation as being within the limits. Their purpose is to ensure renewal applications are not assessed as exceeding interim limits and then declined. The panel supports this intent but considers that because WQ P10, WQ P12 and WQ R9 all provide for renewals of consents in over-allocated water bodies, subject to efficient use and other criteria, the effect of the submission is achieved in PC9. However an advice note is provided at WQ P5 explaining how these exceptions operate. The panel notes that the draft NES on ecological flows and water levels provided a similar exemption from limits for existing allocation.

*Federated Farmers (50 - 43, 50 - 44)* also sought to provide for secondary allocations for surface water within WQ P5. The panel supports this and recommends adopting the specific limits identified in the section 42a report for streams with a mean flow exceeding 5 m<sup>3</sup>/s. These limits are loosely based on the proposed NES on ecological flows and water levels, which generally has less conservative limits than proposed in PC9. Combining the primary allocable flow with the secondary allocable flow of 40% of  $Q_s$  7 day enables an allocation of 50% of  $Q_s$  7 day on streams where the mean flow exceeds 5m<sup>3</sup>/s.

*Trustpower (49 - 18)* sought an additional objective stating that environmental flows and/or levels and freshwater quality limits will be set in all WMAs, to achieve the freshwater objectives established for each FMU. This additional objective is unnecessary as it is addressed in the NPSFM (Policy CA2).

#### Low flows and aquifer levels

**WQ P29 Water conservation**: 8.31 (F14.124,F22.50,F26.31), 10.28, 11.12, 31.39 (F14.404,F18.93), 49.48 (F14.214,F9.27),50.73 (F10.139,F14.312,F28.48,F29.48), 65.71

**WQ P30 Actions during low flow**: 5.8 (F30.8), 8.32 (F12.73,F14.125,F22.51,F26.32), 14.25, 27.24 (F18.94), 31.40 (F14.405), 49.49 (F14.215,F9.28), 50.74 (F10.140,F14.313,F28.49,F29.49), 62.25, 65.72, 71.50 (F16.76)

WQ P31 Priority during low flow: 4.11 (F10.7,F18.95,F27.164), 5.4 (F28.129,F29.134,F30.4), 8.33 (F14.126,F26.33), 12.25 (F14.358,F20.47), 14.26 (F26.34), 15.10, 19.8, 26.9, 27.25 (F10.94,F26.35), 28.9, 29.9, 31.41 (F14.406,F18.103,F2.6,F26.36,F27.165), 37.4 (F12.74,F14.413), 38.15 (F14.94,F25.51), 43.19 (F27.166), 48.27 (F12.75,F14.161),49.50 (F11.14,F14.216,F27.167,F9.29), 50.75

**WQ P31 Priority during low flow** 4.11 (F10.7,F18.95,F27.164), 5.4 (F28.129,F29.134,F30.4), 8.33 (F14.126,F26.33), 12.25 (F14.358,F20.47), 14.26 (F26.34), 15.10, 19.8, 26.9, 27.25 (F10.94,F26.35), 28.9, 29.9, 31.41 (F14.406,F18.103,F2.6,F26.36,F27.165), 37.4 (F12.74,F14.413), 38.15 (F14.94,F25.51), 43.19 (F27.166), 48.27 (F12.75,F14.161), 49.50 (F11.14,F14.216,F27.167,F9.29), 50.75

Low flows and aquifer levels relate to periods when, for reasons such as drought or cumulative water use, the stream flow or aquifer levels have fallen. At these times, permits to take water are restricted to stop the minimum flow or level being breached through continued taking of water.

Several submitters to policy WQ P31 (priority at low flow) sought a ranking. The panel felt it was unnecessary to specifically identify priorities. The *New Zealand Fire Service Commission (5-4)* sought to include water for emergency firefighting response. Firefighting is provided for in legislation so it is unnecessary to include. Other submitters sought water for energy, industrial and farming purposes, in addition to drinking water. These are not supported as they fail to identify how cultural, ecological and recreational impacts on the environment would be addressed.

The panel agrees that management of water takes under low flow or low groundwater level conditions may not necessarily require cessation of the water take. Replacing the word "cease" in proposed policy WQ P30(d) with "manage" is more appropriate.

The section 42A report at para 106 states 'While the concept of taking action during periods of low flows or aquifer levels was generally supported by submitters, it is agreed that beyond the rights provided for by RMA s329, or identified on specific resource consents, Council has no ability to give effect to restrictions prior to WMA environmental flows and/or levels being set under proposed policy WQ P2(e). Therefore proposed policy WQ P29 is redundant and should be deleted.' The panel does not agree with this view, as it is possible that consent reviews could set minimum flows or levels on consents. Furthermore, the panel considers that as PC9 is to operate as a default plan, WQ P29 remains relevant in any circumstance where a s329 water shortage direction needs to be issued. This is the same reason given in the section 42A report for retaining WQ P30. It clarifies the council's expected response, both then and when minimum flows or levels have been set under WMA processes. Therefore WQ P29 has been retained.

*Beef* + *Lamb New Zealand* suggested some useful amendments to policies to provide more specificity about efficient water use (81 - 11) and priority during low flows (81 - 12). The panel agrees the measures suggested in 81 - 11 are useful pointers for efficient water use and has incorporated them into policy WQ P13. However the suggestions in 81 - 12 either conflict with other policies or have already been included elsewhere and have not therefore been recommended.

### Matters of Consideration and Conditions on Resource Consents

Proposed policy WQ P15 lists matters that must be taken into account when considering any application for resource consent. The policy attracted a large number of submitters, with many seeking the adoption of the policy without change. Several submitters specifically sought to retain clauses (d) and (e), which relate to consideration of the benefits of the proposed take and the value

of investment it relates to. WQ P16 sets out matters to be addressed by conditions on resource consents.

The panel considered a large number of submissions as summarised in the staff section 42A report relating to resource consent assessment and conditions (Policies WQ P15 and WQ P16). The panel is generally supportive of the staff analysis. However it notes use of the term "must" in WQ P16 was confusing and identified the importance of distinguishing between types of limits referenced in WQ P5, ensuring cumulative effects of activities are addressed and using clear and more appropriate language (for example, "manage or cease" vs "cease"). The panel further notes that these lists will be non-exclusive.

As referred to in the Water Harvesting and Secondary Allocation section above, additional matters have been added to WQ P15 and WQ P16 in relation to consideration of such applications.

### Crop and rootstock survival water

*Horticulture NZ* provided evidence supporting its premise that retaining 25% of base irrigation allocation would be acceptable to them at times when minimum flows or levels occur. They did not however present any evidence as to the vulnerability of irrigated kiwifruit and avocados to cessation of watering. The panel heard that some of these crops are not irrigated and are naturally resilient to low water situations. Given the prevalence of irrigation consents for horticultural crops among all consents in the Bay of Plenty and their particular concentration in some areas, allowing irrigation to continue after cease-taking was implemented would potentially have a significant effect on minimum flows. This is at odds with the directives in the NPSFM. The panel understands there have been few if any recent periods of extreme weather events that might warrant the need for such arbitrary measures.

The panel supports in part the submission of *Eastern Regional Fish and Game (37 - 4)* by requiring (in WQ P16, WQ P31 and in Schedule 7) that any provision for crop and rootstock survival water must be supported by scientific evidence of need. Furthermore, the panel considers a limit of 25% of the allocated (consented) water should be the maximum allowable for rootstock survival, once scientific need for crop and rootstock survival water has been established.

The panel recommends that Schedule 7 Irrigation be revised to include a statement that for the purposes of crop and rootstock survival water the allocation must not exceed 25% of the total consented daily water demand, that an assessment of need be provided and that the cumulative effect of all allocation shall not cause the minimum flow to fall below 80% of  $Q_5$  7 day. An additonal clause is included in WQ P16 to this effect.

#### Stock drinking water

*Beef + Lamb New Zealand Ltd (81 - 9)* requested an objective that specifically states water allocation should, even at minimum flows or below, provide for stock and human drinking. Policy WQ P31 specifically gives priority to reasonable animal drinking and sanitation needs during times of low water flows or aquifer levels. Furthermore, the Act expressly provides for domestic and human water consumption as of right and within environmental limits (RMA s14(3)). The panel therefore considers no new objective is needed.

#### Flows, levels, limits and resource consents

The hearing panel supports in part the proposed amendment to Issue WQ I11. However, it is recommended amendments more clearly state over-allocation as an issue.

The hearing panel recommends that wording be amended in WQ O11 to include replacing 'problem' with the word 'issue' and to provide some geographic context. The hearing panel also recommends

that clause (b) be amended to replace 'water take consents' with 'water take permits' to more accurately reflect RMA terminology as water permits are a type of resource consent (RMA s87).

Amendment to Objective 3 to replace the word 'restore' with 'improve' is recommended by the panel. This provides greater clarity as the term 'restore' sets undefined targets and creates unrealistic expectations of achieving a near-pristine or original environmental state. This amended wording better reflects the objectives of the NPSFM.

The hearing panel recommends WQ O3 clause d is amended to clarify that the objective is referring to authorised users of water.

The use of the term mauri is supported by the hearing panel as a defined term in the RPS. The panel notes that the RPS requires that proposals that may affect the relationship of Māori and their culture and traditions must recognise and provide for a number of matters including the role of tangata whenua as kaitiaki of the mauri of their resources (RPS Policy IW2B). Similarly, proposals that may affect matters of significance to Māori must recognise and provide for mauri, particularly in relation to fresh, geothermal and coastal waters, land and air (IW 5B). Furthermore, the panel notes council has a supportive policy towards development of iwi management plans. These plans, particularly the more recent ones, may help staff to better understand the mauri of freshwater resources. Therefore, the panel supports an amendment to the staff-proposed new clause (h) that seeks to ensure all water takes recognise and provide for mauri. This is likely to be a matter for consideration in larger consent applications.

The panel also recommends inclusion of a new clause in WQ O4 to provide for the interrelationships of ground and surface water. Provisions highlighting the need to maintain the relationship of tangata whenua with freshwater resources are also recommended by the panel. These amendments provide consistency with Rule WQ R6.

The panel noted dewatering and the discharge of sediment contaminated water from building and construction sites is a permitted activity under RNRP rule 42, which was not reviewed in the plan change. The *Oil Companies (submitter 18)* and *Oceania Gold (submitter 43)* sought to enable and provide for dewatering. The hearing panel considered staff recommendations and agreed that amending WQ O4(a) to provide for dewatering would provide certainty for dewatering activities without posing any more than a minor and very short-term local risk. This matter has also been discussed in relation to non-consumptive takes.

*Royal Forest and Bird Protection Society NZ* (39-2) and *DOC* (13-13) sought a definition of sustained decline, in light of the prominence of this phrase in objective O4. The panel agrees that the term requires clarification and supports the staff recommendation that it be: *A continuing long term decline in mean annual groundwater levels or artesian pressure,* with additional caveats that the period and significance of decline depend on factors such as climate and the characteristics of the aquifer in question.

### **Consent terms**

WQ P17 Duration of a resource consent: 2.1 (F17.40), 6.30 (F12.66), 8.26 (F12.67,F14.119,F17.41,F22.44,F27.122,F5.10,F6.10,F7.10), 10.25 (F27.123), 12.20 (F12.68,F14.353,F22.45,F27.124), 14.20, 26.6, 27.19, 28.6, 29.6, 30.38 (F27.125,F28.312,F29.260), 31.31 (F14.397,F2.4), 32.16, 39.22 (F27.126), 40.5, 43.16, 47.29 (F27.127,F28.225,F29.183), 48.23 (F12.69,F14.156,F14.157,F20.44,F26.25,F27.128), 49.41 (F14.207,F27.129,F28.127,F9.19), 50.62 (F10.128,F14.301,F25.46,F28.39,F29.39,F8.22), 53.26 (F27.130,F28.502,F29.452), 55.10 (F27.131), 55.12 (F17.42,F27.132), 56.6, 60.6 (F12.70,F23.20,F26.26,F27.133), 61.2 (F19.160,F27.134), 62.20, 63.27 (F27.135,F28.460,F29.409), 64.5 (F17.43,F19.161,F27.136,F28.332,F29.280), 65.59 (F27.137), 68.1 (F12.71,F26.27,F27.138), 71.39 (F16.69,F17.44,F19.162), 73.24 (F10.173,F14.434,F14.76,F18.115,F8.25), 76.31 (F27.139,F28.180), 80.30 (F27.140,F28.417,F29.366)

Proposed policy WQ P17 provides for a consent term of no more than 10 years where the water body exceeds the interim limits (WQ P5), or no more than 15 years for all other water bodies. This is consistent with the RPS. A longer term is proposed for regionally significant infrastructure, non-typical activities such as dewatering or when the applicant can demonstrate a longer term is appropriate.

The panel recognises that the term of a resource consent is an important consideration to a consent holder because it provides security of access to water, it supports capital investment and the application process can be costly. However the panel is also aware that long consent terms can lead to inefficiencies due to changes to technology or markets, or when new information becomes available. In the case of PC9, which is an interim <u>and</u> default plan change, the panel is also concerned that longer consent terms imply a greater level of confidence in the state of the resource than may be warranted. This is in light of limitations in the information supporting the plan change.

On this basis, the hearing panel supports the guidance provided to applicants in Policy WQ P17 when applying for resource consents. It also supports the recommendations provided by staff in relation to the wording of WQ P17 clauses (a) and (c). These amendments highlight that these clauses are alternatives, where the applicant can demonstrate the longer duration of a consent is appropriate.

The hearing panel does not support the reduction of consent terms from 10 years to 5 years as sought by some submitters. This conservative approach would likely create undue pressure and restrictions on water supply and regional infrastructure and could dramatically increase consent administrative costs and times.

The hearing panel considers that increasing the length of resource consent durations for water takes will limit the ability to encourage or require uptake of improved technology and promote new water management practices. As previously noted, it is also inappropriate in light of the WMA plan changes which will follow PC9.

The panel considers listing regionally significant infrastructure is unnecessary as this information is already listed in the RPS. The list (taken from the RPS) includes:

- Rotorua International, Whakatāne and Tauranga airports
- The regional strategic transport network as defined in the Bay of Plenty Regional Land Transport
   Plan
  - or state highways as defined in the National State Highway Classification System
- The Bay of Plenty rail network
- Commercial port areas including Tauranga Harbour and its channels necessary for the operation of ports and related adjoining land and storage tanks for bulk liquids
- The national electricity grid, as defined by the Electricity Governance Rules 2003
- Facilities for the generation and/or transmission of electricity where it is supplied to the national electricity grid and/or the local distribution network. Broadband and strategic telecommunications facilities, as defined in section 5 of the Telecommunications Act 2001
- Strategic radio communications facilities, as defined in section 2(1) of the Radio Communications Act 1989
- Local authority water supply network and water treatment plants
- Local authority wastewater and stormwater networks, systems and wastewater treatment plants
- Pipelines for the distribution or transmission of natural or manufactured gas or petroleum and other energy sources
- Regional parks
- Tauranga, Rotorua and Whakatāne public hospitals.

### **Consent assessment and conditions**

Proposed policy WQ P15 lists matters that must be taken into account when considering an application for resource consent. The policy attracted a large number of submitters, with many seeking the adoption of the policy without change. Several submitters sought to retain clauses (d) and (e), which consider the benefits of the proposed take and the value of investment it relates to.

The hearing panel accepts in part the staff recommendations to amend WQ P15. In particular:

- Reword clause (a) to emphasise the need to consider efficiency of water use (and link it to WQ P13). This change is consistent with the NPSFM (Objective A2, Policies B2, B4)
- Clause (b) should emphasise water availability relative to the interim allocation limits and allocation within the catchment and also consider measures to phase out over-allocation. This is more directive and clear that the notified text.
- Volume and timing of water take are important considerations, in addition to rate. Volume is particularly relevant in limiting the duration of high-rate takes.
- Amend clause f to consider the cumulative effects of water abstraction which can significantly impact water quality. This amendment provides clarification that assimilative capacity is not progressively eroded as water is removed from a system. It needs to be an important consideration.
- For the sake of clarity, add an additional clause (la) considering the extent to which the applicant may have consulted with tangata whenua and taken into account any views expressed. This recommendation expresses the need for consent staff to consider how iwi or hapu matters are considered, to ensure consultation is as meaningful as possible, even though it is not mandatory for consent applications.
- The panel does not support the deletion of clause (g) as proposed by staff in the section 42A report. The panel considers the effect on tangata whenua values should be considered in this policy, consistent with part D of the NPSFM.
- The Galatea-Murupara Irrigation Society (32 15) suggested the take and use of water may have beneficial effects on downstream flooding risk and on erosion resulting from flooding, which should be taken into account when considering an application for resource consent. The hearing panel finds it extremely unlikely that water takes will have a material effect on downstream flooding because water takes usually occur at times of water shortage, which is not generally the case with flooding. Furthermore, irrigation demand is vastly lower than flow rates during flood events that affect the lower catchments.

In addition a new clause relating to cumulative effects of water harvesting and secondary allocation is previously discussed in that section.

### Technical basis for allocation limits and minimum flows

The AWA report was released at the same time as PC9. This document provides information on how estimates of water availability have been made, how much water is available for allocation from a particular water body and how much water is already allocated or remains available for allocation, applying policy WQ P5 from PC9. Rules in PC9 use the water accounting described in the report to determine the type of consent applicants must seek. Therefore, water accounting is a crucial aspect of PC9 – without it, water permit applicants are unable to determine their consent activity status.

The AWA report shows that a large number of surface water and some groundwater resources are allocated above the interim limits identified in policy WQ P5. The AWA report does not include estimates of unconsented water use that relate to unauthorised use, nor permitted takes such as for stock and domestic drinking water. The report subtracts allocation but does not add back in any water returned to the streams – such as cooling water or industrial process water. The groundwater section does not cover the whole of the region and AWA does not report on surface water bodies without consented allocations.

The hearing panel understands council's reasons for not including current water allocation status for water bodies in PC9. Those numbers would rapidly make the plan outdated as further information is gathered through BOPRC's proposed water accounting system or through metering or other tools. Council is moving swiftly to replace the static AWA report with a real-time/daily updated web-based tool that performs a similar function. AWA information will eventually be presented more accurately via on-line tools.

The panel recognises that although AWA provides guidance on how allocation limits have been set, this is not clear in the plan itself. Council's proposed in-house water accounting system will substantially improve on the AWA report by documenting the allocation of a water resource at any given time and must, for legal reasons, be transparent in terms of how these allocations are calculated. Under s76(2) and 68(2) of the RMA, rules have the force and effect of a regulation but are still subject to the Act and must conform to common law principles and conventions regarding validity.

Accordingly, the hearing panel considers that the bulk of AWA methodological guidance should sit outside PC9 for entirely practical reasons. However, the broad scale approach to allocation status assessment methodology for creating water allocation limits should be included in the plan. This should give readers of the plan certainty about factors that may affect the status of allocation relating to them or water bodies of interest to them. Tauranga City Council (8-16) sought clarity on the linkage to the interim allocation and how it fits within PC9 provisions. It is agreed that the role of AWA and its relationship to PC9 should be clarified.

Water information is continually updating, especially as new consents are granted. The panel believes council would be unduly burdened if it had to update the plan whenever this information changed. This would, in most instances, require additional plan change processes. Accordingly, the panel has added new Schedule 15 of PC9 being a summary of the methods for the calculation of average annual recharge (renamed as Residual Average Annual Recharge as explained below) for groundwater, the 5-year low flow  $Q_5$  7 day for rivers and streams, and the consequential allocation status of a water body. As discussed earlier, submissions asked that 'fully allocated' be defined, which the panel has included in the definitions section of PC9.

Please see below for some recommendations on the AWA methodology. While they mostly sit outside the PC9 decisions, the do affect the allocation status of particular catchments and are included here to assist council staff implementing the methodology. They have also influenced the panel recommendations on Schedule 15 of PC9 which is more correctly labelled Method for estimating surface water and groundwater allocation status.

The interim groundwater allocation limit for each groundwater catchment is calculated as 35% of the what is labelled Average Annual Recharge (s3.1 AWA report). The Average Annual Recharge is clearly shown (e.g. Fig 4 AWA) as excluding a proportion of groundwater flow required to sustain stream flow. The panel conserved that redefining a technical term (Average Annual Recharge) that already has a clear hydrological meaning could create uncertainty about the actual allocation limit in an aquifer. Average Annual Recharge would normally be calculated as the sum of annual effective rainfall plus any irrigation recharge (i.e. rainfall+irrigation-evapotranspiration), plus net annual surface water losses to groundwater for that aquifer. To avoid confusion, the panel recommends that Average Annual Recharge be relabelled Residual Average Annual Recharge (RAAR). Total Average Annual Recharge would be calculated for each aquifer or zone, then the proportion estimated for sustaining stream flow subtracted to calculate RAAR upon which the 35% allocation limit is based. It should be noted that this does not change allocation status or revise the method by which allocation status is calculated, it simply clarifies terminology.

Allocating 35% of RAAR is very conservative, i.e. precautionary, but may reflect the high levels of uncertainty and spatial averaging around the calculated values. For Canterbury aquifers, for

example, a figure of 50% of total Average Annual Recharge has been used. As knowledge of the dynamics of BOP groundwater catchments is developed, and WMA and FMU-specific rules follow, it will be possible to tailor the allocation regime to specific management objectives for each water body. These would usually include avoidance of seawater intrusion, maintenance of minimum flows in connected surface water, and avoidance of excessive localised groundwater drawdowns that are caused by high pumping rates and lead to loss of well yields. In that case, policy is likely to move away from an allocation approach of percentage of RAAR. Section 3.1 of the AWA report states the actual method to estimate groundwater recharge varies depending on data availability. The panel's opinion is the methodology needs consistency and needs to be documented to provide some certainty for applicants. Schedule 15 has been developed to do this.

PC9 proposes an allocation limit for rivers and streams of 10% of the 5-year 7-day annual low flow (Q5) as well as a minimum flow of 90% of Q5. There appears to be some confusion about the terminology, including reference to 'mean' annual low flow. Unlike Mean Annual Low Flow (MALF) advocated by *DOC* as an alternative hydrological metric, Q5 is not an averaged (mean) flow. The 5-year 7-day annual low flow should be calculated from the time series of the annual lowest weekly naturalised flow - meaning no upstream water takes affect the flow - as the low flow which occurs on average every 5 years. This is described in brief in Schedule 15.

Q5 and MALF are readily calculated for river and stream sites where flow recording sites exist. However, other sites in the same stream or similar streams must be estimated by correlation or catchment flow modelling. Figure 6 of the AWA report does not explain how this is done. The AWA report (s3.2) rightly points out that the Q5 at the bottom of each catchment may differ from the listed values, as those values apply at a monitored point in the catchment. The implication is that allocation status must be compliant only for each catchment overall, not at every point along the river or stream. Trustpower submission (49-28) sought clarity as to where and how interim environmental flow and allocation limits will be set in catchments. For example, a large water take in the headwaters of an otherwise unstressed catchment may comply overall, but could have depleted local flows significantly more than 10% of Q5 at the point of take. Thus, policy needs to be clear that the 10% and 90% of Q5 metrics apply and vary at every reach of the river or stream. To be fair, this is stated later in s4.4 and is now stated in Schedule 15.

There is a potential overlap between the policy-making function of PC9 and the technical implementation of allocation limits stated in s4.2 of the AWA report. Effectively, s4.2 states that as permitted activity and currently unauthorised takes are formalised, the amounts considered allocated will be added to current allocation totals for the relevant water body in BOPRC's internal accounting system. The section 42A report at 12.1.10 recommended not doing this until WMA processes refine the allocation status in each WMA and FMU. The panel supports this approach for the reasons described above. The AWA report will need to be revised to ensure consistency between it and PC9.

Section 4.3 of the AWA report summarises the reasons actual use may differ from allocations. It is a reasonable expectation that PC9 and subsequent WMA policy should encourage efficient use of allocated water. However, at the scale of a water body or FMU, it is unreasonable to expect total water use to reach the sum of allocations for daily, weekly, seasonal or annual timeframes due to variance in peak usage and its timing. Efficiency should be encouraged but it is not reasonable to assume that a discrepancy between total use and total allocations represents some measure of inefficiency.

It is important that the basis by which water allocated by water permits is aggregated is clear and standardised. Almost without exception, permits for both ground and surface water currently state a rate of allocation in litres per second (the instantaneous rate of take) and a maximum daily or weekly or annual quantity as relevant to the particular use and the source of water.

Section 4.5 of AWA addresses aggregation of surface water takes. It could be clarified by stating that this refers to the instantaneous rate of take. The panel has included a statement in schedule 15 to provide clarity that, for surface water, the total allocation is the sum of the instantaneous rates of take in water permits, but does not currently include water allocated to frost protection.

Sections 4.7 and 4.8 of AWA refer to groundwater allocation. AWA shows groundwater allocation in litres per second, and illustrates how this is calculated based on the annual limit authorised by permits. AWA also shows how, for the purpose of the water accounts, an additional consideration regarding annual allocation is applied in situations where older permits do not specify such a limit. This additional consideration is to apply a maximum usage of 155 days for irrigation, 30 days for frost protection and 365 days for all other purposes. The panel has retained this statement in schedule 15. The panel also understands that future accounts for groundwater may show allocation as cubic metres per year rather than litres per second, but this is simply expressing the same data in a different format and does not alter the quantity assessed as allocated.

### Consent applications in relation to level of allocation

When considering how council and the wider community best assess the availability of water for particular purposes the panel looked at the information provided to support good decisionmaking. Several submitters, including Whakatane District Council 12-5, Ballance Agri-Nutrients Limited 4-2, New Zealand Kiwifruit Growers 14-4 and Horticulture New Zealand 27-3, highlighted the importance of quality information to underpin good decisions. Several highlighted the need for modelling to support council's allocation work. The panel supports this work and any interim progress council can make towards making information on who has water and also how much is being used and where, relative to the interim limit. This information should be publicly available and discoverable.

#### Low Flows

The operative RNRP has a default minimum flow for surface water of 90% of the Q5 7-day low flow (Method 179). In addition, the primary allocation limit for rivers and streams has been set as 10% of Q5 7-day low flow in PC9. This is more conservative than the proposed National Environmental Standard on Ecological Flows and Water Levels (2008) (pNES).

The panel understands some submitters may consider the 90% Q5 (five year low flow) limits arbitrary but the majority are generally supportive of council carrying its current practice into the plan change. Most submitters appeared to support the metric, though some did propose use of the alternative (MALF) metric. Policy WQ P10 provides flexibility for applicants in over-allocated catchments to provide evidence as to when an exceedance may be considered. On balance, the panel accepts the metric is conservative and appropriate as an interim measure. On the basis that this measure is carried over from current practice, the panel accepts this is likely to be a relatively efficient, albeit coarse measure.

The panel anticipates the WMA process will provide greater detail and catchment-specific information that may change these limits.

The panel notes that the proposed plan refers throughout to 'take and use' of water. Staff were asked whether BOPRC always issues water permits to 'take and use' water or whether there are some consents granted for water 'take' or 'use' only, pursuant to s13 of the Act. It is possible that separate consents could be issued. Therefore, to clarify administratively, all relevant references to 'take and use' have been modified to 'take and/or use' water. This question is particularly relevant to site-to-site transfers of the 'take' part of water allocations, which is discussed below under the 'water permit transfers' section.

### **Temporary allocations**

PC9 does not deal well with temporary/short term water allocations. Many submitters including *Mercury NZ Ltd 31-13, Oceana Gold (New Zealand) Ltd 8-12, Federated Farmers of New Zealand 50-25* addressed the importance of distinguishing between takes that are short and long term. They also sought better coordination of takes to address concerns arising from overlaps in peak demand. This concern is partially addressed with the addition of a new clause 9(d) to WQ O11. Council currently has only rudimentary tools by which it might allocate and manage short-term takes. Therefore, the panel deems it appropriate for temporary water takes to require resource consents and for these takes to take into account hydrological and seasonal effects. The panel notes WQ P16(a) largely achieves this.

### **Temporary dewatering**

*The Oil Companies* (submitter 18) and *Oceania Gold* (submitter 43) sought to enable and provide for dewatering. The section 42A report advises that dewatering and the discharge of sediment-contaminated water from building and construction sites is a permitted activity under RNRP rule 42, at an unlimited rate of take.

The panel has reviewed this rule which reads:

*Rule 42 Permitted – Take of Water and Discharge of Sediment Contaminated Water from the Dewatering of Building and Construction Sites* 

The: 1 Take of water, and 2 Temporary discharge of sediment contaminated water to water or to land where the contaminant may enter water, for the purposes of dewatering of building and construction sites is a permitted activity subject to compliance with the following conditions: [not included here]

The rate of take typically sought for dewatering is no more than 40 litres per second, which provides considerable scope as the discharge under Rule 42 of the RNRP must not exceed 80 litres per second. In conjunction with earlier discussions about non-consumptive water takes, this provision appears to cover the situation the submitters raise. However, the panel considers it appropriate to identify dewatering in WQ O4, which relates to groundwater, and to modify (a) to allow sustained decline in groundwater levels only when the purpose of the take is dewatering.

In principle, the hearing panel supports the consenting of non-consumptive takes for temporary uses, including for dewatering and pump testing. Industries requiring temporary resource consents for activities such as dewatering or aquifer or pump testing are now adequately provided for between new Rule RX and existing Rule 42.

The hearing panel agrees with the remaining section 42A recommendations at 7.1.6 for the reasons given therein.

#### **Fish screens**

*Royal Forest and Bird Protection Society NZ 39-32* noted a requirement for limits on intake screen mesh size has been inexplicably deleted from the operative plan. This may in part be because staff believed that permanent structures - most intakes would be permanent - are required to meet RNRP activity standards that include fish screens. Notwithstanding this, the panel notes that intakes may be portable and may not meet the Act's definition of a structure (being fixed to the ground) and that this reference is somewhat obscure. For that reason, the panel has recommended additions to WQ R3(h) that provide for fish screening.

### **Bore Construction WQ P22**

WQ P22 Groundwater bore construction: 48.25 (F14.159), 50.67 (F10.133, F14.306), 65.64, 71.43

Policy WQ P22 contains a list of requirements for good construction practice of water bores.

The small number of submitters to policy WQ P22 were generally supportive, with *Federated Farmers of New Zealand 50-67* seeking an additional requirement to require the bore to fully penetrate the aquifer.

Existing RNRP provisions include rules on drilling bores and the council has the ability to control the bore installation. These provisions do not have any requirement for bores to fully penetrate the aquifer, though this will often be desirable. Nor does the New Zealand Standard 4411:2001 Environmental Standard for Drilling of Soil and Rock contain requirements to fully penetrate.

Full penetration of an aquifer is supported because it ensures that the bore can efficiently access the water in the aquifer and it minimises the interference drawdown effects of pumping from neighbouring bores, which may 'dry out' shallow bores during periods when aquifer levels are low. However, the panel considers this requirement should not apply universally, but rather when there is a risk of interference drawdowns causing such problems. This is because the costs of drilling to the full depth of an aquifer may be considerable and should only be incurred where necessary. Later deepening of a bore is an option where shallow well depth becomes an issue.

Additional wording has been added to WQ P22(f) to require full penetration where appropriate.

### **Fire fighting**

The New Zealand Fire Commission (5-2) was opposed in part to objectives and policies that fail to address the contribution that emergency services make to the health, safety and wellbeing of people and the community. The commission requested amendments to objectives and policies to particularly address this matter and to reflect section 14(3) of the RMA. Several submitters were largely supportive.

As discussed earlier, the panel considered a proposed amendment to WQ P31 to include a new clause (ba) Emergency firefighting response as a priority water use. However, it considers s14(3)(e) of the RMA and the firefighting legislation already address this issue.

### Water bodies, FMUs or WMAs

The panel heard considerable discussion and some confusion over the terms 'FMU' (Fresh water Management Unit) and 'WMA' (Water Management Area). The NPSFM defines a freshwater management unit as "the water body, multiple water bodies or any part of a water body determined by the regional council as the appropriate spatial scale for setting freshwater objectives and limits and for freshwater accounting and management purposes".

The panel understands the confusion and recognises the point of take is the most significant consideration for water take and use. The panel agrees council must define "FMUs" and implement the NPSFM in a staged manner by smaller geographic units. However, the panel also understands how this new term "water management area" has caused confusion.

Submitters including *Federated Farmers 50-26, Trustpower 49-19 and Fonterra 73-4* have noted inconsistencies in the use of surface water terminology. As a result, changes have been made to refer to rivers and streams rather than a multitude of variations. Elsewhere minor amendments to wording have been made to clarify the use of terms, including the use of the fundamental hydrological unit 'water body' when referring to allocation limits.

