

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

RECOMMENDATIONS IN RESPONSE TO SUBMISSIONS and FURTHER SUBMISSIONS

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### Plan Change 9: Water Quantity (WQ)

The Water Quantity provisions in the Bay of Plenty Regional Water and Land Plan are being changed to become a separate subject. The introduction, issues, objectives, policies and methods are contained in Part II. Rules including definitions and schedules are contained in Part III. Both parts of this subject are identified by the unique identifier 'WQ'.-

### **PART II: Water Quantity**

This part 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. The non-consumptive use of water (e.g. for hydro-electricity generation), is also addressed in Section 5.2 Damming and Diversion of the regional plan.

Unless otherwise specified all clauses apply within each provision.

Para 1

The <u>allocation</u>, taking take and use of geothermal fluid (<u>water >30 degrees Celsius</u>) is covered by provisions in Section 7 Geothermal Resources of this regional plan, and the Rotorua Geothermal Regional Plan (for activities in the Rotorua Field), and is not subject to the provisions in <del>Section 5 Water Quantity and Allocation Part II WQ</del>. 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 Use of Surface Water and Groundwater

Para 1

Section 5.1 Part II WQ 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 the National Policy Statement on Freshwater Management 2014 (NPSFM), Water Management Areas (WMAs) have been established throughout the region. The Council will work with tāngata whenua, city and district councils, resource users and the community to progressively develop water management frameworks (i.e. sub-regional plans) for each of the WMAs. These planning processes will involve the setting of freshwater objectives and limits for the water bodies within the WMAs. Part II WQ 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. Part II WQ 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 freshwater.

The NPSFM recognises that tangata whenua have particular values and interests in freshwater. 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 tāngata whenua to determine how this can best be achieved.

### 5.1.1 Issue<u>s</u>

### Issue 29WQ I1

The over-abstraction of surface water can degrade water quality and adversely affect ecological values, landscape values, recreational values, tangata whenua cultural values Maori Maori customary values and traditional instream 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 Plenty 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. Overabstraction of surface water can adversely affect other users, including nonconsumptive uses.

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Objective 40, 41, 46

Policy 64, 66, 67, 68, 69, 72, 76, 79

Method 54, 66, 67, 159, 166, 167, 169, 171, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 185

Rule 41, 43

Schedule 7
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### Issue 30WQ I2

Increasing demand for water in the Bay of Plenty is placing pressure on streams, rivers, 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. lifestyle blocks), and municipal water supply as a result of population growth. Increased water abstraction may not be appropriate 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.

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Objective 44

Policy 68, 77, 78

Method 152, 153, 154, 155, 156, 157, 158, 159

Rule 39, 40, 41, 52,
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### Issue 31WQ I3

The inefficient allocation and use of water can significantly reduce the overall benefits to that could 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 <u>users or benefits of water use abstractors</u> may be excluded where a water body is fully allocated, but actual water use is lower than the

volume consented by water permitsauthorised. Inefficient water use also occurs where a greater volume of water is taken than is actually that required through the lifecycle of the activity required to operate the use without wastage or when an 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 Council with limited ability to review the amount of water that is allocated or whether the quantity taken is used efficiently.

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Objective 39
Policy 73
Method 155, 157, 160, 161, 162, 164, 168, 170
Rule 40, 41, 41A, 43
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### Issue 32WQ I4

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 streams and maintains the water level in wetlands.

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Objective 43
Policy 70, 71, 74, 75
Method 54, 66, 155, 156, 159, 165, 166, 167, 169, 183, 184
Rule 38, 42, 43
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### Issue 33WQ I5

Continued abstraction of <u>surface</u> water <u>from streams and rivers</u> during <u>low flows drought conditions</u> may reduce <u>surface</u> water flows below that necessary to <u>safeguard the mauri and life-supporting capacity and other values of water bodies <u>sustain aquatic life</u>.</u>

Para 1

It may be necessary to restrict the take and use of surface water during meteorological and hydrological droughts to ensure the mauri and life-supporting capacity values of water bodies is safeguarded aquatic life is sustained.

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Objective 45
Policy 80
Method 158, 163, 172
Rule 41, 41A, 43
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### Issue 34WQ I6

Water abstraction from streams and rivers can reduce stream flow variability, which is necessary for to maintain instream biota ecological integrity and the flushing of stream systems to remove deposited sediment and growths of nuisance algae.

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Objective 42
Policy 65, 68
Method 152, 155, 158, 159, 169, 171, 172, 173, 175, 176, 177, 181, 185
Rule 43
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### <u>WQ 17</u>

The effective management of water allocation and use relies on the collection and -availability of good quality information.

The Council and the public requires 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 freshwater.

Research and monitoring is to be undertaken during the development of future plan changes under WQ P2 to enhance the understanding of freshwater resources, location of future demand, values, significance, potential stressors and impacts of climate change in the region to better inform freshwater management.

### **WQ 18**

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.

### **WQ 19**

The unauthorised taking of water creates difficulties managing allocation, and can impede achieving the objectives of this regional plan and is unfair 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 use is efficient; and managing the potential adverse effects of such takes.

### **WQ I10**

<u>Inadequate recognition of tāngata whenua values and interests in freshwater management.</u>

Cross reference: Issues 1-9 (Chapter 2: Kaitiakitanga)

### **WQ I11**

The taking of water in over-allocated or fully allocated catchments or aquifers should be more stringently regulated than in under-allocated catchments or aquifers. The taking of water in rivers or aquifers that exceed the interim allocation thresholds in WQ P5 or allocation limits identified in WQ P2, should be more stringently regulated than in under allocated rivers or aquifers because there is a need to avoid further over allocation and phase out existing over allocation.

The NPSFM requires the avoidance of any further over-allocation of freshwater and phasing out of existing over-allocation.

### 5.1.2 Objectives

### Objective 39 WQ O1

Efficient allocation and use of water resources in the Bay of Plenty.

### Objective 40

Allocation of water resources in the Bay of Plenty recognises and maintains the generation capacity of hydroelectric power schemes as a renewable energy sources.

### **WQ 02**

### Objective 41 WQ O3

Manage the allocation and abstraction of surface water at a volume and rate that: Water flows in streams and rivers are maintained to:

- (a) Provide protection for existing aquatic life in the water body.
- (a) Safeguards or restores the mauri and life-supporting capacity of the water body.
- (b) Maintains or restores identified significant ecological integrity, significant ecological values, landscape values, recreational values, and tangata whenua values Māori customary values and traditional instream uses of associated with rivers and streams surface water bodies.
- (c) Maintains or restores water quality relative to the values, and, where set, objectives and limits assimilative capacity of the water body.

- (d) Avoids or mitigates adverse effects on downstream environments, and existing authorised users of the water resource.
- (e) Meets the reasonably foreseeable needs of future generations.
- (f) Maintains or restores flow variability to allow for ecological integrity and the flushing of stream systems to remove deposited sediment and growths of nuisance algae.
- (g) Recognises and provides for the interactions and interrelationships between ground and surface water and, where appropriate, manages them as a single resource.
- (hg) Sustains the relationship of Māori with their freshwater resources.

### Objective 42\_

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

### Objective 43 WQ O4

<u>Manage the allocation and</u> abstraction of groundwater at a volume and rate that does not maintains the characteristics of the aquifer and:

- (a) Does not Rresult in a sustained decline in groundwater levels or pressure except in localised situations for the purpose of dewatering.
  - Permanently or unsustainably lower water levels or decrease groundwater quality in aquifer systems.
- (b) <u>Does not Ppermanently</u> or unsustainably lower water levels in streams or rivers where groundwater and surface water bodies are linked to an extent that is contrary to WQ O3.
- (c) Does not Aadversely affect groundwater quality in aquifer systems, including taking into account the risk of saltwater intrusion.
- (d) Does not Cause the mixing of water between different aquifers where those aquifers are not naturally connected.
- (e) Recognises and provides for the interactions and interrelationships between ground and surface water and, where appropriate, manages them as a single resource.
- (f) Sustains the relationship of Māori with their freshwater resources.

### Objective 44 WQ O5

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.

### Objective 45 WQ O6

The potential adverse effects of water abstraction during low surface water flows or low aquifer levels are avoided or mitigated to an acceptable level.

Water abstractions account for water availability limitations during drought events.

### Objective 46

Adequate flows are restored to rivers, streams, including individual reaches where allocation or diversion causes water flow to be at or below the Instream Minimum Flow Requirements set in Schedule 7.

### **WQ 07** Limits are set and applied for:

(a) 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 tāngata whenua values 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 streams and wetlands;
  - (iii) The prevention of aquifer contamination by saltwater intrusion; and
  - (iv) Water levels in aquifers.

# <u>WQ 08</u> Decision-making and allocation of freshwater water resources in the Bay of Plenty recognises the:

- (a) Social benefits from the use of water for domestic, marae, or municipal water supply, including in particular essential drinking and sanitation requirements.
- (b) Social, economic and cultural benefits that existing water takes contribute, which is often associated with significant investment.
- (c) Tāngata whenua values and interests in the water body.
- (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, electricity generation from renewable resources.
- (f) Long term certainty and priority required for safe and adequate municipal drinking water supplies

# <u>WQ 09</u> <u>Integrated management of freshwater resources within WMAs-Water</u> Management Areas that reflects:

- (a) <u>Tāngata whenua values and aspirations, including the significance the relationship of Māori with their water resources.</u>
- (b) Community values and aspirations.
- (c) Scientific research and mātauranga Māori.
- (d) Understanding of the relationship between freshwater quantity and quality.

### **WQ 010** All water takes are authorised and accounted for.

# Where water shortage is an issue in a Water Management Area, -significant problem potential solutions are explored so the allocation and use of water is improved over time by enabling:

- (a) Water storage and managed aquifer recharge.
- (b) More efficient use of allocated water through ∓the transfer of water take consents.
- (c) Water harvesting.

