Water Allocation Options and Resource Consent Requirements for the Waimea Water Augmentation Project

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Contents

1. Background to this Study

In 2007 Tonkin & Taylor Ltd and its sub-consultants completed a Phase 1 pre-feasibility evaluation of a number of options to provide water storage for long-term irrigation and community supplies in the Waimea Basin, Tasman District. The evaluation was undertaken on behalf of the Waimea Water Augmentation Committee (WWAC).

The overall principle of the study was to identify and develop a water augmentation scheme (the Waimea Water Augmentation (WWA) Scheme) to capture excess water for storage and release that water back into the Waimea River system during periods of high water demand and/or low natural water flows to augment those supplies, either directly or via recharging of the groundwater system.

The outcome of that Phase 1 study was to focus feasibility investigations on a water storage dam and reservoir site located in the upper Lee River catchment, a tributary of the Waimea River.

In 2007 WWAC initiated Phase 2 of the study, to take the Lee investigation programme to a feasibility level. The Phase 2 feasibility study is based on a potential dam on the Lee River, at a site approximately 300 metres upstream of the confluence of Anslow Creek and the Lee River. The reservoir would have a storage capacity of about 13 million m^3, a dam height of approximately 52 m, and a 4-km long reservoir with a water surface area, when full, of about 65 hectares.

The WWA scheme will release water from the dam into the Lee River to augment the natural flow of the Wairoa and Waimea rivers, for two purposes:

1. *Consumptive water use* by irrigation, industry and urban users, including an allowance for future water demand. This component of the flow equals about 70% of the water released. This consumptive portion can be further divided into water available within the 'Zone of Effect'[1] vs that available for consumption further from the rivers only with additional water distribution infrastructure (see Fenemor & Bealing 2009)

2. *Enhancement of environmental flows* within the Wairoa and Waimea rivers. This component of the flow equals about 30% of the water released. The management objective is to improve low flows by maintaining a minimum flow of 1100 l/sec at Appleby Bridge. This non-consumptive portion can be divided into the flow and water quality requirements for the various values and uses from the Lee Valley dam down to the Waimea Inlet.

As part of the Phase 1 WWA pre-feasibility study, a review was completed of water allocation issues and the policy context within the Tasman Resource Management Plan (TRMP) for implementation of the scheme. This further review at the feasibility stage is to refine those options in light of directions established on governance, funding, and management structure for the scheme, along with mostly minor changes to Council's TRMP since the earlier report (Fenemor 2007). Both reports should be considered together for decision-making on management and consenting for the WWA scheme.

[1] Zone of Effect comprises the parts of the aquifers where increased river flow is predicted to raise the water table or piezometric levels of the aquifers during a design drought year, or which already have adequate well yields even if the water table is not projected to rise, or which have adequate reticulation to supply part of the projected water demand, for example, the Waimea East and Redwoods Valley irrigation schemes (Fenemor & Bealing 2009).

2. Purposes of this Report

2.1 Water Allocation

1. Canvass options for initial and ongoing allocation of water among consumptive users (the 70% block)
2. Suggest ways to encourage efficient and sustainable use of allocated water (as this will be a requirement under the TRMP for the Council to consider in granting consents for the scheme to take and use water)

2.2 Scheme RMA Process

3. Summarise likely consent requirements for gaining approvals for the scheme to proceed
4. Based on (1)–(3) above, identify potential plan changes that may be necessary for Council's TRMP which would appropriately provide for scheme components and facilitate ongoing operation of the scheme

3. Directions from Previous Work and from the Waimea Water Augmentation Committee (WWAC)

3.1 Recap from Phase 1

There is a need to distinguish between those water allocation design options the WWAC may wish to pursue and those that may be required by TDC as regulatory authority granting consents for the scheme. The WWAC will want a scheme that is affordable yet likely to gain resource consents; the TDC would grant consents for a scheme that avoids, remedies or mitigates adverse environmental effects in compliance with TRMP objectives, policies and rules.

The Council has three roles: one in facilitating the planning and implementation of the project through the WWAC, one as a water user (responsible for supplying water to Tasman District), and the third as consent authority responsible for independently (using commissioners) deciding the resource consent applications for the scheme to proceed, then monitoring and enforcing its conditions of operation under the Resource Management Act 1991.

The Phase 1 report (Fenemor 2007) identified a range of options for achieving efficient and flexible allocation of water from the WWA scheme.

On the efficiency question, it stated:
Irrigation efficiency is relevant to the water augmentation scheme because efficient use of the augmented supply will enable more revenue to be generated, reduce the environmental impacts of use of that water, and potentially a wider range of users will be able to utilise and therefore pay for the scheme.