### Water Use Efficiency, Water Metering, Reporting and Information Requirements, Water Accounts, & Schedule 7

WQ I2 Increasing demand for water: 8.2 (F12.10,F14.3,F15.9,F22.11,F26.6,F27.15,F5.5,F6.5,F7.5), 10.2 (F4.5), 12.3 (F14.336,F20.6,F22.12), 13.2 (F14.19), 30.3 (F28.277,F29.225), 47.5 (F28.201,F29.158), 48.3 (F12.11,F14.11,F20.7,F27.16), 49.7 (F10.40,F14.15,F18.26), 50.2 (F10.68,F14.27,F28.2,F29.2), 53.5 (F28.481,F29.430), 63.6 (F28.439,F29.388), 71.5 (F16.48,F19.40), 76.10 (F28.159),80.9 (F28.396,F29.345) WQ I3 3.2, 4.1, 6.2, 12.4 (F14.337,F22.13), 13.3 (F14.20), 14.3 (F27.17,F4.6), 27.2 (F27.18), 30.4 (F28.278,F29.226), 37.1 (F14.411,F18.27,F27.20), 47.6 (F28.202,F29.160), 49.8 (F10.41,F12.12,F14.178,F18.28,F28.100,F29.100), 50.3 (F12.13,F14.28,F28.3,F29.3), 53.6 (F28.482,F29.432), 54.3, 54.4, 62.3 (F27.19), 63.7 (F28.440,F29.389), 65.1 (F18.29,F19.41,F27.21), 65.2 (F12.14,F27.22), 71.6 (F16.49), 76.11 (F28.160), 77.2, 80.10 (F28.397,F29.346) WQ I7 The availability of good information: 4.2, 12.5 (F11.2,F12.17,F14.338,F20.8,F22.15,F4.7), 13.7 (F14.236,F18.34), 14.4, 27.3 (F10.14,F11.1), 30.8 (F28.282,F29.230), 31.3 (F14.370,F18.35), 32.1, 48.5 (F14.138), 50.6 (F10.71,F12.18,F14.258,F28.6,F29.6), 53.7 (F28.483,F29.433), 54.5, 62.4, 63.8 (F28.441,F29.390), 65.3, 71.10 (F16.51), 76.12 (F28.161), 80.11 (F28.398,F29.347) WQ I8 Water available for growing social and economic needs: 3.3, 4.3 (F12.19,F19.43,F8.1), 8.4 (F12.20,F14.99,F15.11,F22.16,F27.23,F5.6,F6.6,F7.6), 10.3 (F12.21,F17.9), 12.6 (F14.339,F15.12,F20.9,F4.8), 13.8 (F14.237), 14.5 (F18.36,F19.44), 26.2, 27.4 (F10.15,F18.37,F19.45), 28.2, 29.2, 30.9 (F28.283,F29.231), 31.4 (F14.371), 32.2, 33.1, 43.1 ,47.10 (F28.206,F29.164), 48.6 (F12.22,F14.139,F15.13,F27.24), 49.10 (F10.43,F12.23,F14.180,F28.101,F29.101), 50.7 (F14.259), 53.8 (F28.484,F29.434), 56.2, 62.5 (F18.38), 63.9 (F28.442,F29.391), 73.20 (F14.430,F14.72), 76.13 (F28.162), 77.3, 80.12 (F28.399, F29.348) WQ O1 Efficient allocation and use of water: 6.4, 8.6 (F12.24,F14.4,F15.19,F19.57,F22.20,F26.8,F27.32), 30.13 (F28.287,F29.235), 33.2, 47.13 (F18.49,F28.209,F29.167), 50.11 (F10.75,F14.29,F15.20,F28.9,F29.9), 53.10 (F18.50,F28.486,F29.436), 54.6, 63.11 (F18.51,F28.444,F29.393), 65.6 (F18.52,F19.58,F27.33), 76.15 (F18.53,F28.164), 80.14 (F18.54,F28.401,F29.350), 15.4 (F14.69,F26.52) WQ O5 Land use change: 6.8 (F19.83), 8.8 (F12.26,F14.5,F19.84,F22.25,F27.39), 10.5, 30.17 (F28.291,F29.239), 39.3, 48.9 (F14.142,F20.11), 49.16 (F10.49,F14.185,F28.106), 50.19 (F14.36), 53.14 (F28.490,F29.440), 60.3 (F12.27,F22.26,F23.18), 63.15 (F28.448,F29.397), 65.18 (F15.29,F19.85,F27.40), 66.2 (F19.86,F27.41), 71.14 (F15.30,F16.54,F20.12), 76.19 (F28.168), 80.18 (F28.405,F29.354) WQ 010 All takes are authorised and accounted for: 6.13 (F19.107), 30.22 (F28.296,F29.244), 31.12 (F14.378,F18.58), 33.4, 39.7, 47.19 (F21.17,F28.215,F29.173), 48.12 (F14.145,F15.37), 49.21 (F10.52,F14.188,F25.13,F28.110), 50.24 (F10.81,F14.266,F19.108,F21.26,F25.14), 53.18 (F28.494,F29.444), 63.19 (F21.53,F28.452,F29.401), 65.25, 71.19, 76.23 (F28.172), 80.22

#### (F28.409,F29.358)

WQ O11 Water shortage: 5.5 (F30.5), 6.14 (F19.109), 8.12 (F12.35,F14.105,F15.38,F27.51), 10.10, 13.14 (F14.23), 14.7, 27.6 (F10.17), 30.23 (F28.297,F29.245,F4.17), 32.10, 47.12 (F28.208,F29.166), 48.13 (F14.146), 49.22 (F10.53,F14.189,F28.111), 50.25 (F10.82,F12.36,F14.39), 52.17 (F28.359,F29.307), 55.2 (F19.110), 58.12 (F28.254,F29.202), 62.7, 65.26 (F19.111), 66.4 (F19.112), 71.20

WQ P 25 Fresh water accounting system: 8.28 (F14.121,F15.62), 11.10, 31.36 (F14.401,F18.91), 49.46 (F14.212,F9.25), 50.70 (F10.136,F14.309,F28.45,F29.45), 65.67, 71.46 (F16.72,F21.59,F24.10) WQ P26 Establish accurate record of permitted takes: 11.11 (F21.8,F27.158), 15.3 (F27.159), 31.37 (F14.402,F18.92), 38.12 (F14.91), 38.9 (F10.37,F14.88), 39.25 (F27.160), 47.34 (F21.22,F28.230), 50.71 (F10.137,F14.310,F19.182,F21.29,F28.46,F29.46), 53.31 (F21.44,F28.507,F29.457), 59.2, 63.32 (F21.55,F28.465,F29.414), 65.68, 71.47 (F16.73,F21.60,F24.11), 76.36 (F28.185), 80.35 (F28.422,F29.371)

**WQ M1 Submissions on district plans and consents:** 49.52 (F14.218,F18.96), 65.74, 71.52 (F16.78) **WQ M2 Information on water availability:** 14.27, 15.6, 19.4, 27.26, 32.20, 48.28 (F14.162), 49.53 (F10.63,F14.219), 50.76 (F10.142,F14.315), 59.4, 62.27, 65.75, 71.53 (F16.79)

**WQ M3 Encourage efficiency measures:** 8.34 (F14.127,F22.52), 12.26 (F14.359), 14.28, 26.10, 27.27, 28.10, 29.10, 32.21, 50.77 (F10.143,F14.316), 56.10, 62.28, 65.76, 71.54 (F16.80)

**WQ M4 Support initiatives:** 12.27 (F14.360), 13.25 (F14.251), 14.29, 26.11, 27.28, 28.11, 29.11,

32.22, 39.26, 50.78 (F10.144,F14.317), 55.13, 56.11, 62.29, 65.77, 71.55 (F16.81)

**WQ M7 Requirements for measurements:** 50.80 (F10.146,F14.319), 65.79, 71.57 (F16.83) **WQ M8 Water management groups:** 8.36 (F14.129,F22.53), 47.35 (F28.231), 48.30 (F14.164,F27.171), 49.54 (F14.220,F9.30), 50.81 (F10.147,F14.320,F28.51,F29.51), 53.32

(F28.508,F29.458), 54.15, 59.5, 63.33 (F28.466,F29.415), 65.80, 71.58 (F16.84), 76.37 (F28.186), 80.36 (F28.423,F29.372)

WQ O9 Integrated management: 4.5 (F10.2,F27.50,F8.2), 6.12, 10.9, 16.2 (F14.365), 30.21 (F28.295,F29.243), 31.11 (F14.377), 39.6 (F8.16), 41.2, 47.18 (F19.103,F21.16,F28.214,F29.172), 49.20 (F10.51,F14.187,F28.109), 50.23 (F10.109,F14.265,F21.25,F28.19,F29.19), 53.17 (F19.104,F28.493,F29.443), 53.23 (F28.499,F29.449), 54.9, 58.11 (F28.253,F29.201), 63.18 (F19.105,F21.52,F28.451,F29.400), 63.24 (F28.457,F29.406), 65.24, 71.18 (F16.56), 76.22 (F28.171), 80.21 (F19.106,F28.408,F29.357)

### Metering, use and efficiency

WQ P24 Metering: 6.33 (F21.3), 7.5, 9.2 (F21.4,F28.336,F29.284), 9.3 (F21.5,F28.337,F29.285), 12.22 (F14.355,F17.46,F22.47), 14.23, 17.6, 18.8 (F10.9,F28.99,F29.99,F8.8), 20.3, 20.4, 21.5, 27.22, 30.41 (F28.315,F29.263), 31.35 (F14.400), 34.4, 36.6,3 8.11 (F10.36,F14.90,F19.181), 39.24 (F21.10), 43.18, 46.6, 47.33 (F21.21,F28.229), 50.69 (F10.135,F14.308,F21.28,F25.50,F28.44,F29.44), 51.6, 53.30 (F18.90,F21.43,F28.506,F29.456), 54.14, 60.15, 60.8, 60.9, 62.23, 63.31 (F21.54,F28.464,F29.413), 65.66, 68.2, 69.6, 70.6, 71.45 (F16.71,F21.58,F24.9), 73.11 (F10.174,F14.422,F28.88,F29.88), 74.2 (F24.2,F28.144,F29.149), 75.1 (F28.145,F29.150), 76.35 (F28.184), 77.8, 78.6, 79.8 (F16.8,F24.7,F28.382,F29.331), 80.34 (F28.421,F29.370)

Issue WQ I3 recognises there can be opportunity costs as a result of inefficient allocation. The panel recommends minor editorial changes to this issue statement, to provide greater clarity. Issue WQ I7 addresses information requirements and acknowledges the importance of good information systems to underpin water management decisions. This issue must acknowledge the value of information for users other than council. The panel has also recommended changes as discussed above in relation to Schedule 15 and the AWA report.

A large number of submissions on water metering showed mixed support. Farming groups raised concerns about the cost of meeting standards than were higher than metering regulations. PC9 sets a high standard for metering, exceeding that of the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010. The panel was advised that one third of surface water takes and approximately half of groundwater takes in the Bay of Plenty are for less than 5 litres per second and are therefore not required to meter under the 2010 Regulations. The requirement to meter to a higher standard than the 2010 Regulations is considered sensible due to the characteristics of water bodies and use patterns in the Bay of Plenty. There are obvious difficulties determining compliance when use is not metered. A robust metering policy addresses the need for information to support water accounts and to evaluate efficiency of allocation as well providing data to help understand aquifer dynamics.

Staffs advised in the section 42A report that council's experience with manual reporting of data showed a large number of consent holders do not provide data in a timely or accurate manner. In the 2016/17 year, many were charged late fees for failing to provide metering data, despite

reminders to do so. The panel understands that supplied data is often of poor quality, and because it is not electronic requires further work by council to enable even basic assessments.

Lack of metering hampers efforts to understand the effects of current allocation levels on streams or aquifers. Allocation *per se* does not cause harm to freshwater ecology or aquifers; it is the taking of water that creates a potential harm and it is only through meters that council can assess taking. The absence of comprehensive records on use is therefore a particular concern. Anecdotal evidence and preliminary assessments from staff indicate that a significant proportion of allocation is unused, even after allowance for variability due to weather. This is also the case in other parts of the country. Allocations should over time be reduced closer to actual water need, in the interests of efficient allocation.

Many legacy consents, granted at a time when the benefits of metering were not well understood and technology less advanced are unmetered. The panel acknowledges that the revised metering policy applies only to new consents, and to certain takes allowed as a permitted activity. Unless metering is already required under the 2010 Regulations there are legal constraints to imposing metering on existing unmetered consents.

The panel supports the use of water meters and monthly electronic reporting to provide accurate information on water use. The format by which data is submitted is important because it determines the ease and reliability by which it can subsequently be used. Some councils provide detailed information on their websites, outlining the format required for electronic data submission. Many have adopted the Open Geospatial Consortium (OGC) WML2 standard format but accept data in other formats, too. BOPRC follows similar conventions, allowing data upload to its database, but also allows paper returns and, we understand, has limited quality assurance of data returns in whatever format they are submitted. Specifying that reporting must be in a Council approved electronic format ensures that all data is able to be used without additional handling. This should ensure the best possible use of metering data.

The panel reviewed the complexity of metering and reporting requirements that applied to different regimes according to rates of take, allocation status and whether the water was from ground or surface water sources. Metering is considered by the panel to be one of the most efficient methods of implementing council's responsibilities under the NPSFM. This core tool must be implemented effectively in order to discharge its responsibilities. Robust metering and reporting requirements improve understanding of the water resource, providing applicants, council staff, iwi and the wider community reassurance that evidence-based decisions are being made.

The panel determined that some simplification was justified, including to:

- remove the need to separately meter and report water taken under s14(3)(b) of the Act, but to retain the requirement for certain permitted activities to meter and report use
- retain the minimum requirement that all consented water takes be metered and reported monthly
- only require daily reporting if considered necessary to meet the objectives of the plan
- specify that reporting must be in a council approved electronic format

The panel consider that the revised policy WQ P24 better balances the cost and physical difficulties that would make daily reporting excessively onerous in certain circumstances while ensuring that Council obtains data necessary to confirm compliance, support water accounts and undertake efficiency analysis. It recommends daily reporting only in cases where takes are larger than 5 l/sec, are secondary or flood harvesting takes, where the resource is allocated above the interim limit or where resource use is under restriction.

Evidence was presented at the hearing that some dairy farms would require up to 7 meters to comply with requirements. However, submitters also highlighted that information gained from registration of permitted takes would support a greater understanding of total water use on a property. The deletion of the requirement for separate metering and reporting of water taken as a permitted activity and under 14(3)(b) (stock drinking water) is not considered to significantly impact on Council's understanding of total water use, as there are many other properties that were not required to meter stock drinking or permitted activity water use. Council should be able to model the size and cumulative effect of those smaller takes.

### Schedule 7

Schedule 7 Reasonable and efficient use criteria: 5.9, 8.44 (F14.134,F15.76), 9.5 (F28.339,F29.287), 9.6 (F28.340,F29.288), 12.32, 13.29 (F14.254,F19.205), 15.8, 19.6, 31.52 (F15.74,F18.114,F20.59,F27.244), 38.18 (F14.96), 39.39, 43.22 (F13.5), 48.39 (F14.172), 50.99 (F10.164,F25.57,F28.67,F29.67,F4.32), 52.33 (F28.374,F29.323), 58.32 (F28.274,F29.191), 60.10 (F20.60,F23.23), 60.16, 65.93 (F15.75), 65.94 (F27.243), 68.4 (F26.59), 14.45 (F19.206,F4.33), 27.44 (F10.99), 62.45

Schedule 7 in PC9 is referenced in multiple policies and rules and specifies how efficient use will be determined. As notified, detail was provided only for irrigation and municipal water supplies. Other uses will be calculated by reference to good management practices, including an independent party audit.

The panel noted that while extensive guidance is provided for municipal and irrigation takes, this is not the case for other uses. This is either because the takes either have somewhat unique characteristics or more detailed information is unavailable. *Federated Farmers of New Zealand 50-99* proposed an opening paragraph that explains the purpose of the schedule is to ensure the amount of water taken is both reasonable and justifiable, pursuant to a rule in the plan. It is recommended that the following text be included in the schedule to provide greater clarity as to its purpose: "*The amount of water taken pursuant to any provision in this plan must be reasonable and justifiable with regard to the intended use and, where appropriate, comply with this schedule.*"

Policies P21 and P31 and Rule R6 require a water management plan (WMP) for municipal water supplies. The schedule provides details about the content of sucha plan. Submissions from *Tauranga City Council* (8-44), *Whakatāne District Council* (12-32), *Western Bay of Plenty District Council* (48-39), *Rotorua Lakes Council* (60-10) and *Ōpōtiki District Council* (68-4) sought points of clarification or minor change to the requirement. These are mostly supported.

The panel does not consider there is scope in submissions to address soil moisture testing as a tool for water allocation.

### **Climate Change**

30.3 (F28.277,F29.225), (also listed in WQ I2), 30.6 (F28.280,F29.228) (also in WQ I4), 12.17 (F14.349,F17.32,F20.39,F22.40), 14.4(also WQ I7), 27.3 (F10.14,F11.1) (also WQ I7), 11.1 (F18.55,F19.74), (also WQ O3), 62.4 (also WQ I7), 32.6 (also WQ O2), 14.7 (also WQ O11), 27.6 (also WQ O11), 62.7 (also WQ O11), 1.6, 27.45 (F10.100,F20.62,F26.61), (also in municipal water supplies), 62.46 (F20.63,F26.62) (also in municipal water supplies

Several submitters including *Ngati Manawa 30-6, Horticulture NZ 12-17, New Zealand Kiwifruit Growers 14-4* considered PC9 should make more explicit statements on climate change.

Climate change is a significant regional, national and global issue. The NPSFM Policy B1 requires council to have regard to the reasonably foreseeable impacts of climate change. In Policy IR 2B, the BOP RPS explicitly requires climate change to be considered:

**Having** regard to the likely effects of climate change: Recognise and provide for the predicted effects of climate change having particular regard to: (a) Predicted increase in rainfall intensity, taking account of the most recent national guidance and assuming a minimum increase in the annual mean temperature of 2°C by 2090 (relative to 1990 levels);

(b) Predicted increase in sea level, taking into account the most recent national guidance and the minimum sea-level rise projections in Policy NH 11B.

The panel is acutely aware that climate change must be considered in developing all RMA policy and acknowledges the many strong directives along this line. Preferably, climate change will be directly considered in developing policy as opposed to incrementally considered consent by consent. The panel considers WQ P2(f)(i) adequate because it provides a specific reference and consideration of climate change in PC9. In addition, sufficient direction on this matter is given in the amendment of WQ P2(d)(viii) and requirements in the numerous external guides and policies including the NPSFM itself.

### Water Management Areas

WQ O11 Water shortage: 5.5 (F30.5), 6.14 (F19.109), 8.12 (F12.35,F14.105,F15.38,F27.51), 10.10, 13.14 (F14.23), 14.7, 27.6 (F10.17), 30.23 (F28.297,F29.245,F4.17), 32.10, 47.12 (F28.208,F29.166), 48.13 (F14.146), 49.22 (F10.53,F14.189,F28.111), 50.25 (F10.82,F12.36,F14.39), 52.17 (F28.359,F29.307), 55.2 (F19.110), 58.12 (F28.254,F29.202), 62.7, 65.26 (F19.111), 66.4 (F19.112), 71.20

WQ P1 Establish FMU: 4.6 (F10.3,F17.15,F19.115,F27.60), 6.15, 8.13 (F14.106,F15.42,F17.16,F22.33), 10.11, 13.15 (F14.24,F19.116), 15.5, 19.3, 25.10 (F1.10,F27.61,F28.139,F29.144), 30.24 (F28.298,F29.246), 48.14 (F14.147), 49.23 (F14.190,F28.112), 50.26 (F10.83,F14.267,F19.117,F28.20,F29.20), 53.19 (F19.118,F21.41,F27.62,F28.495,F29.445), 63.20 (F19.119,F27.63,F28.453,F29.402), 65.27, 71.21 (F16.57), 76.24 (F19.120,F27.64,F28.173), 80.23 (F19.121,F27.65,F28.410,F29.359)

WQ P2 Work within WMA: 3.5, 4.7, 6.16, 7.1, 8.14 (F12.37, F14.107, F15.43, F26.10), 10.12 (F25.15), 12.13 (F14.345), 12.14 (F14.346), 13.16 (F14.242,F14.243,F19.122,F3.1), 14.8,17.2,18.3 (F10.11,F28.94,F29.94,F8.5), 21.1,22.1 (F9.35), 25.11 (F1.11,F28.140,F29.145), 27.7, 30.25 (F28.299,F29.247), 31.14 (F14.380), 31.15 (F14.381), 31.16 (F14.382), 31.17 (F14.383), 31.18 (F14.384), 31.19 (F14.385), 32.12, 33.5, 38.4 (F10.30, F14.83, F19.123, F25.16), 39.10, 39.8, 39.9 (F19.124,F27.66,F3.2), 41.3, 43.7 (F13.2,F13.4), 46.2, 47.21 (F18.62,F19.125,F21.19,F28.217,F29.175), 47.22 (F19.126,F21.20,F28.218,F29.176), 48.15 (F12.38,F14.148), 49.24 (F10.54,F14.191,F18.63,F25.17,F28.113), 50.27 (F10.110,F14.268,F21.27,F28.21,F29.21), 50.28 (F14.40,F25.18,F4.21), 50.29 (F25.19), 50.30 (F14.269,F25.20,F28.22,F29.22), 50.31 (F14.270,F25.21), 50.32 (F14.41,F19.127,F25.22), 50.33 (F14.271,F25.23), 50.34 (F14.272,F25.24), 50.35 (F12.39,F14.273,F25.25), 51.2, 52.18 (F19.128,F28.360,F29.308), 53.20 (F19.129,F21.42,F28.496,F29.446), 54.10, 58.13 (F28.255,F29.203), 62.8, 63.21 (F19.130,F28.454,F29.403), 65.28, 65.29, 65.30, 65.31, 65.32, 65.33 (F11.10), 65.34, 65.35, 65.36, 65.37, 65.38, 65.39, 65.40, 65.41, 65.42, 65.43, 66.5, 69.2, 70.2, 71.22 (F16.58), 71.23 (F16.59), 73.2 (F10.166, F14.416, F28.80, F29.80), 76.25 (F18.64, F19.131, F28.174), 77.5, 78.2, 80.24 (F18.65,F19.132,F28.411,F29.360), 81.4 (F17.17,F19.133,F20.19,F28.71,F29.71), 81.6 (F28.73,F29.73) WQ P13 Promote efficient use: 5.7 (F30.7), 6.27, 8.23 (F14.116, F15.55), 10.21, 12.18 (F14.350,F14.351,F15.56,F20.42,F22.41), 14.16, 27.15, 30.35 (F27.108,F28.309,F29.257), 31.27 (F14.393,F19.153,F27.109), 32.14 (F19.154), 33.7, 39.18, 43.14, 44.5, 47.28 (F28.224,F29.182), 49.36 (F14.202,F28.123), 50.55 (F10.122,F14.294,F28.32,F29.32), 52.21 (F28.363,F29.311), 55.5, 58.16 (F28.258,F29.207), 62.16, 65.54 (F4.23), 71.35 (F16.66,F4.24), 81.11 (F11.12,F27.110,F28.78,F29.78)

### Framework

The panel received comprehensive background information for the two-stage (PC9 first, then WMA later) approach proposed by council.

The notified plan change provided very little introduction to the background and rationale for the plan change and how it linked to future work at the WMA and FMU level. This is discussed in early sections of this report.

The following diagram was therefore useful:



The panel believes the introduction to the plan change, under heading Part II Quantity, requires greater explanation. As a result, amendments have been made to provide a more detailed introduction and explanation of the key concepts and ideas behind PC9. In particular, the reference to interim limits in PC9 and terms FMU and WMA are explained. The panel notes that PC9 seeks to change the RNRP and, once PC9 is operative, a separate PC9 document will no longer exist. The panel does not support providing lengthy explanatory text specific to PC9 within the RNRP itself.

#### Water user groups

A large number of submitters supported water user groups as an innovative and efficient way to promote sustainable use of freshwater resources, particularly transfers. *Federated Farmers (50-93)* made detailed submissions on the role of water user groups.

The panel is supportive of water user groups but notes these groups, as described in WQ P 13, require definition. Consequently, the panel has recommended a new definition for water user group.

PC9 seeks to encourage the establishment of water user groups. Method WQ M8 says their purpose is:

- (a) Co-ordinating the take and use of water authorised by resource consent.
- (b) Voluntary rostering or rationing of water takes during times of low water availability.
- (c) Pro rata reduction of water allocated by resource consent.
- (d) Recording and reporting information to Council.

In addition to this statement of function, the hearing panel supports providing a definition of water user group as the term is used throughout the plan, particularly in the rules section.

### Water Permit Transfers

WQ P23 Transfer of resource consents: 6.32, 10.26 (F17.45), 14.22, 27.21 (F10.22), 30.40 (F28.314,F29.262), 31.34 (F14.399), 32.18, 33.9, 38.8 (F10.35,F14.87), 43.17, 44.6 (F19.179,F27.154), 47.32 (F28.228,F29.186), 49.45 (F14.211,F27.155,F9.24), 50.68 (F10.134,F14.307,F28.43,F29.43), 52.23 (F27.156,F28.365,F29.313), 53.29 (F28.505,F29.455), 54.13, 55.6, 58.20 (F27.157,F28.262,F29.211), 62.22, 63.30 (F28.463,F29.412), 65.65 (F19.180,F25.49), 71.44 (F16.70), 76.34 (F28.183) 80.33 (F28.420,F29.369) WQ R7 Rule permitted transfer: 1.13, 6.34 (F4.26), 10.30, 11.22, 14.38, 27.37, 30.48 (F28.322,F29.270), 31.48 (F12.97,F27.227), 33.14, 48.35 (F14.169), 50.92 (F10.157,F14.329,F21.35,F28.62,F29.62), 52.29 (F27.228,F28.371,F29.319), 55.7, 58.28 (F27.229,F28.270,F29.219), 61.8 (F16.42,F27.230), 62.38, 65.89, 71.66 (F27.231) WQ R8 Rule controlled activity transfer: 1.14, 6.35 (F27.232, F4.27), 10.31, 11.23, 11.24, 11.25, 14.39, 27.38, 30.49 (F27.233, F28.323, F29.271), 31.49 (F18.108), 32.23, 33.15, 44.7 (F12.98,F19.198,F27.234), 47.43 (F28.239,F29.187), 49.62 (F14.229,F31.7), 50.93 (F10.158,F14.330,F19.199,F21.36,F25.56,F28.63,F29.63), 52.30 (F28.372,F29.320), 53.40 (F28.516,F29.466), 55.8 (F12.99), 58.29 (F28.271,F29.220), 61.9 (F16.43), 62.39, 63.41 (F28.474,F29.423), 65.88 (F12.100), 71.67, 73.17 (F14.428,F28.92,F29.92), 75.2 (F28.146,F29.151), 76.45 (F28.194),80.44 (F28.431,F29.380)

WQ R9 Rule RDA transfer: 1.15, 6.36 (F19.200,F27.235,F4.28), 10.32, 11.26, 11.27, 14.40, 27.39, 30.50 (F19.201,F27.236,F28.324,F29.272), 31.50, 33.16, 39.36, 44.8 (F12.101,F27.237), 47.44 (F28.240,F29.188), 49.63 (F11.15,F14.230,F9.34), 50.94 (F10.159,F14.331,F28.64,F29.64), 52.31 (F28.373,F29.321), 53.41 (F28.517,F29.467), 55.9, 58.30 (F28.272,F29.221), 61.10 (F16.44), 62.40, 63.42 (F28.475,F29.424), 65.90 (F11.16,F12.102), 71.68, 76.46 (F28.195), 80.45 (F28.432,F29.381)

A large number of submissions related directly or indirectly to water permit transfers. Iwi submitters in particular (30-40, 52-23, 55-6, 65-65, 71-44) opposed the transfer of water totally, unless it was subject to approval by tangata whenua. *CNI Iwi Land Management (65-26, 65-65) and Ngāti Pikiao Environmental Society (71-44)* opposed the principle of transfer on both philosophical and commercial grounds, on the basis that those not using their original allocation should relinquish it back to the pool of water available for allocation. The breadth of perspectives presented made this a challenging topic.

The transfer of permits for the take and use of water is provided for under s136(2)(b) of the RMA. Under this section, a person may transfer the whole or any part of the holder's interest in the permit to another person on the site for which the permit is granted, or to another site if both sites are in the same catchment or aquifer. In the latter situation, the transfer is expressly allowed only by a rule in a plan or if it has been approved by the consent authority that granted the permit.

The staff section 42A report noted that in *Hampton v Canterbury Regional Council* the court stated that water permits are only <u>freely</u> transferable to an owner or occupier of the site for which the permit was granted. The court's view was that transfer to anyone else was only available in limited circumstances, where either the regional plan expressly allows it or the consent authority has approved it as if it were an application for resource consent. From this case, it is clear that PC9 needs to provide a rule to enable transfers between properties.

The NPSFM (Policy B3) requires regional councils to "state the criteria by which applications for the approval of transfers of water take permits are to be decided, including to improve and maximise the efficient allocation of water." The Ministry for the Environment's guide to the NPSFM confirms that the focus of Policy B3 is to support greater uptake of consent transfers, to maximise efficient allocation. Stating assessment criteria is designed to increase certainty and remove unnecessary administrative barriers or inefficiencies.

The RPS specifically references water transfers in Policy WQ 1A. It says:

**Policy WQ 1A: Promoting efficient water use, water harvesting and water transfers** Promote the efficient use of water, enable water harvesting where adverse effects on the environment can be avoided, remedied or mitigated, and enable the transfer of water permits in whole or in part.

The panel considered evidence that both supported and opposed water transfers. It also studied detailed discussion in the staff section 42A report that included statements concerning the potential for unfettered water transfers to embed consent over-allocation. This is where the transfer of water that is never likely to be used by the consent holder simply increases actual use.

On balance, the panel supports the use of water permit transfers pursuant to s136 of the RMA as an efficient means of managing and, potentially, clawing back water use. The panel recognises that by providing for water permit transfers, PC9 is giving effect to the Bay of Plenty Regional Policy Statement (RPS) Policy WQ 1A.

### Limitations on transfer

Several factors have been considered for and against a permissive water transfer regime. The panel is concerned that enabling the transfer of unused water could embed over-allocation by enabling use of water that, currently, is allocated but unlikely to be used. This could lead to significant environmental harm. The panel is also concerned that transfer may not be well understood by many submitters and appears to cause significant cultural offence. The extent to which water becomes "monetised" under a transfer scheme may sit behind many of these issues. The panel considers that many of these problems will become clearer when WMA limits are assessed. The WMA process is considered the appropriate place to review policy and develop rules for transfer.

The panel believes amendments made to WQ R7 and deletion of the controlled and restricted discretionary rules for transfers will result in greater clarity over when a water transfer can be undertaken. This will ensure assessment of a transfer will be undertaken. It will now allow for the trading of water permits within a catchment and between users, only subject to the full discretion of the council.

To avoid embedding over-allocation, the panel supports a new clause to WQ P23, specifying that the transferor must show the water has been taken and lawfully used for the purpose for which it was granted in the preceding 5 years.

### Temporary transfer

The panel considers the amendment to permitted activity rule WQ R7(b) limits permitted transfers to temporary transfers only and requires specified information to be provided to council. The amendment also ensures an understanding of the volume and the level at which the take has been occurring over the previous 5 years.

### **Recognising Existing Users**

WQ 08 Decision making when allocating water: 4.4 (F10.1,F12.32,F22.29,F27.43), 5.2 (F25.6,F30.2), 6.11 (F19.95), 8.11 (F12.33,F14.104,F15.34,F22.30,F5.8,F6.8,F7.8), 10.8 (F17.13), 12.12 (F14.344,F15.35,F20.14,F22.31), 14.6 (F25.7,F27.44), 15.12 (F20.15,F22.32), 19.10, 26.4, 27.5 (F10.16,F19.96,F25.11,F27.45), 28.4, 29.4, 30.20 (F28.294,F29.242), 31.10 (F11.9,F14.376,F2.3,F27.46), 32.9 (F19.97,F25.8), 33.3 (F19.98,F27.47), 38.3 (F10.29,F14.82,F19.99,F25.12), 40.2, 43.6, 44.3 (F20.16,F27.48), 47.17 (F28.213,F29.171), 48.11 (F14.144,F15.36,F20.17), 49.19 (F10.50,F25.9,F9.5), 50.22 (F10.80,F12.34,F14.38,F17.14,F19.100,F25.10,F28.18,F29.18), 56.4, 58.10 (F28.252,F29.200), 62.6 (F19.101,F27.49), 65.21, 65.22, 65.23, 66.3, 71.17 (F16.55,F19.102), 73.21 (F10.165,F14.431,F14.73,F27.245)
WQ P12 Recognise existing users: 4.9 (F10.5,F17.28), 6.26 (F17.29), 8.22 (F12.61,F14.115,F15.54,F26.21,F27.101), 9.8 (F17.30,F19.150,F21.7,F27.102,F28.342,F29.290), 10.20 (F17.31), 11.8, 12.17 (F14.349,F17.32,F20.39,F22.40), 14.15, 27.14 (F10.20,F19.151), 30.34 (F17.33,F28.308,F29.256), 31.26 (F14.389), 40.4, 43.13 (F27.103), 48.22 (F12.62,F14.155,F20.40,F26.22,F27.104), 49.35 (F14.201,F17.34,F18.87,F25.42,F9.17), 50.54

### First in, first served

The hearing panel received several submissions suggesting alternative approaches to allocation, ranging from moratoriums to reviews of all consents.

(F10.91,F14.293,F28.31,F29.31), 55.11, 59.1, 62.15, 65.53 (F17.35,F27.105), 66.6 (F17.36,F27.106),

71.34 (F16.65,F17.37,F19.152,F20.41,F27.107), 73.22 (F10.171,F14.432,F14.74,F4.22)

Under the Act, allocation between competing uses of the same resource is determined by the firstin, first-served process confirmed in the Court of Appeal's decision in *Fleetwing Farms Ltd v Marlborough District Council*. The Court of Appeal found the consent authority was required to decide each application on its merits "without regard" to any competing application. The Court stated that if the sustainable management purpose of the Act is satisfied in a particular case, the consent should be granted.

*Trustpower (49-51)* has noted the deletion of policy 71 that stated water was to be allocated on a first in, first served basis. Policy 71 is *"To allocate water on a first in first served basis, subject to efficient use as specified in policy 73"*. The panel notes the default allocation method under the Act is first in, first served. The panel supported this deletion. Policie WQ P21 is the only policy that potentially moves one use ahead of others in a concurrent assessment situation.

The panel is very mindful that there is nothing in the Act to warrant refusing an application on the grounds that another applicant might better meet the Act's purpose. This matter was further explored and confirmed in *Central Plains Water Trust v Synlait Ltd,* where the court concluded the point at which an application was lodged determined priority for processing purposes.

Although the Act provides plenty of scope for councils to write rules that allocate water on other than a first in, first served basis, there is little guidance on how this might occur. Therefore, the panel is unable to support any alternative.

It should be noted that the hearing panel understands the principle of first in, first served remains in relation to existing water users and those seeking consent.

### **Registering permitted activities**

*Federated Farmers of New Zealand 50-56* presented a submission on WQ P14. *Mercury NZ 25-44* and others made submissions concerning timing - when permitted activities (Rules WQ R1 - 3) should be registered with council. Similarly, WQ R4 (controlled activity for dairy sheds) and WQ R5 (controlled activity for dairy sheds) and WC R5 (controlled activity for dairy sheds) activity for dai

groundwater takes) rely on applications being received within a specified planning milestone period. Council has considerable discretion to determine whether that milestone should be when council notifies its decision on those matters or when appeals on the matter or whole plan have been resolved. The panel notes the registration process depends on applicants presenting the appropriate documents to council and on council's in-house systems being able to accommodate those documents. The panel understands considerable work is needed to manage this process, ranging from database amendments to establishing appropriate monitoring and compliance checking processes.

The panel considers permitted take registration (WQ R1-3) a relatively important but somewhat onerous requirement. Permitted take information is an important part of water accounts and, without registration, subsequent WMA processes will be more difficult. Therefore, the panel concludes the timeframe for lodging a resource consent or registration of a permitted activity should remain at 12 months from the relevant rule becoming operative, providing sufficient time for council to communicate the new rules and prepare registration systems..

Rules WQ R4-5 concerning controlled activities for dairy shed and existing currently permitted groundwater takes also require reasonably timely implementation. In both cases the panel considers it appropriate that council bring current activities into the planning regime as soon as possible, to provide confidence the Act is being soundly administered. The panel therefore recommends that the opportunity for accessing these controlled activity rules is within 12 months of the rule becoming operative.

## **Additional Permitted Activities**

5.2 (25.6, 30.2)

### Well Testing

When seeking resource consent to take water from a well or bore, the applicant is often required to undertake a pump test to ascertain the potential effects the proposed take would have on the aquifer and other users. The rate and volume of the test generally exceeds permitted activity volumes. *Federated Farmers of New Zealand* (50 - 87) seeks a new permitted activity rule to allow for well or aquifer testing.