# WQ O12 Decision making and the allocation of freshwater in the Bay of Plenty maintains or enhances the relationship tangata whenua have with their ancestral waters.

# WQ O13 Require, record and maintain good quality information about the water resources of the region, including the use of those resources and supply and demand modelling to provide systems 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.

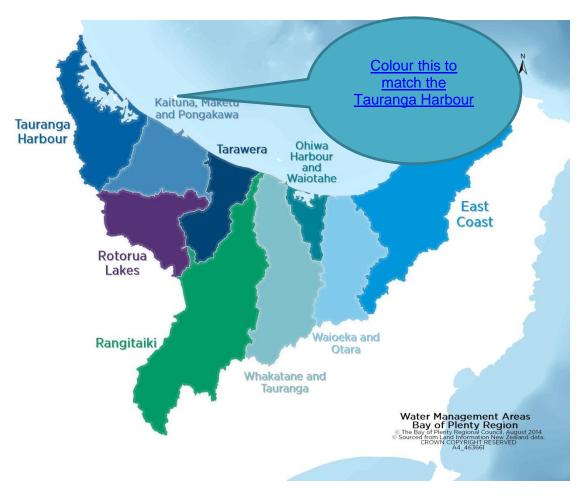
### 5.1.3 Policies

### Water Management Areas

### Policy 64 WQ P1

Apply the National Objectives Framework of the National Policy Statement for Freshwater Management, including the identification of Establish freshwater management units and for each of these freshwater values, freshwater objectives and environmental flows and levels applying within the following Water Management Areas:

- Tauranga Harbour
- Kaituna, Maketū, Pongakawa and Waitahanui
- Rotorua Lakes
- Tarawera
- Rangitaiki
- 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, Māori 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

Identify freshwater management units in each Water Management Area and within each unit deliver (a) to (m) by involving tangata whenua in working with cogovernance partners, city and district councils and the community for safeguarding the life-supporting capacity of fresh water and the wellbeing of freshwater bodies. Workby working with co-governance partners, tangata whenua, city and district councils, stakeholders and the community and within in each of these to deliver (a) to (mn) 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) The capacity of surface and groundwater resources to meet expected future water demand; and
- (iv) Information needs for the purposes of water accounting; and
- (v) Means by which the exercise of kaitiakitanga by Māori with mana whenua for the area may be provided including the involvement of iwi and hapu hapū in the overall management of freshwater;
- (vi) The meaning and application of te mana o te wai;
- (b) Identify tāngata whenua values and interests relating to freshwater.
- (c) <u>Identify significant values of wetlands and outstanding freshwater bodies,</u> and social, economic and environmental values relating to freshwater.
- (d) Establish freshwater objectives taking into consideration:
  - (i) The current state of the freshwater management unit, and its anticipated future state on the basis of past and current resource use;
  - (ii) The limits that would be required to achieve the freshwater objectives;
  - (iii) Any choices between values that would be required to achieve them;
  - (iv) Any implications for resource users, people and communities including implications for actions, investments, ongoing management changes and any social, economic or cultural implications;
  - (v) <u>Values identified through community and tāngata whenua engagement and discussion;</u>
  - (vi) Timeframes required to achieve themthe freshwater objectives; and
  - (vii) Other matters relevant and reasonably necessary to give effect to the freshwater objectives.
- (e) Set environmental flows and levels (including an allocation limit and a minimum flow or water level) for rivers, streams, lakes and aquifers:
  - (i) Based on the freshwater values and objectives; and
  - (ii) That reflect tangata whenua values and interests;
- (f) Set water allocation limits and water quality limits for rivers, streams and aquifers based on the freshwater values and objectives, that have regard to:
  - (i) The reasonably foreseeable impacts of climate change;
  - (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) The connection between groundwater and low temperature 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
- (viii)(ix) The mauri of the water body.
- (g) Consider the status of new takes under section 14(3)(b) of the Act and permitted activity takes within fully allocated catchments, and the extent to which these as well as existing takes under section 14(3)(b) and permitted activities should be accounted for within limits.
- (h) Identify opportunities to incorporate mātauranga and tikanga Māori into fresh water planning, management and decision-making.
- (i) <u>Identify methods to avoid further er- and phase out existing over-allocation of water.</u>
- (j) <u>Identify opportunities to enhance water availability in areas over allocated or nearing full allocationunder abstraction pressure.</u>
- (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.
  - (iv) The transfer of water
- (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) of the Act, once a rule imposing environmental flows and levels is made operative.
- (n) Prepare a 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 as determined in in-WQ P2(i) whichever is the earlier. These steps include, but are not limited to, by:

- (a) Encouraging voluntary reductions in allocation.
- (b) Reviewing resource consents to determine reasonable and efficient use requirements and whether any efficiency gains can be made, including through altering the volume, rate or timing of take.
- (c) Rostering users or reducing the rate of take.
- (d) Encouraging the establishment of water user groups and voluntary agreements between water users, provided that does not enable an increase in the actual volume of water abstracted.
- (e) <u>Directing applicants to consider alternative sources including water</u> harvesting, storage or roof water.
- (f) Shared reduction applied to all users of the water resource, including permitted activity volumes via a plan change.

- (g) Setting agreed methods and timeframes to phase out over-allocation.
- (h) Setting limits, managing allocation and providing for flow variability.

Setting limits, managing allocation and providing for flow variability

### Policy 65 WQ P4

To <u>maintain</u> allow for flow variation in streams and rivers when <u>setting limits</u>, <u>environmental flows and/or levels</u>, allocating water <u>and setting resource consent conditions for takes</u>, <u>controlling the effects of damming and diversion activities</u>.

### Policy 66 WQ P5

To allocate surface water according to Policy 71, Policy 73, and Policy 69, and the following (refer to Figure 5 for explanation):

Table 13 - Water Allocation Methodology

	Aspect	Policy		
Use	Use of Water excluding existing Hydroelectric 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 $Q_\delta$ 7 day low flow minus the instream minimum flow requirement.		
<del>(b)</del>	High flow allocation (water harvesting) during periods of high flow.	To consider allocating water flow above the $Q_5$ 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 Hydroelectric Power Schemes that are not otherwise provided for in (a) or (b).	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:  (i) Maintaining the instream minimum flow requirements set in accordance with this regional plan (refer to Schedule 7 or Policy 68).  (ii) Requiring the efficient use of the water.  Also refer to Policies 65, 67 and 72, and Section 5.2 for Policies relating to the Damming and Diversion of Water.		
	Dam, diversion or take of water associated with existing Hydroelectric Power Schemes listed in Schedule 11			
<del>(d)</del>	Water allocation for existing Hydroelectric Power Schemes listed in Schedule 11.	To allocate water to avoid, remedy or mitigate adverse effects on the environment, while having regard to relevant instream minimum flow requirements set in accordance with this regional plan, and the value of investment by the existing consent holder.  Policy 66(d) applies at the time existing resource consents come in for		
		replacement. Also refer to Section 5.2 for policies relating to the Damming and Diversion of Water.		

### Notes:

- 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).
- Resource consent conditions will specify the rate of take of water allocated to a consumptive or non-consumptive use.
- 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 limitsthresholds, until permanent NPS-FM locally specific limits are established under WQ P2(e) and (f):set through regional and/or sub-regional plans within each WMA:

- (a) Primary linstream minimum flows: 90% of Q<sub>5</sub> 7 day low flow for each river or stream.
- (b) Primary Aallocation limit-thresholds for surface water:

### Whichever is the greater of:

- (i) 10% of Q<sub>5</sub> 7 day low flow for each river or stream; or.
- (ii) The total allocation from the catchment on the date this plan change becomes operative; less any resource consents surrendered, lapsed, cancelled or not replaced.
- (c) Allocation limit for groundwater: 35% of the long-term average annual recharge for each aquifer.
- (c) Secondary instream minimum flow for rivers for streams with a mean flow of greater than 5 cubic metres per second: 100% of Q<sub>5</sub>7 low flow for each river or stream.
- (d) Secondary allocation threshold for rivers for streams with a mean flow of greater than 5 cubic metres per second of 40% of the  $Q_57$  day low flow, providing that the combined total of primary and secondary allocation does not exceed 50% of the  $Q_57$  day low flow.
  - (e) Primary allocation thresholds for groundwater:

### Whichever is the greater of:

- (i) 35% of the long-term average annual recharge for each aquifer.
- (ii) The total allocation from the catchment on the date this plan change becomes operative; less any resource consents surrendered, lapsed, cancelled or not replaced.

Advice Note: Information on the assessment of the limits-thresholds and current allocation status is available at Council's offices and on its website.

The total allocation allowable under this policy for surface water is 50% of  $Q_57$  day low flow. Where primary allocation determined under WQ P5(b)(ii) exceeds 10% of Q57 day, the amount available under WQ P5(c) reduces accordingly.

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

### Policy 67 WQ P6

To take into account adverse effects of water abstraction from rivers and streams on existing downstream water users, including non-consumptive users.

To provide for the harvesting of water during periods of high river or stream flow (where flow upstream of the take is above the median flow) where the additional take:

- (a) The flow upstream of the take is above the median flow.
- (a) (b) The additional take, Combined with all other harvesting takes, does not compromise the achievement of WQ O3, including avoiding or mitigating adverse effects on existing authorised uses e.g. the operation of hydroelectricity power scheme identified in Schedule 11.
- (b) The additional take, cCombined with all other harvesting takes, does not exceed 10% of the median flow.
- (c) 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).
- (dc) It—Wwill result—achieve sustainable management of the river or stream having regard of in social, cultural, economic erand environmental benefits.