On the flexibility question, it stated:
The flexibility of the system is important when no further water is available for allocation, and some system is needed to allow water uses to be moved to higher valued uses. This is the re-allocation challenge. It is even more important for a water augmentation scheme where potential water users need a way to recoup or divest their investment in the scheme if they no longer want the water.

In summary the following options were identified at Phase 1 for allocating water from the WWA:

- Soil-based allocations were supported for irrigation water uses, but adding crop-based allocations to water permits was not recommended because of administrative complexity and cost
- Maintain the current 35 mm/week basis allocation for irrigation in conjunction with introduction of flexibility to transfer allocations when the augmentation scheme is operational (WWAC has since decided for reservoir sizing purposes to use an average overall irrigation water allocation of 30 mm/week)
- Provision for transfers of water permits should be incorporated into scheme planning, along with removal of the 'bona fide' reviews, as done for the Wai-iti scheme
- The option of aggregating water permits of a group of water users, in the same way that the Waimea East Irrigation Company is able to operate, was seen as warranting further consideration
- The option of user-driven water management plans was seen as warranting further work, including design options and legal issues for implementation.

These options are discussed further below, in light of directions from WWAC and from the Phase 2 investigations.

3.2 Changes to TRMP Policies & Rules since 2007 Report

There have been some changes to the policies and rules in the TRMP relating to water allocation within the Waimea catchment since the earlier report was issued (Fenemor 2007). These changes have occurred either as a result of variations to the TRMP or through the settlement of appeals. The changes of note are summarised in Appendix 1. An updated list of policies is included in Appendix 2 and an updated list of rules is included in Appendix 3. As the changes since 2007 are relatively minor, the summary of the water allocation policies and rules provided in the 2007 report remains applicable.

3.3 Directions from WWAC

Options for water allocation and consenting depend on governance and funding approaches decided for the scheme (Northington Partners, 2009); hence direction was sought from the WWAC Technical Committee at their meeting on 9 Nov 2009. Their preferences are also referred to in the assessment of options below.

4. Water Allocation Options

4.1 Principles for Water Allocation

We suggest the following principles should guide design of a water-allocation system, whether for a catchment or a reticulated water scheme. WWA has elements of both:

- Efficiency, comprising *allocative efficiency* (the water resource is allocated in a way that allows the maximum possible nett benefit from its use, i.e. optimal allocation of uses), *productive or technical efficiency* (maximum output from a given set of inputs, i.e. best practice) , and *dynamic efficiency* (achieving an efficient allocation of resources over time, i.e. adaptive)
- Equity, meaning that all those who benefit from the scheme contribute to its cost in proportion to the benefits they receive
- Adaptability, meaning the scheme should be managed so its operation can adapt to changing returns from the various water uses, and to changes in community preferences for the water
- Consistency where possible with current water allocation practice, because that is what existing water users are familiar with.

Note that in this report, when we discuss 'allocations' we are referring to a prescribed rate or volume of water taken. This may, for example, be expressed as litres per second or cubic metres per week, or hectares equivalent of irrigation water as used in the Phase 1 report.

4.2 Options for water take and use consents

There are two broad models for the water permits to take and use water from the scheme. The first is where the scheme owner holds consents for the taking and use of the water on shareholders' land (examples being the Waimea East Irrigation Company and Central Plains Water Trust in Canterbury). The second model is where those consents are held by individual water users/shareholders (an example being the Kainui Dam scheme in the Wai-iti).

Consents held by WWA scheme

Advantages:

- Simple for TDC to administer
- WWAC exercises control like Waimea East Irrigation Company does
- facilitates self-management

Disadvantages:

- WWAC liable for compliance by individual water users;
- there may be a perception that with mandatory membership, control by WWAC rather than TDC is not seen as democratic;
- existing users would need to agree to WWA replacing their consents with WWA shares;
- WWAC would need to set up an administration body to carry out or contract out this function

Consents held by individual water users

Advantages:

- Similar to current allocations via water permits
- Familiar to existing users

Disadvantages:

- TDC responsible for ensuring users' compliance
- WWAC divorced from and not responsible for how the water is used

Preferred Option for Water Take & Use Consents

The WWAC Technical Committee has indicated a preference for the first option, i.e. consents for water take and use held by the WWAC scheme.