The taking of water for aquifer of pump testing is normally included in a resource consent under rule 40B(g) of the NRRP. In limited circumstances, such as seeking resource consent for an existing bore drilled prior to rule 40B becoming operative in 2010, testing may not be required. Also, the testing may not have been required at the time of drilling if the initial take and use of water did not require resource consent.

As further submitters, Trustpower (FS 19-90) and Ngāti Mākino (FS 28-57) raised concerns about the risk a permitted activity rule could create to the sustainability of the resource and also controls on the undertaking of such tests.

The panel agrees with the section 42A report, which says it would be inefficient to require a resource consent to temporarily take water in order to obtain a resource consent to more permanently take water. Concerns raised by further submitters and others about the potential abuse of any provisions can be managed by utilising conditions that require council must be advised and volumes limited.

The new rule WQ RX provides for well testing and allows the additional time submitters had sought. The panel considers the temporary nature of aquifer or pump testing is appropriately considered as a permitted activity.

### **Unauthorised Water Takes**

**WQ I9 Unauthorised taking of water**: 12.8 (F14.341,F15.14,F22.17,F4.9), 13.9 (F14.238), 30.10 (F28.284,F29.232), 31.5 (F14.372), 48.7 (F14.140), 49.11 (F10.45,F14.181,F18.39,F28.102,F29.102), 50.8 (F10.72,F14.260,F19.46,F21.23,F28.7,F29.7), 65.4

WQ P14 Opportunity for existing unauthorised: 6.28 (F21.1), 10.22, 11.9, 14.17, 22.4, 27.16, 30.36 (F28.310,F29.258), 31.28 (F14.394,F27.111), 38.10 (F10.34,F14.89), 39.19, 49.38 (F14.204,F27.112,F28.124), 50.56 (F10.92,F14.295,F19.155,F25.44,F28.33,F29.33), 62.17, 65.55 (F27.113), 66.7 (F27.114), 71.36 (F16.67), 73.8 (F14.420,F28.85,F29.85), 79.10 (F15.57,F28.384,F29.333)

WQ R4 Controlled activity rule – existing dairy: 1.10, 10.29 (F27.198), 14.35 (F27.199), 17.9,21.8, 27.34 (F10.24,F27.200,F31.3), 30.45 (F28.319,F29.267), 31.45 (F14.410,F27.201,F31.2), 38.14 (F10.39,F14.93), 38.17 (F12.90,F14.95), 39.33 (F12.91,F19.196,F21.11,F27.202), 41.1, 46.9, 47.40 (F27.203,F28.236), 49.60 (F14.226,F14.227,F27.204,F3.12,F31.5,F9.31), 50.88 (F10.153,F14.325,F21.33,F28.58,F29.58), 50.89 (F10.154,F12.92,F14.326,F28.59,F29.59), 51.9, 52.27 (F28.369,F29.317), 53.37 (F27.205,F28.513,F29.463), 58.25 (F28.267,F29.216), 59.9 (F27.206), 61.5 (F27.207), 62.35 (F27.208), 63.38 (F27.209,F28.471,F29.420), 64.6 (F27.210,F28.333,F29.281), 65.85 (F27.211),69.9, 70.9, 71.63, 72.6, 73.15 (F12.93,F14.426,F28.90,F29.90), 75.3 (F28.147,F29.152), 76.42 (F27.212,F28.191), 78.9, 80.41 (F27.213,F28.428,F29.377)

### Issue

Council is aware approximately 160 of the region's dairy farmers and 130 horticultural irrigators are potentially taking water at volumes that exceed permitted activity limits and do not have resource consent. There are various reasons for this, including a lack of awareness of the limitations of what is allowed under s14(3)(b) of the Act. The panel understands the precise number of unauthorised dairy farms is uncertain, partly due to lack of information about whether water is being taken from groundwater, surface water or from a reticulated supply. There is no practical means to ascertain the source of the water or verify use when no consent is held. Council and the dairy industry have shared data to better understand the problem and this has helped significantly.

The panel understands council seeks to bring unauthorised dairy activities into its consenting system by way of a controlled activity consent. The proposal, as notified, is to "grandfather" these unlawful dairy takes - i.e. guarantee their consent on the basis that the water takes are relatively minor and the activity is longstanding. All these unconsented-for-take dairy farms have obtained council discharge consents but were not advised that they required consents to take water, too. To further complicate matters, some of these takes are in over-allocated catchments and several occur above hydro-electric power stations that hold consents for downstream water.

The controlled activity dairy rule has been particularly contentious, with the dairy community supporting the principle of "grandfathering" users in, while most tāngata whenua, other water users and environmental interests seek greater control. The issue was subject to a formally mediated session.

The panel understands the unauthorised dairy use problem has arisen at several councils around New Zealand.

Other councils have:

- Provided a permitted activity rule for all existing dairy shed takes; or
- Provided a controlled activity for all existing dairy shed takes; or
- Provided a controlled activity for the majority of dairy shed takes and no special rules for the largest takes

The section 42A report provided the panel with options on the basis that staff considered these dairy takes had a minor effect on the environment and other users. Technically, an argument for derogation could be made but the impact is small, the activity longstanding and it seems extremely unlikely consents would be declined if discretionary. Derogation depended on the particulars of the consent(s) in question.

Horticultural irrigation takes, which are more water-use-dense per hectare, and less easily confused with takes allowed under s14(3)(b) do not have the same special status as is proposed for dairy.

### **Principles**

In brief, the panel supports council's intent to ensure all water takes sit within the framework established by PC9, meaning they are consented, metered and managed. There is an expectation that council will administer the Act appropriately, which means ensuring administrative systems and processes are in place to manage the effects of activities. The panel supports council's intent to provide a pathway to compliance that is proportionate to the issue and understands that existing consented users have an expectation for continued use for the length of the consent. However, no user has the ability to claim perpetual rights to an allocation. In the panel's opinion, the WMA process is the correct process to consider the available allocation of a particular water supply. On this basis, the panel has some sympathy for the position of *Horticulture NZ* and others who note that granting unlawful users consent en masse, via a controlled activity consent, potentially reduces their own long term rights to water and reliability of use.

To address concern about derogation, the panel have incorporated additional matters for control into the controlled activity rule for existing dairy shed wash down and milk cooling takes. In water bodies that are allocated above the limit Council has reserved its control over measures to avoid or mitigate adverse effects on existing authorised users. The panel supports the overarching drive of PC9 to provide a sustainable water management framework that supplies more information. In obtaining this information, Bay of Plenty Regional Council will be better able to assess those catchments that are over-allocated and those that have additional supply capacity.

### Unauthorised dairy farm water takes

WQ R4 Controlled activity rule – existing dairy: 1.10, 10.29 (F27.198), 14.35 (F27.199), 17.9, 21.8, 27.34 (F10.24,F27.200,F31.3), 30.45 (F28.319,F29.267), 31.45 (F14.410,F27.201,F31.2), 38.14 (F10.39,F14.93), 38.17 (F12.90,F14.95), 39.33 (F12.91,F19.196,F21.11,F27.202), 41.1, 46.9, 47.40 (F27.203,F28.236), 49.60 (F14.226,F14.227,F27.204,F3.12,F31.5,F9.31), 50.88 (F10.153,F14.325,F21.33,F28.58,F29.58), 50.89 (F10.154,F12.92,F14.326,F28.59,F29.59), 51.9, 52.27 (F28.369,F29.317), 53.37 (F27.205,F28.513,F29.463), 58.25 (F28.267,F29.216), 59.9 (F27.206), 61.5 (F27.207), 62.35 (F27.208), 63.38 (F27.209,F28.471,F29.420), 64.6 (F27.210,F28.333,F29.281), 65.85 (F27.211), 69.9, 70.9, 71.63, 72.6, 73.15 (F12.93,F14.426,F28.90,F29.90), 75.3 (F28.147,F29.152), 76.42 (F27.212,F28.191), 78.9, 80.41 (F27.213,F28.428,F29.377)

The majority of the panel considers a controlled activity status the most balanced approach for both existing consent holders and unauthorised takes associated with water for dairy shed wash down and milk cooling purposes. Using section 42A option 1, the panel proposes an appropriate middle-ground. Special note is made of the inclusion matter (e) in WQ R4. This is intended to provide an opportunity for applicants, industry and the council to consider the practical measures they intend to implement to manage the aforementioned effects. This will happen before the first consent is lodged.

The panel believes lodging the necessary information within 12 months of PC9 being operative is an appropriate timeframe, for the same reasons given above for notifying council of permitted water takes.

The panel also wished to highlight both the extent to which this issue has challenged its members and the importance of metering in PC9 to ensure successful implementation of WQ R4. Those dairy shed operations that do require resource consent for a controlled activity are, by the nature of their operation, of a scale that should be assessed and accounted for in the Bay of Plenty Region water take accounts.

The panel believes it appropriate that WQ R4 address both surface water and groundwater takes and has provided specific conditions for each.

### **Municipal water Takes**

??? Municipal water supplies: 14.46 (F15.77,F20.61,F26.60), 27.45 (F10.100,F20.62,F26.61), 62.46 (F20.63,F26.62), 8.40 (F12.108,F14.7,F15.78,F22.56), 12.31 (F12.109,F14.49), 14.44 (F26.53), 27.43 (F14.63,F26.54), 44.2 (F20.56,F27.239), 48.37 (F14.170), 50.98 (F10.163,F15.79), 62.44 (F26.55)
WQ P21 Essential nature of domestic municipal water: 8.27 (F12.72,F14.120,F22.46,F27.143), 12.21 (F14.354,F15.60), 14.21 (F26.28,F27.144), 15.9, 19.7, 27.20 (F10.21,F20.45,F26.29,F27.145), 31.33 (F14.398), 44.4 (F20.46,F27.147), 47.31 (F27.148,F28.227,F29.185), 48.24 (F14.158,F15.61,F27.149), 50.66 (F10.132,F14.305,F28.42,F29.42), 53.28 (F27.150,F28.504,F29.454), 58.19 (F28.261,F29.210), 62.21 (F26.30,F27.146), 63.29 (F27.151,F28.462,F29.411), 65.63, 73.10 (F14.61,F28.87,F29.87), 76.33 (F27.152,F28.182), 80.32 (F27.153,F28.419,F29.368)

WQ M5 Metering in reticulated areas: 12.28 (F14.361), 14.30, 27.29 (F10.95), 33.10, 39.27, 62.30 WQ R6 Municipal renewal: 1.12, 8.37 (F12.95,F14.6,F22.54,F26.41,F5.12,F6.12,F7.12), 9.4 (F20.49,F21.6,F26.42,F28.338,F29.286), 11.20, 11.21 (F15.68), 12.30 (F14.363,F20.50), 14.37 (F26.43), 15.7 (F15.67,F20.51), 19.5 (F20.52), 26.12, 27.36 (F10.26,F14.64,F26.44), 28.12, 29.12, 30.47 (F28.321,F29.269), 31.47 (F18.107), 39.35, 47.42 (F28.238), 48.34 (F14.168), 50.91 (F10.156,F14.328,F15.69,F20.53,F26.45,F28.61,F29.61), 53.39 (F27.221,F28.515,F29.465), 56.12, 58.27 (F28.269,F29.218), 60.13 (F20.54), 60.7 (F12.96,F23.22,F26.46), 61.7 (F16.41), 62.37 (F26.47), 63.40 (F28.473,F29.422), 65.87 (F15.70,F26.48), 71.65, 75.4 (F28.148,F29.153), 76.44 (F28.193), 79.5 (F10.180,F15.65,F16.5,F24.6,F28.379,F29.328), 79.6 (F10.181,F16.6,F28.380,F29.329), 79.7 (F15.66,F16.7,F28.381,F29.330), 80.43 (F28.430,F29.379)

*Territorial Authorities (8-46, 60-2)* and developers submitted and presented strong arguments that the importance of municipal water supplies was insufficiently acknowledged by proposed PC9 and the section 32 report. They sought to further prioritise municipal takes.

The panel notes policy WQ I2 identifies that urban growth increases demand for water and is already increasing demand on some streams, rivers, springs and groundwater. Municipal water supplies are an important part of local government services, including urban development and health in terms of drinking water. Policy WQ P21 expressly provides for municipal water supplies. Territorial authorities and developers ask for this to be recognised further by giving municipal water takes additional priority over other freshwater values and uses.

*Trustpower* has noted a number of the provisions in the PC9 should acknowledge that the taking and use of water from lakes - in addition to rivers and streams - will also require management. The panel agrees and has therefore amended issue WQ I2 to include lakes. Further as pointed out by (*Oji Fibre*) we consider land use change can have cumulative effects and support the inclusion of cumulative effects in WQ I2 to acknowledge this.

*Tauranga City Council (8-7)* was highly supportive of objective WQ O3(e) and sought an additional objective to provide long term certainty for municipal water supplies. Territorial authority submitters sought to add an additional clause to WQ O8 to include "(e) The long term certainty and priority required for safe and adequate municipal water supplies, recognising the need to provide for future growth and urban development capacity". They asked that this matter to be recognised when allocating water and making decisions on freshwater resources.

The NPSFM 2017 identifies water supply as one of the 'other national values' to be identified on a case-by-case basis, depending on the respective FMU.

In the panel's view, objective WQ O8 currently aligns with operative policy WQ 3B of the RPS. It would therefore be inappropriate to add further items that are not stated in the RPS. The panel considers WQ O8(a) *"Social benefits from the use of water for domestic, marae, or municipal water supply, including in particular essential drinking and sanitation requirements."* provides appropriate recognition of the importance of municipal water when making decisions about water

allocation. Operative Policy WQ 3B of the BOP RPS states in its explanation that "the scope of this [municipal use] priority is not unlimited and must be considered in relation to other matters listed in Policy WQ 3B, especially efficient use and the availability of water for other uses. ...Demands on domestic or municipal water supply must not be seen as unlimited and should be constrained to avoid waste, uncontrolled consumption and associated cost".

While it is important to recognise drinking-water and sanitation needs, further strengthening the priority of municipal water supply or the inclusion of private industrial development needs is inconsistent with national and regional policies. These policies demand a more considered and balanced approach. The panel considers it unnecessary to make reference to the development of Māori owned land and the need for specific water allocation. As amended to include the values and interests of tangata whenua, the panel believes WQ O8 provides adequate provision in relation to this issue.

### Definition of municipal water supply

Several submitters including *Quayside Properties Ltd 44-3, Horticulture NZ 12-108, New Zealand Kiwifruit Growers 14-44* and *Tauranga City Council (various)* questioned the definition of municipal water supply. They were split between support and opposition for the preference given to domestic water takes in the definition.

As noted above, the panel acknowledges the importance of municipal water supplies and considers objectives and policies adequately provide for municipal use and priority for water. However, it is not solely councils that provide municipal water supplies and until these assets are vested with council it is often developers who provide the infrastructure. By inserting 'or for' ahead of the reference to a territorial authority, allowance is made for those private and/or partnership arrangements to provide municipal water supply. The panel considers this entirely consistent with legislation and land development norms.

### Other municipal uses

Several submitters suggested that private drinking water supplies could be included in proposed Rule WQ R6 and subject to similar conditions. This idea was further supported by *Tauranga City Council* and *Rotorua Lakes Council*.

Drinking and sanitation use of water is prioritised through objective WQ O8 and policies WQ P21 & WQ P31. The panel has recommended changes to WQ O8 to reinforce and further recognise benefits derived from the use of water for energy generation and municipal water supplies, consistent with national policy and the requests of several municipal and generation authorities.

Initiatives by local communities, tāngata whenua or sector groups are further supported by proposed methods WQ M4 community initiatives and WQ M8 as water user groups. Many small-scale water takes that support rural homes, marae and papakāinga are likely to be within the permitted activity provisions.. For example a bore in a property larger than 5 ha could support an estimated 70 households (roughly 180 people), while a smaller property could draw water from above or below the ground to support an estimate of 30 households (roughly 80 people). Any volume of take exceeding this would require resource consent. Small scale takes are, in most situations, likely to be permitted activities and not subject to WQ R6. Drinking water supplies must be listed on the Ministry of Health's drinking water register. However, only local authorities are bound by the legislative requirements specific to local government. Accordingly, the hearing panel supports staff recommendations to exclude private water supply from Rule WQ R6.

Policy WQ P21 specifically recognises the essential nature of domestic, marae water supplies in addition to municipal water supplies and policy WQ P15 requires decision makers to consider the relative social and economic benefits of the proposed use of water. In this regard, other suppliers for

domestic type purposes are supported by these policies. The Combined Tāngata Whenua Forum (53-28) sought to include papakainga in policy WQ P21. This is supported because papakainga water requirements are domestic related.

The panel believes small scale community initiatives should be encouraged and requiring municipal take regulations to apply to community activities would be a disincentive to community water supply initiatives.

While the panel is generally supportive of the priority afforded municipal water, it notes other submitters asked that priority be given to water for energy, industrial and farming purposes. These uses are not supported as they fail to identify how cultural, ecological and recreational impacts on the environment would be addressed. The panel does not consider these uses should be afforded the same legislated prominence as municipal and domestic/drinking supply.

### Controlled renewal of municipal consents.

Rule WQ R6 establishes a controlled activity instruction for the renewal of existing municipal takes at the same rate and volume. The panel understands that under the operative plan there is no special rule for municipal takes.

Local authorities and the public health sector were strongly supportive of the controlled activity status and sought that it be broadened to cover increases in water demand/take, or have less onerous conditions. Other parties, including farming and horticulture representatives, generally agreed in principle but raised matters regarding the importance of the water management plan. They specified the need for control over non domestic uses such as industry and horticulture that draw from municipal supplies. Iwi noted the importance of taking account of tangata whenua values.

Most submissions supported the 'controlled activity' status for existing water take for municipal water supply, subject to minor amendments. The panel notes the support and concerns raised, particularly in relation to situations where municipal takes provide water for non-municipal purposes.

The panel considers the proposed provisions are appropriate and that concerns can be addressed through minor amendments to proposed rule WQ R6, to reference the current consent and to tighten the definition of "municipal water supply".

Some confusion has arisen by restricting takes under WQ R6 to those in existence at the date of plan notification 18 October 2016. *Tauranga City Council (8-37)* sought to include the term "subsequent renewals" in (1) and (2), to confirm the rule applies to renewals. The panel believes the rule is intended to enable simple renewals on a like for like ongoing basis, not once only. A modification of the consent volume is an entirely different RMA process, akin seeking a new consent. This would be considered on its merit and, potentially, notified. On this basis, the panel sees no problem referring solely to the consented take, excluding any reference to date.

*Tauranga City Council* and some iwi submitters also raised concern about consultation. As part of the water management plan, an applicant is required to provide information on any consultation undertaken with key stakeholders. The Regional Council has retained control over the extent to which the applicant has consulted and taken into account Māori values. As the circumstance of each take will differ, it is not possible to define consultation requirements. However, it is assumed that local councils have existing relationships and protocols with tāngata whenua that will assist in determining the appropriate level. The panel sees no basis to change this requirement.

The amendment to WQ R6(c) replaces 'the cessation' with 'management'. This is considered appropriate by the panel as use of the term 'management' is consistent with RMA terminology and the amendment provides for greater flexibility in low flow events.

The hearing panel agrees with the proposed amendment to Rule WQ R6 clause 3 to include the word 'set' and delete the word 'outlined'. The wording change provides greater certainty and consistency in the application of Schedule 7.

The insertion of WQ R6(h) is appropriate in the panel's view as council should have an understanding of what volumes are being used for non-domestic uses. This new clause is more appropriately located following clause c.

### Exempt smaller municipal supplies from a water management plan

Whakatane District Council 26-59 has requested establishing a minimum threshold, below which water management plans are not required. This would be the case for very small municipal supplies. While the panel agrees and supports delivering the NPSFM without undue costly process, it is also mindful that municipal supplies enjoy certain policy advantages over other, less privileged uses.

On the basis that these very small takes are within the permitted activity standard, the panel recommends changing Schedule 7 to allow smaller municipal water supplies to occur without the requirement to develop a water management plan. This amendment provides consistency with other activities in PC9 that have permitted activity status.

The development of and requirement for a water management plan is deemed an appropriate resource management tool where the scale of the activity is likely to have effects that should be assessed.

### Availability of water for development and land use change

*Tauranga City Council* 8-2 and Western Bay of Plenty District Council (48-3) noted that land development decisions are made on a long time-frame basis. As well as providing water for drinking purposes, water is an essential part of the whole land development cycle. The submitters requested the removal of references to urban growth being limited due to lack of available water resources.

As noted previously, the panel considers PC9 provides adequately for urban development. The panel is unaware of local circumstances where water availability would needlessly curtail urban development, which has the potential to access water from a wide variety of sources not so readily available for rural purposes. Urban development should be considered a priority and the panel is comfortable that PC9 achieves this.

PC9 is focused on water quantity and cannot consider water quality-specific issues.

In relation to WQ O5, the panel considers it particularly important that urban development leverage the long-term planning process available to it and consider options to secure long-term access to water. It should not, carte blanche, assume access to the closest, most cost-effective source. In the Bay of Plenty, in particular, a looming tension exists between horticultural water demands and the potential for urban development water demand to impose limits on available water.

The panel believes WQ O5 appropriately considers the issue of urban growth and land use change and its effects on water quantity and supply. In the panel's opinion, WQ O5's companion policy WQ P27 is an appropriate policy to ensure that development and land use consider the effects of these uses and how that development relates to water availability.

# Taking into account resource limitations and investigating water availability

**WQ P27 : Take account of resource limitations**: 5.3 (F28.128,F29.133,F30.3), 8.29 (F14.122,F19.183,F22.48,F27.161,F5.11,F6.11,F7.11), 10.27 (F27.162), 12.23 (F14.356,F15.63), 26.7, 28.7, 29.7, 49.47 (F10.62,F14.213,F27.163), 56.7, 65.69, 71.48 (F16.74,F19.184) **WQ P28 Promote investigate water availability:** 8.30 (F14.123,F22.49,F27.121), 12.24 (F14.357),

14.24, 26.8, 27.23, 28.8, 29.8, 31.38 (F14.403), 32.19, 48.26 (F14.160), 49.66 (F9.26), 50.72 (F10.138,F14.311,F19.185,F28.47,F29.47), 56.8, 62.24, 65.70, 71.49 (F16.75)

Proposed policy WQ P27 encourages landowners and others to take account of any water resource limitations before making a land use change. Most of the submissions received supported the policy but others sought amendments to either create a more regulatory approach or to exempt the activities of firefighting or urban growth. Proposed policy WQ P27 provides good direction to ensure that resource constraints are factored into decisions and the panel supports this sentiment.

Proposed policy WQ P28 and proposed method WQ M4 promote or support the investigation of options to enhance water availability such as water storage. These were mainly supported by a range of submitters. *Federated Farmers* (50-72) noted that WQ P28 may be more appropriate as a method and this was supported by *Trustpower*. The panel disagrees with *Federated Farmers* that the policy should be deleted; however it has merged parts of WQP 28 with WQ M4.

Method WQ M4 supports initiatives to identify and enhance water availability and lists examples of possible options, including water storage dams, and including investigations supported by the Council itself.

### Hydro-electric Power Schemes and Renewable Energy Generation

WQ O2 ????: 6.5 (F11.4,F19.59), 30.14 (F19.60,F28.288,F29.236), 31.6 (F11.5,F14.55,F2.2,F27.34),
32.6 (F19.61,F25.3), 47.14 (F19.62,F28.210,F29.168), 49.13 (F10.46,F14.183,F25.1,F27.35,F9.2),
50.12 (F14.30,F19.63,F25.2,F28.10,F29.10), 52.13 (F19.64,F28.355,F29.303), 53.12
(F28.488,F29.438), 63.13 (F19.66,F28.446,F29.395), 64.2 (F19.67,F28.329,F29.277), 65.7 (F19.68),
71.12 (F19.69,F25.4), 76.17 (F19.70,F28.166), 80.16 (F19.71,F28.403,F29.352)
WQ P19 Importance of renewable energy: 1.4, 6.31 (F19.168,F21.2), 9.7 (F28.341,F29.289), 30.39
(F19.169,F28.313,F29.261), 32.17 (F19.170), 49.43 (F14.209,F27.141,F3.11,F31.4,F9.21), 50.64
(F10.130,F14.303,F19.171,F25.48,F28.40,F29.40), 52.22 (F19.172,F28.364,F29.312), 58.18
(F19.173,F28.260,F29.209), 65.61 (F19.174), 66.9 (F19.175), 71.41, 71.42
WQ P20 Taking upstream of existing HEP: 1.5, 39.23, 49.44 (F14.210,F27.142,F9.22), 50.65
(F10.131,F14.304,F19.176,F28.41,F29.41), 65.62 (F11.13,F19.177), 66.10 (F19.178), 71.71

### Hydro-electric power schemes

Proposed objective WQ O2 states that "Allocation of water resources in the Bay of Plenty recognises and maintains the generation capacity of <u>hydro-electric power schemes</u> as a renewable energy source". This provision responds to RPS Policy El 6B and supports Policy E2 of NPSREG.

Many submitters disagreed that maintaining hydro generation capacity should be an objective when allocating water, and they particularly objected to its being prioritised above other values. In particular, many iwi consider hydro-electric power generation has seriously affected their awa by, for example, impacting the migration of eels or passage of vessels. Others, such as *Mercury Energy* recognise renewable energy includes geothermal energy, which also needs access to water.

Eight submissions specifically asked for the word "maintain" to be removed from WQ O2. A further submission from *Trustpower (19)* opposes this request given the NPSREG requirements.

While the NPSREG does not direct freshwater allocation and prioritisation, there is a clear relationship between the allocation of water and the ability to meet the objective of the NPSREG. The RPS requires decision-makers to provide for the on-going renewable energy electricity generation therefore, the panel considers it appropriate to retain the word maintain.

Policy WQ 3B of the RPS takes a slightly different approach. It directs that "the benefits to be derived from the use of water for [...] electricity generation from renewable sources" be considered as one of 10 matters listed in no order of priority.

### **Renewable energy generation**

Having provided for hydro-electric generation capacity in WQ O2, the panel has recommended the inclusion of an additional clause in WQ O8 to provide for a broader range of renewable energy sources.

### Extent of derogation of existing consents

The panel considered the importance of renewable energy carefully and, in reviewing WQ P19 and WQ P20, formed the view that these would read more clearly as a single omnibus provision similar to that relating to municipal water use in WQ P21. The panel considered arguments from Ms Hamm and Mr Matheson concerning the extent to which existing consents had exclusive access to catchment water and was persuaded by Mr Matheson that *Trustpower* does not have exclusive

access to water in the Rangitaiki catchment above the Matahina dam nor, necessarily, above many other hydroelectric schemes.

The panel considered a range of typical rural activities likely to be significantly affected in the face of a strong, exclusionary policy position. In the panel's view, hydroelectric/renewable energy generation is a significant and important resource but not to the extent that it has exclusive rights to water. In cases such as the Matahina dam, there appears to be considerable uncertainty over the precise effect of the consents (exclusive or not).

The panel considers the most appropriate interpretation is that which gives best effect to the RMA purpose. In light of the very minor impact some activities can have on hydroelectric output, the panel therefore favours strong policy direction to consider these effects in light of national policy direction.

### Effect of the Operation of this plan

The panel has tested the operation of the revised Plan to satisfy itself that the Plan operates as intended, using as examples the following types of activities:

- 1. Water take in an under-allocated water body
- 2. Renewal of water take in an over-allocated water body
- 3. Secondary allocation of surface water
- 4. New water take in an over-allocated water body
- 5. Flood harvesting of surface water
- 6. Water take for currently unauthorised dairy shed wash down and milk cooling

## The diagrams are a summary only - plan provisions apply universally to all applications, special pathways for WQ R4, and WQ R6 are not shown.



### 1. Allocation does not exceed primary limit (10% Q5, 35% RAAR)

### 2. Renewal in over allocated waterbody








### 6. Currently unauthorised dairy



Additional matters for control if proposed take is from waterbody that is allocated above the limit in WQ P5(b) or WQ P5(e)

## Recommendation

The panel recommends that the changes shown in PC9 appended to this report be adopted by the Bay of Plenty Regional Council, and that submitters be advised of the reasons for those decisions as detailed herein.

## Appendices

# Plan Change 9 Panel Recommendations Version with track changes to operative version

Version 8.1

Deliberations [note: Consequential renumbering will occur prior to this plan change becoming operative. The Regional Natural Resources Plan has replaced the Regional Water and Land Plan and the title page is changed accordingly]



## Region-wide Water Quantity -Proposed Plan Change 9 to the Bay of Plenty Regional Natural Resources Plan (Track Change Version from Operative Plan)

Bay of Plenty Regional Council PO Box 364 Whakatane 3158

#### WQ Water Quantity

This section contains provisions relating to the allocation, taking and use of surface water and groundwater;

Damming and diversion; artificial control of lake water levels; and, flood hazard management and the non-consumptive use of water (e.g. for hydro-electricity generation), is addressed in BW Beds of Water Bodies.

Unless otherwise specified all clauses apply within each provision.

 Para 1
 The allocation, taking take and use of geothermal fluid (water >30 degrees Celsius) is covered by provisions in Geothermal Resources section of this regional plan, and the Rotorua Geothermal Regional Plan (for activities in the Rotorua Field), and is not subject to the provisions in Section 5 Water Quantity and Allocation the WQ section. The exception to this is the Tauranga Geothermal Resource, covering much of the Western Bay of Plenty, which shares the same aquifer systems as the groundwater resource. Therefore, groundwater management in this area must account for, and consider the effect on, the Tauranga Geothermal Resource.

#### **5.1** Take and/or Use of Surface Water and Groundwater

Para 1 Section 5.1 The WQ section of this regional plan addresses consumptive use of water where the water is taken out of a surface water body or groundwater system (e.g. irrigation, industrial use, municipal water supply). The non-consumptive use of water where water is used within the water body and not abstracted from the river, stream or lake (e.g. hydro-generation systems), is addressed in section 5.2 Damming and Diversion.

To enable the implementation of give effect to the National Policy Statement on Freshwater Management 2014 (NPSFM), Water Management Areas (WMAs) have been established throughout the region. Water Management Areas are large catchments that Council has decided will be prioritised in order to break NPSFM implementation into manageable geographic units. The Council will work with tangata whenua, city and district councils, resource users and the community WMA by WMA to progressively develop water management frameworks (i.e. subregional plans) for each of the WMAs. These planning processes will involve the setting of freshwater objectives and limits for the water bodies within Freshwater Management Units (FMUs) in the WMAs.

The NPSFM defines "Freshwater management unit" as an area determined by the regional council as the appropriate spatial scale for setting freshwater objectives and limits and for freshwater accounting and management purposes. This is a much smaller scale than WMAs, which exist solely for Council administrative/project management purposes. Council will develop FMUs for each WMA depending on a mixture of scientific and community views. FMUs may comprise multiple water bodies for which limits are to be set.

Due to the relatively complex nature of the NPSFM the term "interim limits" is used in relation to water quantity take limits that are considered provisional and will benefit from further analysis and consideration under more detailed WMA processes. Most of these limits will be superseded by specific provisions within the relevant Water Management Area chapters of this plan.

The WQ section in its entirety will continue to apply across all catchments in the region, except where the sub-regional plans specify that its application has been superseded. The WQ section will also guide the development of these sub-regional plans. This is to ensure an holistic and integrated approach to developing sub-regional frameworks for managing fresh water.

The NPSFM recognises that tangata whenua have particular values and interests in fresh water. Therefore, it is important that freshwater management and decision-making reflects these values and interests. A key element of the WMA process will be working with tangata whenua to determine how this can best be achieved.

#### 5.1.1 Issues

- <u>Issue 29WQ I1</u> The over-abstraction of surface water can degrade water quality and adversely affect ecological values, landscape values, recreational values, <u>tangata whenua values</u> <u>Maori customary values and traditional instream</u> uses, the downstream environment, and existing uses.
- Para 1 'Pressure abstraction' areas are those where surface water is at or near full allocation relative to the allocation policy, which determines the flow available for use from a specific stream or river. In all WMAs, there are rivers and streams under abstraction pressure. Catchments that are under abstraction pressure are largely in the western Bay of Plenty area (e.g. Waiari, Waimapu, Waipapa, Ohaurere, Kopurereroa, Mangawahi, Uretara (Wharawhara streams), and the Haumea Stream catchment on the Galatea plains. Municipal water takes consume a large proportion of the available low flow allocation in the majority of pressure abstraction catchments. Potential Aadverse effects of over-abstraction that are evident in the Bay of Plentysurface waters under abstraction pressure. Potential adverse effects of over-abstraction are reduced habitat for fish and invertebrates, reduced water velocities (which can allow the accumulation of sediment and algae), reduced dilution of contaminants (which increases the impact of contaminants such as ammonia), increased water temperature, and reduced oxygen concentration as re-aeration is reduced and plant respiration increases. Over-abstraction of surface water can adversely affect other users, including non-consumptive uses.

| Objective | <del>- 40, 41, 46</del>                     |
|-----------|---|
| Policy    | <del>- 64, 66, 67, 68, 69, 72, 76, 79</del> |
| Method    |   |
|           | <del>179, 180, 181, 182, 185</del>          |
| Rule      | <u>41, 43</u>                               |
| Schedule  |   |

<u>Issue 30WQ I2</u> Increasing demand for water in the Bay of Plenty is placing pressure on rivers, streams, riverslakes, springs and groundwater.

Para 1 Increasing water demand in the Bay of Plenty is evident due to increasing amounts of water being abstracted for irrigation, domestic water supply (e.g. life-style blocks), and municipal water supply as a result of population growth. Increased water abstraction <u>may not be appropriate</u> is inappropriate where it may cause significant or cumulative adverse effects on the environment and the resulting. The lack of availability of water resources may limit land use

intensification or urban growth in some areas of the region. -as increased water abstraction may cause significant adverse effects on the environment.

<u>Objective 44</u> <u>Policy 68, 77, 78</u> <u>Method 152, 153, 154, 155, 156, 157, 158, 159</u> <u>Rule 39, 40, 41, 52,</u>

**<u>Issue 31WQ I3</u>** The inefficient allocation and use of water can significantly reduce the overall benefits total be derived from the use of the resource.

The inefficient use of water can exclude other abstractors from streams and rivers.

- Para 1 Other potential water abstractorsusers or benefits of water use may be excluded where a water body is fully or over\_allocated, but actual water use is lower than the volumerate of\_take consented by water permits. Inefficient water use also occurs where a greater volume of water is taken than <u>is actually</u> that required to operatethrough the <u>use without wastage</u>lifecycle of the\_activity <u>or when an</u> activity wastes water.
- Para 2
   There are a significant number of resource consents, particularly those rolled over from the Water and Soil Conservation Act 1967, that provide where the Bay of Plenty Regional Council with limited ability may need to review the amount of water that is allocated or whether the quantity taken is used efficiently.

