E2. Water quantity, allocation and use

E2.1. Introduction

Demand for water already equals or exceeds availability in some surface waterbodies and aquifers. Future growth is expected to increase this demand and competition for fresh water and geothermal water. Choices then need to be made about the allocation of water for municipal water supply, industrial and rural activities, and other users.

The Plan provides for the taking and use of fresh water for domestic purposes, animal drinking and firefighting purposes which are allowed by the Resource Management Act 1991 without the need for resource consents. This is enabled by section 14 of the Resource Management Act 1991.

The objectives and policies of this section address the demand for fresh water and geothermal water with the available surface and groundwater resources while protecting the life supporting capacity of water. Improved water allocation outcomes are sought across a whole catchment or aquifer, support more efficient use of water and reduce wastage. They also address priority for future allocations of geothermal water, heat or energy.

The National Policy Statement for Freshwater Management requires that freshwater objectives are established and environmental flows and or levels set for all freshwater bodies. Water availability, flows and levels are included in Appendix 2 River and stream minimum flow and availability and Appendix 3 Aquifer water availabilities and levels to guide the assessment of resource consent applications to take and use surface water from lakes, rivers, streams, springs or wetlands, and take and use groundwater from aquifers. These guidelines will be reviewed and updated to meet the requirement of the National Policy Statement for Freshwater Management where applicable. The National Policy Statement for Freshwater Management also requires the inclusion of interim policies in the Plan to guide fresh water allocation. This is until such time as the Plan's provisions give full effect to the National Policy Statement for Freshwater Management.

E2.2. Objectives [rp]

(1) Water in surface rivers and groundwater aquifers is available for use provided the natural values of water are maintained and established limits are not exceeded.

(2) Water resources are managed within limits to meet current and future water needs for social, cultural and economic purposes.

(3) Freshwater resources available for use are managed and allocated in order of priority to provide for domestic and municipal water supplies, animals, and economic development.

(4) Water resources are managed to maximise the efficient allocation and efficient use of available water.

(5) Mana Whenua values including the mauri of water, are acknowledged in the allocation and use of water.

E2.3. Policies [rp]

Priority of water use

(1) Manage the allocation of fresh water within the guidelines provided by Appendix 2 River and stream minimum flow and availability and Appendix 3 Aquifer water availabilities and levels and give priority to making freshwater available for the following uses (in descending order of priority):

(a) existing and reasonably foreseeable domestic and municipal water supply and animal drinking water requirements;

(b) existing lawfully established water users;

(c) uses of water for which alternative water sources are unavailable or unsuitable; and

(d) all other uses.

(2) Ensure allocations support the outcomes sought by relevant objectives and policies in B7.3 Freshwater systems.

(3) Manage the allocation of geothermal water, heat or energy within the guidelines provided by Appendix 3 Aquifer water availabilities and levels and give priority to making water, heat or energy available for (in descending order of priority):

(a) in accordance with tikanga Māori for the communal benefit of Mana Whenua of the area;

(b) existing lawfully established water uses;

(c) heating public pools; or

(d) all other uses.

Efficient allocation and use

(4) Promote the efficient allocation and use of freshwater and geothermal water by:

(a) requiring the amount of water taken and used to be reasonable and justifiable with regard to the intended use, and where appropriate:

(i) municipal water supplies are supported by a water management plan;

(ii) industrial and irrigation supplies implement best practice, in respect of the efficient use of water for that particular activity or industry; or

(iii) all takes (other than municipal water supplies from a dam) are limited to a maximum annual allocation based on estimated water requirements;

(b) requiring consideration of water conservation and thermal efficiency methods;

(c) facilitating the transfer of surface water take permits, provided the transfer is within the same surface water catchment and does not result in site-specific adverse effects;

(d) encouraging the shared use and management of water through water user groups or other arrangements where it results in an increased efficiency in the use and allocation of water; and

(e) providing for storage and harvesting of fresh water.

Water allocation and availability guidelines

(5) Manage the taking and use of surface water from rivers, streams and springs and taking and use of groundwater from aquifers to meet all of the following except where water allocation exceeds or is close to exceeding the guidelines (refer to Policy E2.3(10)):

(a) the minimum flow and availability guidelines in Table 1 River and stream minimum flow and availability in Appendix 2 River and stream minimum flow and availability are not exceeded; and

(b) the aquifer availability and groundwater levels in Table 1 Aquifer water availabilities and Table 2 Interim aquifer groundwater levels in Appendix 3 Aquifer water availabilities and levels are not exceeded.