WWAC has also indicated a preference for a community-owned governance arrangement for the scheme managed by a board of water users and relevant environmental representatives (Northington Partners 2009). This would imply an allocation structure with shareholders owning and liable for the costs of saleable shares of the consumptive 70% allocation. One share could be equivalent (say) to 1 hectare of irrigation, i.e. a rate of use of 300 m^3/week or 30 mm/ha/week.

Under the second option, each user could hold their own water permit, authorising their taking and use of their share of the consumptive allocation, and linked for charging purposes to the property title where the water is to be used.

4.3 Initial and Ongoing Allocations of WWA Scheme Water

Implementation of the WWA scheme will bring a transition from the current arrangement that some properties hold a water permit allowing them to take and use water, while others do not. It is envisaged that the TRMP would be changed to facilitate this transition from existing water permits into the WWA scheme.

Initial Allocations within Zone of Effect

Options for making initial allocations to water users *within a prescribed Zone of Effect* are outlined below.

(1) Allocations of water for irrigation water use could be made mandatory for all land parcels within the prescribed zone. It could also be mandatory for the amount allocated already to any other existing water uses (i.e. non-irrigation) within that zone. These allocations would be based on the assessed irrigable area of each land title within the Zone of Effect, or the level of existing allocation (or some higher allocation nominated by the user) for other water uses. Payment for allocated water could be implemented through a differential rate levied by the council, following consultation with and majority agreement by those affected. There could be an exemption for land parcels less than a specified size, e.g., 1 hectare. The definition of irrigable area could be based on the criteria stated in the Tasman Regional Water Study[2] (Lincoln Environmental 2003) or some tighter specification agreed with TDC.

[2] The **area of irrigable land** is calculated using soil type, slope, aspect, elevation, and rainfall criteria. Both suitable and marginal soils are included. Unirrigable areas within stopbanks, and land with high groundwater tables and properties less than 1 ha in area or zoned for urban use are excluded.

(2) As a sub-option for (1) above, allocations could be based on type and location of the particular water use on that land parcel. This approach would differentiate allocations based on reasonable needs of different uses, as applies at present when one applies for a water permit.

For irrigation, the current allocation rate is 350 m^3/ha/week or 35 mm/week in the Waimea Basin. For rural residential supply, an allocation of 2 m^3/day per property is common. This 'reasonable use' approach may be needed if demand for shares in the scheme is likely to exceed availability, but given the cost and large storage volume planned for the scheme, this is probably unlikely.

(3) Allocations could be as nominated by each landowner, whether an existing water permit holder or a new user. Landowners within the prescribed Zone of Effect could nominate whether they wish to be part of the scheme, and need not nominate the entire irrigable area of their property for determining their allocation. However, all existing water permits would be cancelled, otherwise non-participating landowners would benefit from the scheme without being shareholders.

Landowners' allocations also need not necessarily be related to their 'reasonable needs', so they could invest in allocations for future uses or for transfer sale to others. This approach need not be limited to within the Zone of Effect, and could therefore attract investor shareholders in addition to user shareholders to assist in getting the scheme up and running.

(4) Existing water permit holders could be issued with the same allocation from the scheme as they have at a specified date, and new users could apply for whatever allocation they nominate. This was the approach taken for the Kainui scheme in the Wai-iti, with new users being limited in their water permit application to water required for their land area (i.e. reasonable use). Again, new users need not necessarily be limited to within the Zone of Effect.

The WWAC Technical Committee on 9 November 2009 indicated an informal preference for the first option above.

Outside the Zone of Effect for water released down-river some 1275 ha has been identified as potential Distribution Zones where reticulation would make water available to landowners who otherwise would not benefit from flow releases (Fenemor & Bealing 2009). These are in the lower Wai-iti Valley, Redwood Valley and Waimea West, Rabbit Island, the Swamp Road area and Haycocks Road South. In addition there is potential future urban water demand across the NCC boundary.

Beyond these Distribution Zones, reticulation would be more expensive; however, the WWAC may wish to keep open the option of allowing anyone to buy allocations from the scheme. Depending on the mode of allocating and charging for shares, allocations may or may not need to be attached to a land title.

Initial Allocations within Distribution Zones requiring additional reticulation

Initial allocations could be allocated within Distribution Zones in the following ways.

(5) A Tier 2 (lower cost) mandatory allocation per option 1 above. WWAC may consider this as a way to broaden the number of potential water users funding the scheme and lower costs to individuals overall. This may be particularly justified for some Distribution Zones with lower costs for reticulation or the possibility that there may be a particular benefit for water to be made available within their area.