### **WQ P7**

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

### **WQ P8**

To considerIn providing for secondary allocation of surface water to thatas identified in WQ P5, wherehave regard of the extent to which:

- (a) the applicant can demonstrate the secondary take meets the requirements of WQ O3 and WQ P4 and
- (b) the secondary take does not adversely affect the use of existing resource consents including existing hydro-electric power schemes; and
- (c) the assessment undertaken in accordance with WQ P15 includes:
  - (i) how details of the take relative to current flows will be communicated to Council; and
  - (ii) systems intended to be used by the applicant to comply with any conditions of consent related to control of the take; and
  - (iii) an assessment of the cumulative effects of this take and other takes in the primary and secondary block in the environment.
- (a)(d) Relevant matters listed in WQP15.
- (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
- (b) The applicant can demonstrate that an alternative allocable flow meets the requirements of WQ O3 and WQ P9.

### Advice Notes:

WQ P8(a) provides for a second tier of lower reliability surface water takes.
 In fully allocated catchments 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 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 10.

### Policy 74 WQ P9

To investigate the linkage between groundwater and surface water bodies to determines if groundwater takes are adversely affecting water flows in streams, rivers and springs.

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) Avoid adverse impacts effects from the abstraction of groundwater on associated values and uses of linked surface water.
- (d) Support freshwater accounting.

# Figure 5 – Water Allocation Program [diagram deleted]

### Consent processing

### Policy 68 WQ P10

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 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 Māori customary and traditional heritage values is no more that minor (where the values have been identified as significant through the use of the Criteria for Assessing Specified Matters in the Bay of Plenty Region in the 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.

To generally decline applications to take and use surface water or groundwater, where the water resource is allocated above the <u>limits\_thresholds</u> identified in<sub>7</sub> WQ P5 or limit in WQ P6 unless the application is:

- (a) A renewal of an existing authorised take that is:
  - (i) At the same or lesser rate and volume of take; and
  - (ii) Assessed as a reasonable and efficient rate and volume of take or
- (b) For the harvesting of surface water under WQ P6; or
- (c) For secondary allocable flow under WQ P8(a); or

- (a) Supported by a detailed assessment of environmental effects which demonstrates provides sufficient information for decision-makers to assess the matters listed in WQ P15 and demonstrates:
  - (i) That the proposed take is reasonable, efficient and will meet WQ O3 or WQ O4;
  - (ii) Consideration has been given to alternative water supplies, rates of take and timing of take;
  - (iii) Water conservation measures are proposed for times of low water flows or aquifer levels; and
  - (iv) The extent to which the proposed take will result in social, economic, cultural or ecological benefits.

Advice Note: Adverse effects on aquifer characteristics include reduction in aquifer recharge, sustained reduction in aquifer water level and changes to water chemistry or quality. With regard to the Tauranga Geothermal Resource (Tauranga and Kaituna-Maketū-Pongakawa WMAs), additional consideration may be required in relation to Chapter 7 of this regional plan. Where a groundwater take may have an effect on stream flow, the associated allocation should also be reflected in freshwater quantity accounting.

# Policy 70 WQ P11

To allocate 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.

To consider grantinggenerally grant annew and renewal applications to take and use surface water or groundwater, that will not result in the total allocation exceeding the interim limits-thresholds identified in WQ P5 or any NPS-FM locally specific limits, levels and flows set under WQ P2, provided that:

- (a) The proposed rate and volume of take are reasonable and efficient for the intended use of water having regard to the reasonable and efficient use criteria in Schedule 7; and-
- (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; or -
- (c) In the case of groundwater:
  - (i) The take does not result in adverse localised adverse effects, including bore interference;
  - (ii) If applicable, the potential for saltwater intrusion can be avoided or mitigated to an acceptable level; and
  - (iii) If applicable, adverse effects on the Tauranga Geothermal Resource or associated surface water bodies can be avoided or mitigated to an acceptable level.
- (d) For surface water takes and steam depleting groundwater takes, other than for water harvesting takes; have conditions that require abstraction to cease when the flow in the river reaches 90% of the Q<sub>5</sub>7 day low; and
- (d)(e) For water harvesting takes under WQ P6, have conditions that require abstraction to cease when the flow in the river reaches the median flow and ensure that when combined with all other harvesting takes, this take does not cause more than 10% of the median flow to be allocated.

### Advice Notes:

- <u>Adverse effects on aquifer characteristics include reduction in aquifer recharge, sustained reduction in aquifer water level and changes to water chemistry.</u>
- With regard to the Tauranga Geothermal Resource (Tauranga and Kaituna-Maketū-Pongakawa WMAs) additional consideration may be required in relation to Chapter 7 of this regional plan.

### Policy 72 WQ P12

To ensure that any allocation of water does not derogate from any existing consents.

To recognise and provide certainty to existing authorised users of freshwater, including non-consumptive users, by:

- (a) Ensuring that any new allocation of water does not adversely impact upon the use of existing resource consents.
- (b) Giving priority to existing users over new users when considering the renewal of existing resource consents.
- (c) Considering granting an application that meets the criteria specified by WQ P9 10(a) where limits have not been set under WQ P2(f).

### Policy 73 WQ P13

To require the efficient use of water where the efficiency is assessed as defined in Method 168.

To promote the efficient use of freshwater resources by:

- (a) Requiring the quantity of water granted to be no more than that required for the intended use of water and apply the reasonable and efficient use criteria in Schedule 7.
- (b) Requiring the use of water conservation methods and encourage the use of alternative water sources.
- (c) Requiring good management practices for all uses.
- (d) Promoting the shared use and management of water, through water user groups or other arrangements where it results in an increased efficiency efficient in the allocation and use of water.
- (e) Enabling the transfer of water permits in accordance with WQ P23.
- (f) Working with, and seeking co-operation from, holders of existing rights granted under section 386(1) of the Act to encourage:
  - (i) Consent renewal prior to 1 October 2026 to match allocation to use; and
  - (ii) Greater water use efficiency.

Note: The options below relate to 4 alternatives presented in the s42A report assessment. No particular option is proposed ahead of the others – all are to be considered.

### **OPTION 1**

### Policy 75 WQ P14

To take appropriate action within the framework of this regional plan (including future plan changes) to address the adverse effects of groundwater takes on associated surface water bodies where investigations prove this is a significant issue in the areas noted in Method 184.

To provide an opportunity for existing users who require but do not have resource consents for their activities to become or remain authorised by:

- (a) 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;
- (b) Providing information regarding the need for resource consent;
- (c) Working in conjunction with industry groups and representatives of unauthorised users to increase awareness and share information;
- (d) Providing opportunities for authorisation in preference to compliance action; and
- (e) Undertaking compliance when the period provided for those activities to become authorised expires

while giving effect to WQ P1 3 to 12 8 and WQ P18 P110 to WQ P20 12 and WQ P18 - 22.

### **OPTION 2**

### **WQ P14**

To provide an opportunity for existing users who require but do not have resource consents for their activities to become or remain authorised by:

(a) 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;

- (b) Providing information regarding the need for resource consent;
- (c) Working in conjunction with industry groups and representatives of unauthorised users to increase awareness and share information;
- (d) Providing opportunities for authorisation in preference to compliance action; and
- (e) Undertaking compliance when the period provided for those activities to become authorised expires.

while giving effect to WQ P1 to 12 and WQ P18 to WQ P20.

### **OPTION 3**

# WQ P14 To provide an opportunity for existing users who require but do not have resource consents for their activities to become or remain authorised by:

- (a) 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;
- (b) Providing information regarding the need for resource consent;
- (c) Working in conjunction with industry groups and representatives of unauthorised users to increase awareness and share information;
- (d) Providing opportunities for authorisation in preference to compliance action; and
- (e) Undertaking compliance when the period provided for those activities to become authorised expires.

while giving effect to WQ P1 to 12 and WQ P18 to WQ P20.

### **OPTION 4 - No special rule**

# WQ P14 To provide an opportunity for existing users who require but do not have resource consents for their activities to become or remain authorised by:

- (a) 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;
- (b) Providing information regarding the need for resource consent;
- (c) Working in conjunction with industry groups and representatives of unauthorised users to increase awareness and share information;
- (d) Providing opportunities for authorisation in preference to compliance action: and
- (e) Undertaking compliance when the period provided for those activities to become authorised expires.

while giving effect to WQ P1 to 12 and WQ P18 to WQ P20.

### Note: The options end here.

### Policy 78 WQ P15

To develop and implement a long-term water sustainability strategy to manage future water use in areas of high population growth, or where there is high demand for commercial, industrial, agricultural or horticultural uses.

When considering any application for resource consent to take and use water under WQ R11, prior to the setting of NPS-FM limits under WQ P2 decision makers must, have regard to:

- (a) The volume of water sought in relation to the intended use of water. The efficient use of water in accordance with WQ P13.
- (b) Water availability relative to the interim allocation thresholds determined in in WQP5(b)(i) or WQP5(e) and allocation within the catchment to which the application relates and any measures to phase out over allocation in accordance with WQ P3.-
- (c) The rate of take for surface water of takes.
- (d) The relative social and economic benefits of the proposed use of the water.
- (e) The value of investment that existing consent holders have made which is dependent on the water being abstracted. which depend on the water abstracted.
- (f) The cumulative effects of water abstraction on the assimilative capacity of the water body with regard to the effects on water quality.
- (g) The potential effect on:
  - (i) Instream flows;
  - (ii) Authorised users;
  - (iii) Ecological, landscape and recreational values, where applicable; and
  - (iv) <u>Tāngata whenua values</u>.
- (h) The outcome of pumping tests and hydrogeological assessments for groundwater takes.
- (i) The degree of connectivity between groundwater and surface water.
- (j) The potential risk of saltwater intrusion, where applicable.
- (k) The potential risk on the sustainability of the Tauranga Geothermal Resource, where applicable.
- (I) Relevant iwi and hapū resource management plans.
- (la) The extent to which the applicant has consulted with tangata whenua and taken into account any potential effects of the proposal on tangata whenua values.
- (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.