<u>Objective 39</u> <u>Policy 73</u> <u>Method 155, 157, 160, 161, 162, 164, 168, 170</u> <u>Rule 40, 41, 41A, 43</u>

- <u>Issue 32WQ I4</u> Over-abstraction of groundwater can degrade groundwater quality, and reduce water levels in aquifer systems and associated surface water bodies.
- Para 1 Over abstraction in coastal aquifers can result in seawater entering the aquifer. Groundwater provides base flow to rivers and streams, and maintains the water level in wetlands.

<u>Objective 43</u> <u>Policy 70, 71, 74, 75</u> <u>Method 54, 66, 155, 156, 159, 165, 166, 167, 169, 183, 184</u> <u>Rule 38, 42, 43</u>

- <u>Issue 33WQ I5</u> Continued abstraction of <u>surface</u> water from streams and rivers during <u>low</u> <u>flows\_drought\_conditions</u> may reduce <u>surface</u> water flows below that necessary to <u>safeguard the mauri and life-supporting capacity</u> and other values <u>of water bodies</u>-sustain aquatic life.
- Para 1 It may be necessary to restrict the take and/or use of surface water during meteorological and hydrological droughts to ensure the mauri and lifesupporting capacity values of water bodies <u>-is</u>are safeguarded aquatic life is sustained.

<u>Objective 45</u> <u>Policy 80</u> <u>Method 158, 163, 172</u> <u>Rule 41, 41A, 43</u>

#### Issue 34

Proposed Water quantity Plan Change 9 - Version 8.1

| <u>WQ 16</u>                     | Water abstraction from rivers,_streams and riverslakes can reduce stream<br>flow variability, which is necessary for to maintain instream biota ecological<br>integrity and the flushing of stream systems to remove deposited sediment<br>and growths of nuisance algae.   |
|----------------------------------|---|
|                                  | <del>Objective 42</del><br><del>Policy 65, 68</del><br><del>Method 152, 155, 158, 159, 169, 171, 172, 173, 175, 176, 177, 181, 185</del><br><del>Rule 43</del>  |
| <u>WQ 17</u>                     | The effective management of water allocation and use relies on the collection and availability of good quality information.   |
|                                  | <u>The Bay of Plenty Regional Council requires</u> and the public require robust information on both the amount of available water and the amount being taken to effectively make decisions around the management of rivers, streams and aquifers. This includes understanding the values and interests associated with freshwater bodies, access to scientific information and mātauranga Māori pertaining to fresh water. |
| <u>WQ 18</u>                     | The ability to provide for the growing social and economic needs of people is dependent on water being available.   |
|                                  | Key social and economic activities in the region require reliable and secure access to water.   |
| <u>WQ 19</u>                     | The unauthorised taking of water creates difficulties in managing allocation,<br>and can impede achieving the objectives of this regional plan and is unfair<br>to authorised users.  |
|                                  | These difficulties include lack of accurate information on the number of existing water takes and the amount of water taken; an inability to ensure that each take and/or use is efficient; and managing the potential adverse effects of such takes.   |
| <u>WQ 110</u>                    | Inadequate recognition of tangata whenua values and interests and the mauri of water in freshwater management can adversely affect the relationship of tangata whenua with fresh water.   |
|                                  | Cross reference: Issues 1-9 (Chapter 2: Kaitiakitanga)  |
| <u>WQ I11</u>                    | The taking of water infrom over-allocated or fully allocated<br><u>catchments</u> surface waters or aquifers <u>should be more stringently regulated</u><br>than in under-allocated catchments or aquifers. can have adverse effects on<br>the values associated with those freshwater bodies.  |
|                                  | The NPSFM requires the avoidance of any further over-allocation of fresh water and phasing out of existing over-allocation.   |
| <del>5.1.2</del>                 | Objectives  |
| <del>Objective 39</del><br>WQ O1 | Efficient allocation and use of water resources in the Bay of Plenty.   |
| Objective 40<br>WQ O2            | Allocation of water resources in the Bay of Plenty recognises <u>and maintains the</u><br>generation capacity of hydroelectric power schemes as a renewable energy<br>Sourcesources.  |
| Objective 41                     | _   |

## <u>WQ 03</u> <u>Manage the allocation and abstraction of surface water at a volume and rate</u>rates of take that:

Water flows in streams and rivers are maintained to:

- (a) Provide protection for existing aquatic life in the water body.
- (a) Safeguard or improve the mauri and life-supporting capacity of the water body.
- (b) <u>Maintains identified significant</u> Maintain or improve <u>ecological integrity</u>, significant ecological values, landscape values, recreational values, and <u>tangata whenua values</u> Māori-customary values and traditional instream uses of <u>associated with</u> rivers-and, streams and lakes.
- (c) Recognise and provide for the relationship of tangata whenua with the freshwater resource.
- (d) MaintainsMaintain or improve water quality relative in order to sustain the identified values<sub>1</sub> of rivers, streams and lakes; including through the setting of freshwater objectives and limits\_assimilative capacity of the water body, and the Water Quality Classification of the water body.
- (e) <u>Avoids</u>Avoid or <u>mitigates</u>mitigate adverse effects on downstream environments, and existing <u>uses</u>authorised users of the water resource.
- (f) MeetsMeet the reasonably foreseeable needs of future generations.
- (g) <u>MaintainsMaintain or improve flow variability to allow for ecological integrity</u> and the flushing of stream systems to remove deposited sediment and growths of nuisance algae.
- (h) Recognise and provide for the interactions and interrelationships between ground and surface water and, where appropriate, manages them as a single resource.

Objective 42\_ Instream flow variability is maintained to sufficient levels to allow for instream biota and stream flushing requirements.

#### **Objective 43**

- <u>WQ 04</u> <u>Manage the allocation and</u> abstraction of groundwater at a volume and raterates of take that-does:
  - (a) Do not result in a sustained decline in groundwater levels-
  - Permanently or unsustainably lower water levels or decrease groundwater qualitypressure except in aquifer systems localised situations for the purpose of dewatering-
  - (b) Do not permanently or unsustainably lower water levels in streams orto an extent that is contrary to WQ O3 in rivers where groundwater and surface water bodies are linked to an extent that is contrary to WQ O3connected.
  - (c) Do not adversely affect groundwater quality in aquifer systems, including taking into account the risk of saltwater intrusion.
  - (d) Do not cause the mixing of water between different aquifers where those aquifers are not naturally connected.
  - (e) Recognise and provide for tangata whenua values and interests including the mauri of water and relationship of tangata whenua with the groundwater resource.
  - (f) Recognise and provide for the interactions and interrelationships between ground and surface water and, where appropriate, manage them as a single resource.

#### **Objective 44** WQ 05 Land use changes, including urban growth and land use intensification, are planned to account for water resource limitations of the location, particularly in areas with existing and projected high water demand, and limited water resources. Water abstractions account for water availability limitations during drought events. Objective 45-WQ 06 The potential adverse effects of water abstraction during low surface water flowsorflows or low aquifer levels are avoided or mitigated to ensure WQ O3 and WQ O4 continue to be achievedat or below the Instream Minimum Flow Requirements set in Schedule 7. WQ 07 Limits are set and applied for: <u>(a)</u> Instream minimum flows for surface water bodies to safeguard their lifesupporting capacity, ecological integrity, significant ecological values, mauri, landscape values, recreational values, existing uses and take into account tangata whenua values and interests including the mauri of water where relevant. (b) The total amount of water that can be taken from surface water bodies to ensure a reliable and accessible amount of water is available for users. (c) Groundwater, which takes into account: (i) The interaction between groundwater and surface water; (ii) Surface water flows in groundwater-fed rivers, streams, lakes and wetlands; (iii) The prevention of aguifer contamination by saltwater intrusion; and (iv) Water levels in aquifers. WQ 08 Decision-making and allocation of freshwater water resources in the Bay of Plenty recognises the: Social benefits from the use of water for domestic, marae, or municipal (a) water supply, including in particular essential drinking and sanitation requirements. (b) Social, economic and cultural benefits that existing water takes uses contribute, which isare often associated with significant investment. Tangata whenua values and interests including the mauri of the water body. (c) (d) Social, economic and cultural benefits that new water takes can provide. (e) Benefits to be derived from the use of water for, or directly associated with, energy generation from renewable resources. Long term certainty and priority required for safe and adequate municipal (f) water supplies. WQ 09 Integrated management of freshwater resources within WMAsWater Management Areas that reflects: Tangata whenua values and interests, the mauri of fresh water and the <u>(a)</u> future aspirations of tangata whenua. (b) Community values and aspirations. (c) Scientific research and mātauranga Māori.

- (d) <u>Understanding of the relationship between freshwater quantity and quality</u> and between land use and its management, and freshwater uses and values.
- <u>WQ 010</u> <u>All water takes are authorised and accounted for.</u>

 WQ 011
 Where water shortage is a significant problem an issue in a Water Management

 Area, potential solutions are explored so the allocation and efficient use of water is improved over time by enabling:

- (a) <u>Water storage and managed aquifer recharge.</u>
- (b) More efficient use of allocated water including through the transfer of water take consents permits.
- (c) Water harvesting.
- (d) Temporary and periodic takes timed to avoid seasonal water shortage and low flow conditions.
- **WQ 012** Decision making and the allocation of fresh water in the Bay of Plenty recognises and provides for tangata whenua values and interests including the mauri of water and maintains or enhances the relationship tangata whenua have with their ancestral waters.
- **WQ 013** Require, record, update and maintain good quality information about the water resources of the region, including the use of those resources and including system modelling, to ensure that water resource information can be easily and freely accessed by the community to make good decisions on their current and future water use options.

#### **Policies**

#### Water Management Areas

#### Policy 64 WQ P1

Establish the following Water Management Areas within which freshwater management units and for each of these\_freshwater values, will be delineated and freshwater objectives and environmental flows and levels applying within the following WMAs limits set:

- Tauranga Harbour including Motiti Island
- Kaituna, Maketū, Pongakawa and Waitahanui
- Rotorua Lakes
- <u>Tarawera</u>
- <u>Rangitaiki</u>
- Whakatāne and Tauranga
- Ohiwa Harbour and Waiotahi
- Waioeka and Otara
- East Coast



Map WQ 1 Water Management Areas

To establish Instream Minimum Flow Requirements for streams and rivers where water abstraction occurs, that will:

- (a) Provide protection for existing aquatic life in the water body.
- (b) Maintain identified significant ecological values, landscape values, recreational values, Maori customary values and traditional instream uses of rivers and streams where such values can be adversely affected by lower water flows.
- (c) Maintain water quality relative to the assimilative capacity and water quality classification of the water body.
- (d) Avoid or mitigate adverse effects on downstream environments.
- (e) Provide for the assimilative capacity of the river or stream where there are existing discharges of contaminants to water (refer to Methods 172 and 177).

WQ P2 Work with co-governance partners, tangata whenua, city and district councils andthe, the community, within and other stakeholders relevant to each WMA Water Management Area, to identify freshwater management units that include all freshwater bodies in the WMA Water Management Area and within each of these to deliver (a) to (m) below:

- (a) Evaluate:
  - (i) Surface water and groundwater resource quantities;
  - (ii) Water quality, and the suitability of surface and groundwater quality to support various values and uses;
  - (iii) <u>The capacity of surface and groundwater resources to meet expected</u> <u>future water demand; and</u>
  - (iv) Information needs for the purposes of water accounting; and

- (v) The potential effects of climate change.
- (b) Identify tangata whenua values and interests relating to fresh water.
- (ba) Consider how to recognise and provide for Te Mana o te Wai in freshwater management.
- (c) Identify social, economic and environmental values relating to fresh water including the significant values of wetlands and outstanding freshwater bodies.
- (d) Establish freshwater objectives taking into consideration:
  - (i) <u>The current state of the freshwater management unit, and its</u> <u>anticipated future state on the basis of past and current resource use;</u>
  - (ii) <u>The limits that would be required to achieve the freshwater objectives;</u>
  - (iii) <u>Any choices between values that would be required to achieve</u> them;
  - (iv) <u>Any implications for resource users, including implications for actions,</u> investments, ongoing management changes and any social, economic or cultural implications;
  - (v) Values identified through community and tangata whenua engagement and discussion;
  - (v)(vi) <u>Timeframes required to achieve them; and</u>the freshwater objectives;
  - (vii) <u>andOther</u>The reasonably foreseeable effects of climate change; and
  - (vi)(viii) Other matters relevant and reasonably necessary to give effect to the freshwater objectives.
- (e) Set environmental flows and levels for rivers, streams, lakes and aquifers:
  - (i) Based on the freshwater values and objectives; and
  - (ii) <u>That reflect tangata whenua values and interests</u> and the mauri of fresh water; and
  - (iii) The reasonably foreseeable impacts of climate change;
- (f) <u>Set water allocation and water quality limits for rivers, streams, lakes and</u> aquifers based on the freshwater values and objectives, that have regard to:
  - (i) <u>The reasonably foreseeable impacts of climate change;</u>
  - (ii) The connection between water bodies;
  - (iii) The connection between freshwater bodies and coastal water;
  - (iv) The connection between land use, water quantity and water quality;
  - (v) <u>The connection between groundwater and low temperature</u> geothermal resources, where applicable;
  - (vi) The level of reliability for abstraction from rivers and streams;
  - (vii) Whether water is to be allocated to a particular type of use or value; and
  - (viii) The protection of significant values of wetlands and outstanding freshwater bodies, and;
  - (ix) (g) <u>Consider the status</u>The mauri of new the water body.
- (g) Within fully allocated water bodies, consider requiring resource consents for takes otherwise allowed under <u>section 14</u>s14(3)(b) of the <u>Act and</u>RMA or

by permitted activity takes within fully allocated catchments, and the extent to which these as well as existing takes rules.

- (ga) Account for water abstracted under <u>section 14</u>s14(3)(b) and permitted <u>activities should be accounted for within</u>activity rules\_before setting allocation limits<u>.</u> for consented takes.
- (h) Identify opportunities to Incorporate mātauranga and tikanga Māori into fresh-water planning, management and decision-making.
- (i) Identify methods to avoid or phase out over-allocation of water.
- (j) Identify opportunities to enhance water availability in areas under abstraction pressure.
- (k) Identify opportunities to improve the efficient allocation and use of water, including:
  - i) Metering and reporting;
  - ii) Shared use and management of water such as water user groups and rostering; and
  - iii) Community awareness and education; and
  - iv) The transfer of water permits.
- (I) Identify specific actions to manage water allocation, including triggers for water take restrictions during times of low water flows or aquifer levels.
- (m) Consider initiating a collective review of resource consents, in accordance with section 128(b) and section 68(7) of the Act, once a rule imposing environmental flows and levels is made operative.
- (n) Prepare <u>a</u> monitoring plan that includes matauranga indicators, sufficient to track progress towards the achievement of objectives set for the Freshwater Management Units.

#### Existing over allocation

#### WQ P3 Take steps to phase out over-allocation, where applicable, by 1 October 2027 or any earlier date specified in a Water Management Area plan change, by:

- (a) <u>Encouraging voluntary reductions in allocation.</u>authorised takes.
- (b) Reviewing existing resource consents to determine reasonable and efficient take and/or <u>use requirements in compliance with WQ P13 and Schedule 7</u> and whether any efficiency gains can be made, including through altering the volume, rate, or timing of take pursuant to s128(1)(b) of the Act.
- (c) Council at any time prior to 1 October 2027, pursuant to ss68(7) and 130(5) of the RMA, notifying its intention to review existing water permits in any nominated over-allocated water with the aim of achieving compliance with the limits in WQ P5 and with Objective B2 of the NPSFM 2014.
- (d) Rostering users or reducing the rate of take.
- (e) Encouraging the establishment of water user groups and voluntary agreements between water users, provided that does not enable an increase in the actual volume or rate of water abstracted.
- (f) <u>Directing applicants to consider alternative sources including water</u> harvesting, storage or <del>roof</del>rain water collected from impervious surfaces.
- (g) <u>Shared reduction applied to all users of the water resource, including</u> permitted activity volumes rate of takes via a plan change.

#### Advice note:

In relation to (c) Bay of Plenty Regional Council may review resource consents for the take and/or use of water where the total rate of take authorised to be taken is greater than that provided for in WQ P5(b) or (e).

#### Setting limits, managing allocation and providing for flow variability

following (refer to Figure 5 for explanation):

Policy 65WQ P4To maintain allow for flow variation in rivers and streams and rivers when setting<br/>limits, environmental flows or levels, allocating water and setting resource consent<br/>conditions for water takes, controlling the effects of damming and diversion<br/>activities.Policy 66To allocate surface water according to Policy 71, Policy 73, and Policy 69, and the

#### Table 13 – Water Allocation Methodology

|                | Aspect   | Policy   |  |  |
|----------------|--|--|--|--|
| <del>Use</del> | of Water excluding existing Hydroeld   | ectric Power Schemes listed in Schedule 11   |  |  |
| <del>(a)</del> | Low flow allocation.   | To allocate no more than the maximum allocatable flow in a stream reach. The maximum allocatable flow is $Q_{\rm s}$ -7 day low flow minus the instream minimum flow requirement.  |  |  |
| <del>(b)</del> | High flow allocation (water<br>harvesting) during periods of high<br>flow:                                       | To consider allocating water flow above the $Q_s$ -7 day low flow for water takes that are of short duration, and do not compromise the instream minimum flow requirement.   |  |  |
| <del>(c)</del> | Water allocation for new<br>Hydroelectric Power Schemes that<br>are not otherwise provided for in<br>(a) or (b). | <ul> <li>To consider allocating water for new Hydroelectric Power Schemes on a case by case basis to avoid, remedy or mitigate adverse effects on the environment, while:</li> <li>(i) Maintaining the instream minimum flow requirements set in accordance with this regional plan (refer to Schedule 7 or Policy 68).</li> <li>(ii) Requiring the efficient use of the water.</li> <li>Also refer to Policies 65, 67 and 72, and Section 5.2 for Policies relating to the Damming and Diversion of Water.</li> </ul> |  |  |
| <del>Dan</del> | Dam, diversion or take of water associated with existing Hydroelectric Power Schemes listed in Schedule 11       |  |  |  |
| <del>(d)</del> | Water allocation for existing<br>Hydroelectric Power Schemes<br>listed in Schedule 11.                           | To allocate water to avoid, remedy or mitigate adverse effects on the<br>environment, while having regard to relevant instream minimum flow<br>requirements set in accordance with this regional plan, and the value of<br>investment by the existing consent holder.<br>Policy 66(d) applies at the time existing resource consents come in for<br>replacement. Also refer to Section 5.2 for policies relating to the Damming  |  |  |

and Diversion of Water.

#### Notes:

- 1 All consumptive abstractions and non-consumptive uses, excluding existing Hydroelectric Power Schemes listed in Schedule 11, as defined by their existing resource consents, will be allocated water in accordance with Policy 66(a), (b) and (c). Both consumptive and non-consumptive water uses will reduce the remaining allocatable flow, even though non-consumptive uses may not physically take water out of the water body. Water allocated to non-consumptive uses may be available for allocation downstream of the activity site subject to Policy 66(a), (b) and (c) as appropriate. The release of water from dams is addressed by Policy 81(a).
- 2 Resource consent conditions will specify the rate of take of water allocated to a consumptive or non-consumptive use.

- 3 In relation to Policy 66(d), the effects of existing Hydroelectric Power Schemes listed in Schedule 11 will also be considered on case by case basis in accordance with Policy 83. Both consumptive and non-consumptive water uses will reduce the remaining allocatable flow, even though non-consumptive uses may not physically take water out of the water body. Water allocated to non-consumptive uses may be available for allocation downstream of the activity site subject to Policy 66(a), (b) and (c) as appropriate. The release of water from dams is addressed by Policy 81(a).
  - To use the following interim allocation limits, until permanent limits are set through regional and/or sub-regional plans within each WMAWater Management Area:
    - (a) <u>Instream</u>Primary instream minimum flows: 90% of Q<sub>5</sub> 7-day low flow for each river or stream.
    - (b) Primary allocation limit for surface water:

<u>10% of Q<sub>5</sub> 7-day low flow for each river or stream.</u>

- (c) Secondary instream minimum flow for rivers or streams with a mean flow of greater than 5 cubic metres per second: 100% of Q<sub>5</sub> 7-day low flow for each river or stream.
- (d) Secondary <u>allocation limit for</u> rivers or streams with a mean flow of greater than 5 cubic metres per second of 40% of the  $Q_5$  7-day low flow, providing that the combined total of primary and secondary allocation does not exceed 50% of the  $Q_5$  7-day low flow.
- (e) Primary allocation limits for groundwater:

<u>35% of the long-term average annual recharge for each aquifer</u>Residual Average Annual Recharge.

where Q5 7-day low flow and Residual Average Annual Recharge are calculated as described in Schedule 15.

#### Advice Note:

WQ P5

<u>Information on</u>Accounts detailing the assessment of <u>the</u>allocation limits and <u>current allocation status</u> is amount of water allocated for abstraction are <u>available</u> at Bay of Plenty Regional <u>Council's offices and on its website</u>.

These accounts exclude any water users, including non-consumptive users takes undertaken as permitted activities provided for under Rules WQ R1, WQ R2, and WQ R3, and section 14(3)(b) of the RMA.

WQ P10, WQ P12 and WQ R9 provide for renewals of consents in over-allocated water bodies, subject to efficient use and other criteria.

No secondary allocation is allowed for rivers or streams with a mean flow of less than 5 cubic metres per second or for groundwater.

Clauses (c) and (d) provide a second tier of lower reliability surface water takes. In fully allocated water bodies, this enables more water to be allocated providing the applicant accepts the lower reliability. Applicants may build on-site storage to enable continued operation during low flow periods, or use this water for an activity such as frost protection that generally doesn't occur during low flow periods.

Policy 67 To take into account adverse effects of water abstraction from rivers and streams on existing downstream

<u>WQ P6</u> <u>To provide for the harvesting of water during periods of high river or stream flow</u> where:

- (a) <u>The flow upstream of the take is above the median flow.</u>
- (b) <u>The additional take, combined with all other harvesting takes</u>, does not compromise the achievement of WQ O3.
- (c) No more than 10% of the median flow is allocated to all harvesting takes.
- (d) The take is not upstream of a hydroelectric power scheme identified in Schedule 11, unless the flow into the dam of the hydroelectric power scheme exceeds the flow allocated to the dam operator (where applicable).

(e) It will result in social, cultural, economic or environmental benefits.

WQ P7To take a precautionary approach to granting water allocation<br/>take permits<br/>(including through the imposition of short-term durations and robust review<br/>conditions) where there is uncertainty about the level of effects a proposed<br/>abstraction may have on the environment. This may include adaptive management<br/>conditions (where the allowable abstraction is linked to surface water flows or<br/>aquifer levels) on any resource consent granted, where the allocated rate or<br/>volume of water take is at or exceeding the interim limits in WQ P5-(b) and WQ<br/>P5(e).

## WQ P8 To consider providing for secondary allocation of surface water to that identified in WQ P5, where: WQ P5, where:

(a) The applicant accepts an instream minimum flow of Q<sub>5</sub>.7 day low flow, so that the reliability of existing authorised takes is not reduced and flow variability is provided for abstraction in relation to this secondary allocable flow must cease when the flow reaches Q<sub>5</sub>.7 day low flow; or

#### Advice Notes:

- <u>1. WQ P8(a) provides for a second tier of lower reliability surface water takes.</u> In fully allocated catchments, this enables more water to be allocated providing the applicant accepts the lower reliability. <u>Applicants may build</u> on-site storage to enable continued operation during low flow periods, or use for an activity such as frost protection that generally doesn't occur during low flow periods.
- 2. WQ P8(b) enables the applicant to provide information that demonstrates that an alternative limit to the interim limit set in WQ P5 meets the requirements of WQ P9.
- Policy 74 To investigate the linkage between groundwater and surface water bodies to determine if groundwater takes are adversely affecting water flows in streams, rivers and springs.

#### **WQ P9** To integrate the management of groundwater and surface water resources to:

- (a) Recognise the interrelationship between adjoining bodies of water.
- (b) Manage abstraction from aquifers that have a direct or partial connection to surface water.
- (c) <u>Avoid adverse impactseffects</u> from the abstraction of groundwater on associated values and uses of linked connected surface water.
- (d) Support freshwater accounting.

#### Figure 5 – Water Allocation Program [diagram deleted]

#### Consent processing

| Policy 68     | To consider granting an application for a resource consent to take water from a river or stream, subject to an instream minimum flow that is an alternative to that   |  |  |
|---------------|---|--|--|
|               | specified in Schedule 7 or Method 179, on a case by case basis, where:  |  |  |
|               | (a) The applicant has proposed an appropriate Instream Minimum Flow<br>Requirement based on new or improved scientific knowledge; and   |  |  |
|               | (b) The adverse effect on aquatic ecosystems is no more than minor; and   |  |  |
|               | (c) The adverse effect on significant landscape, recreational, and Maori<br>customary and traditional heritage values is no more that minor (where the<br>values have been identified as significant through the use of the Criteria for<br>Assessing Specified Matters in the Bay of Plenty Region in the<br>Bay of Plenty Regional Policy Statement); and   |  |  |
|               | (d) The matters listed in Method 177(c) have been considered; and   |  |  |
|               | (e) The adverse effects of the take on existing downstream users, including non-consumptive users, are no more than minor.  |  |  |
| <u>WQ P10</u> | To generally decline applications to take and/or use surface water or groundwater,<br>where the water resource is allocated above the consented abstraction exceeds<br>the interim limits identified in, WQ P5-unless the application is:, or any NPS-FM<br>locally specific limits, levels and flows set under WQ P2.  |  |  |
|               | This policy shall not apply to:   |  |  |
|               | (a) <u>A renewal of an existing authorised take that is:</u>  |  |  |
|               | (i) <u>At the same or lesser rate and volume of take; and</u>   |  |  |
|               | (ii) Assessed as a reasonable and efficient rate and volume of take; or.  |  |  |
|               | (b) For the harvesting of surface water under WQ P6.  |  |  |
|               | <del>; or</del>   |  |  |
|               | For secondary allocable flow under WQ P8(a): or   |  |  |
|               | Supported by a detailed assessment of environmental effects which demonstrates:   |  |  |
|               | Consideration has been given to alternative water supplies, rates of take and   |  |  |
|               | timing of take:   |  |  |
|               | Water conservation measures are proposed for times of low water flows or aquifer  |  |  |
|               | ieveis, and   |  |  |
|               | Advice Note: Adverse effects on aquifer characteristics include reduction in aquifer<br>recharge, sustained reduction in aquifer water level and changes to water<br>chemistry or quality. With regard to the Tauranga Geothermal Resource<br>(Tauranga and Kaituna-Maketū-Pongakawa WMAs), additional consideration may<br>be required in relation to Chapter 7 of this regional plan. Where a groundwater<br>take may have an effect on stream flow, the associated allocation should also be<br>reflected in freshwater quantity accounting. |  |  |
| Policy 70     | <u>To allocate</u> groundwater according to Policy 73, and at a sustainable yield that avoids permanently or unsustainably lowering water levels, or degrading water quality in aquifer systems.  |  |  |

#### **WQ P11**

To generally grant applications to take<u>To consider granting an application to take</u> and/or use surface water or groundwater that where the rate of consented take will not <u>result in the total allocation exceeding</u>exceed the interim limits identified in WQ P5, or any NPSFM locally specific limits, levels and flows set under WQ P2, provided that:

- (a) <u>The proposed rate and volume of take are reasonable and efficient.</u>
- (b) In the case of surface water, the take does not result in localised adverse effects including on fish entrainment and river bed or bank erosion.
- (c) In the case of groundwater:
  - (i) <u>The take does not result in adverse localised adverse effects,</u> including bore interference;
  - (ii) <u>If applicable, the potential for saltwater intrusion can be avoided or</u> <u>mitigated to an acceptable level; and</u>
  - (iii) If applicable, adverse effects on the Tauranga Geothermal Resource or associated surface water bodies can be avoided or mitigated to an acceptable level.

|               | Adv<br>Adv<br>rect<br>chei<br><u>and</u><br>requ | <u>e notes:</u><br>se effects on aquifer charactersitics include reduction in aquife<br>rge, sustained reduction in aquifer water levels and changes to wate<br>stry. With regard to the Tauranga Geothermal Resource (Tauranga<br>aituna-Maketū- Pongakawa WMAs) additional consideration may be<br>ed in relation to Chapter 7 of this Regional Plan). |  |  |
|---------------|--|--|--|--|
| Policy 72     |  | ensure that any allocation of water does not derogate from a   |  |  |
| <u>WQ P12</u> | <u>To re</u><br>inclu                            | ognise and provide certainty to existing authorised users of fresh water,<br>ng non-consumptive users, by:   |  |  |
|               | <u>(a)</u>                                       | Ensuring that any new allocationgranting of a water take permit does no adversely impact upon the use exercise of existing resource consents.  |  |  |
|               | <u>(b)</u>                                       | Giving priority to existing users over new users when considering the renewal of existing resource consents.   |  |  |
|               | <u>(c)</u>                                       | Considering granting an application that meets the criteria specified by WG<br>P9 where limits have not been set under WQ P2(f). is the renewal of ar<br>existing authorised take and is   |  |  |
|               |  | (i) At the same of lesser rate and volume of take, and   |  |  |
|               | Ton  | (ii) Assessed as a reasonable and encient rate and volume of take.   |  |  |
|               | <u>10 p</u>                                      | mole the enclent use of neshwater resources by.  |  |  |
|               | <u>(a)</u>                                       | Requiring the quantity of water granted to be no more than that required for the intended use of water and applyapplying the reasonable and efficient use criteria in Schedule 7.  |  |  |
|               | <u>(b)</u>                                       | Requiring the use of water conservation methods and encourage encouraging the use of alternative water sources. These measures may include (but are not restricted to) the following measures:   |  |  |
|               |  | <ul> <li>Requiring water audits and water budgets to check for leakages and<br/>water-use efficiency as appropriate;</li> </ul>  |  |  |
|               |  | (ii) Enabling the transfer of water permits, including temporary transfer and  |  |  |
|               |  | (iii) Raising awareness about water efficiency issues and techniques   |  |  |
|               | <u>(c)</u>                                       | Requiring good management practices for all uses. These measures may include (but are not restricted to) the following measures:   |  |  |
|               |  | (i) Requiring the use of, or progressive upgrade to, infrastructure;   |  |  |
|               |  | (ii) Promoting water storage; and  |  |  |
|               |  | (iii) Promoting the shared use of water through water user groups, o<br>alternative arrangements which result in improving certainty of supply<br>and efficient use of water   |  |  |
|               | <u>(d)</u>                                       | Promoting the shared use and management of water, through water use groups or other arrangements where it results in an increased efficient officiency in the allocation and use of water.   |  |  |
|               | <u>(e)</u>                                       | Enabling the transfer of water permits in accordance with WQ P23.  |  |  |
|               | <u>(f)</u>                                       | Working with, and seeking co-operation from, holders of existing rights granted under section 386(1) of the Act to encourage:  |  |  |
|               |  | (i) <u>Consent renewal prior to 1 October 2026 to match allocation to use</u><br>and   |  |  |

| Policy 75   | <del>To ti</del><br><del>futur</del><br><del>asso</del><br>issue | take appropriate action within the framework of this regional plan (including<br>re plan changes) to address the adverse effects of groundwater takes on<br>ociated surface water bodies where investigations prove this is a significant<br>le in the areas noted in Method 184.                        |  |
|---|--|--|--|
| WQ P14  | <u>To p</u><br>cons  | rovide an opportunity for existing users who require but do not have resource<br>ents for their activities to become or remain authorised by:  |  |
|   | <u>(a)</u>   | Providing a more permissive activity status for applications to authorise those activities, where applications are lodged within 12 months of WQ R4 and WQ R5 becoming operative;  |  |
|   | <u>(b)</u>   | Providing information regarding the need for resource consent;   |  |
|   | <u>(c)</u>   | Working in conjunction with industry groups and representatives of<br>unauthorised users to increase awareness and share information;  |  |
|   | <u>(d)</u>   | Providing opportunities for authorisation in preference to compliance action; and  |  |
|   | <u>(e)</u>   | Undertaking compliance when the period provided for those activities to become authorised expires.   |  |
|   | while  | e giving effect to WQ P1 to 12 and WQ P18 to WQ P20.   |  |
| Policy 78To develop and implement a long-term water sustainability strated<br>future water use in areas of high population growth, or where there<br>for commercial, industrial, agricultural or horticultural uses.WQ P15When considering any application for resource consent to take and |  | levelop and implement a long-term water sustainability strategy to manage<br>e water use in areas of high population growth, or where there is high demand<br>ommercial, industrial, agricultural or horticultural uses.<br>n considering any application for resource consent to take and/or use water, |  |
|   | decis  | sion makers must have regard to:   |  |
|   | <u>(a)</u>   | The <u>volume of water sought in relation to the intended</u> efficient use of <u>water</u> in accordance with WQ P13.   |  |
|   | <u>(b)</u>   | Water availability <u>and</u> relative to the interim allocation limits in WQ P5(b), WQ P5(d), WQ P5(e) and WQ P6, the level of allocation within the <u>catchment</u> water body_to which the application relates, and any measures to phase out over-allocation in accordance with WQ P3.              |  |
|   | <u>(c)</u>   | The rate, and timing of take for surface of water takes.   |  |
|   | <u>(d)</u>   | The relative social and economic benefits of the proposed use of the water.  |  |
|   | <u>(e)</u>   | The value of investment that existing consent holders have made which<br>dependis dependent on the water abstracted to be taken and/or used.   |  |
|   | (f)  | The cumulative effects of water take and use on the assimilative capacity of the water body with regard to the effects on water quality.   |  |
|   | (fa)   | Potential cumulative effects of this and other water takes on ecological values.   |  |
|   | <u>(g)</u>   | The potential effect on:   |  |
|   |  | (i) Instream flows, including flow variability;  |  |
|   |  | (ii) <u>Authorised users;</u>  |  |
|   |  | (iii) Ecological, landscape and recreational values, where applicable; and   |  |
|   |  | (iv) Tangata whenua values and interests including the mauri of fresh water.   |  |

- (h) The outcome of pumping tests and hydrogeological assessments for groundwater takes.
- (i) The degree of connectivity between groundwater and surface water.
- (j) <u>The potential risk of saltwater intrusion, where applicable.</u>
- (k) <u>The potential risk onto the sustainability of the Tauranga Geothermal</u> <u>Resource, where applicable.</u>
- (I) <u>Relevant iwi and hapū resource management plans.</u>
- (la) The extent to which the applicant may have consulted with tangata whenua and taken into account any views expressed.
- (m) The extent to which the applicant has considered other sources of water, for example deep groundwater, where the water body is at or exceeding the interim limits in WQ P5.
- (n) The duration of the take.