(6) Mandatory allocation per option 1 above if more than 50% of landowners in a Distribution Zone agree to fund water distribution in that zone. If this decision occurred later, WWAC would have had to reserve an additional allocation (future demand) so that the water was actually available for allocation.

Initial Allocations outside both the Zone of Effect and the Distribution Zones

(7) In combination with a chosen allocation regime within the Zone of Effect, all land parcels outside that zone could be denoted as Tier 2 beneficiaries of the scheme. Those with existing water permits could be allocated WWA shares at existing allocation rates. As the scheme will have created a sustainable minimum flow regime, allocation limits for water management zones even beyond the Zone of Effect would be able to be increased. Additional allocations could be made from those zones up to the new sustainable yield of each water management zone (allocations beyond these new limits would require reticulation from areas of plenty, as discussed earlier). This option would create a Tier 2 charging regime, and those within Tier 2 obtaining shares would pay an additional amount for access to the natural water resource in their management zone.

(8) Allocations could be offered to anyone wishing to invest in and support the WWA scheme. Such allocations could only be exercised within the prescribed Zone of Effect, or further away if reticulation was paid for by the shareholder. This 'investment option' may appeal to iwi groups, electricity generators, foresters or construction contractors involved with the scheme or private investors. It would allow them to hold and trade allocations, or alternatively to fund specific infrastructure components on a commercial basis. It may also appeal to investors who believe the value of shares in the scheme will rise once it proceeds, as has happened for other schemes.

Ongoing Allocations – Facilitating Re-Allocation

An ongoing allocation mechanism is needed to facilitate re-allocation to high valued water uses during the life of the scheme. Options include

(9) Transfers of water permits are facilitated, and 'bona fide reviews' no longer occur to reduce or cancel unexercised allocations, or

(10) WWAC or TDC operate as a broker for reallocating allocations relinquished by users, or

(11) A schedule of rules is developed to govern approval of permanent transfers, for example, transfers to beyond scheme boundaries, or for specified new types of water use, or to restrict certain transfers for community reasons (e.g., prevent monopoly control; maintain productivity of lands, etc.), and

(12) Allocations reserved for future use would be held and allocated either by WWAC or the relevant local authority according to rules in line with the options selected above. For example, allocations reserved for longer term urban demand could be allocated in the meantime for shorter term use by irrigators or other water users.

Preferred Water Allocation Options

The indicative preference of the WWAC Technical Committee was for option (1) – mandatory membership of the scheme within a prescribed zone.

Other options which we suggest deserve particular consideration are

- option (7) – a second tier charging regime within the catchment boundary but beyond the Zone of Effect of released water
- option (8) – the investor option, particularly if the charges for the scheme are at a level which may make the scheme difficult to sell to users
- options (9) and (12) facilitating transfers of shares and reserved allocations.

4.4 Reliability of Supply

An operating regime will be needed for the scheme, based on meeting scheme commitments to shareholders for the total amount of water allocated, maintaining the minimum flow regime, complying with consent requirements, and including a precautionary rationing regime when reservoir levels fall below designated trigger levels. The latter may be addressed through a Drought Management Plan.

A process will also be needed for WWAC response when a shareholder within the prescribed zone cannot reliably access their water allocation, particularly if mandatory participation in the scheme is required of some water users.

4.5 Achieving Efficiency and Sustainability of Water Use

If WWAC wishes to hold consents for use of water by scheme shareholders (its preliminary preference), it will need - for consent application purposes – to demonstrate how the scheme will achieve efficient and sustainable use of scheme water. Scheme water would include both release of stored water as well as the component of natural flow allocated to consumptive users.

If instead individual landowners and water users are required to hold individual water permits for their taking and use of water, the TDC is also likely to require an Assessment of Environmental Effects demonstrating how efficient and sustainable use of their individual water allocations will be achieved.

We suggest the following could be elements of WWAC's scheme design to meet these RMA obligations:

(1) WWA Sustainability Protocol

This would describe the scheme operating regime, responsibilities of key staff, and reporting requirements. It would logically also include a description of the environmental management objectives of the scheme divided into those for the dam and reservoir, the Lee River to the Wairoa confluence, and the Wairoa and Waimea rivers from there to the sea (including management of the minimum flow regime).
The environmental management objectives may also include biodiversity and ecosystem protection, water quality, water quantity, kaitiakitanga, and community wellbeing.

The protocol would summarise the scheme requirements of water users to achieve and demonstrate efficient and sustainable use of allocated water. Elements may comprise irrigation management to assure efficient use, soil management, nutrient management to minimise nutrient losses, and relevant riparian and biodiversity management. Other schemes are demonstrating these good practice measures through Landowner Environmental Plans or sustainable water use plans.