Take and use of water

(6) Require proposals to take and use water from lakes, rivers, streams, springs or wetlands to demonstrate all of the following:

(a) the taking of surface water from any river or stream is within the guideline in Table 1 River and stream minimum flow and availability in Appendix 2 River and stream minimum flow and availability, except in accordance with Policy E2.3(11);

(b) appropriate water levels and downstream flow regimes will be maintained, including:

(i) low flows in rivers and streams to protect in-stream values;

(ii) flow variability in rivers, streams and springs;

(iii) water levels and flows in wetlands ensure vegetation and habitat values of the wetland are protected throughout the year;

(iv) water levels in lakes maintain the ecological values and water quality of the lake and its shoreline stability, and enable recreational use; and

(v) existing lawfully established taking of water is not adversely affected;

(c) the taking of water will be at times of the day or year that will safeguard the identified freshwater values of the water body;

(d) intake structures will be designed, constructed, operated and maintained to avoid adverse effects on biota, including the entrainment and impingement of fish; and

(e) there are options for implementing water conservation measures in times of water shortage.

(7) Require all proposals to take and use groundwater from any aquifer to demonstrate that:

(a) the taking is within the water availabilities and levels for the aquifer in Table 1 Aquifer water availabilities and Table 2 Interim aquifer groundwater levels in Appendix 3 Aquifer water availabilities and levels, except in accordance with Policy E2.3(11), and meeting all of the following:

(i) recharge to other aquifers is maintained; and

(ii) aquifer consolidation and surface subsidence is avoided.

(b) the taking will avoid, remedy or mitigate adverse effects on surface water flows, including the following:

(i) base flow of rivers, streams and springs; and

(ii) any river or stream flow requirements and in particular the minimum stream flow and availability in Appendix 2 River and stream minimum flow and availability.

(c) the taking will avoid, remedy or mitigate adverse effects on terrestrial and freshwater ecosystem habitat;

(d) the taking will not cause saltwater intrusion or any other contamination;

(e) the taking will not cause adverse interference effects on neighbouring bores to the extent their owners are prevented from exercising their lawfully established water takes;

(f) Policy E2.3(7)(e) above will not apply in the following circumstances:

(i) where it is practicably possible to locate the pump intake at a greater depth within the affected bore; or

(ii) where it can be demonstrated that the affected bore accesses, or could access, groundwater at a deeper level within the same aquifer, if drilled or cased to a greater depth.

(g) the proposed bore is capable of extracting the quantity of groundwater applied for; and

(h) the proposal avoids, remedies or mitigates any ground settlement that may cause distress, including reducing the ability of an existing building or structure to meet the relevant requirements of the Building Act 2004 or the New Zealand Building Code, to any existing:

(i) buildings;

(ii) structures; or

(iii) services including roads, pavements, power, gas, electricity, water and wastewater networks and fibre-optic cables.

(8) Consider mitigation options, where there are significant adverse effects on the matters identified in policies E2.3(6) and (7) above, including any of the following:

(a) consideration of alternative locations, rates and timing of takes for both surface water and groundwater;

(b) use of alternative water supplies;

(c) use of water conservation methods when water shortage conditions apply;

(d) provision for fish passage in rivers and streams;

(e) wetland creation or enhancement of existing wetlands;

(f) riparian planting; or

(g) consideration of alternative designs for groundwater dewatering proposals.

(9) Require proposals to take and use surface water and groundwater to monitor the effects of the take on the quality and quantity of the water resource and to:

(a) measure and record water use and rate of take;

(b) measure and record water flows and levels;

(c) sample and assess water quality and freshwater ecology;

(d) measure and record the movement of ground, buildings and other structures; and

(e) monitoring should be of a type and scale appropriate for the activity.