#### <u>WQ P16</u>

Decision-makers shall include any of must address the following matters via conditions on resource consents for the take and/or use of water unless site specific circumstances determine that particular matter to be unnecessary irrelevant:

- (a) <u>The maximum allowable water take over specific time periods, including</u>. <u>This includes maximum seasonal allocation</u> of take for irrigation and frost protection based on estimated crop water requirements (see Reasonable and Efficient Use Criteria in Schedule 7).
- (aa) The maximum allowable water take during periods when water take restrictions are in place to protect minimum flows and levels.
- (aaa) When evidence of need has been demonstrated to Council, the maximum volume allowed as crop and rootstock survival water during periods when water take restrictions to protect minimum flows and levels are in place.
- (b) The maximum abstraction rate.
- (c) The requirement to measure, record and report on water use and rate of take, including any specific conditions to enable confirmation of compliance with restrictions relating to secondary allocation under WQ P5(d) or water harvesting under WQ P6.
- (d) The requirement to measure and record water flows or levels and in the river or lake from which abstraction occurs, including any specific conditions to enable confirmation of compliance with restrictions relating to secondary allocation under WQ P5(c) or water harvesting under WQ P6.
- (da) The requirement to manage or <u>cease</u> the taking of water <u>when</u> <u>certain</u>minimum flows are reached to minimise <u>impacts</u>effects on the <u>environment and other users.</u>
- (e) <u>The requirement to monitor the risk of saltwater intrusion associated with</u> <u>groundwater takes near the coast.</u>
- (f) <u>Common review dates within specified catchments or <u>WMAs</u>Water Management Areas.</u>
- (g) <u>TeProvision for review of the resource consent, in accordance with section</u> <u>128 of the Act, to:</u>
  - (i) <u>Determine whether any</u>Require <u>efficiency gains can be made</u>or in combination with other resource consents in the same water body, phase out over-allocation, including through altering the rate, volume, rate-or timing of take; and

- (ii) Deal with any adverse effects on the environment which may arise from the exercise of that consent.
- (h) For surface water takes and stream depleting groundwater takes, other than for secondary takes, consideration is given to the need to have conditions that require abstraction to cease when the flow in the river reaches 90% of the  $Q_5$  7-day low flow.
- (i) For takes under WQ P5(d) consideration is given to the need to have conditions that require abstraction to cease when the flow in the river reaches 100% of the  $Q_57$  Day low flow.
- (j) For water harvesting takes under WQP6 consideration is given to the need to have conditions that require abstraction to cease when the flow in the river reaches the median flow and to ensure that when combined with all other harvesting takes does not cause more than 10% of the median flow to be allocated.
- **Policy 79** To assess the adverse effects of proposed abstraction of surface water or the discharge of contaminants to water on the assimilative capacity of the water body when processing resource consent applications. The assimilative capacity will be determined relative to the water quality classification, instream minimum flow requirement, ecological values, landscape values, recreational values, Maori customary values and traditional instream uses of the water body, amount of water already abstracted from the water body, and cumulative effect of existing and proposed activities in the catchment.
- WQ P17
   When determining the duration of a resource consent to take and/or use water, to apply a:
  - (a) Consent term of no more than 10 years for water bodies which are at or exceeding the interim limits in WQ P5(b) or WQ P5(e); or.
  - (b) Consent term of no more than 15 years for all other water bodies.
  - (c) Notwithstanding clauses (a) and (b) above, a longer consent term if the take and/or use of water:
    - (i) Enables the use or development of regionally significant infrastructure; or
    - (ii) Is for a non-typical activity such as dewatering and the access to, and use and development of, mineral resources; or
    - (iii) Is demonstrated by the applicant to be appropriate in the circumstances.

#### Requirement of National Policy Statement Freshwater Management

#### Policy 68A WQ P18 When

When considering any application the consent authority must have regard to the following matters:

- (a) The extent to which the change would adversely affect safeguarding the lifesupporting capacity of fresh water and of any associated ecosystem; and
- (b) The extent to which it is feasible and dependable that any adverse effect on the life-supporting capacity of fresh water and of any associated ecosystem resulting from the change would be avoided.

This policy applies to:

(a) Any new activity; and

(b) Any change in the character, intensity or scale of any established activity -

that involves any taking, using, damming or diverting of fresh water or draining of any wetland which is likely to result in any more than minor adverse change in the natural variability of flows or level of any fresh water, compared to that which immediately preceded the commencement of the new activity or the change in the established activity (or in the case of a change in an intermittent or seasonal activity, compared to that on the last occasion on which the activity was carried out).

This policy does not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management takes took effect on 1 July 2011.

#### Advice Note:

This policy was inserted to meet the requirements of the National Policy Statement for Freshwater Management 2011 (<u>now the National Policy Statement Freshwater</u> <u>Management 2014</u>).

#### Renewable electricity generation

| Policy 69     | To recognise the importance of maintaining existing renewable electricity  |
|---------------|--|
| <u>WQ P19</u> | generation capacity by not allowing any new taking or diversion of surface water or  |
|               | shallow groundwater connected to surface water upstream of the hydroelectric   |
|               | power schemes listed in Schedule 11 at all times unless:   |
|               | (a) For the Wheap Aniwhenua and Matahina hydroelectric power schemes the   |
|               | flow into Lake Matahina is greater than 160 cubic metres per second; or  |
|               | (b) The take is a controlled activity under WQ R4: or  |
|               | $(a) \qquad WO B20 \text{ applies}$  |
|               | <u>(C) WQ P20 applies.</u>   |
| <u>WQ P20</u> | To enable the reasonable and efficient taking and use of water upstream ofexisting   |
|               | hydroelectric power schemes listed in Schedule 11 provided that:   |
|               | (a) Upon the expirit of existing resource concerts for the taking or diversion of  |
|               | water upstream of the schemes, the consents may be renewed:  |
|               | (i) At the same or a lesser volume of take:  |
|               | $\frac{11}{11} = \frac{At the same of a lesson volume of take,}{At the same of a lesson volume of take,}$  |
|               | (III) At the same or a lessor rate of take; and  |
|               | Having regard to the matters set out in WQ P16.  |
|               | (b) Surface water or shallow groundwater water that is allocated to a resource   |
|               | consent that expires and is not renewed or has its allocation reduced by a review or renewal on the basis of reasonable and efficient use requirements |
|               | or technical efficiency, may be available for reallocation to other users:   |
|               | (i) At the same or a lessor volume of take;  |
|               | (ii) At the same or lessor rate of take: and   |
|               | (iii) Having regard to the matters set out in WQ P16.  |
|               | Any water released from the schemes may be available for allocation downstream.  |
|               | subject to the protection of any instream and recreational flow requirements   |
|               | specified in the resource consents for the hydroelectric power scheme and where  |
|               | the downstream abstractors accept that the reliability of the released water is  |
|               | subject to the consented operating regime for the scheme.  |
|               | Advice Note:   |
|               | 1. Other provisions within this Part II continue to apply to all applications to   |
|               | take water within the catchments of existing hydroelectric power schemes.  |
|               | 2. Takes of water for milk cooling and dairy shed washdown above the   |
|               | Matahina dam need to obtain resource consent in accordance with WQ R4.   |
|               | 3. Policy 81 and Table 18 apply to the release of water from dams.   |
|               | 4. The upstream extent of hydroelectric power schemes listed in Schedule 11  |
|               | is shown in Maps WQ2 and WQ3.  |
|               | To manage water allocation on surface water bodies where there are existing  |
|               | Hydroelectric Power Schemes listed in Schedule 11 in accordance with the   |
|               | following, until resource consents for the existing Hydroelectric Power Schemes  |
|               | come in for replacement:   |
|               | Table 14 - Water Allocation on Surface Water bodies with   |
| -             | Hydroplactric Power Schemes  |
|               |  |

|                | Hydroelectric Power<br>Scheme as listed in<br>Schedule 11 | Water Allocation Management  |
|----------------|---|--|
| <del>(a)</del> | Kaimai  | (i) Upstream of the:   |
|                |   | <ul> <li>McLaren Falls Dam on the Wairoa River, including Mangakarengorengo<br/>River and Tributaries, Opuiaki River and tributaries (including Ngatuhoa,<br/>Awakotuku and Mangaonui Streams), Mangapapa River and tributaries;<br/>and</li> </ul>  |
|                |   | <ul> <li>Dam and intake structure on the Omanawa River; and</li> </ul>   |
|                |   | <ul> <li>Dam on the Ruakaka Stream; and</li> </ul>   |
|                |   | <ul> <li>Points on Tributary streams 1, 2 and 3 of the Wairoa River where they<br/>intersect the Ruahihi Canal,</li> </ul>   |
|                |   | water allocation held by existing consent holders (other than the power scheme owner) will be recognised until the consent expires.  |
|                |   | (ii) There is no more surface water available for allocation from the following areas:   |
|                |   | <ul> <li>Upstream of the McLarens Falls Dam on the Wairoa River, including<br/>Mangakarengorengo River and tributaries, Opuiaki River and tributaries<br/>(including Ngatuhoa, Awakotuku and Mangaonui Streams), Mangapapa<br/>River and tributaries;</li> </ul>   |
|                |   | <ul> <li>Upstream of the dam and intake structure on the Omanawa River;</li> </ul>   |
|                |   | <ul> <li>Upstream of the dam on the Ruakaka Stream;</li> </ul>   |
|                |   | <ul> <li>Upstream of the points on tributary streams 1, 2 and 3 of the Wairoa River</li> </ul>   |
|                |   | where they intersect the Ruahihi Canal;  |
|                |   | unless the water flow in the rivers and streams are above the levels allocated to the power scheme owner.  |
|                |   | (iii) On the Wairoa River between the McLarens Falls Dam and the Ruahihi Power<br>Station, surface water will be allocated in accordance with Policy 66(a). Any<br>water released from the dam above the required discharge flow is available for<br>reallocation under Policy 66(b) while fully accounting for recreational use<br>between the McLaren Falls Dam and the State Highway 29 Bridge, and where<br>the proposed users recognise that the additional flow is subject to the operating<br>regime used by the hydroelectric power scheme owner. (iv) On the: |
|                |   | Wairoa River downstream of the Rughihi Power Station:  |
|                |   | Omanawa River downstream of the dam and intake structure:  |
|                |   | Ruskaka Stream downstream of the dam:  |
|                |   | Mangakarengorengo River between the diversion structure and McLarens     Falls Dam:  |
|                |   | <ul> <li>Opuiaki River and tributaries (including Ngatuhoa, Awakotuku and<br/>Mangaonui Streams) between the diversion structures and McLarens Falls<br/>Dam;</li> </ul>   |
|                |   | <ul> <li>Mangapapa River between the diversion structure and McLarens Falls<br/>Dam;</li> </ul>  |
|                |   | surface water will be allocated in accordance with Policy 66(a).   |
|                |   | Any water released from the scheme or dam is available for allocation under Policy 66(b) where the proposed users recognise that the additional flow is subject to the   |
|                |   | operating regime used by the hydroelectric power scheme owner.   |
| <del>(b)</del> | Wheao   | (i) Upstream of the:<br>Rangitaiki Intake structure on the Rangitaiki River; and   |
|                |   | Wheao Intake structure on the Wheao River: and   |
|                |   | Flavy Dam on Flavy Creek   |
|                |   | water allocation held by existing consent holders and authorised users (other that   |
|                |   | the power scheme owner) will be recognised until the consent expires.  |
|                |   | (ii) inere is no more surface water, or groundwater connected to surface water<br>bodies, available for allocation from the following areas:   |
|                |   | <ul> <li>Kangitaiki River and tributaries above the Rangitaiki Intake structure;</li> <li>Wheao River and tributaries above the Wheao Intake structure;</li> </ul>   |

|                |           | <ul> <li>Flaxy Creek and tributaries above the Flaxy Dam;</li> </ul>   |
|----------------|-----------|--|
|                |           | Unless the river flow into Lake Matahina is greater than 160 cubic metres per second (160,000 litres per second).  |
| <del>(c)</del> | Aniwhenua | ) Upstream of the Aniwhenua dam, water allocation held by existing consent<br>holders and authorised users (other than the power scheme owner) will be<br>recognised until the consent expires.  |
|                |           | ) There is no more surface water or groundwater connected to surface water<br>bodies, available for allocation from the Rangitaiki River and tributaries above<br>the Aniwhenua Dam unless the river flow into Lake Matahina is greater thar<br>160 cubic metres per second (160,000 litres per second).   |
| <del>(d)</del> | Matahina  | ) Upstream of the Matahina dam, water allocation held by existing consent<br>holders and authorised users will be recognised until the consent expires.  |
|                |           | There is no more surface water or groundwater connected to surface water<br>bodies, available for allocation from the Rangitaiki River and tributaries above<br>the Matahina Dam unless the river flow into Lake Matahina is greater than 160<br>cubic metres per second (160,000 per second).   |
|                |           | Water downstream of the Matahina dam will be allocated in accordance with<br>policy 66(b) where the proposed users recognise that the additional flow is<br>subject to the operating regime used by the hydroelectric power scheme owner.  |
| <del>(e)</del> | Karaponga | ) Upstream of the Karaponga dam, water allocation held by existing consent<br>holders and authorised users (other than the hydroelectric power scheme owner)<br>will be recognised until the consent expires.  |
|                |           | ) There is no more surface water available for allocation from the Karaponga<br>Stream and tributaries above the Karaponga dam.  |
|                |           | Water downstream of the Karaponga dam will be allocated in accordance with<br>Policy 66(a). Any additional water released from the dam above the required<br>discharge flow from the dam is available for allocation under Policy 66(b) where<br>the proposed users recognise that the additional flow is subject to the operating<br>regime used by the hydroelectric power scheme owner. |

Note:

4

Existing consented, <u>permitted and 14(3)(b)</u> surface water and shallow groundwater takes, and transfers of such consents in the areas specified in Policy 69 will be allowed to continue. However, there will be no increase in the rate or volume of surface water and shallow groundwater allocated upstream of the Hydroelectric Power Schemes listed in Policy 69, except for water harvesting where river flows are greater than the levels already allocated to the Hydroelectric Power Scheme.



#### Map WQ2 Kaimai Upstream Extent

## Map WQ 3 Wheao, Aniwhenua, Matahina and Karaponga Upstream Extent



**WQ P19** To recognise the importance of maintaining existing renewable electricity generation capacity by not allowing any new taking or out of catchment diversion of surface water or shallow groundwater connected to surface water in a state of the bulk advection of the bulk advection.

upstream of the hydroelectric power schemes listed in Schedule 11 except in the following limited circumstances:

- i. For the Rangitaiki River above Matahina Dam, when the flow into Lake Matahina is greater than the consented maximum take from Lake Matahina; or
- ii. Where the take and/or use is within the interim primary or secondary allocation limits set in WQ P5, subject to any seasonal restrictions required to ensure adverse effects on the schemes and the environment are acceptable; or
- iii. Where the take is for existing dairy shed washdown authorised under Rule WQ R4.

#### Advice Note:

The upstream extent of hydroelectric power schemes listed in Schedule 11 is shown in Maps WQ 2 and WQ 3.

#### Importance of domestic, marae and municipal water supply

**WQ P21** To recognise the essential nature of domestic, papakāinga, marae and municipal water supply requirements when <u>allocating</u>-considering the granting of <u>water</u> take permits and to require <u>all</u>\_applications to take water for municipal water <u>supply</u>supplies\_to provide a water management plan in accordance with the requirements of Schedule 7.

#### Construction of bores

#### **WQ P22** Require groundwater bores to be constructed to:

- (a) <u>Minimise the leakage of water.</u>
- (b) Protect headworks against wastage.
- (c) <u>Have appropriate casing and construction.</u>
- (d) <u>Be screened for only one aquifer to prevent cross contamination between aquifers.</u>
- (e) Prevent backflow of water and contaminants into the aquifer.
- (f) Fully penetrate the aquifer as appropriate, to ensure reliable access to water.

Policy 71 To allocate water on a first in first served basis, subject to efficient use as specified in Policy 73.

#### Transfer of water permits

## WQ P23 To enable consider the transfer of resource consents water permits to take and/or use water in whole or part to another site providing the transfer:

- (a) Is within the same catchment or aquifer as the original resource consent.
- (b) Is for the same or a lesser amount of water.
- (c) Does not result in more than minor adverse effects.
- (d) Is no more than that required for the intended use.

- (e) Where it is in an over allocated surface water catchment or groundwater aquifer, involves the surrender of a proportion of the allocated water to be surrendered and not re-allocated when water is transferred, unless there is an alternative method and defined timeframe to phase out over-allocation set out in an applicable WMA.
- (e) Does not increase the rate and volume of take of water that the transferor is able to demonstrate has actually been taken and used in accordance with the conditions on the existing water permits at any time in the preceding 5 years.

#### Water metering, reporting and accounting

- WQ P24
   Require the installation of a water measuring device (water meter) for consumptive water takes, and electronic reporting as follows:
  - (a) For permitted All takes, where in combination with a take of authorised by a water permit and, for stock drinking water under section 14(3)(b) of the Act, takes authorised as a permitted activity, where the total volume amount of water taken for the property (permitted takes plus takes allowed by RMA s14(3)(b)) exceeds the permitted activity volumes, limit for that property.
  - (a)(b) The minimum metering requirement for all water permits, and for permitted activities that require the total metering shall be a daily volumes recording of the volume taken (in cubic metres) of abstracted water to be separately recorded. and monthly reporting in a council approved electronic format.
  - (b) For consented takes, require the daily volume (in cubic metres) of abstracted water to be recorded.
  - (c) For consented groundwater takes where the rate of take is less than 5 litres, records must be in a suitable format for electronic storage and reported on a monthly basis.
  - (d) For consented groundwater takes where the rate of take is equal to or exceeds 5 litres, records must be transferred from the meter to Council in a suitable format for electronic storage and reported electronically on a daily basis.
  - (e) For consented surface water takes where the water body is not over allocated and the rate of take does not exceed 2.5 litres, records must be in a suitable format for electronic storage and reported on a monthly basis to Council.
  - (f) For consented surface water takes where the rate of take exceeds 2.5 litres or is from an over allocated water body records must be transferred from the meter to Council in a suitable format for electronic storage and reported electronically on a daily basis.
  - (c) <u>For each</u>If considered necessary to meet the objectives of this plan, require more frequent reporting. This may include, but is not restricted to, the following circumstances:
    - (i) The maximum allowed rate of take exceeds 5l/s;
    - (ii) The stream or aquifer is over allocated;
    - (iii) The water permit was granted as secondary allocation or for flood harvesting; or
    - (iv) The resource use is under restriction.

#### Advice notes:

1. Horizons Regional Council Technical Report December 2007 "Reasonable Stock Water Requirements Guidelines for Resource Consent Applications"
(available at: https://www.boprc.govt.nz/media/470831/reasonable-stockwater-requirements-guidelines-horizons.pdf) provides a means of assessing stock drinking water requirements.

- 2. Dairy shed water requirements (milk cooling and wash down) shall be assessed according to Schedule 7.
- 3. Properties taking water under section 14(3)(b) of the Act from multiple locations on a property must include all water taken from all locations when determining whether metering is required, but only need to meter and report water that is used as a permitted activity.

| Activity status and source of water  | Meter  | Report frequency   |
|--|--|--|
| <del>Property size 5ha or more</del><br><del>Stock drinking water and/or</del><br>permitted use does not exceed 35<br><del>cubic metres per day (ground</del><br>water) or 15 cubic metres per day<br>(surface water)                  | Not required   | Not-required   |
| Property size less than 5ha<br>Stock drinking water and/or<br>permitted use does not exceed 15<br>cubic metres per day (ground water<br>or surface water)  | Not required   | Not required   |
| Stock drinking water and/or<br>permitted use exceeds 35 cubic<br>metres per day (groundwater and<br>property exceeds 5ha) or exceeds<br>15 cubic metres per day (surface<br>and groundwater and property less<br>than or equal to 5ha) | Y <u>es</u><br>Will require 2<br>meters if RMA<br>section 14(3)(b)<br>and permitted<br>activity water<br>used. | Monthly unless rate<br>of take exceeds 2.51/s<br>(surface water) or 5<br>1/s (groundwater) |
| <del>Consent groundwater rate of take</del><br>e <del>quals or exceeds 51/s</del>  | <mark>Yes</mark>   | Daily  |
| <del>Consent groundwater rate of take</del><br><del>less than 5 litres</del>   | <mark>Yes</mark>   | <mark>Monthly</mark>   |
| <del>Consent surface water rate of take</del><br>e <del>quals or exceeds 2.5 litres</del>  | <mark>Yes</mark>   | Daily  |
| <del>Consent surface water, rate of take</del><br>I <del>ess than 2.5 litres.</del>  | <mark>¥es</mark>   | <mark>Monthly</mark>   |

Policy 76To identify catchments that are under abstraction pressure, relative to lowWQ P25flow allocation in Policy 66, and take appropriate action to manage consented<br/>water takes in those areas. Pressure abstraction areas are those where surface<br/>water abstraction in a stream or river reach is at, or near, full allocation relative to<br/>the allocation limits in Policy 66.

WQ P25 Council will undertake <u>freshwater</u> accounting to support <u>management</u> <u>unit where</u> <u>objectives and limits are being, or have been set, establish, maintain and</u> <u>make publicly available a</u>of the <u>freshwater</u> <u>quantity accounting system to</u> <u>record the following information</u>resource. The accounts shall include calculations of:

- (a) The amount of fresh water available for allocation;
- (b) The amount of fresh water allocated <u>by</u> types of <u>resource consent-and</u> actually <u>taken</u>; and;

Permitted under WQ R1 and R3 and allowed by section 14(3)(b) of the Act.

- (c) <u>Where limits have been set</u>, The amount of fresh water estimated to be taken without resource consent;
- (c)(d) The proportion of the limit-allocable rate or volume that has been allocated -;
- (e) The effect of non-consumptive takes and discharges;
- (f) The proportion of consented water used; and
- (d)(g) The proportion of water allocated to, and taken by, each major category of <u>use</u>.

**WQ P26** To establish an accurate record of permitted takes within the region by:

- (a) Requiring all water takes permitted under WQ R1, R2 and R3 to be registered and to be metered if, in combination with water taken for stock drinking water under section 14(3)(b) of the Act the total volumerate of take exceeds the Permitted Activity volume on a property.
- (b) Establishing and maintaining a model to quantify water takes permitted under WQ R1, R2 and R3 and allowed by section 14(3)(b) of the Act.
- (c) <u>Undertaking audits in selected areas to estimate or verify water use.</u>

#### Ensuring and enhancing water availability

Policy 77 WQ P27 To encourage landowners, developers, the city council and district councils to <u>take</u> <u>into</u> account <u>any</u> water resource limitations the ongoing availability of surface and groundwater based on the interim allocation limits in WQ P5 before making any land use changes. including land use intensification and urban growth.

WQ P28Promote and help investigate enhanced water availability options, including water<br/>harvesting, water storage and managed aquifer recharge that provide for the<br/>social, economic or cultural well-being of communities while remedying existing<br/>adverse effects and avoiding further adverse effects on water resources.

Low flows and aquifer levels

| Policy 80 |  |
|-----------|--|
| WQ P29    | To require water conservation procedures in accordance with WQ P30 and P3  |
|           | during times of low water flows or aquifer levels, specifically:   |
|           | (a) When surface water flows or aquifer levels fall below instream minimum flows or levels set within WMAs under WQ P2.  |
|           | (b) When a water shortage direction is issued under section 329 of the Act.  |
|           | To use appropriate measures to restrict the take and use of water during hydrologic or meteorological drought events to ensure the instream minimum flow requirement is not breached as a result of abstraction, while recognising and providing for public health requirements. |

## WQ P30 To take the following actions during times of low water flows or aquifer levels:

- (a) Advise abstractors and work with councils and industry groups to conserve water and limit non-essential use of water as far as practicable.
- (b) <u>Provide water conservation advice to the community.</u>
- (c) Work with water users and encourage support from the horticultural and agricultural sectors to encourage and support the use of rationing or rostering.
- (d) <u>Require resource consent</u>water permit holders to <u>cease</u>manage abstraction in accordance with the instream minimum flows or levels specified as conditions on their consents.
- (e) <u>Require non-consumptive users to ensure that the discharge from a</u> <u>dam/impoundment is equal to the inflow.</u>
- (f) Consider the need to issue a water shortage direction under section 329 of the Act.

# WQ P31 To give priority to water abstraction for the following uses during times of low water flows or aquifer levels:

- (a) Essential domestic drinking and sanitation requirements.
- (b) Municipal water supplies, in compliance with the requirements of any Water Management Plan prepared in accordance with Schedule 7.
- (c) <u>Reasonable animal drinking and sanitation needs.</u>
- (d) <u>Non-consumptive takes</u>, provided that the discharge from a dam/impoundment is equal to the inflow.
- (d) <u>Municipal water supplies, subject to the requirements of the Water</u> <u>Management Plan prepared in accordance with Schedule 7.</u>
- (e) <u>Crop and rootstock survival water</u>, when scientifically proven as necessary provided that no more than 25% of the rate of take allocated by the relevant water permit shall be taken.

Advice Note: This above list is not in order of priority. If a water shortage direction is issued under section 329 of the Act, it is expected that all water users will reduce the volume of their takes rate of taking.

## 5.1.4 Methods of Implementation

#### Long-Term Strategic Overview

- Method 152 Develop a long-term water sustainability strategy in conjunction with the city council, district councils, stakeholders and the community (including representatives from commercial, industrial, horticultural and agricultural organisations) to manage future water use requirements in areas of high water demand. The strategy will:
  - (a) Determine the potential long-term requirement for water resources in the region according to future population growth projections, possible horticultural and agricultural land use changes, and possible industrial growth.
  - (b) Investigate:
    - (i) Surface water and groundwater resource quantities, availability and reliability.

- (ii) Water quality, and the suitability of surface and groundwater quality for various uses.
- (iii) The capacity of those surface and groundwater resources to meet expected future water demand.
- (iv) Water resources that are likely to come under abstraction pressure.
- (c) Identify appropriate mechanisms to manage future water use to ensure water is allocated in a fair and equitable manner.
- (d) Integrate long-term development and the protection of the Bay of Plenty's water resources in relation to Policy 66 and 70.
- (e) Identify areas in the region where:
  - (i) There is a lack of water resources that may limit land use intensification or urban growth, as increased water abstraction may cause significant adverse effects on the environment.
  - (ii) The area is suitable for non-consumptive uses based on the availability of water resources.

Any changes to the regional plan resulting from the Water Sustainability Strategy will be in accordance with the requirements of Schedule 1 to the Act, and in consultation with the community and stakeholders.

Method 153

WQ M1Environment-WQ M1 Bay of Plenty <u>Regional Council</u> will make submissions on district plans and district resource consents in accordance with statutory contacts processes, to advise that land use changes, intensification and urban growth should not occur without adequate assessment of water resources, and account for any limitations on the available resource.

- Method 154 Undertake surveys in areas of the region where water is at or near full allocation, or where location-specific projects are being carried out, to identify water takes permitted under Rule 38 and 41, and allowed by Section 14(3)(b) of the Act, for the purpose of establishing an accurate record of water takes in the region.
- Method 155 Raise community awareness of:
  - (a) The adverse effects of the over-abstraction of surface water on the ecological values, landscape values, recreational values, Maori customary values and traditional instream uses, downstream environments, and water users,
  - (b) The finite characteristics of high quality fresh water resources,
  - (c) The present allocation of surface and groundwater resources,
  - (d) The long-term effects of depletion and degradation of groundwater resources, and
  - (e) The availability of water resources in the region, abstraction pressures, and water limitations in the region.

Method 156\_WQ M2 Provide updated information to the community on the availability and quality of freshwater resources, where such information is available. This includes:

- (a) Reference to technical reports detailing the calculation of flow statistics for surface water allocation or aquifer recharge for groundwater allocation.
- (b) Reference to information regarding the hydraulic connection of ground and surface water bodies.

- (c) <u>A map showing surface and groundwater boundaries.</u>
- (d) The present allocation of surface and groundwater resources.
- (e) Advice for potential water users within fully allocated resources water bodies regarding alternatives such as accessing lower reliability water (2<sup>nd</sup> tiersecondary allocations of surface water); harvesting of high flow surface water or accessing groundwater.
- (f) <u>How freshwater objectives, values and limits environmental flows and/or levels are set or evaluated.</u>

Method 157 WQ M3 Encourage <u>city councils, district councils and</u> the community, <u>including the</u> <u>commercial, industrial, horticultural, agricultural and energy sectors</u> to:

- (a) Use water audits <u>or irrigation performance assessments</u> to identify water losses, wastage, or opportunities to conserve or use water more efficiently.
- (b) Adopt efficient water use and conservation practices.
- (c) Utilise water conservation devices.
- (d) Adopt recognised industry good management practices.
- (e) <u>Use alternative water sources to supplement supply, such as water</u> harvesting, managed aquifer recharge and storage.
- Method 158 Promote and encourage the use of water management methods to reduce surface water abstraction during low flow, particularly in catchments under water abstraction pressure, and to buffer sensitive streams. Such methods include:

(a) Collection of rainwater.

(b) Water harvesting and peak flow collection and storage.

 WQ M4
 Support initiatives by local communities, sector groups or tangata whenua and, as appropriate, undertake investigations to identify and evaluate options to enhance water availability-such as:

Initiatives may include, and are not limited to:

- (a) Community water supply schemes.
- (b) Water storage dams.
- (c) Managed aquifer recharge.
- (d) Water harvesting.

Bay of Plenty Regional Council will provide support through the following:by:

- (i) providing data and information that will assist identification and evaluation of the options;
- (ii) participating, as appropriate, in the option identification and evaluation process; and
- (iii) where appropriate, undertaking investigations into methods to enhance water availability.

<u>Council provision of data and information that will assist identification and evaluation of the options; and</u>

#### as appropriate, in the option identification and evaluation process; and

#### Education, Promotion and Provision of Information

Method 160 Advise the community that section 3A of the Act provides the opportunity for people to use water that has been allocated to another person as part of a resource consent, where the activity complies with the conditions of the original resource consent and the permission of the consent holder has been obtained. Note: Water may only be taken from the surface water intake structure or groundwater bore on the original resource consent, but may then be piped or otherwise transported to another site or property.

- Method 161 Encourage the adoption of best irrigation management practices.
- Method 162 Provide information to the community about the need to use efficient pump technology and appropriate bore construction techniques to adequately and efficiently access groundwater resources. Efficient pump technology and bore construction is where a bore penetrates the aquifer from which water is being drawn at a depth sufficient to enable water to be drawn all year (i.e. the bore depth is below the range of seasonal fluctuations in groundwater level), is adequately maintained, of sufficient diameter, and is screened to minimise drawdown within the bore with a pump capable of drawing water from the base of the bore to the land surface.

#### Working with Other Resource Management Agencies and the Community

Method 163 Establish a Memorandum of Understanding with the city council, district councils and the Medical Officer of Health regarding the management of water abstraction for municipal water supply during drought events.

#### **Advocacy**

Method 164-WQ M5 Advocate that the city council and district councils use individual property water metering systems in reticulated areas to reduce water usage and wastage.

#### Regulatory Methods

| Method 165<br>WQ M6 | Consider using any of the following methods to address the adverse effects of groundwater takes on associated surface water bodies:   |
|---------------------|---|
| <del>(a)</del>      | Initiate a Plan change to address the outcomes of the investigations in respect to the linkage between groundwater and surface water bodies. This may include, but not be limited to, provisions to control the proximity of groundwater bores to surface water bodies, and the volume of groundwater abstractions. |
| <del>(b)</del>      | Work with existing groundwater abstractors, including water user groups where appropriate.  |
| Cross-Reference     | Also refer to Method 54, Rules 38, 41, 42, 43.  |
| WQ M6               | Require resource consent applicants for groundwater to use an appropriate   |

# scientific method to calculate the likely degree of connection between groundwater and surface water at the location of the groundwater take.

#### Matters Relevant to Resource Consent Applications and Processing

Method 166 Give preference to existing holders of resource consents for the take and use of water when allocating water in pressure abstraction catchments and existing consents are being replaced. This is subject to the efficient use of water (refer to

|            | Policy 73), and that the mechanisms to use the water have already been installed<br>in association with the existing consent (including, but not limited to, irrigation<br>systems).  |
|------------|---|
| Method 167 | Require the installation of a water measuring device to measure the take of wateras a condition on a resource consent for the take of water where any of the following are met:   |
|            | (a) The take is from a stream where the Q <sub>5</sub> 7day low flow is less than 250 litres<br>per second.   |
|            | (b) The take is for municipal water supply.   |
|            | (c) The take is from groundwater and the aquifer is at or near full allocation of<br>the sustainable yield. This will be applied to applications for the take and<br>use of groundwater where a sustainable yield for an identified aquifer has<br>been included in the regional plan through a publicly notified change.   |
|            | (d) The take is from surface water and the cumulative take from the river or stream is approaching full allocation within the river or stream reach.  |
|            | (e) The take is from surface water in an area that has sensitive or significant<br>ecological values, landscape values, recreational values, or Maor<br>customary values and traditional instream uses.   |
|            | (f) The take is from a surface water body where water quality is degraded<br>below its Water Quality Classification, or it is necessary to maintain the<br>assimilative capacity of the water body.   |
|            | Resource consent applicants are advised to consult with Environment<br>Bay of Plenty to determine if this requirement will be enacted for their proposed<br>activity. Water measuring devices can be located on portable pumps. Water<br>measuring devices or methods will be required, as appropriate, relative to the<br>specific activity and site characterises. For example, where a take of water is<br>physically restricted, that restriction may be accepted as a means to measure<br>water flows. A flow meter is not necessarily required to comply with Method 167. |
| WQ M7      | All measurements taken relating to water quantity should adhere to the:   |
|            | (a) National Environmental Monitoring Standards.  |
|            | (b) Bay of Plenty Regional Council's specified format documents.  |
|            | (c) <u>Resource Management (Measurement and Reporting of Water Takes)</u><br><u>Regulations 2010.</u>   |
|            | (d) Any other specified format stated within resource consent conditions.   |
| Method 168 | Assess the efficiency of the water use of a proposed activity on a case by case basis relative to the proposed use with consideration to the following:   |
|            | (a) For irrigation activities – soil moisture deficit, evapotranspiration, and reasonable water coverage for crop type. Efficient irrigation use is the minimum volume of water required to optimise production while avoiding or mitigating adverse effects on the environment, using current best management practices.   |
|            | (b) For commercial, trade and industrial processes – sufficient to meet the needs of the use with minimal waste of water.   |
|            | (c) For municipal or community water takes – sufficient to meet the needs of<br>the urban area, including projected population growth based on Census<br>figures.   |
| Method 169 | Include any of the following conditions on resource consents for the take and use of water where appropriate:   |
|            | (a) The maximum allowable water take over specific time periods and maximum abstraction rates.  |

|              | (b) The maximum abstraction rate or volume during water short periods, and<br>the river or stream flow levels at which the action outlined in Method 172 are<br>to be implemented.  |
|--------------|---|
|              | (c) Variations to the maximum allowable take over the duration of the consent.  |
|              | (d) For the take and use of surface water, specify no-take days by catchment,<br>or processes that will be enacted, to allow monitoring of stream flows in their<br>natural condition.  |
|              | Note: There are also conditions on surface water intake structures in this regional plan that must be complied with – refer to Rule 52 (permitted).   |
| Method 170   | Require groundwater bores to be constructed to minimise the leakage of water,<br>including, but not limited to, the protection of headworks against wastage, and the<br>appropriate casing and construction of bores.   |
| Method 171   | Use any of the following instruments, where appropriate, to manage existing water takes in surface water abstraction pressure catchments, and aquifers where groundwater levels or quality has been adversely affected:   |
|              | (a) Use water user groups to encourage the voluntary rostering or rationing of<br>water takes, or pro rata reduction of water takes.  |
|              | (b) Encouraging, or recommending the surrender or cancellation of unused<br>resource consents pursuant to section 126 and 138 of the Act.   |
|              | (c) Reviewing consent conditions on large water takes pursuant to section 128<br>(1) (b) of the Act. Environment Bay of Plenty will review a resource consent<br>in accordance with section 128 of the Act, where it is proven that adverse<br>environmental effects will occur or continue due to the exercise of that<br>consent. |
|              | (d) Reviewing resource consent conditions according to actual use pursuant to<br>section 128(1) (a) or (b) of the Act, while allowing for matters under Method<br>168 (b) and (c).  |
|              | (e) Promote efficient use of water.   |
|              | (f) Promote the use of alternative water sources.   |
|              | In relation to groundwater, such methods may be temporary until groundwater<br>levels or quality return to 'normal', particularly where there is saline intrusion of<br>fresh water.  |
| <u>WQ M8</u> | Support the establishment of water user groups to assist Bay of Plenty Regional<br>Council and water users in the management of water through the following:  |
|              | (a) <u>Co-ordinating the take and/or use of water authorised by resource consent.</u>   |
|              | (b) Voluntary rostering or rationing of water takes during times of low water availability.   |
|              | (c) Pro rata reduction of water allocated by resource consent.  |
|              | (d) Recording and reporting information to Bay of Plenty Regional Council.  |
|              | Advice Note:  |
|              | Support may include provision of staff time, co-ordination and administration to help establish and maintain groups.  |
| Method 172   | Manage water abstraction during drought/low flow events according to the following:   |
| WQ M9        | Recognise:  |

- (a) The value of involving iwi and hap<del>u</del> to identify the extent of cultural impacts associated with resource consent applications to take water.
- (b) <u>The value of iwi and hapū management plans to articulate issues of significance to tangata whenua.</u>
- (c) <u>The role of specialists in mātauranga and tikanga, such as kaumātua and pūkenga, in resource management decisions where tangata whenua values or interests, or the mauri of fresh water are affected.</u>

WQ M9(c) supports the preparation of Cultural Values/Impact Assessments as well as the use of Hearing Commissioners who have a strong background and understanding of mātauranga and tikanga.