(2) Individual water-use plans

Achieving efficient and sustainable water use at individual water user level is likely to require water use plans at property scale. These types of measures and documentation are already required by some horticultural and other primary sector organisations, such as the EUREP-GAP requirements for export apple growers. The Primary Sector Water Partnership commits primary producers to nutrient management planning, benchmarked 'good practice' water use, and management programmes to minimise sediment and microbial losses (PSWP 2008).

At a minimum, water use plans for irrigators would require best practice irrigation management approaches such as soil moisture monitoring to schedule irrigation, monitoring of actual water used (likely via meters, as at present), avoidance of drainage losses and remedying of breakdowns to prevent wastage.

A Sustainability Protocol and a 'Farm Plan for Sustainable Irrigated Land Use' can be found for the Central Plains Water Ltd proposal in Canterbury on the Environment Canterbury website (CPWL 2008). Elements of those documents would be useful to draft a simple version for this scheme.

5. Summary of Resource Consents Likely to be required for the Scheme

The remainder of this report summarises the resource consent requirements for the scheme, and potential plan changes that would facilitate operation of the scheme long term.

An initial assessment has been undertaken of the likely resource consents required for the scheme. This is based on an understanding of the scheme at the present level of detail, and may change as further information comes to hand. No discussions have been held with the consent authority staff to confirm the consent requirements.

The Tasman Resource Management Plan sets out the objectives, policies and rules that apply to the scheme. This is a combined district and regional plan. Parts of it are operative, while some parts are still subject to appeals. The proposed dam site on the Lee River is within the Rural 2 Zone. The proposed reservoir would be within both the Rural 2 Zone and the Conservation Zone.

The resource consents required for the scheme can be divided into the two phases of the scheme: construction, and ongoing operation and maintenance.

5.1 Resource consents required for construction of the scheme

Temporary damming and diversion during construction

Flows in the Lee River will be dammed and diverted around the works site while the dam is constructed. Coffer dams will be used to divert the flow through culverts. The dams, and either ends of the culverts, will be defined as structures in the riverbed.

The consents likely to be required for this aspect of construction are as follows:

- The temporary diversion of water, requiring consent for a discretionary activity under Rule 31.1A.2

- The temporary damming of water, requiring consent for a restricted discretionary activity under Rule 31.2.3

- Temporary structures in the riverbed and associated disturbance of the riverbed (the coffer dams and diversion culverts), requiring a consent for discretionary activity under section 13 of the RMA (there is no specific rule for this activity in the Plan).

Construction of the dam in the bed of the Lee River

The construction of the dam in the riverbed, and the associated disturbance of the riverbed, will require consent for a discretionary activity under section 13 of the RMA (there is no specific rule for this activity in the Plan).

Discharges during construction

The placement of fill material for construction of the dam will constitute a discharge of earth material to land. Earthworks activities and construction of the dam will generate sediment runoff that will discharge to the surrounding waterways. Concrete batching at the site may also result in a discharge of wash water to land. In addition, the earthworks activity is likely to result in a discharge of dust to air.

The discharge consents likely to be required during construction are as follows:

- Discharge of earth material to land, requiring a consent for a discretionary activity under Rule 36.1.16

- Discharge of sediment to water from land disturbance activities, requiring a consent for a discretionary activity under Rule 36.2.8

- Discharge of sediment to water from disturbance of the Lee riverbed, requiring a consent for a discretionary activity under Rule 36.2.8

- Discharge of concrete wash water to land, requiring a consent for a discretionary activity under Rule 36.1.16

- Discharge of dust to air, requiring a consent for a discretionary activity under Rule 36.2.8.

Land disturbance and vegetation clearance activities

Clearance of indigenous vegetation will be required around the works site and within the reservoir footprint area, including within the Mt Richmond Forest Park. Land disturbance activities (excavation and filling) will also occur around the dam site.
The consents likely to be required for these activities are as follows:

- Land disturbance and vegetation clearance within the Rural 2 Zone, requiring a consent for a restricted discretionary activity under Rule 18.5.2.5, as it is likely that the works will comply with the restricted discretionary activity standards

- Vegetation clearance within the Conservation Zone, requiring a consent for a discretionary activity under Rule 17.11.2.2.

The Council has restricted its discretion when considering land disturbance and vegetation clearance applications to specific matters.