# Decision-makers must include any of the following conditions on resource consents for the take and use of water-shall address the following matters via conditions on resource consents unless site specific circumstances determine that to be unnecessaryirrelevant:

- (a) The maximum allowable water take over specific time periods, including maximum seasonal allocation for irrigation and frost protection based on estimated crop water requirements, and the maximum volume allowed for is crop and rootstock survival water during periods when water take restrictions to protect environmental 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.
- (d) The requirement to measure and record water flows or levels, and cease taking when certain flows are reached to minimise impacts on the environment and other users.
- (da) The requirement to manage the taking of water when certain flows are reached to minimise impacts on the environment and other users.
- (e) The requirement to monitor the risk of saltwater intrusion associated with groundwater takes near the coast.
- (f) Common review dates within specified catchments or WMAs.
- (g) To review the resource consent, in accordance with section 128 of the Act, to:
  - (i) Determine whether any efficiency gains can be made, including through altering the 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.

### Policy 79 WQ P17

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, Māori 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.

When determining the duration of a resource consent to take and 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; or-
- (b) Consent term of no more than 15 years for all other water bodies.
- (c) Notwithstanding clauses (a) and (b) above, a Llonger consent term if the take and 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) <u>Is demonstrated by the applicant to be appropriate in the circumstances.</u>

### Requirement of National Policy Statement Freshwater Management

### Policy 68A WQ P18

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 (now the National Policy Statement Freshwater Management 2014).

### Renewable electricity generation

### Policy 69 WQ P19

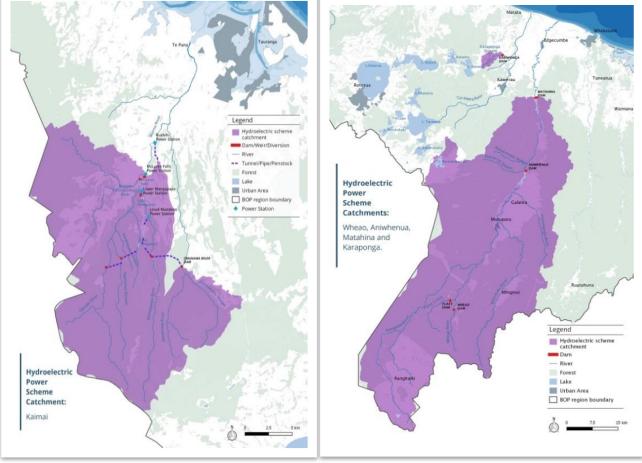
To recognise the importance of maintaining existing renewable electricity generation capacity by not allowing any new taking or diversion of surface water or shallow groundwater connected to surface water upstream of the hydroelectric power schemes listed in Schedule 11 at all times unless:

For the Wheao, Aniwhenua and Matahina hydroelectric power schemes the flow into Lake Matahina is greater than 160 cubic metres per second; or The take is a controlled activity under WQ R4; or WQ P20 applies.

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

### Map WQ2 Kaimai Upstream Extent

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



<u>WQ P20</u> To enable the reasonable and efficient taking and use of water upstream of existing hydroelectric power schemes listed in Schedule 11 provided that:

- (a) Upon the expiry of existing resource consents for the taking or diversion of water upstream of the schemes, the consents may be renewed:
  - (i) At the same or a lessor volume of take;
  - (ii) At the same or a lessor rate of take; and
  - (iii) 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.
- (c) 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 an identified electric power scheme need to obtain resource consent. in accordance with WQ R4.
- 3. Policy 81 and Table 18 apply to the release of water from dams. This freshwater allocation is based on current circumstances, which could be superseded by subsequent Water Management Area specific regional plans provisions.
- 2. 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 Hydroelectric Power Schemes

	Hydroelectric Power Scheme as listed in Schedule 11	Water Allocation Management
<del>(a)</del>	Kaimai	(i) Upstream of the:
		<ul> <li>McLaren Falls Dam on the Wairea River, including Mangakarengorenge River and Tributaries, Opuiaki River and tributaries (including Ngatuhea, Awaketuku and Mangaenui Streams), Mangapapa River and tributaries; and</li> </ul>
		Dam and intake structure on the Omanawa River; and
		<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 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 Mangakarengorengo River and tributaries, Opuiaki River and tributaries (including Ngatuhoa, Awakotuku and Mangaonui Streams), Mangapapa 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 where they intersect the Ruahihi Canal;</li> </ul>
		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 Station, surface water will be allocated in accordance with Policy 66(a). Any water released from the dam above the required discharge flow is available for reallocation under Policy 66(b) while fully accounting for recreational use between the McLaren Falls Dam and the State Highway 29 Bridge, and where the proposed users recognise that the additional flow is subject to the operating regime used by the hydroelectric power scheme owner.
		(iv) On the:

	Hydroelectric Power Scheme as listed in Schedule 11	Water Allocation Management	
		Wairoa River downstream of the Ruahihi Power Station;	
		<ul> <li>Omanawa River downstream of the dam and intake structure;</li> </ul>	
		<ul> <li>Ruakaka Stream downstream of the dam;</li> </ul>	
		<ul> <li>Mangakarengorengo River between the diversion structure and McLarens Falls Dam;</li> </ul>	
		<ul> <li>Opuiaki River and tributaries (including Ngatuhoa, Awaketuku ar Mangaenui Streams) between the diversion structures ar McLarens Falls Dam;</li> </ul>	
		<ul> <li>Mangapapa River between the diversion structure and McLarens Falls 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	(ii) Upstream of the:	
		<ul> <li>Rangitaiki Intake structure on the Rangitaiki River; and</li> </ul>	
		Wheao Intake structure on the Wheao River; and	
		<ul> <li>Flaxy Dam on Flaxy Creek,</li> </ul>	
		water allocation held by existing consent holders and authorised users (other that the power scheme owner) will be recognised until the consent expires.  (iii) There is no more surface water, or groundwater connected to surface water bodies, available for allocation from the following areas:	
		Rangitaiki River and tributaries above the Rangitaiki Intake structure;      Wheae River and tributaries above the Wheae Intake structure;	
		<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	(i) Upstream of the Aniwhenua dam, water allocation held by existing consent holders and authorised users (other than the power scheme ewner) will be recognised until the consent expires.	
		(ii) There is no more surface water or groundwater connected to surface water bodies, available for allocation from the Rangitaiki River and tributaries above the Aniwhenua Dam unless the river flow into Lake Matahina is greater than 160 cubic metres per second (160,000 litres per second).	
<del>(d)</del>	Matahina	(i) Upstream of the Matahina dam, water allocation held by existing consent holders and authorised users will be recognised until the consent expires.	
		(ii) There is no more surface water or groundwater connected to surface water bodies, available for allocation from the Rangitaiki River and tributaries above the Matahina Dam unless the river flow into Lake Matahina is greater than 160 cubic metres per second (160,000 per second).	
		(iii) Water downstream of the Matahina dam will be allocated in accordance with 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.	

	Hydroelectric Power Scheme as listed in Schedule 11	Water Allocation Management
<del>(0)</del>	Karaponga	(i) Upstream of the Karaponga dam, water allocation held by existing consent holders and authorised users (other than the hydroelectric power scheme owner) will be recognised until the consent expires.
		(ii) There is no more surface water available for allocation from the Karaponga Stream and tributaries above the Karaponga dam.
		(iii) Water downstream of the Karaponga dam will be allocated in accordance with Policy 66(a). Any additional water released from the dam above the required discharge flow from the 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.

### Note:

Existing consented, permitted and 14(3)(b) 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.

### 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 allocating water and to require all applications to take water for municipal water supply 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) Minimise the leakage of water.
- (b) Protect headworks against wastage.
- (c) Have appropriate casing and construction.
- (d) Be screened for only one aquifer to prevent cross contamination between aquifers.
- (e) Prevent backflow of water and contaminants into the aquifer.

(e)(f) Fully penetrate the aquifer.

# 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 to take or use water in whole or part to another site, prior to the setting of limits under WQ P2(f), 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. Does not increase the volume of water that the transferee is able to demonstrate has actually been taken and used in accordance with the conditions on the existing resource consent at any time in the preceding 5 years.

Is no more than the amount of water the transferor can show has been taken and used for the purpose for which it was granted within the last 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 in a format suitable for automatic upload into council's database systems as follows:

- (a) For permitted takes, where in combination with a take of water for stock drinking water under section 14(3)(b) of the Act, the total volume of water taken for the property exceeds the permitted activity volumes, require the total daily volumes (in cubic metres) of all water taken on the property abstracted water to be separately recorded on a daily basis by a data logger or telemetry and electronically reported to Council on a monthly basis no later than 1 month after the end of the previous months record.
- (b) For consented takes, require the daily volume (in cubic metres) of abstracted water to be recorded For takes granted under WQ P5(b) or WQ P5(e) require the daily volume (in cubic metres) of abstracted water to be recorded by a data logger or telemetry and electronically reported to Council on a monthly basis no later than 1 month after the end of the previous months record, unless site specific conditions determine that daily reporting is required.
- (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. For takes granted under WQ P5(d) or WQ P6 or WQ P10 require the daily volume (in cubic metres) of abstracted water to be recorded by a data logger or telemetry and electronically reported to Council on a daily basis no later than 1 day after the end of the previous days record.
- (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.