#### Table 15 – Water Management during Drought and Low Flow Events

|                           | Water Flow   | Action Taken   |
|---------------------------|--|--|
| Const                     | imptive Water Use  |  |
| <del>(a)</del>            | River or stream flow is within<br>10% of the instream minimum<br>flow requirement, or default<br>instream minimum flow<br>requirement. | <ul> <li>Consider giving water shortage advice, including:</li> <li>(i) Advising abstractors to restrict non-essential use of water in order to meet water take reduction requirements;</li> <li>(ii) Providing water conservation advice to the community;</li> <li>(iii) Working with city and district councils to reduce community usage of water</li> <li>(iv) Suggesting rostering or rationing to abstractors.</li> <li>Water user groups may also be used to facilitate the voluntary reduction of abstraction during drought events.</li> </ul> |
| <del>(b)</del>            | River or stream flow is at the<br>instream minimum flow<br>requirement.  | Issue, where appropriate, water shortage directions under Section 329 of the Act to apportion, restrict or suspend water takes, and restrict the discharge of contaminants to water. This includes rationing, rostering, water user groups, or no take days for selected or all abstractors. The memorandum of understanding developed under Method 163 will be implemented at this stage.   |
| Non-Consumptive Water Use |  |  |
| <del>(c)</del>            | River or stream flow is at the<br>instream minimum flow<br>requirement.  | Issue, where appropriate, water shortage directions under Section 329 of the Act to apportion, restrict or suspend water use. This includes requiring such uses to be managed to ensure that the discharge from a dam/impoundment is equal to the inflow.  |

Note:

Water flow is measured assuming all consumptive water takes are occurring, and at their full allocated rate, on the river or stream.

| Method 173 | Assess the adverse effects of the take of water from rivers and streams on downstream users, including non-consumptive users, in the resource consent process.   |
|------------|--|
| Method 174 | Initiate early discussion with resource consent holders where an existing water  |
|            | take is above the water allocation limits in Policy 66 or Policy 70, or there is a diversion of water that is greater than required for the use. The discussion will identify measures to comply with the requirements of this regional plan, and he |
|            | included in resource consent conditions at the time of consent renewal.  |

#### **Monitoring and Investigation of the Environment**

Method 175 Prioritise the establishment of instream minimum flow requirements using the methodology in Method 177 in catchments where:

- (a) There are large abstractions and low residual flows.
- (b) There are large abstractions and the water permits were issued prior to 1991.
- (c) A catchment is under abstraction pressure with regards to Policy 66(a). Pressure abstraction catchments will be identified using Method 182.
- (d) Significant ecological values, landscape values, recreational values, Maori customary values and traditional instream uses are potentially adversely affected by water abstraction.

This does not restrict the establishment of an instream minimum flow requirement by a resource consent applicant in other areas.

Method 176Identify the ecological values, landscape values, recreational values, and Maori<br/>customary values and traditional instream uses of a stream or river reach at the<br/>time of determining an instream minimum flow in accordance with Method 177.Method 177Use the following process and methodology to determine an appropriate instream<br/>minimum flow requirement:

|                | Process  | Methodology to be used   |
|----------------|--|--|
| <del>(a)</del> | Determine the water flow necessary to<br>sustain aquatic life evident in the stream<br>or river reach.   | Use a scientifically accepted ecological assessment method, such as Instream Flow Incremental Methodology (IFIM) or similar. In assessing the effects on instream aquatic life, the method will consider factors including:         (i)       Hydrological parameters.         (ii)       Substrate.         (iii)       Dissolved oxygen.         (iv)       Water temperature. |
|                |  | habitat flow response curves:  |
|                |  | Step 1<br>For each species present in the stream or river reach identify a primary<br>flow where habitat is optimum (greatest). Where the flow equating to<br>optimal habitat exceeds the stream's median flow, use the MALF as<br>the primary flow.   |
|                |  | Multiply habitat at the primary flow by the protection level in Method<br>178 to obtain a minimum flow for each species present in the stream<br>or river reach. The point of inflection may be used instead of the<br>scaled primary flow in cases where this exceeds the minimum flow<br>otherwise produced, or where any additional loss of habitat is<br>insignificant.      |
|                |  | <u>Step 3</u><br>Identify the highest flow of the minimum flows identified for the<br>species present. This is the Instream Minimum Flow Requirement<br>necessary to sustain aquatic life.   |
| <del>(b)</del> | Determine the water flow necessary to<br>sustain significant landscape,<br>recreational, Maori customary and<br>traditional heritage values, where these<br>have been identified as significant<br>through the use of the Criteria for<br>Assessing Specified Matters in the Bay<br>of Plenty Region in the Bay of Plenty<br>Regional Policy Statement, and where<br>those values may be adversely affected<br>by water abstraction. | Ministry for the Environment Flow Guidelines for Instream Values (May 1998) <sup>1</sup> .   |
| <del>(c)</del> | Assess the importance of other factors<br>that may be relevant to the environmental<br>quality of the stream or river reach.   | Assess effect of lower water flow on the following factors, and take<br>this into account if the effect is important:<br>(i) Water quality class in the river or stream, assimilative<br>capacity of the river or stream and effects on downstream   |

#### Table 16 – Instream Minimum Flow Requirement Methodology

<sup>1-</sup>Ministry for the Environment, May 1998. Flow Guidelines for Instream Values. Wellington, New Zealand.

|                |  | surface water bodies.   |
|----------------|--|---|
|                |  | (ii) Coastal or lake environments.  |
|                |  | (iii) Instream minimum flow requirements in downstream areas.   |
|                |  | (iv) Wetlands.  |
|                |  | (v) Fish migratory pathways and spawning sites.   |
|                |  | (vi) River or stream mouth closure (some mouths may naturally close periodically).                          |
|                |  | (vii) Flow variability.   |
|                |  | (viii) Habitat requirements of indigenous fauna and trout.  |
|                |  | (ix) Water temperature.   |
|                |  | (x) Aquatic flora requirements (e.g. watercress beds).  |
|                |  | (xi) Lagoon or estuary habitat requirements.  |
|                |  | The Ministry for the Environment Flow Guidelines for Instream Values (May 1998) may assist this assessment. |
| <del>(d)</del> | Determine the highest flow resulting from the assessments in (a) to (c).   |   |
| <del>(e)</del> | Assess the social, economic, cultural and  | Have regard to the following matters:   |
|                | environmental benefits and costs.  | (i) The value of investment by existing consent holders.  |
|                |  | (ii) The effect on the operation of existing infrastructure.  |
|                |  | (iii)       Other       relevant       social,       economic,       cultural       and                     |
| <del>(f)</del> | Determine the most appropriate instream<br>minimum flow requirement resulting<br>from the assessments in (a) to (e). |   |

#### Notes:

- 1 An Instream Minimum Flow Requirement will not be determined in the following circumstances:
  - (a) Ephemeral flowpaths (refer to Definition of Terms), or
  - (b) Artificial watercourses (refer to Definition of Terms), or
  - (c) Dry streams reaches allowed for in existing resource consent conditions.
    - 2 The adverse effects of existing dams and diversions on aquatic ecosystems and water flows will be considered on a case by case basis when consents are reviewed or replaced consistent with Policy 83.
    - 3 When the Instream Minimum Flow Requirement, determined under Method 177(f) is less than the flow determined by Method 177(d), then the flow determined under Methods 177(d) will included as an Advisory Note in Schedule 7.
- Method 178 Use the following protection levels for aquatic life in relation to Method 177(a), except where alternative catchment-specific or area-specific protection levels are ecologically justified:

|                | Significance Criteria  | Protection Level<br>(percentage of<br>primary habitat) |
|----------------|--|--|
| <del>(a)</del> | Short jawed kokopu, Giant Kokopu.  | <del>100%</del>  |
| <del>(b)</del> | Banded Kokopu, koaro, black mudfish, dwarf galaxias.   | <del>95%</del>   |
| <del>(c)</del> | Significant trout fisheries and spawning habitat as identified in Schedule 1D.   | <del>95%</del>   |
| <del>(d)</del> | Diverse indigenous fish communities: Fish community featuring a significant high number of indigenous species. Constituent species that do not meet criteria in (a) or (b) | <del>90%</del>   |

## Table 17 – Protection Levels for Aquatic Life

| (e)       Other indigeness-againtic-species, migratory-puthways of mut to Schedule 1D areas;<br>and other front-populations contributing to Schedule 1D areas;       85%         Netes;       -       -       Species in (a) and (b) have been sourced from Molly, J., and Davies, A., as upgraded by Tisdall, C. 1994. Se<br>Priorities, for the Concernation of New Zealand's Threatenet Plants and Annuals, 2 <sup>-3</sup> edition, Departmer<br>Conservation.       Decements that determine Instream Minimum Flow Requirements will include justification of the protection Is<br>used for that eatchment or areas.         Method 170       Where an instream minimum flow has not been established in accordance.<br>Method 170, the following flow will be used as the default instream minimum<br>requirement: 90% of Q <sub>0</sub> 7 day low flow.         Method 180       Initiate a plan change or plan variation in accordance with the requirements of<br>Act and in consultation with stakeholders and the community, to include listr<br>Minimum Flow Requirements in Schedule 7 of this regional plan, where they<br>been determined in accordance with Method 177. Plan changes for the follow<br>areas will be publicly notified by the opecified dates:         (a)       Kaimai area, and Tauranga area – July 2007.       (b)         (c)       Rational area, July 2007.       (c)         (d)       Eastern Bay of Plenty (oxcluding (c) and the Rangitalki River above<br>Matahina Dam)       December 2008.         (a)       Main stem of the Rangitalki River dovo the Matahina Dam, Whirinaki Ri<br>Haumea River – December 2009.         Method 181       Identify pressure abstraction -catchments in technical publications that report<br>stream flows  | a                | are individually given this protection level.                         |   |  |
|---|------------------|---|---|--|
| Notes:         I - Species: In (a) and (b) have been sourced from Molly, T, and Davies, A, as upgraded by Tisdath, C, 1991-52         Promities: for the Conservation of New Zealand's Threatened Plants and Animals. 2 <sup>rd</sup> edition. Departmen Conservations:         2 - Documents: that determine Instream Minimum Flow Requirements will include justification of the protection Is used for that each finem or area:         Method 179       Whore an instream minimum flow has not been established in accordance Method 177, the following flow will be used as the default instream minimum requirement: 90% of Q, 7-day low flow.         Method 180       Initiate a plan change or plan variation in accordance with the requirements of Act and in consultation with stakeholders and the community, to include Instre Minimum Flow Requirements in Schedule 7-of this regional plan, where they h been determined in accordance with Method 177. Plan changes for the follow areas will be publicly notified by the specified dates: <ul> <li>(a)</li> <li>Kaimai area, and Tauranga area</li> <li>July 2007.</li> <li>(b)</li> <li>Rotorua area area July 2007.</li> <li>(c)</li> <li>Rangitaliki River downstream of the Matahina Dam</li> <li>December 2007.</li> <li>(d)</li> <li>Eastern Bay of Plenty (excluding (c) and the Rangitaliki River above Matahina Dam)</li> <li>December 2008.</li> <li>(e)</li> <li>Main stem of the Rangitaliki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2008.</li> <li>(e)</li> <li>Main stem of the Rangitaliki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2008.</li> <li>(e)</li> <li>Main stem of the Rangitalik</li></ul>   | (e) G<br>au      | )ther indiger<br>nd other trou  | ter indigenous aquatic species, migratory pathways of trout to Schedule 1D areas, 85% lother trout populations contributing to Schedule 1D areas.                   |  |
| <ul> <li>Species in (a) and (b) have been sourced from Molly, I, and Davies, A, as upgraded by Tiodall, C, 1994. Se Priorities for the Conservation of New Zealand's Threatened Plants and Annuals 2<sup>std</sup> edition. Departmet Conservation.</li> <li>Decuments that determine Instream Minimum Flow Requirements will include justification of the protection Is used for that catchment or area.</li> <li>Mothod 177. the following flow will be used as the default instream minimum requirement: 90% of Q<sub>0</sub> 7 day low flow.</li> <li>Method 180 Initiate a plan change or plan variation in accordance with the requirements of Act and in consultation with stakeholders and the community, to include instream Minimum Flow Requirements. Schedule 7.0 this regional plan, where they h been determined in accordance with Method 177. Plan changes for the follow areas will be publicly notified by the specified dates:         <ul> <li>(a) Kaimai area, and Tauranga area — July 2007.</li> <li>(b) Rotorua area _ July 2007.</li> <li>(c) Rangitaiki River downstream of the Matahina Dam _ December 2007.</li> <li>(d) Eastern Bay of Plenty (oxcluding (c) and the Rangitaiki River above Matahina Dam) December 2008.</li> <li>(e) Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River _ December 2009.</li> </ul> </li> <li>Method 182</li></ul>   | Notes:           |   |   |  |
| <ul> <li>Priorities For the Conservation of New Zeeland's Threatened Plants and Animals 2<sup>st</sup> edition. Department Conservation.</li> <li>Documents that determine Instream Minimum Flow Requirements will include justification of the protection Is used for that catchment or area.</li> <li>Method 177 Where an instream minimum flow has not been established in accordance Method 177, the following flow will be used as the default instream minimum requirement: 90% of Q<sub>6</sub> 7 day low flow.</li> <li>Method 180 Initiate a plan change or plan variation in accordance with the requirements of Act and in consultation with stakeholders and the community, to include Instre Minimum Flow Requirements in Schedule 7 of this regional plan, where they have areas will be publicly notified by the specified dates:         <ul> <li>(a) Kaimai area, and Tauranga area – July 2007.</li> <li>(b) Rotorua area – July 2007.</li> <li>(c) Rangitaiki River downstream of the Matahina Dam – December 2007.</li> <li>(d) Eastern Bay of Plenty (oxcluding (c) and the Rangitaiki River above Matahina Dam) December 2008.</li> <li>(e) Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2009.</li> </ul> </li> <li>Method 181 Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.</li> <li>Method 182 Identify pressure abstraction- catchments in technical publications that report stream flow. Such reports are prepared as part of NRMM.</li> <li>Method 183 Determine sustainable yields for groundwater systems.</li> <li>Method 184 Investigate the linkages between groundwater systems.</li> <li>Method 185 Monitor the ongoing appropriateness of instream minimum flow requirements - regards to the coology of rivers and streams.</li> <li><u>Cross-reference</u> Also refer to Methods 66 and 67.</li> <li><u>51.5 Explanation/Principal Rea</u></li></ul>                           | 1 Spec           | <del>ties in (a) ar</del>   | nd (b) have been sourced from Molly, J., and Davies, A., as upgraded by '   | Fisdall, C., 1994. Setting                             |
| <ul> <li>2 Documents that determine Instream Minimum Flow Requirements will include justification of the protection to used for that eachment or area.</li> <li>Method 179 Where an instream minimum flow has not been established in accordance - Method 177, the following flow will be used as the default instream minimum requirement: 90% of Q<sub>8</sub> 7 day low flow.</li> <li>Method 180 Initiate a plan change or plan variation in accordance with the requirements of Act and in consultation with stakeholders and the community, to include Instream Minimum Flow Requirements in Schedule 7 of this regional plan, where they h been determined in accordance with Method 177. Plan changes for the follow areas will be publicly notified by the specified dates:         <ul> <li>(a) Kaimai area, and Tauranga area July 2007.</li> <li>(b) Rotorua area July 2007.</li> <li>(c) Rangitaiki River downstream of the Matahina Dam – December 2007.</li> <li>(d) Eastern Bay of Plenty (excluding (c) and the Rangitaiki River above Matahina Dam) – December 2008.</li> <li>(e) Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2009.</li> </ul> </li> <li>Method 181 Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.</li> <li>Method 182 Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.</li> <li>Method 183 Determine sustainable yields for groundwater systems.</li> <li>Method 184 Investigate the linkages between groundwater systems.</li> <li>Method 185 Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams.</li> <li><u>Cross-reference</u> Also refer to Methods 66 and 67.</li> <li><u>5.1.5 Explanation/Principal-Reasons</u></li> <li>Para 1 The objectives, policies and me</li></ul>                                     | Prior<br>Cons    | rities for th<br>servation.   | e Conservation of New Zealand's Threatened Plants and Animals. 2 <sup>nd</sup>  | edition. Department of                                 |
| <ul> <li>used for that eatchment or area.</li> <li>Method 179 Where an instream minimum flow has not been established in accordance. Method 177, the following flow will be used as the default instream minimum requirement: 90% of Q<sub>2</sub>, 7 day low flow.</li> <li>Method 180 Initiate a plan change or plan variation in accordance with the requirements of Act and in consultation with stakeholders and the community, to include hestre Minimum Flow Requirements in Schedule 7 of this regional plan, where they have not determined in accordance with Method 177. Plan changes for the follow areas will be publicly notified by the specified dates: <ul> <li>(a) Kaimai area, and Tauranga area July 2007.</li> <li>(b) Rotorua area July 2007.</li> <li>(c) Rangitaiki River downstream of the Matahina Dam – December 2007.</li> <li>(d) Eastern Bay of Planty (excluding (c) and the Rangitaiki River above Matahina Dam). December 2008.</li> <li>(e) Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2009.</li> </ul> </li> <li>Method 181 Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.</li> <li>Method 182 Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.</li> <li>Method 183 Determine sustainable yields for groundwater systems.</li> <li>Method 184 Investigate the linkages between groundwater systems.</li> <li>Method 185 Monitor the ongoing appropriateness of instream minimum flow requirements in regards to the coolegy of rivers and streams.</li> <li>Cross-reference Also refer to Methods 66 and 67.</li> <li><i>5.1.5 Explanation/Principal Reasons</i></li> <li>Para 1 The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quarties water and surface water and appropriateness.</li> </ul> | 2 Doce           | uments that   | determine Instream Minimum Flow Requirements will include justification   | 1 of the protection levels                             |
| Method 170       Where an instream minimum flow has not been established in accordance-<br>Method 177, the following flow will be used as the default instream minimum-<br>requirement: 90% of Q <sub>6</sub> 7-day low flow.         Method 180       Initiate a plan change or plan variation in accordance with the requirements of<br>Act and in consultation with staksholders and the community, to include Instr<br>Minimum Flow Requirements in Schedule 7 of this regional plan, where they h<br>been determined in accordance with Method 177. Plan changes for the follov<br>areas will be publicly notified by the specified dates:         (a)       Kaimai area, and Tauranga area – July 2007.         (b)       Rotorua area – July 2007.         (c)       Rangitaiki River downstream of the Matahina Dam – December 2007.         (d)       Eastern Bay of Plenty (excluding (c) and the Rangitaiki River above<br>Matahina Dam) – December 2008.         (e)       Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri<br>Haumea River – December 2009.         Method 181       Identify the location of each river or stream reach where an Instream Minim<br>Flow Requirement will apply as part of each plan change to Schedule 7.         Method 182       Identify pressure abstraction catchments in technical publications that report<br>stream flows. Such reports are prepared as part of NERMN.         Method 183       Determine sustainable yields for groundwater and surface water in the Bay<br>Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where it<br>are large abstractione of groundwater and streams.         Method 184       Investigate the linkages between groundwater a  | used             | for that cate   | hment or area.  |  |
| Method 177, the following flow will be used as the default instream minimum-requirement: 90% of Q <sub>8</sub> -7 day low flow.         Method 180       Initiate a plan change or plan variation in accordance with the requirements of Act and in consultation with stakeholders and the community, to include Instre Minimum Flow Requirements in Schedule 7 of this regional plan, where they have needed the publicly notified by the specified dates:         (a)       Kaimai area, and Tauranga area – July 2007.         (b)       Rotorua area – July 2007.         (c)       Rangitaiki River downstream of the Matahina Dam – December 2007.         (d)       Eastern Bay of Plenty (excluding (c) and the Rangitaiki River above Matahina Dam) – December 2008.         (e)       Main etem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2009.         Method 181       Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.         Method 182       Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.         Method 183       Determine sustainable yields for groundwater and surface water in the Bar Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where the areal area subject.         Method 184       Investigate the linkages between groundwater and surface water in the Bar Plenty, as necessary in the Galatea plains, Opotiki plains, and areas where the areal area subject.         Method 185       Monitor the on   | Method 1         | 179   | Where an instream minimum flow has not been established   | I in accordance with                                   |
| <ul> <li>Method 180 Initiate a plan change or plan variation in accordance with the requirements of Act and in consultation with stakeholders and the community, to include InstruMinimum Flow Requirements in Schedule 7 of this regional plan, where they have neetermined in accordance with Method 177. Plan changes for the folley areas will be publicly notified by the specified dates:         <ul> <li>(a) Kalimai area, and Tauranga area – July 2007.</li> <li>(b) Rotorua area – July 2007.</li> <li>(c) Rangitaliki River downstream of the Matahina Dam – December 2007.</li> <li>(d) Eastern Bay of Plenty (excluding (c) and the Rangitaliki River above Matahina Dam) – December 2008.</li> <li>(e) Main stem of the Rangitaliki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2009.</li> </ul> </li> <li>Method 181 Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.</li> <li>Method 182 Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are propared as part of NERMN.</li> <li>Method 183 Determine sustainable yields for groundwater systems.</li> <li>Method 184 Investigate the linkages between groundwater and surface water in the Bay Plenty, as necessary, in the Galatea plains, Opoliki plains, and areas where the areal areas where the area obstraction of groundwater in the recharge areas of springs used municipal water supply.</li> <li>Method 185 Monitor the ongoing appropriateness of instream minimum flow requirements - regards to the ecology of rivers and streams.</li> <li><u>Cross-reference</u> Also refer to Methods 66 and 67.</li> <li><u>5.1.5 Explanation/Principal Reasons</u></li> <li>Para 1 The objectives, policies and methods in this section are necessary to promote sustainable - management of water resources, maintain good _quantity areas and surface water in an</li></ul>                                      |                  |   | Method 177, the following flow will be used as the default ins  | tream minimum flow                                     |
| <ul> <li>Method 180 Initiate a plan change or plan variation in accordance with the requirements of Act and in consultation with stakeholders and the community, to include Instrt Minimum Flow Requirements in Schedule 7 of this regional plan, where they heen determined in accordance with Method 177. Plan changes for the follov areas will be publicly notified by the specified dates:         <ul> <li>(a) Kaimai area, and Tauranga area – July 2007.</li> <li>(b) Retorua area – July 2007.</li> <li>(c) Rangitaiki River downstream of the Matahina Dam – December 2007.</li> <li>(d) Eastern Bay of Plenty (excluding (c) and the Rangitaiki River above Matahina Dam) – December 2008.</li> <li>(e) Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2009.</li> </ul> </li> <li>Method 181 Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.</li> <li>Method 182 Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.</li> <li>Method 183 Determine sustainable yields for groundwater systems.</li> <li>Method 184 Investigate the linkages between groundwater systems.</li> <li>Method 185 Monitor the ongoing appropriateness of instream minimum flow requirements i regards to the occology of rivers and streams.</li> <li>Cross reference Also refer to Methods 66 and 67.</li> <li><i>5.1.5 Explanation/Principal Reasons</i></li> <li>Para 1 The objectives, policies and methods in this section are necessary to promote sustainable water recourses, maintain _good quantity groundwater deviace date achieves the integrated magement of w</li> </ul>   |                  |   |   |  |
| Act and in consultation with stakeholders and the community, to include Instit         Minimum Flow Requirements in Schedule 7 of this regional plan, where they here         been determined in accordance with Method 177, Plan changes for the follow areas will be publicly notified by the specified dates:         (a)       Kaimai area, and Tauranga area — July 2007.         (b)       Retorua area — July 2007.         (c)       Rangitaiki River downstream of the Matahina Dam — December 2007.         (d)       Eastern Bay of Plenty (excluding (c) and the Rangitaiki River above Matahina Dam) — December 2008.         (e)       Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River — December 2009.         Method 181       Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.         Method 182       Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.         Method 183       Determine sustainable yields for groundwater systems.         Method 184       Investigate the linkages between groundwater and surface water in the Bar Plenty, as necessary, in the Galataa plaine, Opotiki plaine, and areas where thare large abstractions of groundwater in the recharge areas of springs used municipal water supply.         Method 185       Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ceology of rivers and streams.         Cross referen   | Method 1         | 180   | Initiate a plan change or plan variation in accordance with the   | requirements of the                                    |
| <ul> <li>Minimum From Requirement in Schodule 7 of this specified plan, while they in been determined in accordance with Method 177. Plan changes for the follow areas will be publicly notified by the specified dates:         <ul> <li>(a) Kaimai area, and Tauranga area – July 2007.</li> <li>(b) Rotorua area – July 2007.</li> <li>(c) Rangitaiki River downstream of the Matahina Dam – December 2007.</li> <li>(d) Eastern Bay of Plenty (excluding (c) and the Rangitaiki River above Matahina Dam) – December 2008.</li> <li>(e) Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2009.</li> </ul> </li> <li>Method 181 Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.</li> <li>Method 182 Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.</li> <li>Method 183 Determine sustainable yields for groundwater and surface water in the Bar Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where the area large abstractions of groundwater in the recharge areas of springs used municipal water supply.</li> <li>Method 185 Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams.</li> <li>Cross-reference Also refer to Methods 66 and 67.</li> <li>5.1.5 Explanation/Principal Reasons</li> <li>Para 1 The objectives, policies and methods in this section are necessary to promote sustainable – management – of water – resources, maintain good quantity yroundwater of water and achines the independent of water and achines the independent of water – resources.</li> </ul>  |                  |   | Act and in consultation with stakeholders and the community   | ; to include Instream                                  |
| areas will be publicly notified by the specified dates:         (a)       Kaimai area, and Tauranga area – July 2007.         (b)       Rotorua area – July 2007.         (c)       Rangitaiki River downstream of the Matahina Dam – December 2007.         (d)       Eastern Bay of Plenty (excluding (c) and the Rangitaiki River above Matahina Dam) – December 2008.         (e)       Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2009.         Method 181       Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.         Method 182       Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.         Method 183       Determine sustainable yields for groundwater systems.         Method 184       Investigate the linkages between groundwater and surface water in the Bar Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where it are large abstractions of groundwater in the recharge areas of springs used municipal water supply.         Method 185       Monitor the ongoing appropriateness of instream minimum flow requirements - regards to the ecology of rivers and streams.         Cross-reference       Also refer to Methods 66 and 67.         5.1.5       Explanation/Principal Reasons         Para 1       The objectives, policies and methods in this section are neccessary to promote sustainable – management of  |                  |   | Minimum Flow Requirements in Schedule 7 of this regional plan chan  | an, where they have                                    |
| <ul> <li>(a) Kaimai area, and Tauranga area – July 2007.</li> <li>(b) Rotorua area – July 2007.</li> <li>(c) Rangitaiki River downstream of the Matahina Dam – December 2007.</li> <li>(d) Eastern Bay of Plenty (excluding (c) and the Rangitaiki River above Matahina Dam) – December 2008.</li> <li>(e) Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2009.</li> <li>Method 181 Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.</li> <li>Method 182 Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.</li> <li>Method 183 Determine sustainable yields for groundwater systems.</li> <li>Method 184 Investigate the linkages between groundwater and surface water in the Bay Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where it are large abstractions of groundwater in the recharge areas of springs used municipal water supply.</li> <li>Method 185 Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams.</li> <li>Cross-reference Also refer to Methods 66 and 67.</li> <li><i>5.1.5 Explanation/Principal Reasons</i></li> <li>Para 1 The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quantity arrupdwater and surface water and achiace and achiace marked management of the section and streams of the resources of a springe appropriate and streams.</li> </ul>  |                  |   | areas will be publicly notified by the specified dates:   | gee for the following                                  |
| <ul> <li>(b) Rotorua area – July 2007.</li> <li>(c) Rangitaiki River downstream of the Matahina Dam – December 2007.</li> <li>(d) Eastern Bay of Plenty (excluding (c) and the Rangitaiki River above Matahina Dam) – December 2008.</li> <li>(e) Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River – December 2009.</li> <li>Method 181 Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.</li> <li>Method 182 Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.</li> <li>Method 183 Determine sustainable yields for groundwater systems.</li> <li>Method 184 Investigate the linkages between groundwater and surface water in the Bay Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where it are large abstractions of groundwater in the recharge areas of springs-used municipal water supply.</li> <li>Method 185 Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams.</li> <li>Cross-reference Alse refer to Methods 66 and 67.</li> <li><i>5.1.5 Explanation/Principal Reasons</i></li> <li>Para 1 The objectives, policies and methods in this section are necessary to promote sustainable and agreement of water resources, maintain good quantity areand active and surface water and surface management of water resources.</li> </ul>   |                  |   | (a) Kaimai area, and Tauranga area – July 2007.   |  |
| <ul> <li>(c) Rangitaiki River downstream of the Matahina Dam — December 2007.</li> <li>(d) Eastern Bay of Plenty (excluding (c) and the Rangitaiki River above Matahina Dam) — December 2008.</li> <li>(e) Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River — December 2009.</li> <li>Method 181 Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.</li> <li>Method 182 Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.</li> <li>Method 183 Determine sustainable yields for groundwater systems.</li> <li>Method 184 Investigate the linkages between groundwater and surface water in the Bar Plenty, as necessary, in the Galatea plains, Opetiki plains, and areas where it are large abstractions of groundwater in the recharge areas of springs used municipal water supply.</li> <li>Method 185 Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams.</li> <li>Cross reference Also refer to Methods 66 and 67.</li> <li><i>S.1.5 Explanation/Principal Reasons</i></li> <li>Para 1 The objectives, policies and methods in this section are necessary to promote surface water and agreement of water resources, maintain good quantity groundwater and surface water management of water resources maintain good quantity groundwater and schew the integrated management of water surface water management of water resources, maintain good quantity groundwater and schew the integrated management of water surface water management of water resources.</li> </ul>   |                  |   | <del>(b) Rotorua area – July 2007.</del>  |  |
| (d)       Eastern Bay of Plenty (excluding (c) and the Rangitaiki River above Matahina Dam) — December 2008.         (e)       Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri Haumea River — December 2009.         Method 181       Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.         Method 182       Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.         Method 183       Determine sustainable yields for groundwater systems.         Method 184       Investigate the linkages between groundwater and surface water in the Bar Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where the are large abstractions of groundwater in the recharge areas of springs used municipal water supply.         Method 185       Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams.         Cross-reference       Also refer to Methods 66 and 67.         5.1.5       Explanation/Principal Reasons         Para 1       The objectives, policies and methods in this section are necessary to promote sustainable surface water recources, maintain good quantity groundwater and schere and achieve the integrated management of water recources, maintain good quantity are undwater and schere and achieve the integrated management of water recources, maintain good quantity are undwater and schere and achieve the integrated management of water recources, maintain good quantity are undwater and schere and achieve the   |                  |   | (c) Rangitaiki River downstream of the Matahina Dam - De  | <del>cember 2007.</del>                                |
| <ul> <li>(e) Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki Ri<br/>Haumea River – December 2009.</li> <li>Method 181 Identify the location of each river or stream reach where an Instream Minin<br/>Flow Requirement will apply as part of each plan change to Schedule 7.</li> <li>Method 182 Identify pressure abstraction catchments in technical publications that report<br/>stream flows. Such reports are prepared as part of NERMN.</li> <li>Method 183 Determine sustainable yields for groundwater systems.</li> <li>Method 184 Investigate the linkages between groundwater and surface water in the Bar<br/>Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where it<br/>are large abstractions of groundwater in the recharge areas of springs used<br/>municipal water supply.</li> <li>Method 185 Monitor the ongoing appropriateness of instream minimum flow requirements -<br/>regards to the ecology of rivers and streams.</li> <li><u>Cross-reference</u> Also refer to Methods 66 and 67.</li> <li><u>5.1.5 Explanation/Principal Reasons</u></li> <li>Para 1 The objectives, policies and methods in this section are necessary to promote<br/>sustainable management of water resources, maintain good quantity<br/>groundwater and surface water and achieve the integrated management of</li> </ul>  |                  |   | (d) Eastern Bay of Plenty (excluding (c) and the Rangita<br>Matahina Dam) December 2008.  | aiki River above the                                   |
| Method 181       Identify the location of each river or stream reach where an Instream Minim Flow Requirement will apply as part of each plan change to Schedule 7.         Method 182       Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.         Method 183       Determine sustainable yields for groundwater systems.         Method 184       Investigate the linkages between groundwater and surface water in the Bay Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where the are large abstractions of groundwater in the recharge areas of springs used municipal water supply.         Method 185       Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams.         Cross-reference       Also refer to Methods 66 and 67.         5.1.5       Explanation/Principal Reasons         Para 1       The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quantity groundwater and surface water and achieve the integrated management of water of water resources and achieve the integrated management of water resources and achieve the integrated management of water of  |                  |   | (e) Main stem of the Rangitaiki River above the Matahina E<br>Haumea River – December 2009.   | <del>)am, Whirinaki River,</del>                       |
| Method 182       Identify pressure abstraction catchments in technical publications that report stream flows. Such reports are prepared as part of NERMN.         Method 183       Determine sustainable yields for groundwater systems.         Method 184       Investigate the linkages between groundwater and surface water in the Bar Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where the are large abstractions of groundwater in the recharge areas of springs used municipal water supply.         Method 185       Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams.         Cross-reference       Also refer to Methods 66 and 67.         5.1.5       Explanation/Principal Reasons         Para 1       The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quantity groundwater and schere the integrated management of water and achieve the integrated management of water  | Method 1         | 181   | Identify the location of each river or stream reach where an<br>Flow Requirement will apply as part of each plan change to Se                                       | <del>n Instream Minimum</del><br><del>Shedule 7.</del> |
| Method 183       Determine sustainable yields for groundwater systems.         Method 184       Investigate the linkages between groundwater and surface water in the Bay Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where the are large abstractions of groundwater in the recharge areas of springs used municipal water supply.         Method 185       Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams.         Cross-reference       Also refer to Methods 66 and 67.         5.1.5       Explanation/Principal Reasons         Para 1       The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quantity groundwater and surface water and achieve the integrated management of water resources.   | Method 1         | 182   | <ul> <li>Identify pressure abstraction catchments in technical publications that report on<br/>stream flows. Such reports are prepared as part of NERMN.</li> </ul> |  |
| Method 184       Investigate the linkages between groundwater and surface water in the Bay Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where the are large abstractions of groundwater in the recharge areas of springs used municipal water supply.         Method 185       Monitor the ongoing appropriateness of instream minimum flow requirements aregards to the ecology of rivers and streams. <u>Cross-reference</u> Also refer to Methods 66 and 67.         5.1.5       Explanation/Principal Reasons         Para 1       The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quantity aroundwater and surface water and achieve the integrated management of water   | Method 1         | 183   | Determine sustainable yields for groundwater systems.   |  |
| Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where the are large abstractions of groundwater in the recharge areas of springs used municipal water supply.         Method 185       Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams. <u>Cross-reference</u> Also refer to Methods 66 and 67.         5.1.5 <u>Explanation/Principal Reasons</u> Para 1       The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quantity groupdwater and surface water and achieve the integrated management of water resources  | Method 1         | 184   | Investigate the linkages between groundwater and surface  | water in the Bay of                                    |
| are large abstractions of groundwater in the recharge areas of springs used<br>municipal water supply.         Method 185       Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams. <u>Cross-reference</u> Also refer to Methods 66 and 67. <u>5.1.5</u> <u>Explanation/Principal Reasons</u> Para 1       The objectives, policies and methods in this section are necessary to promote<br>sustainable management of water resources, maintain good quantity<br>groupdwater and surface water and achieve the integrated management of water   |                  |   | Plenty, as necessary, in the Galatea plains, Opotiki plains, ar   | id areas where there                                   |
| municipal water supply.         Method 185       Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams. <u>Cross-reference</u> Also refer to Methods 66 and 67. <u>5.1.5</u> <u>Explanation/Principal Reasons</u> Para 1       The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quantity groupdwater and surface water and achieve the integrated management of water  |                  |   | are large abstractions of groundwater in the recharge areas   | of springs used for                                    |
| Method 185       Monitor the ongoing appropriateness of instream minimum flow requirements regards to the ecology of rivers and streams. <u>Cross-reference</u> Also refer to Methods 66 and 67. <u>5.1.5</u> <u>Explanation/Principal Reasons</u> Para 1       The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quantity groupdwater and surface water and achieve the integrated management of water  |                  |   | municipal water supply.   |  |
| regards to the ecology of rivers and streams. <u>Cross-reference</u> Also refer to Methods 66 and 67.         5.1.5       Explanation/Principal Reasons         Para 1       The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quantity groupdwater and surface water and achieve the integrated management of water   | Method 1         | 185   | Monitor the ongoing appropriateness of instream minimum flo   | w requirements with                                    |
| Cross-reference       Also refer to Methods 66 and 67.         5.1.5       Explanation/Principal Reasons         Para 1       The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quantity groupdwater and surface water and achieve the integrated management of water  |                  |   | regards to the ecology of rivers and streams.   |  |
| 5.1.5 Explanation/Principal Reasons Para 1 The objectives, policies and methods in this section are necessary to promote sustainable management of water resources, maintain good quantity groupdwater and surface water, and achieve the integrated management of w  | <u>Cross-re</u>  | ference   | Also refer to Methods 66 and 67.  |  |
| Para 1 The objectives, policies and methods in this section are necessary to promote<br>sustainable management of water resources, maintain good quantity<br>groupdwater and surface water, and achieve the integrated management of w  | <del>5.1.5</del> |   | Explanation/Principal Reasons   |  |
| sustainable management of water resources, maintain good quantity   | Para 1           |   | The objectives policies and methods in this section are nece  | ssarv to promote the                                   |
| groundwater and surface water, and achieve the integrated management of w   |                  |   | sustainable management of water resources, maintain   | -good quantity of                                      |
| and land resources in the Bay of Plenty Region.   |                  |   | groundwater and surface water, and achieve the integrated n<br>and land resources in the Bay of Plenty Region.  | nanagement of water                                    |
| Para 2 Objective 39. Policy 73. Method 155. 157 160 161 162 164 and 170 ar  | Para 2           |   | Objective 39. Policy 73. Method 155 157 160 161 162   | 164 and 170 are to                                     |
| require the efficient use of water, which is a major factor in the sustainabl management of water resources. Environment Bay of Plenty is required to hav particular regard to the efficient use and development of natural and physica   |                  | r in the sustainable<br>r is required to have<br>natural and physical |   |  |