Water takes for use during construction

The taking of water from the Lee River for use during construction activities is likely to require a resource consent as a non-complying activity under Rule 31.1.6A. This is because, at the present time, the Upper Catchment of the Waimea Water Management Zone is fully allocated (Joseph Thomas, TDC, pers. comm.).

TDC has advised that there is currently no waiting list for the Upper Catchment. If Council establishes a waiting list before a consent application to take water for the scheme is lodged, the taking of water for construction activities will be a prohibited activity under proposed Rule 31.1.6.B and no resource consent can be applied for. There is however an exception to prohibited status, being that all parties on the waiting list provide written approval to the proposed take. However, until this rule becomes operative, a discretionary consent application could be made.

Policy 30.1.30(a) of the TRMP states that applications for new resource consents to take water within the Upper Catchment will be declined, except where water is taken at times of high flow. This policy, combined with the fact that the resource is fully allocated, points to a likely need for some form of water storage for any take of water for construction purposes.

It is likely that an application to take water for construction purposes would be the only activity with non-complying status. At the consent stage of the project therefore, options should be examined in order to try to select a construction methodology that avoids triggering the non-complying status for this component. If avoidance is not possible, it is likely that arguments could be made that there is no need to 'bundle' all the activities for which consents are necessary into non-complying status, and that the water take application could be considered separately to the other applications. A different scenario would be to argue that 'bundling' of activities together to non-complying status should only apply to the (temporary) construction activities, and not any of the long-term consents for operation and maintenance activities.

5.2 Resource consents required for ongoing operation and use of the scheme

Operation and maintenance of the dam and reservoir

The operation and ongoing maintenance of the dam and reservoir within the riverbed, including use and disturbance of the riverbed, require consent for a discretionary activity under section 13 of the RMA (there is no specific rule for this activity in the Plan).

Damming and diversion of the Lee River and tributaries

Resource consents will be required for the ongoing damming and diversion of the Lee River and tributaries. The consents likely to be required are as follows:

- The diversion of water, requiring consent for a discretionary activity under Rule 31.1A.2
- The damming of water, requiring consent for a restricted discretionary activity under Rule 31.2.3.

For consideration of application for the damming of water, Council has restricted its discretion to the following matters:

- The rate, manner and timing of the discharge of water from the dam, including provision of a residual flow or any steps necessary to maintain any flow specified in Schedule 31.1C

- Effects on aquatic and riparian ecosystems including effects of the impoundment, and upstream and downstream of the take
- Maintenance of aquatic habitat within the impoundment, including management of pest plant and animal species
- Effects on other uses and values of the water body and those of connected water bodies such as groundwater, springs or wetlands, including those given in Schedule 30.1
- Effects on other water users, downstream landowners, and landowners affected by the dam structure or impounded water
- Effects on fish and eel habitat, including passage and entrainment in pipes
- Degree of compliance with the current New Zealand Society of Large Dams (NZSOLD) guidelines
- Information to be supplied and monitoring, including water meters required
- Monitoring the effects of the damming
- Structural stability of the dam
- The duration of the consent (Section 123 of the Act), timing of reviews, and the purposes of reviews (Section 128 of the Act)
- Financial contributions, bonds and covenants in respect of the performance of conditions and administration charges (Section 108 of the Act).

Discharges from the dam

The ongoing operation and maintenance of the dam will require a number of discharges from the dam, including ongoing discharge from the reservoir and discharges via the spillway.

The ongoing discharge from the reservoir to the Lee River could be a permitted activity if the following conditions can be complied with:

- The discharge does not cause erosion of the bed of any river or stream
- The discharge does not contain contaminants other than heat
- When the natural temperature of the water is less than 20 degrees Celsius, the water temperature is not increased by more than 3 degrees Celsius and in any event does not exceed 20 degrees Celsius. When the natural temperature of the water is 20 degrees Celsius or greater, there is no increase in water temperature.
- Where the discharge is from a dam that is authorised under rules 31.2.1, 31.2.2 and 31.2.3:

  (i) the discharge during floods does not exceed the natural inflow
  (ii) the discharge does not exceed the amount required on any resource consent to dam water

It is possible that discharges from the dam may not be able to comply with all the above standards. For example, sediment may be present in the discharge, the temperature of the discharge may not comply with the temperature standard at all times, and discharge during floods may exceed the natural flow. Therefore, it is likely that resource consent for a discretionary activity will be required under Rule 36.2.8.
Discharge via the spillway is likely to contain contaminants such as sediment. A resource consent for a discretionary activity under Rule 36.2.8 would be required for this discharge.