(10) Manage water availability, where water allocation exceeds or is close to exceeding the guidelines in Table 1 River and stream minimum flow and availability in Appendix 2 River and stream minimum flow and availability and Table 1 Aquifer water availabilities and Table 2 Interim aquifer groundwater levels in Appendix 3 Aquifer water availabilities and levels by:

(a) not granting new consent applications to take water except where provided for by Policy E2.3(11);

(b) reducing existing takes over time and phasing out any over allocation by:

(i) encouraging voluntary reductions in water allocations; and

(ii) reviewing existing consents to align water allocations to the actual historical use of water, for horticultural operators this will be averaged across the full rotational cycle of the crops grown.

(c) exempting existing allocations for municipal water supply under Policy E2.3(10)(b)(ii) above from review where a water management plan demonstrates a necessary increase in abstraction to cater for planned urban growth;

(d) reviewing existing consents to require the efficient use of water; and

(e) accounting for takes expressly permitted in this Plan, or allowed under section 14(3)(b) of the Resource Management Act 1991.

(11) Allow takes that exceed the guidelines in Table 1 River and stream minimum flow and availability in Appendix 2 River and stream minimum flow and availability and Table 1 Aquifer water availabilities and Table 2 Interim aquifer groundwater levels in Appendix 3 Aquifer water availabilities and levels in the following circumstances:

(a) For guidelines in Table 1 River and stream minimum flow and availability in Appendix 2 River and stream minimum flow and availability, when the river or stream flow is greater than the median flow, provided the total take does not exceed 10 per cent of the flow in the river or stream at the time of abstraction, and natural flow variability is maintained; or

(b) For all guidelines, where it is appropriately demonstrated in terms of the requirements of Policy of E2.3(6)(b) or Policy E2.3(7), that additional water is available for allocation.

Temporary water shortage, including minimum flow and groundwater conditions

(12) Consider the use of water shortage directions under section 329 of the Resource Management Act 1991 to impose temporary restrictions on water take, use, allocation, damming or diversion or discharge of contaminants into water in times of serious temporary water shortage, including where a river is at or below its Table 1 River and stream minimum flow and availability specified in Appendix 2 River and stream minimum flow and availability or groundwater levels are below the Table 2 Interim aquifer groundwater levels in Appendix 3 Aquifer water availabilities and levels having regard to the following priority uses:

(a) takes for firefighting purposes, allowed under section 14(3)(e) of the Resource Management Act 1991;

(b) takes expressly permitted in this Plan or allowed under section 14(3)(b) of the Resource Management Act 1991;

(c) consented or permitted takes for domestic and municipal water supply taken in accordance with a water shortage management plan in any relevant Water Management Plan;

(d) takes for lifeline utilities, marae, residential accommodation and schools not connected to municipal water supply;

(e) takes for perishable food processing; or

(f) takes for irrigating water sensitive crops for human consumption.

National Policy Statement for Freshwater Management 2014

(13) When considering any application the Council must have regard to the following matters:

(a) the extent to which the change would adversely affect safeguarding the life-supporting 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 freshwater and of any associated ecosystem resulting from the change would be avoided.

(14) Policy E2.3(13) 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 freshwater 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).

(15) Policies E2.3(13) and (14) do not apply to any application for consent first lodged before the National Policy Statement for Freshwater Management 2011 took effect on 1 July 2011.

Note 1

Policies E2.3(13) to (15) above are required by Policy B7 of the National Policy Statement for Freshwater Management to be incorporated in regional plan provisions under section 55 of the Resource Management Act 1991 without using the process in schedule 1 of the Resource Management Act 1991. They apply until provisions that give effect to National Policy Statement for Freshwater Management Policy B1 (allocation limits), Policy B2 (allocation), and Policy B6 (over-allocation) are operative.

(16) Develop catchment specific limits for freshwater quantity with Mana Whenua, through community engagement, scientific research and mātauranga Māori.

Comprehensive reviews of consents

(17) Require resource consents granted to take, use or dam water and to discharge contaminants to land or freshwater to be for a duration and to include a condition setting the review date(s) of the consent, that will enable the concurrent processing or review of all consents/replacement applications, as a basis for a comprehensive and integrated assessment of water quality and water quantity issues in a specific catchment and/or aquifer system.

Damming of surface water

(18) Encourage the off-stream damming of water in preference to the damming of rivers or streams.

(19) Avoid damming water in the Natural Lake Management Areas Overlay, Wetland Management Areas Overlay and Natural Stream Management Areas Overlay other than where:

(a) these areas are in a Water Supply Management Areas Overlay and the damming is necessary for municipal water supply;

(b) the damming is necessary for the protection or maintenance of the natural values of the management area and there are no practicable alternative methods to achieve this protection; or

(c) the damming is necessary for managing hazards or the provision of infrastructure and there are no practicable alternatives to damming the water.