resources by section 7(b) of the Act. Policy 73 is intended to sustain the use rather than allow for peak use, for example to sustain pasture through summer rather than allow for peak growth rates.

Para 3 Policy 66 establishes the surface water allocation regime for the Bay of Plenty, and is necessary to achieve Objective 41. The Q<sub>5</sub>-management level for low flow allocation has been set as it represents an acceptable level of risk (the community can expect water restriction one in every five years on fully allocated streams) while allowing sufficient allocatable volume to service reasonable needs. Those communities who can expect water restrictions one in every five years on fully allocated streams will be advised of water restrictions in relation to Method 172. High flow allocation provides for water harvesting or short-term abstractions during high flows (e.g. frost protection, municipal water supply storage), and contributes to the efficient allocation of water while protecting the Instream Minimum Flow Requirement. Method 177 takes into consideration the effect of water abstraction on water quality for consistency with Policy 79 and Objective 45. The methodology to determine Instream Minimum Flow Requirements to sustain ecological values has been established by assessments carried out by Environment Bay of Plenty (refer to Environmental Reports 99/22 and 2000/252). Method 179 will be used where an Instream Minimum Flow Requirement has not been set in accordance with Method 177. The default Instream Minimum Flow Requirement will generally apply where there is low water abstraction from a catchment and it is not costeffective to carry out investigations. In the absence of an Instream Minimum Flow Requirement established under Method 177, water allocation will be conservative, and as such it is expected that an Instream Minimum Flow Requirement (under Method 177) will be lower than the default Instream Minimum Flow Requirement (under Method 179). Over-allocated streams will be identified and addressed on a case by case basis

using measures appropriate to the circumstances of the individual catchment using Policy 76 and Method 171. Objective 42 and Policy 65 ensure that stream flows variations are maintained and stream hydrographs are not managed as a 'flat line'. This is necessary to sustain stream biota and natural flushing processes.

Para 4 Schedule 7 contains a list of Instream Minimum Flow Requirements set using Method 177. Other Instream Minimum Flow Requirements will be included in Schedule 7 using Method 180. The Instream Minimum Flow Requirement low flow allocation is the 'environmental baseline' and Environment Bay of Plenty will allocate water flows above that level for consented surface water abstraction.

> Policy 68 provides for situations where new or improved scientific knowledge is available to a resource consent applicant to determine an Instream Minimum Flow Requirement, while considering the matters specified in Policy 68 and taking into account instream values and existing users. In those situations an Instream Minimum Flow Requirement, different from that in Schedule 7 may be applied when assessing the consent application.

Para 5 Method 177 sets the methodology used to determine Instream Minimum Flow Requirements. This follows from Objective 41, which clearly identifies the water quantity management goals for the Bay of Plenty region. Appropriate Instream Minimum Flow Requirements will be determined for each stream or river reach in relation to aquatic habitat requirements for species present in the reach; other values identified during the Instream Minimum Flow Requirement investigation; the water quality classification of the water body; and other social, economic, cultural

<sup>&</sup>lt;sup>2</sup> Wilding, T.K., 1999. Instream Flow requirements and Water Takes in the Bay of Plenty – A Discussion Document. Environmental Report 99/22. Environment Bay of Plenty.

Wilding, T.K., 2000. Minimum Flow report for the Waitahanui Stream. Environmental Report 2000/25. Environment Bay of Plenty.

and environmental matters relevant to the particular stream or river reach. All the matters listed in Method 177 must be assessed to determine an appropriate Instream Minimum Flow Requirement before it is included in Schedule 7 of the regional plan in accordance with Method 180. Figure 6 explains the Instream Minimum Flow Requirement process. Effects on other water users are assessed during the processing of resource consent applications. Method 178 states the habitat protection level that will be provided by an Instream Minimum Flow Requirement in the stream or river reach.

#### Figure 6 – Instream Minimum Flow Requirements Process



## **Rules**

Advisory Advice Note:

- Section 14(3<del>)(</del>) (e) of the Act allows the take and use of water for firefighting purposes. This applies to surface water, groundwater, geothermal and coastal water.
- 2 Section 14(3)(b) of the Act allows the take and use of fresh water (this excludes geothermal water [greater than 30<sup>o</sup> Celsius] and coastal water) for:
  - (a) An individual's reasonable domestic needs,
  - (b) The reasonable needs of an individual's animals for drinking water, providing the take and use does not, or is not likely to, have an adverse effect on the environment. Adverse effects include, but are not limited to, effects on other persons, abstraction (either singularly or cumulative takes within the streamwater body) at a rate or volume that cause the water flow to fall below the instream minimum flow requirement (including the default instream minimum flow requirement).) or groundwater or lake level.

People taking and using water may take a reasonable volume of water for the purposes of (a) and/or (b) above, plus an additional volume permitted by Rule 38-WQ R1 or R2 (groundwater) or Rule 41 WQ R3 (surface water).

3 <u>Unless otherwise specified all clauses apply within each rule.</u>

#### **Rule 38WQ R1** Permitted Activity – Take and Use of Groundwater

The take and use of groundwater with a temperature of less than 30° Celsius, where the quantity of water does not exceed 35 cubic metres per day per property, is a permitted activity.

In addition to any take under section 14(3)(b) of the Act, the take and use of groundwater with a temperature of less than 30° Celsius, where the property size is less than 5 hectares, the rate of take does not exceed 2.5 litres per second and the quantity of water taken does not exceed 15 cubic metres per day per property, is a Permitted Activity subject to the following conditions:

- (a) <u>The take and use is Existing takes are registered with the Bay of Plenty</u> <u>Regional Council within one year of the plan</u>rule becoming operative, or <u>forand new takes prior to the commencement with</u>of the take. The following information is to be provided to Council with all registrations:
  - (i) <u>Location of all water takes on the take</u>property, including those that supply water for stock;
  - (ii) <u>General purpose for which the water is being used or is proposed to be used;</u>
  - (iii) <u>Confirmation that conditions (b) to (ec) below can be met;</u>
  - (iv) Whether the take provides for stock or domestic drinking requirements; and
  - (v) Name, address and contact details of person responsible for the take and use.
- (b) Metering is undertaken and data is provided to Council in accordance with WQ P24 if required.
- (c) No additional water is taken under WQ R3.

Advice Note: Clause b of this rule requires the metering and reporting of permitted water takes on the property if the total volume of water taken, including stock drinking water, exceeds the permitted activity quantity. Stock drinking water is provided for in addition to the permitted activity quantity. The purpose of metering and reporting is to assist with water accounts, and to enable compliance monitoring.

#### **Explanation/Intent of Rule**

To allow minor takes of groundwater for any purpose that are unlikely to have adverse effects on the environment, and to prevent a proliferation of small takes on a single property that may have significant cumulative effects on a groundwater system. 12 months is provided as time for registration of permitted activity and installation of any meters that are required.

#### WQ R2 Permitted Activity – Take and Use of Groundwater

In addition to take under section 14(3)(b) of the Act, the take and use of groundwater with a temperature of less than 30° Celsius, where the property size is equal or greater than 5 hectares, the rate of take does not exceed 2.5 litres per second and the quantity of water taken does not exceed 35 cubic metres per day per property, is a Permitted Activity subject to the following conditions:

- (a) <u>The Existing takes and use is are registered with the Bay of Plenty Regional</u> <u>Council within one year of the plan rule becoming operative, or for and new</u> <u>takes prior to the commencement with of the take.</u> <u>tThe following</u> <u>information is to be provided to Council with all registrations:</u>
  - (i) Location of the all water takes on the property, including those that supply water for stock;
  - (ii) <u>General purpose for which the water is being used or is proposed to be used;</u>
  - (iii) <u>Confirmation that conditions (b) to (ec) below can be met;</u>
  - (iv) Whether the take provides for stock or domestic drinking requirements; and
  - (v) <u>Name, address and contact details of person responsible for the take</u> <u>and use.</u>
- (b) <u>The rate of take does not exceed 2.5 litres per secondMetering is</u> <u>undertaken and data is provided to Council in accordance with WQ P24 if</u> <u>required.</u>
- (c) <u>No additional water is taken under WQ R1 or WQ R3.</u>

The take is not from a water resource that is fully allocated at the time the take first commences, unless the take was established prior to 18 October 2016.

(e) Where the quantity of water taken under this rule, in combination with stock drinking water taken under s14(3)(b) of the Act, exceeds 35 cubic meters per day water meters must be installed to separately record stock drinking water and all other water taken. Records are to be provided to Bay of Plenty Regional Council in an electronic format on a monthly basis within 28 days following the end of each month.

#### Advice Note:

<u>Clause b of  $\pm$ this rule requires the metering and reporting of stock drinking water</u> where the volume used, in combination with any permitted <u>uses</u> water takes on the property if the total volume of water taken, including stock drinking water, exceeds the permitted activity limitguantity. Stock drinking water is provided for in addition to the permitted activity volumeguantity. The purpose of metering and reporting is to assist with water accounts, to encourage efficiency by providing information about water use and to ensure that the volume is reasonable, as required by the Actand to enable compliance monitoring.

#### Explanation/Intent of Rule

To allow minor takes of groundwater for any purpose that are unlikely to have adverse effects on the environment, and to prevent a proliferation of small takes on a single property that may have significant cumulative effects on a groundwater system.

Rules 39-40B [are not relevant for this Plan Change and will be shifted under a new heading Groundwater Bores and Flooding Conditions].

#### **Rule 41WQ R3** Permitted Activity – Take and Use of Surface Water

In addition to any take under section 14(3)(b) of the Act, the take and use of water from any surface water body for any purpose, where the rate of take does not exceed 2.5 litres per second, the water has a temperature of less than  $30^{\circ}$  Celsius, and the quantity taken does not exceed 15 cubic metres per day per property is a Permitted Activity subject to the following conditions:

- (a) The take of water shall not be from a wetland.
- (b) The quantity of water taken shall not exceed 15 cubic metres per day per property.
- (c) Where the take is from a river or stream, the rate of abstraction shall not exceed 2.5 litres per second or 10% of the estimated five year low flow (Q5 7 day low flow) at the point of abstraction whichever is the lesser.
- (d) Where the take is from a river or stream, the total abstraction (all users) of surface watershall not exceed the instream minimum flow requirement (including the default instream minimum flow requirement) for the river or stream at any point.
- (e) The intake structure shall be screened with a mesh aperture size:
  - (i) Not exceeding three (3) millimetres by 30 millimetres in the tidal areas of rivers and streams.
  - (ii) Not exceeding five (5) millimetres by 30 millimetres or five (5) mm diameter holes in any other area that is not in the tidal area of a river or stream.
- (f) The intake velocity through the screen shall not exceed 0.3 metres per second.
- (a) <u>The take and use is</u>Existing takes are registered with the Bay of Plenty Regional Council within one year of this regional planthe rule becoming operative, or for and new takes, are registered prior to their commencement and of the take. The following information is to be provided to Council with all registrations:
  - (i) <u>Location of takeall water takes on the property</u>, including those that supply water for stock;
  - (ii) <u>General purpose for which water is being used;</u>
  - (iii) Confirmation that requirements (b) to (h) can be met;
  - (iv) Whether the take also provides for stock or domestic drinking requirements; and
  - (v) <u>Name, address and contact details of person responsible for the take</u> <u>and use.</u>
- Where the quantity of water taken under this rule, in combination with stock drinking water taken under section 14(3)(b) of the Act exceeds 15 cubic metres per day per property, water meters must be installed to separately record stock drinking water and all other water taken. Records are to be provided to Bay of Plenty Regional Council in an electronic format on a monthly basis within 28 days following the end of each month.
- (b) The rate of take does not exceed 2.5 litres per second.
- (b) Metering is undertaken and data is provided to Council in accordance with WQ P24 if required.
- (c) <u>No additional water is taken under WQ R1 or WQ R2.</u>
- (d) <u>The take is not from a water resource that is fully or over-allocated at the time the take is established, unless the take was established prior to 18 October 2016.</u>

- (e) The take is not from a wetland.
- (e) <u>The take is not from waters flowing into a wetland that will be adversely</u> <u>affected by the take.</u>
- (f) The intake shall be screened with a mesh aperture size:
  - (i) Not exceeding three (3) millimetres by 30 millimetres in the tidal areas of rivers, streams or lakes; and
  - (ii) Not exceeding five (5) millimetres by 30 millimetres or five (5) millimetres diameter holes in any other areas that is not in the tidal area of a river stream or lake.
  - (i)(iii) The intake velocity through the screen shall not exceed 0.3 metres per second.
- (h) Where the take is from a river or stream, the total abstraction (all users) of surface water takes shall not exceedcause the interim-instream minimum flow to be\_breached\_at any point.

#### Advisory Advice Note:

1 Potential water abstractors are encouraged to seek the advice of Environment

Bay of Plenty <u>Regional Council</u> to ensure that there is sufficient flow in a water body to accommodate their water take and comply with condition (d). This is particularly relevant for small streams. <u>Environment</u> Bay of Plenty <u>Regional Council</u> will take appropriate action when flows fall below the instream minimum flow. <u>requirement</u>.

- 2 Surface water intake structures for the take and use of water under this rule must also be authorised (refer to Rule 52 BW R5).
- 3 This rule requires the metering and reporting of stock drinking water where the volume used, in combination with any permitted uses on the property exceeds the permitted activity limit. Stock drinking water is provided for in addition to the permitted activity volume. The purpose of metering and reporting is to assist with water accounts, to encourage efficiency by providing information about water use and to ensure that the volume is reasonable, as required by the Act.

#### Explanation/Intent of Rule

To allow small takes of water from rivers, streams, lakes and other surface water bodies excluding wetlands which are unlikely to cause adverse environmental effects. Conditions (c) and (d) are to avoid adverse effects on small streams, which are particularly sensitive to abstraction pressure. 15-m<sup>3</sup>-cubic metres per day is a reasonable amount for small uses, such as dairy shed wash-down and milk cooling for small dairy sheds, small glasshouse operations, horticultural spray makeup, or irrigation of gardens (up to approximately 0.5 hectares). Condition (b) is to prevent a proliferation of small takes on a single property, which may have significant cumulative effects on streams and rivers.surface waters. Intake velocity and screening conditions are to prevent adverse effects on aquatic life.

This rule allows the take of water for the supply of the persons for their reasonable domestic needs and the needs of their animals.

#### WQ RX

# Permitted activity – the Taking of Water for the Purpose of Aquifer or Pump Testing

The taking of groundwater for aquifer or pump testing is a permitted activity subject to the following:

- (a) The Bay of Plenty Regional Council shall be notified in writing at least 1 week in advance of a test.
- (b) No test for a particular well shall exceed a pumping period of 7 days in duration.
- (c) The rate of take shall not exceed 2,500 cubic metres or tonnes per day.
- (d) Records of the pump test(s) shall be kept by the owner and provided in writing to the Bay of Plenty Regional Council within one month of completion.
- (a)(e) The records shall include:
  - (i) The location of the bore and any observation bores;
  - (ii) Temperature/pressure profiles; and
  - (iii) The amount of water taken.

Advice note:

The Bay of Plenty Regional Council can provide information on constant discharge pump testing methodology to assist the applicant determining the appropriate protocol with regard to the information needed to support any future application for resource consent to take and use water from the bore. A separate consent to discharge aquifer or pump test water may be required.

#### Rule 41A Controlled – Take and Use of Surface Water within Allocation Regime

#### The take and use of surface water or groundwater that:

- 1 Is not permitted by a rule in this regional plan, and
- 2 Is not prohibited by Rule 49, and
- 3 Complies with the low flow allocation specified in Policy 66 and where an instream minimum flow requirement has been established in Schedule 7 for the stream or river reach, and
- 4 Does not have an adverse effect on downstream water users.

Is a controlled activity.

Environment Bay of Plenty reserves its control over the following matters:

- (a) Volume and rate of water take.
- (b) Measures to achieve the efficient use of water.
- (c) Measures to restrict the water take during low flow or drought events.
- (d) Measures to avoid, remedy or mitigate adverse effects on downstream water users.
- (e) Requirements to temporarily stop water takes to enable Environment Bay of Plenty water flow monitoring.
- (f) Monitoring requirements.

#### **Explanation/Intent of Rule**

To provide for the take and use of water where the activity complies with Policy 66(a), and Policy 67. Matters of which Environment Bay of Plenty retains control are those relevant to effects on water flows and administrative issues. The take

|              | and use of surface water that does not meet the conditions of Rule 41A is a discretionary activity under Rule 43. |  |  |
|--------------|---|--|--|
| Rule 41A     | Controlled – Take and Use of Surface Water within Allocation Regime   |  |  |
|              | The ta  | ake and use of surface water or groundwater that:  |  |
|              | 1   | Is not permitted by a rule in this regional plan, and  |  |
|              | 2   | Is not prohibited by Rule 49, and  |  |
|              | 3   | Complies with the low flow allocation specified in Policy 66 and where an instream minimum flow requirement has been established in Schedule 7 for the stream or river reach, and  |  |
|              | 4   | <ul> <li>Does not have an adverse effect on downstream water users.</li> </ul>   |  |
|              | <del>ls a co</del>  | ontrolled activity.  |  |
|              | Envire  | onment Bay of Plenty reserves its control over the following matters:  |  |
|              | <del>(a)</del>  | Volume and rate of water take.   |  |
|              | <del>(b)</del>  | Measures to achieve the efficient use of water.  |  |
|              | <del>(c)</del>  | Measures to restrict the water take during low flow or drought events.   |  |
|              | <del>(d)</del>  | Measures to avoid, remedy or mitigate adverse effects on downstream water users.   |  |
|              | <del>(e)</del>  | Requirements to temporarily stop water takes to enable Environment Bay of Plenty water flow monitoring.  |  |
|              | (f) Monitoring requirements.  |  |  |
|              | <del>Expla</del> i  | nation/Intent of Rule  |  |
|              | <del>To pro<br/>66(a),</del><br>are th<br>and u<br>discre   | ovide for the take and use of water where the activity complies with Policy<br>and Policy 67. Matters of which Environment Bay of Plenty retains control<br>ose relevant to effects on water flows and administrative issues. The take<br>use of surface water that does not meet the conditions of Rule 41A is a<br>tionary activity under Rule 43. |  |
| <u>WQ R4</u> | <u>Contr</u><br>Down  | olled Activity – Take and Use of Water for Existing Dairy Shed Wash<br>and Milk Cooling Purposes   |  |
|              | <u>The ta</u><br>shed<br>notific  | ake and use of surface water and/or groundwater for the purposes of dairy washdown and milk cooling is a Controlled Activity that does not require ation under section 95A or 95B of the RMA, subject to the following:  |  |
|              | 1   | The take and use is not permitted by a rule in this regional plan.   |  |
|              | 2   | The take and use is not prohibited by Rule 49.   |  |
|              | 3   | The take and use is not otherwise provided for by a rule in the Tarawera River Catchment Plan  |  |
|              | <del>3</del> 4  | <u>A resource consent application is lodged within 12 months of this rule becoming operative.</u>  |  |
|              | 5   | Where the take is from a river or a stream:  |  |
|              |   | (a) The rate of abstraction shall not exceed 2.5 litres per second or 10% of the estimated five year low flow ( $Q_57$ -day low flow) at the point of abstraction, whichever is the lessor.  |  |

(b) The intake shall be screened with a mesh aperture size:

- (i) Not exceeding three (3) millimetres by 30 millimetres in the tidal areas of rivers, streams or lakes; and
- (ii) Not exceeding five (5) millimetres by 30 millimetres or five (5) mm diameter holes in any other area that is not in the tidal area of a river, stream or lake.
- 6 Where the take is from groundwater:
  - (a) The rate of take shall not exceed 2.5 litres per second.
  - (b) The bore shall be registered with the Bay of Plenty Regional Council.
  - (c) The bore shall be maintained and decommissioned in accordance with the relevant requirements of schedule 14.
- 7 The application information contains verifiable evidence of the existence of the take at the time of notification of this plan change on 18 October 2016, including but not limited to:
  - (i) Any consent to discharge dairy shed effluent; and
  - (ii) Evidence of the presence of a water pump on the property and the volume and rate of take is proven to be the same or less than that occurring as at 18 October 2016.

Bay of Plenty Regional Council reserves its control over the following matters:

- (a) <u>Rate and volume of take.</u>
- (b) <u>Measures to restrict or stop the take during periods of low river flow or</u> low aquifer level or to enable flow monitoring by Council.
- (c) Metering and reporting requirements, including separate metering of any water taken under provisions of section 14(3)(b) of the Act.
- (d) <u>Measures to achieve efficient use of waterAdvice</u>water and consistency with schedule 7 dairy shed water use.
- (e) Where the proposed take is from a water body that is allocated above the limit identified in WQ P5(b) or WQ P5(e):

- (f) Measures to avoid, or mitigate adverse effects on the environment, including on the matters in WQ O3 and WQ O4; and
- (d)(g) Measures to avoid or mitigate adverse effects of the take on existing authorised users, and on tangata whenua values and interests.

- 1 <u>This rule does not enable an additional volume to be added to an existing</u> resource consent or permitted activity relating to the take and use of water on the same property.
- 2 No pump testing or ecological assessment is required.
- 3 <u>The rate of take maybe</u>may be reduced to the minimum required to achieve the daily volume. Storage maybe may be needed to enable higher rates of use.
- 4 Efficient use of water is 55 litres per cow per day.

#### Explanation

The intent of the 12-month period in (4) is to ensure all relevant activities are registered with Council, and that meters are installed.

#### WQ R5 Controlled Activity – Take and Use of Groundwater

The take and use of groundwater is a Controlled Activity that does not require notification, subject to the following:

- <u>1</u> <u>The total daily volume of take does not exceed 35 cubic metres per property.</u>
- <u>2</u> The take and use is not permitted by a rule in this regional plan.
- <u>3</u> The take and use is not prohibited by Rule 49.
- <u>4</u> <u>A resource consent application is lodged within 12 months of this rule becoming operative.</u>
- 5 The application incudes verifiable evidence of the existence of the take as at 18 October 2016, including but not limited to:
  - (i) Any resource consent to discharge the volume of water sought; and
  - (ii) Evidence of the presence of a water pump on the property

and the volume and rate is proven to be the same or less than that occurring as at 18 October 2016.

Bay of Plenty Regional Council reserves its control over the following matters:

- (a) Rate and volume of take.
- (b) Measures to restrict or stop the take to enable monitoring by Council.
- (c) <u>The restriction or cessation of the takes at times of low aquifer levels.</u>
- (d) Metering and reporting requirements., including separate metering of any water taken under provisions of section 14(3)(b) of the Act.
- (e) Measures to achieve the efficient use of water.

- 1 <u>This rule does not enable an additional volume to be added to an existing</u> resource consent or permitted activity relating to the take and use of water on the same property.
- 2 No pump testing or ecological assessment is required.

#### <u>WQ R6</u> <u>Controlled Activity – Take and Use of Water for Existing Municipal Water</u> <u>Supplies</u>

The taking and use of water for a municipal water supply is a Controlled Activity, providing that the application:

- <u>1</u> Relates to an existing take authorised by a resource consent-as of 18 October 2016.
- 2 Retains the same or lessor rate and volume of water authorised by a resource consent-as of 18 October 2016.
- <u>3</u> Is subject to a Water Management Plan, which meets the requirements <u>outlined</u>set in Schedule 7, if the application is for more than 35 cubic metres per day.

Bay of Plenty Regional Council reserves its control over the following matters:

- (a) All issues contained in the municipal water supplies component of Schedule 7 - Reasonable and efficient use criteria.
- (b) The rate and volume of water to be taken.
- (c) <u>The restriction</u> or <u>cessation</u>management of the take when instream minimum flows or minimum aquifer levels are reached.
- (ca) The extent to which the supply is used for purposes other than domestic water use.
- (d) Measures to avoid, remedy or mitigate any adverse effects on:
  - (i) <u>River and stream</u> flows (including effects on flow variability and duration) or aquifer water levels;
  - (ii) The mauri and life-supporting capacity of the water body; and
  - (iii) <u>Life-supporting capacity, ecological integrity,</u> Landscape values, recreational values, and existing uses and whenua values.
- (e) The availability and reliability of supply for existing users and water quality.
- (f) Water measurement, monitoring and reporting requirements.
- (g) <u>The extent to which the applicant has consulted with Māori</u>tangata whenua and taken into account <u>Māori</u>tangata whenua\_values

Advice Note: Tangata whenua values include those of the owners of Māori owned land, if the water source is on such land.

#### <u>WQ R7</u> <u>Permitted Activity – Temporary Transfer of Water Permits to Take and Use</u> of Water

<u>The transfer of a resource consent</u>water permit to take and to use surface water, in whole or part, on a temporary basis, to another site is a Permitted Activity subject to the following conditions:

(a) <u>The transferor and transferee are part of the same Water User Group.</u>

- (aa) The transfer is for a duration of no longer than 12 months.
- (b) <u>The transfer is within the same catchment to any point downstream</u> (excluding downstream tributaries) of the location to which the permit <u>applies.</u>
- (c) <u>Written notice signed by the transferor and transferee is given to the Bay of</u> <u>Plenty Regional Council five working days prior to the transfer specifying:</u>
  - (i) <u>Full names and addresses of transferor and transferee;</u>
  - (ii) <u>If the whole resource consent</u>water permit\_is not being transferred, the portion of the consent permit being transferred;
  - (iii) <u>Proposed daily volume (cubic metres per day) and rate (litres per second) of take at both sites;</u>
  - (iv) <u>The number of the consentpermit to be transferred and the number of the use consent, if required, held by each party;</u>
  - (v) <u>The location of new take and use site (shown on a map or identified</u> by NZMS map reference);
  - (vi) The date of transfer and the date on which the transfer ceases;
  - (vii) Description of purpose for which water is to be used; and
  - (viii) <u>The date on which</u>It is for the <u>transfer ceases</u>same or a lesser amount of water;
  - (ix) It is no more than that required for the intended use; and
  - (viii)(x)It does not increase the rate and volume of take of water that the transferor is able to demonstrate has actually been taken and used in accordance with the conditions on the existing water permits at any time in the preceding 5 years.
- (d) <u>The resource consent shall retain the same conditions (excluding location).</u>
- (e) In the case of transfers of more than five days per annum, all parties to the transfer shall have metering and reporting at the appropriate recording and reporting level as defined in WQ M7.

The transferee is required to have any necessary resource consent to use the water transferred.

#### WQ R8 <u>Controlled</u> Activity Transfer of Water Permits to Take and Use Water

The transfer of a resource consent to take or to use water, in whole or part, to another site, is a Controlled Activity where the transfer:

- <u>1</u> Is within the same catchment or groundwater aquifer as the original consent.
- <u>2</u> <u>Is not from downstream to upstream of an existing hydroelectric power</u> scheme, where the transfer relates to surface water.
- <u>3</u> Is for the same or lessor rate and volume of take.
- <u>4</u> <u>Does not increase the total rate of take, where the transfer relates to surface</u> water.
- 5 Does not affect any lawfully established takes.
- <u>6</u> <u>Is not to a water resourcethat is over-allocated, or will not cause the water</u> <u>resource to become over allocated.</u>

<u>7</u> <u>Will not result in a greater total volume of water actually being abstracted</u> from an aquifer, where the transfer relates to groundwater.

Bay of Plenty Regional Council restricts its control to the following matters:

- (a) Location, volume and rate of take.
- (b) The nature and/or duration of the transfer whole or partial/short term or permanent, including having regard to any seasonal restrictions that may be necessary.
- (c) <u>The appropriateness of existing conditions to avoid or mitigate effects of the</u> <u>transfer to the new site including conditions on minimum flows and annual</u> <u>volumes.</u>
- (d) <u>The need for conditions preventing concurrent taking where there is a partial</u> transfer or the transfer is to two or more points of take.
- (e) <u>The need for conditions relating to water measurement and reporting,</u> including telemetry requirements.
- (f) The potential effect of the transfer on existing users; on springs or surface water bodies and their values (including water quality); and on tangata whenua values.

Advisory Advice Note: Tangata whenua values include those of the owners of Māori land, if the water source is on such land.

# WQ R9 Restricted Discretionary Activity – Transfer of Water Permits to Take and Use Water

The transfer of a resource consent to take or to use water, in whole or part, temporary or permanent, to another site, where the transfer is within the same catchment or groundwater aquifer and does not meet one or more of the conditions of WQ R8 is a Restricted Discretionary Activity.

Bay of Plenty Regional Council reserves its discretion over the following matters:

- (a) Location, volume and rate of take.
- (a) <u>The nature and/or duration of the transfer whole or partial/short term or</u> permanent, including having regard to any seasonal restrictions that may be necessary.
- (b) The appropriateness of existing conditions to avoid or mitigate effects of the transfer to the new site including conditions on minimum flow and annual volumes.
- (c) <u>The need for conditions preventing concurrent taking where there is a partial</u> <u>transfer or the transfer is to two or more points of take.</u>
- (d) <u>The need for conditions relating to water measurement and reporting,</u> <u>including telemetry requirements.</u>
- (e) The potential effect of the transfer on:
  - (i) Other users;
  - (ii) <u>Springs, connected groundwater aquifers or surface water bodies;</u> and
  - (iii) <u>Tangata whenua values.</u>

Where surface water and/or groundwater allocation exceeds the relevant limits for the catchment, whether a reduction in the rate or volume of take may be required to assist with phasing out that exceedance.