Subdivision

Subdivision of existing land titles for the dam and reservoir will be required. Resource consents for the subdivision will be required for discretionary activities under Rule 16.3.6.2 (Rural 2 Zone) and Rule 16.3.9.1 (Conservation Zone).

Taking and using water from the scheme

The taking and use of water released by the scheme will require resource consent. The rules that govern this aspect of the scheme are likely to be subject to a plan change, as discussed in section 4 of this report, to introduce a revised allocation regime to reflect the augmentation of water provided by the scheme. An assessment of the consent requirements for this aspect of the scheme is therefore not provided in this section of the report.

6. Potential Changes to Tasman Resource Management Plan

This section identifies areas in the TRMP where current policies and rules may need changing if the water augmentation scheme is proceeded with. There may also be changes necessary if no scheme is proceeded with, to otherwise address the present security of supply issues. This section is taken from Fenemor (2007) and updated where necessary.

6.1 Context

Changes will be needed in Part V of the TRMP to accommodate the WWAC scheme, in the same way that changes were made for the Wai-iti (Kainui) scheme.

It is not considered appropriate (nor probably necessary) to seek to change existing water allocation policies, apart from the more administrative issues.

Policy changes may be needed to:

- formally recognise the status and ownership of the augmentation scheme
- update interim policies aimed at preventing increased water allocation
- make any changes to the security of supply targets for the scheme.

Changes to rules will be needed to reflect the new information on appropriate minimum flows that can be achieved and the new hydrological regime that the scheme will deliver. This gives the ability to enhance the values of the river. Specific changes will be to:

- implement the increased minimum flow in the Waimea River
- increase allocation limits (potentially in all water management zones)
- link allocation to payments for the scheme.

6.2 TRMP policy changes

The following options are identified for TRMP policy changes relating to water allocation, if the WWAC scheme is implemented:

- Update Schedule 30.1 with any new Uses and Values identified for Waimea water bodies through the WWAC project
- Remove interim policies 30.1.30 and 30.1.31 added in Variation 52, 13 January 2007
- Consider whether the WWAC has changed the priorities for water use, including those for community supplies, in policies 30.2.1 and 30.2.3
- Add new policy to supplement policy 30.2.14 to reflect the higher security of supply target specifically adopted for the Waimea Plains through the WWAC scheme and adjust 30.2.14 accordingly
- Consider whether approaches recommended by WWAC to improve efficiency of use of augmented water require changes to policy 30.2.17.

6.3 TRMP rule changes

Changes to rules are likely to be more extensive:

- Changes to permitted activity use of water under Rule 31.1.2 are probably unnecessary but TDC's own share of the scheme costs needs to recognise that future subdivisions without reticulated water will bring an expectation of access to natural waters such as groundwater, which will have benefited from the scheme. The current restriction on takes within the coastal margin of the Delta Zone may also be able to be relaxed with an increased minimum Waimea River flow

- In rule 31.1.3, Figure 31.1C will need updating to recognise the method and levels of rationing agreed for the WWAC scheme. Schedule 31.1C needs new minimum flows wherever the Waimea River is listed, and an increased minimum flow beyond the previous 96 l/sec needs to be derived for Pearl Creek.

  New allocation limits will be needed in Figure 31.1E to re-implement limits for each water management zone taking into account the flow release regime for the water augmentation scheme, and the freeing up of water in zones where the old minimum flow created the original allocation limit.

Clause (da) of Rule 31.1.3 which regulates renewals of water permits in the Wai-iti Service Area could be applied to the WWAC Service Area; note that one indirect effect of this rule is to limit transfers for irrigation to no more than the soil needs specified in Schedule 31.1D (though this currently appears then to be over-ridden by clause (daa).

Consider whether clause (daa) should be reviewed and in any case reword it to make it clear that no more than a maximum irrigation allocation rate of 35mm/week should be granted (or lesser amount as recommended by WWAC and TDC).

Delete the bona fide provisions (7A) included among the matters to be considered when granting water permits.

Update Schedule 31.1D Table 2 with agreed allocations provided for by the WWAC for the community water schemes, including Wakefield, Hope-Brightwater, Richmond, and Waimea. TDC could also specify allocation limits for the various end users, a more specific way to reserve water longer term for community water supplies.

The rules relating to waiting lists within the Waimea Water Management Zone, and other potentially affected zones, will need to be reviewed. This includes consideration of the necessity for prohibited rule 36.1.6.B. The waiting list system will likely no longer be necessary, particularly if an option such as mandatory allocation is chosen.