Activity status and source of water	<u>Meter</u>	Report frequency
Property size 5ha or more Stock drinking water and/or permitted use does not exceed 35 cubic metres per day (ground	Not required	Not required

Activity status and source of water	<u>Meter</u>	Report frequency
water) or 15 cubic metres per day (surface water)		
Property size less than 5ha Stock drinking water and/or permitted use does not exceed 15 cubic metres per day (ground water or surface water)	Not required	Not required
Stock drinking water and/or permitted use exceeds 35 cubic metres per day (groundwater and property exceeds 5ha) or exceeds 15 cubic metres per day (surface and groundwater and property less than or equal to 5ha)	Yes Will require 2 meters if RMA section 14(3)(b) and permitted activity water used.	Monthly unless rate of take exceeds 2.5l/s (surface water) or 5 l/s (groundwater)
Consent groundwater granted under WQ P5(b) or WQ P5(e) rate of take equals or exceeds 51/s	Yes	<u>Daily</u> Monthly
Consent granted under WQ P5(d) or WQ P6 or WQ P10 groundwater rate of take less than 5 litres	<u>Yes</u>	<u>Monthly</u> Daily
Consent surface water rate of take equals or exceeds 2.5 litres	<del>Yes</del>	<u>Daily</u>
Consent surface water, rate of take less than 2.5 litres.	Yes	Monthly

### Table WQ 1 Summary of Activity Status Metering and Reporting Requirements

### Policy 76 WQ P25

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

For each freshwater management unit where objectives and limits are being, or have been set, establish, maintain and make publicly available a freshwater quantity accounting system to record the following information:

- (a) Amount of freshwater:
  - (i) Available for allocation;
  - (ii) Allocated by resource consent and actually taken; and
  - (iii) Permitted under WQ R1 and R3 and allowed by section 14(3)(b) of the Act.
- (b) Where limits have been set, the proportion of the limit that has been allocated.
- (c) The proportion of water allocated to, and taken by, each major category of use.

To support the provision of freshwater accounts to support management of the freshwater resource. The accounts shall estimate:

- (a) The amount of freshwater available for allocation;
- (b) The amount of freshwater allocated by types of resource consent;
- (c) The amount of freshwater estimated to be taken without resource consent;
- (d) The proportion of the environmental flow and/or level that has been allocated (including the amount estimated as being taken without resource consent);
- (e) The proportion of flow and effect of non-consumptive takes and discharges;
- (f) The proportion of consented water used: and
- (g) The proportion of water allocated to, and taken by, each major category of use.

### 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 volume 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) Undertaking audits in selected areas to estimate or verify water use.

### 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 before making any land use changes. <u>including land use intensification and urban growth.</u>

### **WQ P28**

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

### Low flows and aquifer levels

### Policy 80

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 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 minimum flows or levels set within WMAs under WQ P2.
- (b) When a water shortage direction is issued under section 329 of the Act.

### **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) Provide water conservation advice to the community.
- (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) Require resource consent holders to cease abstraction in accordance with the minimum flows or levels specified as conditions on their consents
- (e) Require non-consumptive users to ensure that the discharge from a dam/impoundment is equal to the inflow.
- (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) Reasonable animal drinking and sanitation needs.
- (ba) Emergency firefighting response.
- (c) Non-consumptive takes, 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) Crop and rootstock survival water.

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.

### 5.1.4 Methods of Implementation

Environment Bay of Plenty Regional Council will:

### **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 M1

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

### Method 157 WQ M3

Encourage <u>city councils</u>, <u>district councils and</u> the community, <u>including the commercial</u>, <u>industrial</u>, <u>horticultural</u>, <u>agricultural</u> and <u>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) Use alternative water sources to supplement supply, such as water 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 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

### Support will be provided through: the following:

- (i) Council provision of data and information that will assist identification and evaluation of the options; and
- (ii) Council participation, as appropriate, in the option identification and evaluation process.

### Method 159

Develop and implement a surface water allocation database system that will document the following information for each river or stream where water abstraction is occurring, where appropriate:

- (a) The instream minimum flow requirement for each stream reach.
- (b) The total volume of water that is available for allocation from each stream reach.
- (c) The total volume of water that has been allocated through resource consents.
- (d) The volume of water that is available for allocation with regards to (b) and (c).
- (e) Other information relevant to water allocation in the water body.

### **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 WQ M6

Consider using any of the following methods to address the adverse effects of groundwater takes on associated surface water bodies:

- (a) 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.
- (b) Work with existing groundwater abstractors, including water user groups where appropriate.

### Cross-Reference Also refer to Method 54, Rules 38, 41, 42, 43.

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 in association with the existing consent (including, but not limited to, irrigation systems).

### Method 167 WQ M7

Require the installation of a water measuring device to measure the take of water as 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 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 the sustainable yield. This will be applied to applications for the take and

- use of groundwater where a sustainable yield for an identified aquifer has 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 ecological values, landscape values, recreational values, or Māori customary values and traditional instream uses.
- (f) The take is from a surface water body where water quality is degraded below its Water Quality Classification, or it is necessary to maintain the assimilative capacity of the water body.

Resource consent applicants are advised to consult with Environment Bay of Plenty to determine if this requirement will be enacted for their proposed activity. Water measuring devices can be located on portable pumps. Water measuring devices or methods will be required, as appropriate, relative to the specific activity and site characterises. For example, where a take of water is physically restricted, that restriction may be accepted as a means to measure water flows. A flow meter is not necessarily required to comply with Method 167.

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) Resource Management (Measurement and Reporting of Water Takes)
  Regulations 2010.
- (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 the urban area, including projected population growth based on Census 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 the river or stream flow levels at which the action outlined in Method 172 are 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, or processes that will be enacted, to allow monitoring of stream flows in their 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, including, but not limited to, the protection of headworks against wastage, and the 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 water takes, or pro rata reduction of water takes.
- (b) Encouraging, or recommending the surrender or cancellation of unused resource consents pursuant to section 126 and 138 of the Act.
- (c) Reviewing consent conditions on large water takes pursuant to section 128 (1) (b) of the Act. Environment Bay of Plenty will review a resource consent in accordance with section 128 of the Act, where it is proven that adverse environmental effects will occur or continue due to the exercise of that consent.
- (d) Reviewing resource consent conditions according to actual use pursuant to section 128(1) (a) or (b) of the Act, while allowing for matters under Method 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 levels or quality return to 'normal', particularly where there is saline intrusion of fresh water.

### WQ M8

<u>Support the establishment of water user groups to assist Council and water users in the management of water through the following:</u>

- (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.

Advice Note: Support may include provision of staff time, co-ordination and administration to help establish and maintain groups.

### Method 172 WQ M9

Manage water abstraction during drought/low flow events according to the following:

### Recognise:

- (a) The value of involving iwi and hapuhapū to identify the extent of cultural impacts associated with resource consent applications to take water.
- (b) The value of iwi and hapū management plans to articulate issues of significance to tāngata whenua.
- (c) The role of specialists in mātauranga and tikanga, such as kaumātua and pūkenga, in resource management decisions where tāngata whenua values are affected.

Advice Note: 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		
Cons	Consumptive Water Use			
<del>(a)</del>	River or stream flow is within 10% of the instream minimum flow requirement, or default instream minimum flow requirement.	Consider giving water shortage advice, including:  (i) Advising abstractors to restrict non-essential use of water in order to meet water take reduction requirements;  (ii) Providing water conservation advice to the community;  (iii) Working with city and district councils to reduce community usage of water  (iv) Suggesting rostering or rationing to abstractors.  Water user groups may also be used to facilitate the voluntary reduction of abstraction during drought events.		
<del>(b)</del>	River or stream flow is at the instream minimum flow 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-	Non-Consumptive Water Use			
<del>(c)</del>	River or stream flow is at the instream minimum flow 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 be 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, Māori 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 176

Identify the ecological values, landscape values, recreational values, and Maori customary values and traditional instream uses of a stream or river reach at the time of determining an instream minimum flow in accordance with Method 177.

Method 177

Use the following process and methodology to determine an appropriate instream minimum flow requirement:

Table 16 - Instream Minimum Flow Requirement Methodology

	Process	Methodology to be used
<del>(a)</del>	Determine the water flow necessary to sustain aquatic life evident in the stream 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.  If RHYHABSIM is selected, use the following steps to interpret habitat flow response curves:  Step 1  For each species present in the stream or river reach identify a primary flow where habitat is optimum (greatest). Where the flow equating to optimal habitat exceeds the stream's median flow, use the MALF as the primary flow.  Step 2  Multiply habitat at the primary flow by the protection level in Method 178 to obtain a minimum flow for each species present in the stream or river reach. The point of inflection may be used instead of the scaled primary flow in cases where this exceeds
		the minimum flow otherwise produced, or where any additional loss of habitat is insignificant.  Step 3 Identify the highest flow of the minimum flows identified for the species present. This is the Instream Minimum Flow Requirement necessary to sustain aquatic life.
<del>(b)</del>	Determine the water flow necessary to sustain significant landscape, recreational, Maori customary and traditional heritage values, where these have been identified as significant through the use of the Criteria for Assessing Specified Matters in the Bay of Plenty Region in the Bay of Plenty Regional Policy Statement, and where those values may be adversely affected 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 that may be relevant to the environmental quality of the stream or river reach.	Assess effect of lower water flow on the following factors, and take this into account if the effect is important:  (i) Water quality class in the river or stream, assimilative capacity of the river or stream and effects on downstream surface water bodies.