Advisory Advice Note: Reductions in the rate or volume of take to assist in phasing out over-allocation will be considered in over-allocated resources and may result in the transferred rate or volume being reduced.

Tangata whenua values include those of the owners of Māori land, if the water source is on such land.

#### WQ R8 Discretionary Activity - Transfer of Water Permits to Take and Use Water

Any transfer of a water permit that does not comply with rule WQ R7 is a discretionary activity.

Rule 42 [This Rule -is not part of the plan change and will be shifted under a new heading].

#### WQ R10 Restricted Discretionary Activity – Take and Use of Water

The take and use of surface water or groundwater is a Restricted Discretionary Activity where:

- <u>1</u> <u>The take will not result in the interim limits set out in WQ P5 being</u> <u>exceeded.</u>
- 2 <u>The take and use is not permitted or controlled by a rule in this regional plan.</u>
- 3 <u>The take and use is not prohibited by Rule 49.</u>
- 4 <u>A water meter is installed.</u>

Bay of Plenty Regional Council reserves its discretion over the following matters:

- (a) <u>Location, rate and volume of take taking into account the interim limits in</u> P5(b) or WQ P5(e) or any subsequent limits established under WQ P2.
- (b) <u>Measures to restrict or stop the take during periods of low flow or aquifer</u> <u>levels.</u>
- (c) <u>Metering and reporting requirements, including separate metering of any</u> water taken under provisions of section 14(3)(b) of the Act.
- (d) <u>Measures to achieve reasonable and efficient use of water.</u>
- (e) <u>Measures to avoid, or mitigate to an acceptable level,</u> adverse localised <u>effects on the surface water or groundwater resource and adverse</u>including the effects on <u>existing authorised groundwater abstractors</u>freshwater values.
- (f) <u>The potential effect of the take on existing authorised users; on springs or surface water bodies and their values (including water quality); and on</u>).
- (f)(g) The extent to which the applicant has consulted with <u>tangata whenua</u> and taken into account their <u>values</u>.

Advice Note: Information on the assessment of the limits and current allocation status is available at Bay of Plenty Regional Council's offices and on its website.

This rule does not apply to take and use relying on WQ P5(d) or WQ P6 (i.e. secondary allocation or flood harvesting).

### WQ R11 Discretionary Activity – Take and Use of Water

Until locally specific limits are established under WQ P2(e) and (f) the take and use of surface water or groundwater that:

Rule 43

- 1 Is not <u>a</u> Permitted, <u>Controlled or Restricted Discretionary Activity under</u> a rule in this regional plan; and
- 2 Is not a controlled activity under a rule in this regional plan, and,
- 32 Is not prohibited by Rule 49

is a discretionary activity.

In relation to this rule, Environment Bay of Plenty <u>Regional Council</u> may review resource consents for the take and use of surface water where the total volume of water authorised to be taken from a stream or river reach is greater than that provided for in the low flow allocation specified in Policy 66 WQ P5. and an Instream Minimum Flow Requirement for the stream or river reach has been specified in Schedule 7.

Explanation/Intent of Rule

To allow <u>Environment</u> Bay of Plenty <u>Regional Council</u> to assess the effects of water takes on the environment on a case by case basis according to the objectives, policies and methods in <u>Section 5.1</u> this regional plan. <u>This rule includes</u>, but is not limited to municipal water supply, irrigation, non-consumptive use by human activities, and other uses. **Assessment Criteria** 

#### en assessing resource consent applications under this rule, Environment

Bay of Plenty <u>Regional Council</u> will have particular regard to, but not be limited to, the following provisions as appropriate to the source of the proposed water take:

Objective 4, 5, 6, 8, 36, 39, 41, 42, 43, 45 Policy 5, 11, 14, 15, 17, 18, 19, 20, 21, 66, 69, 70, 71, 72, 73, 79, 80

Method 13, 17, 18, 20, 21, 56, 60, 66, 67, 169, 170, 172, Schedule 7

- Other matters relevant to existing water takes:
- (a) Investment in existing infrastructure for the activity.
- (b) Site characteristics.
- (c) Statistical variations on water flow data.
- (d) Adverse effects of the activity on the matters listed in Method 169.
- (e) Adverse effects on existing users of the surface water body.

Other matters relevant to new water takes:

- (a) Site characteristics.
- (b) Statistical variations in water flow data.
- (c) Adverse effects of the activity on the matters listed in Method 169.
- (d) Adverse effects on existing users of the surface water

# **Definition of Terms**

## Plan change 9 introduces new definitions for the following:

**Crop and rootstock survival water** - Water provided for the survival of crop <u>or root stock</u> intended for human consumption, or their root stock. This includes permanent horticultural crops (e.g. kiwifruit, avocado, stonefruit, pipfruit) and hydroponic glasshouse crops and excludes annual crops such as pasture species, animal fodder crops and maize.

**Efficient allocation** – In relation to freshwater allocation, including economic, technical and dynamic efficiency. Efficient use – In relation to the use of fresh water, means the amount of water beneficially used in relation to thatthe total amount taken. It relates to the performance of a water-use system, including avoiding water wastage.

**Electronic reporting -** For the purpose of supplying water meter data to council means supplied to council in a council approved machine-readable format.

**Full allocation -** The net allocation allowed by water permits equals the primary allocation limit in WQ P5(b), or WQ P5(e). For surface water the calculation shall be made at the proposed point of take as well as for the whole stream. Fully allocated has a corresponding meaning.

**Instream minimum flow**<sub>**<u>-</u></sub><b>Requirement** — The flow of water in a river or stream necessary to sustain aquatic life, water quality, recreational use, outstanding natural features and/or Māori cultural values.</sub>

<u>Municipal water supply</u> - A reticulated water supply provided by or for a territorial authority primarily to meet domestic, drinking water and public health requirements. The supply may include industrial commercial and irrigation supplies.

**Net allocation -** For the purpose of determining fully allocated/full allocation net allocation means the amount of water that is no longer available to others as a result of the allocation. Net allocation = Water authorised to be Taken minus Water required to be returned.

**Over-allocation** means the net allocation allowed by water permits exceeds the primary allocation limit in WQ P5(b), or WQ P5(e). Over-allocated has a corresponding meaning

**Primary Allocation** is the water allocated to a use which may continue to be used until a low flow or critical resource limit is reached. Typically, for surface-water, the taking of primary allocation water will only be required to cease in times of drought or severe water shortage.

**Secondary Allocation** is the water allocated to a use that may have to cease its take or use at water levels above the limits imposed on primary allocation. Secondary allocation is available to users at times of relative water abundance but is the first to be required to stop taking when water levels start dropping. Secondary water is intended for uses that do not require the reliability of primary water, or occur at times of water abundance.

**Water User Group** – means a group of authorised water users, or potential water users, whose members are registered with the Bay of Plenty Regional Council, that have voluntarily grouped together to collectively manage their water take permits, during times of restriction, or to improve the efficiency of their consented takes.

Replace "Schedule 7 - Instream Minimum Flow Requirement" with "Schedule 7 - Reasonable and efficient use criteria".

# Schedule 7 – Instream Minimum Flow Requirements

| River or Stream   | Stream Reach  | Instream Minimum Flow<br>Requirement |
|-------------------|---|--------------------------------------|
| Waitahanui Stream | From confluence with Whakahaupapa<br>Stream to stream mouth | <del>3.8 m<sup>3</sup>/s</del>       |

# Schedule 7 – Reasonable and Efficient Use Criteria

The amount of water taken pursuant to any provision in this plan must be reasonable and justifiable with regard to the intended use and, where appropriate, comply with this schedule.

#### **Irrigation**

To determine reasonable and efficient irrigation requires use of a field validated model that considers land use, crop water use requirements, on site physical factors such as soil water holding capacity, and climatic factors such as rainfall variability and potential evapo-transpiration. evapotranspiration. The model must reliably predict annual irrigation volume within an accuracy of effecter than 15%.

The annual volume calculated using the model shall meet with the following criteria:

(a) An irrigation application efficiency of 80%, and

(b) Water demand conditions that occur in nine out of 10 years.

The assessment should include consideration of the particular circumstances of the activity, whether there are any existing resource consents for the take and use of water for the same area of land, the documented growth plans of the business and the requirements of the crop through all phases of its life cycle. For the purposes of crop and rootstock survival water the allocation must not exceed 25% of the total consented daily water demand, and a scientific assessment of the need for that crop and rootstock survival water shall be provided. The cumulative effect of crop and other rootstock water allocations shall not cause minimum flows to fall below 80% of  $Q_{5}$ .

#### Municipal water supplies

<u>TheA Water Management Plan is required and shall establish a long term strategy for the water</u> requirements of domestic or municipal suppliers and their communities. It shall demonstrate that the rate and volume of water required, including any increase over that previously authorised, has been justified and that the water take will be used efficiently and effectively. A Water Management Plan is required whether the application is for the renewal of an existing take, or a new application. To this end the Water Management Plan shall, be developed to an extent which is appropriate for the scale of

the activity, provide for supplies that take over 35 cubic metres per day and shall address the following information:

- 1. <u>A description of the water supply system including system operation, distribution extent, levels</u> of service, water use measurement, maintenance and asset management procedures.
- 2. <u>A comprehensive assessment of existing and future demands for water with regard to an</u> assessment of reasonable population growth within the planning horizon to meet the following:
  - a. <u>Reasonable domestic needs.</u>
  - b. <u>Public health needs in accordance with requirements under any Act of Parliament or regulation.</u>
  - c. <u>Reasonable community needs (e.g. for public amenities).</u>
  - d. <u>Reasonable commercial, rural supply and industrial needs.</u>
  - e. <u>An assessment as to how each of the assessments required by clauses a) to d) above is</u> predicted to vary over time.
  - f. <u>A justification for each of the assessments required by clauses a) to e) above including</u> reference to any relevant planning instruments promulgated under the Resource Management Act 1991 that provide for future growth or relevant documents promulgated under the Local Government Act 2002 such as long term plans, growth strategies or spatial plans.
- 3. <u>Any existing or proposed water pricing procedures, including the extent of metering of individual</u> <u>customers and any linkages with wastewater pricing or management.</u>
- 4. <u>How water reticulation networks are planned and managed to minimise their water losses as far</u> <u>as practicable.</u>
- 5. <u>A description of patterns of water use practices and/or behaviour in all sectors of use (and distribution) with the objective of maximising water use efficiency and reducing water use, as far as practicable.</u>
- 6. <u>Water saving targets for the full range of demand conditions including demand saving targets</u> for council owned facilities, domestic demand targets and demand saving targets for commercial and industrial customers.
- 7. Key performance indicators for each of the water saving targets.
- 8. <u>Any external auditing and benchmarking procedures that have been adopted.</u>
- 9. A drought management plan that includes:
  - (i) <u>Steps to be taken to reduce consumption during water shortage conditions, including ensuring that uses not identified as priorities in Policy 80B are restricted to a similar extent to which that that use would be restricted if it was not part of the municipal supply network.</u>
  - (ii) <u>Public and commercial user education programmes.</u>
  - (iii) <u>Seteps taken to reduce consumption when demand is approaching the maximum rate of take-volume</u> specified under the relevant resource consent.
  - (iv) Enforcement procedures.
- 10. <u>Actions, performance measures and a timeline for implementing actions. The actions and performance measures identified will depend on the circumstances of each applicant.</u>
- 11. Any consultation undertaken with key stakeholders and outcomes of such consultation.
- 12. Details of an appropriate water conservation and demand management plan review process.
- 13. <u>Identification of any anticipated increases in water demand over the term of the consent and ability to stage water rates of take-volumes</u> to more closely reflect demand requirements over time.

- 14. <u>Ability to reduce the amount of water used by existing industrial and agricultural users, as a result of improvements in the efficiency of the use of water, in order to meet any increase in water demand over the term of the consent.</u>
- 15. <u>Identification of any single industrial, commercial or agricultural use of water that uses more than 15 cubic metres of water per day (not being water used for human drinking or human sanitation purposes).</u>
- 16. <u>Identification of future domestic or municipal supply take needs over and above that already authorised.</u>
- 17. Domestic or municipal supply takes required to meet growth and development that is provided for in planning instruments promulgated under the Resource Management Act 1991 or relevant documents promulgated under the Local Government Act 2002, such as Long Term Plans, growth strategies or spatial plans (or similar).
- 18. <u>The projected future needs shall be identified in terms of:</u>
  - (a) Location of take; and
  - (b) <u>VolumeRates of take (including any seasonal variations); and</u>
  - (c) The date at which the water is likely to be required.

#### **Dairy Farm Water Use**

- 1. For the purpose of determining whether an application to take and/or use water under WQ R4 is reasonable and efficient, good management guidelines including the following should apply:
  - (a) All water used to cool milk must be recaptured and reused for either stock drinking water or hygiene purposes in the dairy shed.
  - (b) Milk cooling water that is reused for the purpose of stock drinking water will be assessed as being taken for stock drinking water and does not require resource consent.
  - (c) The average rate of take of water used for both hygiene purposes and milk cooling shall not exceed 65 litres per cow per day when averaged over the entire milking season.
  - (d) The maximum weekly volume shall not exceed 490 litres per cow.

Applications to take and use water for milk cooling or dairy hygiene not relying on WQ R4 may provide evidence for the use of alternative rate of takes.

#### **Stock Drinking Water**

For the purpose of estimating the combined volume of stock drinking water taken under s14(3)(b) the requirements for a dairy cow shall be estimated as 70 litres water per cow per day.

#### Other Uses

1. The amount calculated in accordance with good management practices for efficient use of water in relation to that use or by demonstrating that water is not being wasted, such as by means of a water use audit by an independent party to identify any wastage and any opportunities for re-use or conservation.—

# Schedule 15 – Method for estimating surface water and groundwater allocation status

#### Surface water

The five-year seven-day mean annual low flow ( $Q_5$  7-day) is the seven day low flow value which has a 20% probability of occurring in any one year and is determined as follows:

- Calculate the daily moving averages of every seven day period in the record.
- Select the minimum seven day moving average value for the year.
- Calculate the exceedance probability for each of the minima for the years.
- Plot on a probability graph and fit a curve.
- Obtain the value for the 20% probability exceedance value.

Data for all of the permanent flow monitoring stations is provided in the Environmental Data Summaries which are published periodically for the Bay of Plenty. These summaries include low flow including the  $Q_5$  7-day low flow, as well as flood flow information.

The  $Q_5$  7-day low flow will be assessed at the point of the proposed take, estimated from the assessed flows in a similar catchment.

Total current authorised allocations will be calculated by summing the net instantaneous rate of take (litres/second) allocated in every water permit upstream of a proposed point of take. Water allocated for frost protection is not included in these calculations due to it not occurring at the same time as irrigation.

Total current authorised allocations will be compared with the  $Q_5$  7-day low flow to determine whether the river or stream is under-, fully or over-allocated at the proposed point of take in relation to the limits in WQ P5.

#### Groundwater

Residual -Average Annual Recharge is calculated as follows:

- 1. Calculate average annual flows into the relevant aquifer or zone.
- 2. Subtract from this flow an allocation to sustain stream flow, where it is determined that there is connection between groundwater and surface water (Note that this is not necessary for the deeper groundwater zones, where there is unlikely to be connection to surface water).
- 3. The groundwater remaining is referred to as the 'Residual Average Annual Recharge' (RAAR).
- 4. The allocation limit is set at 35% of RAAR as shown in the diagram.

Total current authorised allocations are calculated by summing the net annual volume (cubic metres/year) allocated to every water permit to take water from that aquifer or zone, with the following modifications where the consent does not specify a period of use:

- Annual use is assessed as daily use x 155 days for irrigation (includes crop and pasture)
- Annual use is assessed as daily use x 30 days for frost protection
- Otherwise, annual use is calculated on the basis of 365 days continuous use (this includes municipal and commercial).

Total current authorised allocations will be compared with 35% of RAAR to determine whether the aquifer or zone is under, fully or over-allocated in relation to the limits in WQ P5.


## Section 32AA evaluation of changes

## Further evaluation report for Bay of Plenty Regional Council Proposed Plan Change 9 (Region-wide Water Quantity)

Under s32AA of the Resource Management Act 1991

The purpose of this document is to evaluate significant changes to the notified version of BOPRC's Proposed Plan Change 9 (Region-wide Water Quantity) relative to the latest version of the Proposed Plan Change, after Hearing Panel deliberations. This evaluation is undertaken pursuant to s32AA of the RMA and it should be considered alongside the original notified and post-Hearing panel deliberations versions of the Proposed Plan Change and the section 32 report. The table below summarises the evaluation of significant changes.

| Issue  | Significant change since<br>Proposed Plan Change was<br>notified <sup>1</sup>  | Purpose of changes   | Impact on effectiveness  | Impact on benefits  | Impact on costs   | Other reasonably practicable options   |
|--|--|--|--|---|---|--|
| Renewal of consents granted after 1 October<br>1991 for over-allocated resources | WQ R9 (1) – Provides for<br>renewals of <b>consents granted</b><br><b>after 1 October 1991<sup>2</sup> for over-</b><br><b>allocated resources</b> to be<br>treated as a Restricted<br>Discretionary Activity (as<br>opposed to as a Discretionary<br>Activity as in notified Plan<br>Change). | The intent behind<br>the change is to<br>provide additional<br>certainty for holders<br>of existing consents<br>granted after 1<br>October 1991 for<br>over-allocated<br>resources that their<br>consents could be<br>renewed as a<br>Restricted<br>Discretionary<br>Activity. | The change provides an easier renewal<br>pathway for consents granted after 1<br>October 1991 for allocated resources<br>than the original proposal. This may<br>further the purpose of the Act slightly<br>by better providing for economic<br>wellbeing mainly.  | The benefit of the change is providing more<br>certainty and an easier renewal pathway for<br>existing resource users holding consents<br>granted after 1 October 1991 taking water from<br>over-allocated resources. The original proposal<br>would have treated these renewals as<br>Discretionary Activities, therefore making them<br>subject to additional assessment and potentially<br>additional conditions if granted. Although this<br>change may appear to reduce the level of<br>environmental protection afforded, the risk<br>created will be no greater than under the status<br>quo, until WMA-specific limits are set.<br>The policy to generally decline new takes for<br>over-allocated resources remains in place,<br>preventing additional environmental risk<br>(except in specific circumstances). | The main cost of the change is less<br>ability to restrict any environmental<br>risks created by the current allocation<br>level and the consents in question.<br>These are generally not considered to<br>be significant. These risks will be<br>assessed in more detail during the<br>implementation of the Plan Change and<br>WMA-specific planning processes. | No other reasonably<br>practicable options are<br>identified.  |
| Water permit transfers   | WQ P23 (e) – restricting [off-<br>site] transfers to the rate and<br>volume of water taken in the<br>last 5 years  | To ensure transfers<br>do not further<br>embed over-<br>allocation by making   | The change furthers the purpose of the<br>Act by further protecting the resource<br>through more restrictive provisions for<br>transfers (relative to notified proposal).<br>This protection would be particularly<br>relevant for resources that are allocated<br>beyond default levels. The provision<br>may unnecessarily restrict transfers and<br>economic wellbeing for resources that<br>are allocated at or below default levels,<br>and in cases where transfers occur<br>outside of water user groups. | The benefit of providing for transfers is mainly<br>economic efficiency, by enabling the resource<br>to be transferred to a higher value use. In an<br>extreme case, this could involve being<br>transferred from a consent holder that does not<br>use the resource to one that would. If the<br>transfer occurs within environmental limits,<br>there shouldn't be any adverse effect on the  | Costs of water permit transfers include<br>transaction costs for water users in<br>finding willing transferors or transferees<br>and going through the transfer process.<br>The changes are likely to increase these<br>transaction costs as transferors would  | To minimise transaction costs,<br>the Council could provide<br>easily accessible information<br>about water allocation and use<br>(e.g. on the website).<br>To maximise the (at least<br>theoretical) economic benefits  |
|  | WQ R7 (permitted activity for<br>members of a water user group)<br>– restricting [off-site] transfers<br>to the rate or volume of water<br>taken in the last 5 years   | 'paper' over-<br>allocation real or<br>'waking up sleeper<br>permits'.   |  | The changes limit this benefit by restricting<br>transfers only to water which has been used in<br>the last five years. In order for transfers to be<br>possible, the parties will need to demonstrate<br>use of water being transferred in the last five<br>years. Furthermore, transfers outside of water<br>user groups will be treated as discretionary<br>activities (i.e. more restrictive than the previous  | be limited to those who have used the<br>water to be transferred over the last<br>five years, and who have information to<br>prove it. In general, membership of<br>water user groups would reduce<br>transaction costs.  | To maximise the (at least<br>theoretical) economic benefits<br>of the provision while<br>maintaining its environmental<br>benefits, a reasonably<br>practicable option would be to<br>limit the restrictions to<br>transfers (i.e. 5-year use<br>restriction and discretionary<br>status) to over-allocated<br>resources |

<sup>&</sup>lt;sup>1</sup> References relate to version8 Proposed Plan Change 9 (i.e. Hearing Panel recommendations).

<sup>&</sup>lt;sup>2</sup> This is the date when the Resource Management Act 1991 came into force. There are a large number of water permits granted before this day in the Bay of Plenty. These generally have very permissive conditions and are deemed to expire in 2026.

|                                   | WQ R8 (discretionary activity) –<br>where [off-site] transfer does<br>not comply with conditions in<br>WQ R7  |  |   | controlled and restricted discretionary status).<br>However, the change would increase<br>environmental benefits and reduce<br>environmental risks by preventing increased<br>take, in cases where water has not been used<br>over the last 5 years (i.e. 'sleeper' permits won't<br>be 'woken up').<br>Water transfers, and therefore their economic<br>benefits and environmental risks, are likely to<br>be minimal regardless due to transaction costs<br>and given that demand heterogeneity is<br>required for transfers to be viable. For<br>resources that are not fully-allocated, it may be<br>easier for a user to seek a new resource consent<br>from the Council than to find a willing<br>transferor and get one transferred. |   |
|-----------------------------------|---|--|---|---|---|
| Unconsented takes for dairy sheds | WQ R4 – (e) – including as<br>matters for control measures to<br>remedy, or mitigate to an<br>acceptable level adverse effects<br>on resources, the environment,<br>existing water users and<br>tangata whenua values and<br>interests. | To provide the ability<br>for Council and<br>industry to consider<br>practical measures<br>to manage adverse<br>effects of currently<br>unauthorised dairy<br>shed takes during<br>the consent<br>application process. | The change furthers the purpose of the<br>Act by providing some flexibility for<br>Council and industry to manage adverse<br>effects of currently unauthorised dairy<br>shed takes while minimising impacts on<br>the economic wellbeing of dairy<br>farmers. These adverse effects may<br>relate to the resources themselves or<br>the social, economic and cultural<br>wellbeing of other resource users. | The main benefit of the change is the ability to<br>better manage adverse effects of previously<br>unauthorised dairy shed water takes. These<br>benefits may be environmental, economic,<br>cultural or social.  | The main cost of the cha<br>additional administrative<br>compliance costs for use<br>unauthorised dairy shed<br>will relate to a more det<br>assessment of adverse e<br>the consent application<br>Furthermore, there will<br>costs with any control m<br>required as conditions o<br>avoid, remedy or mitigat<br>effects. <sup>3</sup> In general, thes<br>considered reasonable c<br>circumstances of these t<br>A future cost to other ex<br>putting them in a potent<br>position in the event tha<br>required once WMA-spe<br>limits are set, if these ne<br>takes are treated in the<br>pre-existing consents for<br>purposes. |

Transfers for resources that are not over-allocated could be further enabled by not applying the 5 year use restriction and assigning transfers outside of water user groups a less restrictive activity status (i.e. controlled or restricted discretionary).

inge is e and ers of previously takes. These ailed ffects during process. be compliance easures te any such e costs are onsidering the akes. isting users is tially worse t clawback is cific quantity w dairy shed same way as other

The section 42 report identified four options to address the issue of unauthorised dairy shed takes<sup>4</sup>. Options 2)-4) could result in consents for dairy shed takes not being granted, which could have a significant detrimental impact to individual dairy f the consent to farmers and the wider

economy as these takes are essential for the operation of dairy farms. Not having such consents would effectively require the closure of dairy farms. Due to the scale of these takes relative to takes for other purposes, the environmental risks posed by these takes is generally minor and could be controlled adequately under the preferred approach.

<sup>&</sup>lt;sup>3</sup> These will have to be assessed on a case by case basis but could potentially include, for example, additional restrictions on the timing of takes, requirements to install water storage facilities, compensation to affected existing resource users, contribution to environmental enhancement initiatives in the catchment, etc.

<sup>&</sup>lt;sup>4</sup> The four options identified in the s42 report are:

<sup>1)</sup> Controlled activity status with additional matters of control (as per final proposal evaluated here).

<sup>2)</sup> Limit controlled activity status to 50m3/property/day and restricted discretionary activity status for larger takes (as per original draft Plan Change)

<sup>3)</sup> Controlled activity status for resources not allocated in excess of default levels and restricted discretionary status for other resources.

<sup>4)</sup> No special rule but operational assistance to achieve compliance.

WQ P24 – (water metering and reporting):

- Metering is required for permitted activities where total volume in combination with takes under s14(3)(b) exceeds permitted activity thresholds (original limited relevant s14(3)(b) takes to stock drinking water).
- Daily records are required for all consented water takes and permitted takes as above (original proposal only required daily records for consented takes) All records must be reported monthly in a Council-

although more frequent

if considered necessary

(original proposal required

daily reporting in selected

cases - i.e. large takes and

over-allocated resources).

recording the permitted

properties taking water

under both permitted and 14(3)(b) (original proposal required a different meter

take is acceptable for

A single meter only

Metering

requirements by setting a default minimum requirement of daily records and monthly reporting, but retain the ability to require more frequent reporting where necessary. Also approved electronic format, extend the range of situations in which reporting could be required metering of permitted activities is required. Also removes the requirement to meter consented takes and permitted/s14(3)(b) separately.

Simplify the

and recording

proposed metering

The change furthers the purpose of the Act by enabling better monitoring of resource use in general, while providing flexibility for more stringent requirements where deemed necessary. Metering of permitted activities now excludes s14(3)(b) takes This will simplify metering requirements on properties with multiple water sources. Reduced reporting requirements (where daily reporting is not required) will reduce ability to manage allocation especially if flow restrictions are in place. There are difficulties meeting daily reporting requirements where telemetry is not available (i.e. mainly in the Eastern Bay of Plenty). The removal of the requirement for separate meters for permitted/s14(3)(b) and consented takes may reduce opportunities to improve efficiency of use and provides less information for water accounts, but this information can be estimated using industry standard figures.

The proposed metering and reporting requirements are administratively simpler for the Council and resource users than those in the original proposal.

Allowing a single meter would result in cost savings for users that have multiple takes for 14(3)(b) in addition to other uses.

Reduction in metering co with 14(3)(b)takes in add uses .

For resource users subject frequent reporting requir costs of daily reporting a reduced. Where telemete available, mainly in the E Plenty, daily reporting is practical inconvenience f Appendix 1 for a map of coverage indicating when likely to be available). Allowing a single meter b metering of 14(3)(b) take information about water accounts.

|                         | for permitted/s14(3)(b) and consented takes).              |   |   |   |   |
|-------------------------|--|---|---|---|---|
| Aquifer or pump testing | WQ RX – Aquifer or pump<br>testing as a permitted activity | Providing for aquifer<br>or pump testing as a<br>permitted activity<br>subject to<br>notification, time,<br>volume constraints,<br>and reporting to the<br>Council. | The change provides for administrative<br>efficiency in the process to obtain a<br>permanent resource consent to take<br>groundwater, while setting conditions<br>that would further the purpose of the<br>Act by limiting the potential<br>environmental risk involved and<br>requiring information to monitor these<br>risks. | The benefit is the reduced administrative cost<br>for resource consent applicants of having to<br>apply for a temporary water take consent for<br>the purpose of testing an aquifer and/or pump,<br>as part of the process to obtain a permanent<br>water take consent. <sup>5</sup><br>Given that time and volumes are restricted, and<br>that water users would be required to notify<br>the Council and report on their activities, any<br>environmental risks are likely to be negligible<br>and the Council would have information to<br>enable monitoring of compliance and<br>environmental risks. | There will be a minimal r<br>temporary adverse effect<br>users or the resource itse<br>will be adequately manage<br>monitored through the p<br>activity conditions. |

<sup>5</sup> The administrative cost of a consent is based on the time it takes to process the application; this generally depends on the detail of information provided and the complexity of the application. Currently the deposit is \$2,700, which the costs are taken out of, but if they exceed this, applications will be invoiced for the time over and above the deposit. Consent applications which require limited or public notification also incur further costs.

| ests to users<br>lition to other<br>at to less<br>rements, the<br>re likely to be<br>ry is not<br>astern Bay of<br>likely to be a<br>for users (see<br>mobile<br>re telemetry is<br>by not requiring<br>es may reduce<br>use for | An alternative option to best<br>meet the objective is to<br>require reporting by telemetry<br>wherever this service is<br>available (i.e. mainly in the<br>Western Bay of Plenty, see<br>Appendix 1). It would be<br>reasonable to expect that the<br>availability of telemetry would<br>increase in the future along<br>with technology improvements<br>and increasing mobile network<br>coverage. It is noted that a<br>Consent Officer could make<br>that a requirement of a<br>consent on a case-by-case<br>basis.<br>Alternatively, WQ P24(c) could<br>be extended to include the<br>means of reporting (e.g. by<br>telemetry), in addition to the<br>frequency of reporting, in<br>particular circumstances. |
|--|---|
| isk of<br>ts on other<br>elf, but these<br>ged and<br>ermitted   | There are no other viable options identified.   |

| De-watering<br>takes       | WQ O4(a) – specifies that a<br>localised decline or pressure in<br>groundwater levels as a result<br>of dewatering activities is an<br>acceptable impact                   | Clarify that<br>dewatering activities<br>will remain as a<br>permitted activity.  | As per the pump testing issue, the<br>change provides for certainty that a<br>minor impact is acceptable and does<br>not require a resource consent.  | The benefit of the change is to provide certainty<br>for resource users who may need to carry out<br>dewatering activities as part of authorised<br>construction, mining or oil<br>extraction/exploration activities.   | As above, the change provides for<br>activities that may pose only very minor<br>and very short term environmental<br>risks.   | There are no viable options  |
|----------------------------|--|---|---|---|--|--|
| Non-consumptive allocaiton | Definition of <b>net allocation</b> as<br>water taken minus water<br>returned  | To ensure non-<br>consumptive<br>allocation (i.e. where<br>water is taken – e.g.<br>for an industrial<br>process – and then<br>returned to the<br>original source) are<br>accounted<br>appropriately. | The change furthers the purpose of the<br>Act by ensuring takes of water<br>resources are accounted for accurately<br>and that management measures do not<br>unduly impinge on the wellbeing of<br>communities (as would have been the<br>case if returned water was not<br>accounted for).   | The main benefit of the change is in situations<br>where water is taken but then a proportion of<br>that take is returned to its original source (e.g.<br>after an industrial process as in the Tasman Mill<br>on the Tarawera River, AFFCO plant in Te Puke,<br>or Fonterra plant in Edgecumbe). The<br>implication of not accounting for the returned<br>water is that availability downstream of said<br>take would be reported to be lower than it<br>actually would. This may unnecessarily<br>constrain opportunities to use the resource<br>downstream. There are likely to be a limited<br>number of such situations around the region<br>therefore the benefits are not extensive.       | The main cost is upgrading Regional<br>Council freshwater accounting systems<br>to take returned water into account to<br>ensure accurate assessments of<br>downstream water availability. These<br>costs are likely to be very minor and<br>would need to occur regardless.<br>It is assumed non-consumptive users<br>are already required to report amounts<br>of water returned to the source as part<br>of their existing water take and/or use<br>and/or discharge consents.  | There are no other viable<br>options to achieve the<br>objective.  |
| Root stock survival water  | WQ P16 (aaa) – maximum<br>volume allowed for as crop and<br>rootstock survival water when<br>any flow/level-based<br>restrictions apply as a resource<br>consent condition | To enable consent<br>officers to provide<br>for crop and<br>rootstock survival<br>water, subject to the<br>provision of specific<br>evidence during<br>consent applications.                          | The change furthers the purpose of the<br>Act by not providing a blanket provision<br>for rootstock survival water, as<br>requested by submitters, which could<br>have potentially significant adverse<br>environmental effects during periods of<br>low flow given the predominance of<br>horticulture in the region.<br>The change also provides for the<br>economic wellbeing of water users by<br>maintaining flexibility to provide for<br>crop and rootstock survival water when<br>water take restrictions are in place. | The main benefit of the change is the ability for<br>a consent officer to provide for specific crop<br>and rootstock survival water provisions during<br>periods of flow or level-based restrictions,<br>subject to specific evidence on a case-by-case<br>basis. Benefits are likely to be mainly economic<br>and social by enabling provisions to protect the<br>capital value of horticulture crops during<br>particularly dry periods. Despite the lack of<br>evidence, the risk of crop death for mature<br>plants due to drought is considered to be very<br>low in the region at present. However, this may<br>increase during dry periods in the future as a<br>result of climate change. | There are no costs to the change other<br>than potentially additional consent<br>processing times for a consent officer to<br>consider any evidence of specific crop<br>and rootstock death risk and setting out<br>appropriate conditions to prevent it.<br>There may be additional costs for<br>consent applicants seeking such a<br>provision to obtain the necessary<br>evidence to prove the level of risk. If<br>there are any such risks, the costs of<br>producing this evidence is likely to be<br>minor relative to the capital stock of an<br>orchard and may be able to be shared<br>widely across the industry. | An alternative of providing for<br>crop and rootstock survival<br>water within the primary<br>allocation would impact on<br>the amount of water available<br>for allocation and be<br>inefficient. Evidence provided<br>at the hearing indicated<br>minimal impact on low flows. |
| Review of<br>consents      | WQ P3(c) – Review of resource<br>consents under ss168(7) and<br>130(5) of the Act.   | To highlight the<br>opportunity for<br>consent review in<br>over allocated<br>resources.  | Review of consents would help achieve timeframes to phase out over allocation in NPSFM .  | Improved efficiency of allocation   | Council will need to evaluate the costs<br>and benefits of reviews in light of<br>particular circumstances.  | Additional methods of phasing<br>out over allocation identified in<br>WQ P3.   |

Appendix 1 – Vodafone and Spark mobile coverage in the Bay of Plenty, showing where telemetry is likely to be available.



Vodafone cell phone coverage Source: <u>https://www.vodafone.co.nz/network/coverage/</u>



Spark cell phone coverage Source: <u>https://www.spark.co.nz/4g/</u>