(20) Require proposals to dam a river to demonstrate the following:

(a) adverse effects on fish passage are avoided or remedied, where native fish and/or habitats actually or potentially exist upstream;

(b) appropriate water levels and downstream flow regimes will be maintained, including:

(i) low flows in rivers and streams to protect in stream values;

(ii) downstream flow variability;

(iii) water levels and flows in wetlands to protect vegetation and habitat values of the wetland throughout the year; and

(iv) water levels in lakes to protect the ecological values and water quality of the lake, maintain shoreline stability and enable recreational use.

(c) existing lawfully established upstream and downstream water uses are not adversely affected by the damming proposal, including those allowed by section 14(3)(b) of the Resource Management Act 1991;

(d) Mana Whenua values associated with the wetland, lake or river are identified and the effect of the proposal on these values are assessed and taken into account;

(e) the design, construction, operation and maintenance of the dam avoids significant adverse effects and remedies or mitigates other effects on the following:

(i) flooding;

(ii) bank or bed erosion or aggregation;

(iii) drainage of any property;

(iv) land instability;

(v) people and communities;

(vi) the habitat of fauna or flora, including wetlands, either upstream or downstream of the dam;

(vii) catchment conditions arising from the scale, location or number of dams in the catchment; or

(viii) risk of dam failure.

(f) if applicable, recognise the Vision and Strategy for the Waikato River in Schedule 2 of the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010.

(21) Require proposals for new, change or replacement applications to dam a river or stream or dam water with an off-stream dam to undertake monitoring of a type and scale appropriate for the activity and its effects, including:

(a) inspection of dam embankments and spillways;

(b) measurement and recording of embankment internal water levels and pressures;

(c) sampling and assessment of water quality and freshwater biota in on-stream dams; and

(d) variable flows below on-stream dams where required.

Surface water diversions

(22) Require proposals to divert surface water to demonstrate the diversion will to the extent practicable avoid significant adverse effects and remedy or mitigate other adverse effects including where relevant, effects on:

(a) existing lawfully established surface water takes including those allowed by section 14(3)(b) of the Resource Management Act 1991;

(b) existing buildings, structures and services;

(c) existing flood hazard risks;

(d) river bank stability;

(e) scheduled historic heritage places or scheduled sites and places of significance to Mana Whenua;

(f) people and communities; and

(g) the life supporting capacity of freshwater, ecosystem processes, and indigenous species and their ecosystems.

Diversion of groundwater

(23) Require proposals to divert groundwater, in addition to the matters addressed in Policy E2.3(6) and (7) above, to ensure that:

(a) the proposal avoids, remedies or mitigates any adverse effects on:

(i) scheduled historic heritage places and scheduled sites and places of significance to Mana Whenua; and

(ii) people and communities.

(b) the groundwater diversion does not cause or exacerbate any flooding;

(c) monitoring has been incorporated where appropriate, including:

(i) measurement and recording of water levels and pressures; and

(ii) measurement and recording of the movement of ground, buildings and other structures.

(d) mitigation has been incorporated where appropriate including:

(i) minimising the period where the excavation is open/unsealed;

(ii) use of low permeability perimeter walls and floors;

(iii) use of temporary and permanent systems to retain the excavation; or

(iv) re-injection of water to maintain groundwater pressures.

Drilling holes and bores

(24) Require proposals to drill holes or bores to demonstrate that the location, design and construction:

(a) complies with the New Zealand Standard on the Environmental Standard for Drilling of Soil and Rock (NZS 4411:2001);

(b) prevents contaminants from entering an aquifer;

(c) prevents cross-contamination between aquifers with different pressure, water quality or temperature;

(d) prevents leakage of groundwater to waste;

(e) avoids the destruction, damage or modification of any scheduled historic heritage place or scheduled sites and places of significance to Mana Whenua; and

(f) avoids disturbance of wetlands and significant ecological areas where practicable.

Quarrying

(25) Enable regionally significant mineral extraction activities (extraction within groundwater and dewatering) provided that significant adverse effects are managed through considering all of the relevant policies in this section.