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

	Process	Methodology to be used		
		(iii) 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>(0)</del>	Assess the social, economic, cultural and environmental benefits and costs.	Have regard to the following matters:  (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 environmental matters relevant to the stream or river reach.		
<del>(f)</del>	Determine the most appropriate instream minimum flow requirement resulting 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.
    - 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.
    - 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:

Table 17 - Protection Levels for Aquatic Life

	Significance Criteria	Protection Level (percentage of primary habitat)
<del>(a)</del>	Short-jawed kokopu, Giant Kokopu.	<del>100%</del>
<del>(b)</del>	Banded Kokopu, koaro, black mudfish, dwarf galaxias.	95%
<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) are individually given this protection level.	90%
<del>(e)</del>	Other indigenous aquatic species, migratory pathways of trout to Schedule 1D areas, and other trout populations contributing to Schedule 1D areas.	<del>85%</del>

#### Notes:

- 4 Species in (a) and (b) have been sourced from Molly, J., and Davies, A., as upgraded by Tisdall, C., 1994. Setting Priorities for the Conservation of New Zealand's Threatened Plants and Animals. 2<sup>nd</sup> edition. Department of Conservation.
- 2 Documents that determine Instream Minimum Flow Requirements will include justification of the protection levels used for that catchment or area.
- Method 179

Where an instream minimum flow has not been established in accordance with Method 177, the following flow will be used as the default instream minimum flow requirement: 90% of Q<sub>5</sub> 7 day low flow.

Method 180

Initiate a plan change or plan variation in accordance with the requirements of the Act and in consultation with stakeholders and the community, to include Instream Minimum Flow Requirements in Schedule 7 of this regional plan, where they have been determined in accordance with Method 177. Plan changes for the following 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 the Matahina Dam) December 2008.
- (e) Main stem of the Rangitaiki River above the Matahina Dam, Whirinaki River, Haumea River December 2009.
- Method 181

Identify the location of each river or stream reach where an Instream Minimum Flow Requirement will apply as part of each plan change to Schedule 7.

Method 182

Identify pressure abstraction catchments in technical publications that report on 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 of Plenty, as necessary, in the Galatea plains, Opotiki plains, and areas where there are large abstractions of groundwater in the recharge areas of springs used for municipal water supply.

Method 185

Monitor the ongoing appropriateness of instream minimum flow requirements with 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 the sustainable management of water resources, maintain good quantity of groundwater and surface water, and achieve the integrated management of water and land resources in the Bay of Plenty Region.

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 sustainable

management of water resources. Environment Bay of Plenty is required to have particular regard to the efficient use and development of 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

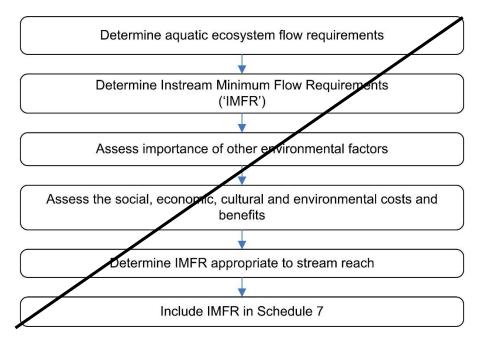
Method 177 sets the methodology used to determine Instream Minimum Flow Requirements. This follows from Objective 41, which clearly identifies the water quantity management goals for the Bay of Plenty region. Appropriate Instream Minimum Flow Requirements will be determined for each stream or river reach 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 for the species present in the stream or river reach.

-Figure 6 - Instream Minimum Flow Requirements Process



Para 6

Objective 45 will be achieved through the implementation of Policy 80, Method 169(b), and Method 172. The water flow levels in Method 127 determine the points at which Environment Bay of Plenty will take appropriate action to ensure the Instream Minimum Flow Requirement is not breached as a result of abstractions. The type of actions that will be considered are also listed in Method 172.

Para 7

Policy 71 and Method 166 provide guidance to the community on water allocation. It is not appropriate or economically efficient to specify priority allocation uses in particular catchments as the dominant use may change over the life of the regional plan due to market forces or landowner choice.

Para 8

Policy 77 identifies that water is scarce in some catchments, particularly those under existing abstraction pressure or where water is naturally in low volume, and consideration of this matter should be made before investment is undertaken in major developments that require large amounts of water.

Para 9

Policy 73 and Method 168 are consistent with section 7(b) of the Act. Method 168 provides guidance to the community on how the efficiency of water use will be assessed as part of a resource consent application, and lists the matters relevant to different types of water use activities. Efficient water uses are subject to the water allocation regimes established in Policies 66 and 67 (surface water), and Policy 70 (groundwater). Resource users should not expect to be able to abstract the maximum consented water take during drought events when measures in Method 172 are enacted. Efficient use of water will also be achieved through the implementation of Methods 157, 158, 160, 161, 162, 164 and 170.

#### Part III WQ: Water Quantity

#### 9.6 Take and Use of Water

#### **Advisory** Advice Note:

- Section 14(3)(e) of the Act allows the take and use of water for fire-fighting 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 freshwater (this excludes geothermal water [greater than 30° 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 or 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 stream) 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).

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 38 WQ 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) The take and use is registered with the Bay of Plenty Regional Council within one year of the plan-rule becoming operative, or for new takes prior to the commencement with the following information is provided to Council with all registrations:
  - (i) Location of the take;
  - (ii) General purpose for which the water is being used or is proposed to be used;
  - (iii) Confirmation that conditions (b) to (e) below can be met;
  - (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 data is provided to Council in accordance with WQ P24 if required.
- (b) The rate of take does not exceed 2.5 litres per second.

- (c) No additional water is taken under WQ R3.
- (d) The take is not from 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 section 14(3)(b) of the Act exceeds 15 cubic metres 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: 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 limitquantity. Stock drinking water is provided for in addition to the permitted activity volumequantity. 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 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. This rule allows the take of water for the supply of the persons for their reasonable domestic needs and the needs of their animals. A greater volume is permitted for groundwater takes than for surface water takes (refer to Rule 41) to encourage people to use groundwater, and reduce abstraction pressure on surface water bodies (particularly small streams)

#### 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) The take and use is registered with Bay of Plenty Regional Council within one year of this regional plan-rule becoming operative, or for new takes prior to their commencement, and the following information is provided to Councilwith all registrations:
  - (i) Location of the take;
  - (ii) General purpose for which the water is being used or is proposed to be used;
  - (iii) Confirmation that conditions (b) to (e) below can be met;
  - (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 data is provided to Council in accordance with WQ P24 if required.
- (b) The rate of take does not exceed 2.5 litres per second.
- (c) No additional water is taken under WQ R3.
- (d) The take is not from 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 section 14(3)(b) of the Act exceeds 15 cubic metres 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: 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 quantity. Stock drinking water is provided for in addition to the permitted activity volume quantity. 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 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. This rule allows the take of water for the supply of the persons for their reasonable domestic needs and the needs of their animals. A greater volume is permitted for groundwater takes than for surface water takes (refer to Rule 41) to encourage people to use groundwater, and reduce abstraction pressure on surface water bodies (particularly small streams).

**Rules 39-40B** 

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

#### Rule 41 WQ 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 water has a temperature of less than 30° Celsius, the rate of take does not exceed 2.5 litres per second 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.
- 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 water takes shall 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) The take and use is registered with the Bay of Plenty Regional Council within one year of this regional planrule becoming operative, or for new takes, prior to their commencement and the following information is provided to Council:
  - (i) Location of take;
  - (ii) General purpose for which water is being used;
  - (iii) Confirmation that requirements (b) to (g) can be met;
  - (iv) Whether the take also provides for stock or domestic drinking requirements; and
  - (v) Name, address and contact details of person responsible for the take and use.
- (b) Metering data is provided to Council in accordance with WQ P24 if required.
- (c) The rate of take does not exceed 2.5 litres per second.
- (d) No additional water is taken under -WQ R1 or WQ R2.
- (e) The take is not from a water resource that is fully allocated at the time the take is established, unless the take was established prior to 18 October 2016.
- (f) The take is not from a wetland or waters draining into a wetland.
  - (g) The intake velocity through the screen shall not exceed 0.3 meters per second.

Where the take is from a river or stream, the total abstraction (all users) of surface water takes shall not exceed the interim instream flow at any point.

#### Advisory-Advice Note:

- Potential water abstractors are encouraged to seek the advice of Environment Bay of Plenty Regional Council to ensure that there is sufficient flow in a water body to accommodate their water take and comply with condition (d) (e). This is particularly relevant for small streams. Environment Bay of Plenty Regional Council will take appropriate action when flows fall below the instream minimum flow. requirement.
- 2 Surface water intake structures for the take and use of water under this rule must also be authorised (refer to Rule 52).
- 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 m³-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. 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.

#### 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.

#### WQ RX Permitted activity – the taking of water for the purpose of aquifer or pump testing

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

- (a) The Bay of Plenty Regional Council shall be notified in writing at least 1 week in advance of tests.
- (b) No test for a particular well shall exceed a pumping period of 3 days in duration, and the test on that well shall not be repeated at any time.
- (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.
- (e) The records shall include
  - (i) The location of the bore and any observation bores
  - (ii) Temperature/pressure profiles
  - (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.

Note: The following four options relate to possibilities discussed in the s42a report for which no particular recommendation is made.

#### **OPTION 1**

#### **WQ R4**

#### <u>Controlled Activity – Take and Use of Water for Existing Dairy Shed Wash</u> Down and Milk Cooling Purposes

The take and use of surface water and/or groundwater for the purposes of dairy shed washdown and milk cooling is a Controlled Activity that does not require notification, subject to the following:

- The take and use is not permitted by a rule in this regional plan.
- <u>2</u> The take and use is not prohibited by Rule 49.
- A resource consent application is lodged within 12 months of this rule becoming operative.
- 4 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<sup>5</sup>7 day low flow) at the point of abstraction, whichever is the lessor:
  - b. The total abstraction (all users) shall not exceed 2.5 litres per second or 10% of the estimated five year low flow (Q<sup>5</sup>7 day low flow) at the point of abstraction, whichever is the lessor.
- 5 Where the take is from groundwater:
  - a. The rate of take shall not exceed 2.5 litres per second;
  - a.b. The bore shall be registered with the Bay of Plenty Regional Council;
  - c. The bore shall be maintained and/or decommissioned in accordance with the relevant requirements of schedule 14.
- The application information contains verifiable evidence of the existence of the take at the time of notification of this plan change, 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 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 during periods of low flow 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) Measures to achieve efficient use of water and consistency with schedule 7 dairy shed water use.

#### Advice Note:

- This rule does not enable an additional volume to be added to an existing 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 The rate of take maybe reduced to the minimum required to achieve the daily volume. Storage maybe needed to enable higher rates of use.
- 4 Efficient use of water is 55 litres per cow per day.

#### **OPTION 2**

## WQ R4 Controlled Activity – Take and Use of Water for Existing Dairy Shed Wash Down and Milk Cooling Purposes

The take and use of up to 50m³ per day of surface water and/or groundwater for the purposes of dairy shed washdown and milk cooling is a Controlled Activity that does not require notification, 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 A resource consent application is lodged within 12 months of this rule becoming operative.
- 4 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 (Q5 7 day low flow) at the point of abstraction, whichever is the lessor;
  - b. the total abstraction (all users) 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 lessor.
- 5 Where the take is from groundwater:
  - a. the rate of take shall not exceed 2.5 litres per second;
  - the bore shall be registered with the Bay of Plenty Regional Council
    - c. The bore shall be maintained and/or decommissioned in accordance with the relevant requirements of schedule 14.
- The application information contains verifiable evidence of the existence of the take at the time of notification of this plan change, 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 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:

- (e) Rate and volume of take.
- (f) Measures to restrict or stop the take during periods of low flow or to enable flow monitoring by Council.
- (g) Metering and reporting requirements, including separate metering of any water taken under provisions of section 14(3)(b) of the Act.

(h) Measures to achieve efficient use of water and consistency with schedule 7 dairy shed water use.

#### Advice Note:

- This rule does not enable an additional volume to be added to an existing 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 The rate of take maybe reduced to the minimum required to achieve the daily volume. Storage maybe needed to enable higher rates of use.
- 4 Efficient use of water is 55 litres per cow per day.

## WQ R4A Restricted Discretionary Activity – Take and Use of Water for Existing Dairy Shed Wash Down and Milk Cooling Purposes

The take and use of surface water and/or groundwater for the purposes of dairy shed washdown and milk cooling is a Restricted Discretionary Activity that does not require notification, where:

- 1 The take and use is not permitted by a rule in this regional plan.
- 2 The take and use does not meet the requirements of WQ R4
- 3 The take and use is not prohibited by Rule 49.
- 4 A resource consent application is lodged within 12 months of this rule becoming operative.
- 5 A water meter is installed.
- The application information contains verifiable evidence of the existence of the take at the time of notification of this plan change, 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 is proven to be the same or less than that occurring as at 18 October 2016.

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

- (a) Location, rate and volume of take.
- (b) Measures to restrict or stop the take during periods of low flow or aquifer levels.
- (c) Metering and reporting requirements, including separate metering of any water taken under provisions of s14(3)(b) of the Act.
- (d) Measures to achieve reasonable and efficient use of water including consistency with schedule 7 dairy shed water use.
- (e) Measures to avoid, or mitigate to an acceptable level adverse effects on the surface water or groundwater resource and adverse effects on existing authorised groundwater abstractors.
- (f) The potential effect of the take on existing authorised users; on springs or surface water bodies and their values (including water quality); and on tāngata whenua values.

#### Advice Note:

- 1 This rule does not enable an additional volume to be added to an existing 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 The rate of take maybe reduced to the minimum required to achieve the daily volume. Storage maybe needed to enable higher rates of use.

#### **OPTION 3**

## WQ R4 Controlled Activity – Take and Use of Water for existing Dairy Shed Wash Down and Milk Cooling Purposes.

The take and use of up to 50m<sup>3</sup> per day of surface water from a river or stream and/or groundwater for the purposes of dairy shed washdown and milk cooling is a Controlled Activity that does not require notification, 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 interim allocation threshold determined in WQP5(b)(i) or WQP5(e)is not exceeded.
- 4 A resource consent application is lodged within 12 months of this rule becoming operative.
- 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 (Q5 7 day low flow) at the point of abstraction, whichever is the lessor;
  - b. the total abstraction (all users) 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 lessor.
- 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
  - the bore shall be maintained and/or decommissioned in accordance with section 3 and 4 of Schedule 14 of the Bay of Plenty Regional water and Land Plan.
- 7 The application information contains verifiable evidence of the existence of the take at the time of notification of this plan change, 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 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:

- (i) Rate and volume of take.
- (j) Measures to restrict or stop the take during periods of low flow or to enable flow monitoring by Council.
- (k) Metering and reporting requirements, including separate metering of any water taken under provisions of section 14(3)(b) of the Act.

(I) Measures to achieve efficient use of water and consistency with schedule 7 dairy shed water use.

#### Advice Note:

- This rule does not enable an additional volume to be added to an existing resource consent or permitted activity relating to the take and use of water on the same property.
- No pump testing or ecological assessment is required.
- 3 The rate of take maybe reduced to the minimum required to achieve the daily volume. Storage maybe needed to enable higher rates of use.

## WQ R4A Restricted Discretionary Activity – Take and Use of Water for Existing Dairy Shed Wash Down and Milk Cooling Purposes

The take and use of surface water and/or groundwater for the purposes of dairy shed washdown and milk cooling is a Restricted Discretionary Activity that does not require notification, where:

- 7 The take and use is not permitted by a rule in this regional plan.
- 8 The take and use does not meet the requirements of WQ R4
- 9 The take and use is not prohibited by Rule 49.
- 10 A resource consent application is lodged within 12 months of this rule becoming operative.
- 11 A water meter is installed.
- The application information contains verifiable evidence of the existence of the take at the time of notification of this plan change, 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 is proven to be the same or less than that occurring as at 18 October 2016.

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

- (g) Location, rate and volume of take.
- (h) Measures to restrict or stop the take during periods of low flow or aquifer levels.
- (i) Metering and reporting requirements, including separate metering of any water taken under provisions of s14(3)(b) of the Act.
- (j) Measures to achieve reasonable and efficient use of water including consistency with schedule 7 dairy shed water use.
- (k) Measures to avoid, or mitigate to an acceptable level adverse effects on the surface water or groundwater resource and adverse effects on existing authorised groundwater abstractors.
- (I) The potential effect of the take on existing authorised users; on springs or surface water bodies and their values (including water quality); and on tangeta whenua values.

#### **OPTION 4**

## WQ R4 Controlled Activity Take and Use of Water for Existing Dairy Shed Wash Down and Milk Cooling Purposes

The take and use of surface water and/or groundwater for the purposes of dairy shed washdown and milk cooling is a Controlled Activity that does not require notification, subject to the following:

- 7 The take and use is not permitted by a rule in this regional plan.
- 8 The take and use is not prohibited by Rule 49.
- 9 A resource consent application is lodged within 12 months of this rule becoming operative.
- The application information contains verifiable evidence of the existence of the take at the time of notification of this plan change, 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 is proven to be the same or less than that occurring as at 18 October 2016.

#### The options end here.

#### 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> The total daily volume of take does not exceed 35 cubic metres per property.
- The take and use is not permitted by a rule in this regional plan.
- 3 The take and use is not prohibited by Rule 49.
- <u>A resource consent application is lodged within 12 months of this rule</u> becoming operative.
- <u>The application incudes verifiable evidence of the existence of the take as at 18 October 2016, including but not limited to:</u>
  - (i) Any resource consentauthorisation 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) The restriction or cessation of the takes at times of low aquifer levels.
- (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.

#### Advice Note:

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

## WQ R6 Controlled Activity – Take and Use of Water for Existing Municipal Water Supplies

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

- <u>Relates to an existing take authorised by a resource consent as of 18 October 2016.</u>
- 2 Retains the same or lessor rate and volume of water authorised by a-the existing resource consent as of 18 October 2016.
- <u>Is subject to a Water Management Plan, which meets the requirements outlined-set in Schedule 7 Reasonable and efficient use criteria.</u>

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) The restriction or cessation of the take when minimum instream flow or minimum aguifer levels are reached.
- (d) Measures to avoid, remedy or mitigate any adverse effects on:
  - (i) River and stream 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, landscape values, recreational values, existing uses and tāngata whenua values.</u>
- (e) The availability and reliability of supply for existing users and water quality.
- (f) Water measurement, monitoring and reporting requirements.
- (g) The extent to which the applicant has consulted with Māori-tāngata whenua and taken into account Māori-theirtāngata whenua values.
- (h) The extent to which the supply is used for purposes other than domestic water use.

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

## WQ R7 Permitted Activity – Temporary Transfer of Water Permits to Take and Use Water

The transfer of a resource consent to take or 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) The transferor and transferee are part of the same Water User Group.
- (b) The transfer is within the same catchment to any point downstream (excluding downstream tributaries) of the location to which the permit applies.

Written notice signed by the transferor and transferee is given to the Bay of Plenty Regional Council five working days prior to the transfer specifying:

- (i) Full names and addresses of transferor and transferee;
- (ii) If the whole resource consent is not being transferred, the portion of the consent being transferred;
- (iii) Proposed daily volume (cubic metres per day) and rate (litres per second) of take at both sites;
- (iv) The number of the consent to be transferred and the number of the use consent, if required, held by each party;
- (v) The location of new take and use site (shown on a map or identified by NZMS map reference);
- (vi) The date of transfer;
- (vii) Description of purpose for which water is to be used; and
- (viii) The date on which the transfer ceases.
- (c) The resource consent shall retain the same conditions (excluding location).

(d) 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.

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

WQ R8	Controlled Activity - Transfer of Water Permits to Take and Use Water
The transfer of a	a resource consent to take or to use water, in whole or part, to another site, is a
1110 114110101 01	Controlled Activity where the transfer:
1	Is within the same catchment or groundwater aguifer as the original consent.
±	is within the same catcriment or groundwater aquiler as the original consent.
2	Is not from downstream to upstream of an existing hydroelectric power scheme,
	where the transfer relates to surface water.
3	Is for the same or lessor rate and volume of take that the transferer can show has
_	been taken and used for the purpose for which it was granted.
4	Does not increase the total rate of take, where the transfer relates to surface
<u> </u>	water.
_	Decrease official and the control field and
<u>5</u>	— Does not affect any lawfully established takes.
<u>6</u>	Is not to a water resource that is over-allocated, or will not cause the water
	resource to become over allocated.
7	Will not result in a greater total volume of water actually being abstracted from an
-	aquifer, where the transfer relates to groundwater.
Ray of Plenty Re	gional Council restricts its control to the following matters:
Bay of Fielity Ite	gional oodnon restricts to control to the following matters.
<u>(a)</u>	Location, volume and rate of take.
<del>(b)</del>	The nature and/or duration of the transfer – whole or partial/short term or
<del>127</del>	permanent, including having regard to any seasonal restrictions that may be
	necessary.
<del>(c)</del>	The appropriateness of existing conditions to avoid or mitigate effects of the
<del></del>	transfer to the new site including conditions on minimum flows and annual
	<u>volumes.</u>
<del>(d)</del>	The need for conditions preventing concurrent taking where there is a partial
	transfer or the transfer is to two or more points of take.
<del>(e)</del>	The need for conditions relating to water measurement and reporting, including
<u>(0)</u>	telemetry requirements.
(1)	The metallic office of the transfer or existing records a spin or a surface restaurant
<u>(f)</u>	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: Tāngata whenua values include those of the owners of Māori land, if the water source is on such land.

## <u>WQ R9</u> <u>Restricted Discretionary Activity – Transfer of Water Permits to Take and Use Water</u>

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:

Location, volume and rate of take.

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.

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.

The need for conditions preventing concurrent taking where there is a partial transfer or the transfer is to two or more points of take.

The need for conditions relating to water measurement and reporting, including telemetry requirements.

#### The potential effect of the transfer on:

- (i) Other users;
- (ii) Springs, connected groundwater aquifers or surface water bodies; and
- (iii) <u>Tāngata 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 Maori land, if the water source is on such land.

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

Any transfer of a resource consent 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

<u>Until NPSFM locally specific limits are established under WQ P2(e) and (f) The-the take- and use of surface water or groundwater is a Restricted Discretionary Activity where:</u>

The take will not result in the interim limits thresholds determined in any of WQP5(b)(i), WQ P5(b)(ii), WQP5(e)(ii), WQ P5(e)(ii) or WQ P5(e)(ii)set out in WQ P5 set out in WQ P5 being exceeded.

- The take and use is not permitted or controlled by a rule in this regional plan.
- 3 The take and use is not prohibited by Rule 49.
- 4 A water meter is installed.

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

- (a) Location, rate and volume of take.
- (b) Measures to restrict or stop the take during periods of low flow or aquifer levels.
- (c) Metering and reporting requirements, including separate metering of any water taken under provisions of section 14(3)(b) of the Act.
- (d) Measures to achieve reasonable and efficient use of water.
- (e) Measures to avoid, or mitigate to an acceptable level, adverse localised effects on the surface water or groundwater resource and adverse effects on existing authorised groundwater abstractors.
- The potential effect of the take on existing authorised users; on springs or surface water bodies and their values (including water quality).; and on tangata whenua values.
- (f) The extent to which the applicant has consulted with tangata whenua and taken into account their values.
- (g) 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.

#### Rule 43 WQ R11

#### Discretionary Activity - Take and Use of Water

<u>Until NPSFM locally specific limits are established under WQ P2(e) and (f) The the take and use of surface water or groundwater that:</u>

- 1 Is not <u>a</u> Permitted, <u>Controlled or Restricted Discretionary Activity by under a rule in this regional plan; and</u>
- 2 Is not a controlled activity under a rule in this regional plan, and,
- 2 Is not prohibited by Rule 49

is a discretionary activity.

In relation to this rule, Environment Bay of Plenty Regional Council 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 P2(f). and an Instream Minimum Flow Requirement for the stream or river reach has been specified in Schedule 7.

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

To allow Environment Bay of Plenty Regional Council to assess the effects of water takes on the environment on a case by case basis according to the objectives, policies and methods in Section 5.1 Part II WQ of this regional plan. This rule includes, but is not limited to municipal water supply, irrigation, nonconsumptive use by human activities, and other uses.

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#### **Assessment Criteria**

When assessing resource consent applications under this rule, Environment Bay of Plenty Regional Council will have particular regard to, but not be limited to, the following provisions as appropriate to the source of the proposed water take:

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 body.

#### **Definition of Terms**

#### Plan change 9 introduces new definitions for the following:

Crop and rootstock survival water - Water provided for the survival of crop or root stock intended for human consumption. This includes permanent horticultural crops (e.g. kiwifruit, avocado, stonefruit, pipfruit) and hydroponic glasshouse crops and excludes all annual crops, pasture species, animal fodder crops and maize.

Instream Minimum Flow Requirement – the flow of water in a river or stream necessary to sustain aquatic life, water quality, recreational use, outstanding natural features or Maori cultural values.

<u>Municipal water supply</u> - A reticulated water supply provided by a territorial authority primarily to meet domestic, drinking water and public health requirements. The supply may include industrial commercial and irrigation supplies.

<u>Sustained decline in groundwater level - a continuing long term decline in mean annual groundwater levels or artesian pressures as measured during the winter period in a dedicated Council monitoring bore.</u>

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 Requirement
Waitahanui Stream	From confluence with Whakahaupapa Stream to stream mouth	3.8 m <sup>3</sup> /s

## Schedule 7 – Reasonable and Efficient Use Criteria

The amount of water taken pursuant to a rule in this plan must be reasonable and justifiable with regard to the intended use and, where appropriate, comply with this schedule.

#### <u>Irrigation</u>

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. The model must reliably predict annual irrigation volume within an accuracy of 15%.

The annual volume calculated using the model shall meet with the following criteria:

- (a) An irrigation application efficiency of 80%, and
- (b) Demand conditions that occur in nine out of 10 years.

The assessment shall 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 document growth plans of the business and the requirements of the crop through all phases of its lifecycle.

#### Municipal water supplies

The Water Management Plan shall establish a long term strategy for the water requirements of domestic or municipal suppliers and their communities. It shall demonstrate that the 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, to an extent which is appropriate for the scale of the activity, provide the following information:

A description of the water supply system including system operation, distribution extent, levels of service, water use measurement, maintenance and asset management procedures.

- A comprehensive assessment of existing and future demands projections for commercial and industrial growth (NPSUDC) for water with regard to an assessment of reasonable population growth—undertaken in accordance with NPSUDC PB1 (long term housing and business development capacity assessment within the planning horizon to meet the following:
  - a) Reasonable domestic needs.
  - b) <u>Public health needs in accordance with requirements under any Act of Parliament or regulation.</u>
  - c) Reasonable community needs (e.g. for public amenities).
  - d) Reasonable commercial, rural supply and industrial needs.
  - e) An assessment as to how each of the assessments required by clauses a) to d) above is predicted to vary over time.
  - f) A justification for each of the assessments required by clauses a) to e) above including 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, economic development strategies or spatial plans.
- Any existing or proposed water pricing procedures, including the extent of metering of individual customers and any linkages with wastewater pricing or management.
- 4 <u>How water reticulation networks are planned and managed to minimise their water losses as far as practicable.</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 including leak/loss detection, and repair and unauthorised water use investigation.
- Water saving targets for the full range of demand conditions including demand saving targets 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 Any external auditing and benchmarking procedures that have been adopted.
- 9 A drought management plan that includes:
  - (i) Steps to be taken to reduce consumption during water shortage conditions, including ensuring that commercial, industrial and irrigation uses within the municipal water supply 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 they were not part of the municipal supply network.
  - (ii) Public and commercial user education programmes.
  - (iii) steps taken to reduce consumption when demand is approaching the maximum take volume specified under the relevant resource consent.
  - (iv) <u>Enforcement procedures.</u>
- Actions, performance measures and a timeline for implementing actions. The actions and performance measures identified will depend on the circumstances of each applicant.
- 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 take volumes to more closely reflect demand requirements over time.</u>
- An assessment of the efficiency of Ability to reduce the amount of water used by existing industrial and agricultural users, and identification 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

- <u>consent.</u> Efficiency assessment should utilise the reasonable and efficient use criteria listed in <u>schedule 7 or relevant industry standards.</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</u> authorised.
- 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).
- 4817 The projected future needs shall be identified in terms of:
  - (a) Location of take; and
  - (b) Volume of take (including any seasonal variations); and
  - (c) The date at which the water is likely to be required.

#### 18 Dairy shed water use:

For the purpose of determining whether an application to take and use water under WQ R4 is reasonable and efficient, the following standards shall 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) For the purpose of calculating cow numbers the maximum herd size milked in the 2016/17 2017/17 season shall be used, unless the applicant can demonstrate that a higher number had been milked previously and the reduction was temporary.
- (d) The average volume 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.
- (e) 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 volumes.

#### Other Uses

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.