- Options for accommodating increased water provided through the WWAC scheme are:

    1. Increase water allocation limits in rule 31.1.4 (Figure 31.1.E) based on projected demand and groundwater modelling of improved availability, or
    2. Distinguish released flows from natural flows and allocate released flows based on new allocation limits in rule 31.1.4 (Figure 31.1.E) for released water

Which of these options is chosen depends on the charging regime adopted for the scheme. If all existing users become 'shareholders' in the scheme, as in the Wai-iti, there will be no need to distinguish augmented volumes from naturally occurring water, and option (1) is preferred[3].

- An amended rule 31.5.1 regulating site-to-site transfers of water allocations in water permits will be needed for the Waimea water management zones, if the WWAC scheme is to include the flexibility for 'shareholders' to transfer or sell their share of the scheme cost to other water users.

- Payment for the Wai-iti (Kainui) water augmentation scheme is made by water users through a TDC rate on the weekly water allocation on their water permit; for irrigators, this corresponds to a charge per hectare of water allocation for irrigation, as all users have the same per hectare allocation in the Wai-iti. Existing Wai-iti water permit holders are to be rated at $280 (incl GST)/ha/year – increasing in years 4–30 to $315 – while new water users will pay this rate plus an up-front single capital contribution of $1060/ha. These costs will repay a 30-year loan for scheme costs, plus the ongoing Operating & Maintenance costs.

If the option of charging for the WWAC scheme through a special rate (and this is not currently the preference of the WWAC), an appropriate rating scheme will need to be set through TDC's Annual Planning process, and this will need to be scheduled alongside the amendments to the TRMP mentioned here.

Changes to policy and rules take time to implement because of the drafting, consultation and formal submission and hearing processes involved. When the augmentation scheme is approved to proceed to the consenting stage, these TRMP changes should also be notified, in tandem. If scheme funding is to be achieved through a rating mechanism, as it was for the Wai-iti scheme, the draft rating provisions should also be progressed at that time. It is noted that the recent changes to the RMA, in terms of when rules have legal effect, have no impact on the timing proposed for notifying changes to the TRMP.

[3] The WWA Technical Committee indicated at its 9 November 2009 meeting that all water should be managed by the scheme, not just the augmented flows.

7. Conclusion & Recommendation

This report, together with the Landcare Research pre-feasibility report 'A Review of Water Allocation Options for the Waimea Water Allocation project' prepared during Phase 1, provides the basis for decisions on how to allocate scheme water among consumptive users, mainly irrigators. It also suggests ways to encourage efficient and sustainable use of allocated water, and summarises resource consent requirements and potential plan changes necessary to accommodate regulatory approvals for the scheme.

There are two broad models for the water permits to take and use water from the scheme. The first is where the scheme owner holds consents for the taking and use of the water on shareholders' land (examples being the Waimea East Irrigation Company and Central Plains Water Trust in Canterbury). The second model is where the consents are held by individual water users/shareholders (an example being the Kainui Dam scheme in the Wai-iti). The WWAC has indicated a likely preference for the first option.

The report outlines 12 options for initial and ongoing allocation of the consumptive water component of the scheme. Based on the WWAC's indicative preferences at this stage, the following options warrant consideration:

- Option 1: Mandatory allocation of and payment for irrigation water for irrigable land on land parcels exceeding 1 hectare within a prescribed 'Zone of Effect[4]' for water released from the dam.

- Option 7: A second tier allocation and charging regime probably within the Waimea catchment boundary but beyond the Zone of Effect of released water

- Option 8: The option for investors such as iwi, electricity generators, forestry companies, construction companies, or private investors to hold and trade allocations, or alternatively to fund specific infrastructure components on a commercial basis

- Option 9: For ongoing flexibility of allocation, to facilitate transfers of allocations to water users, along with cessation of 'bona fide reviews' which currently allow the unexercised portions of water permits to be cancelled by TDC.

- Option 12: Allocations reserved for future use would be held and allocated either by WWAC or the relevant local authority according to rules in line with the options selected above.

If WWAC wishes to hold consents for use of water by scheme shareholders, as adopted, it will need - for consent application purposes - to demonstrate how the scheme will achieve efficient and sustainable use of scheme water. Scheme water would include both release of stored water as well as the component of natural flow allocated to consumptive users. As used in other recent irrigation scheme proposals, the scheme could meet these obligations through:

[4] Zone of Effect comprises the parts of the aquifers where increased river flow is predicted to raise the water table or piezometric levels of the aquifers during a design drought year, or which already have adequate well yields even if the water table is not projected to rise, or which have adequate reticulation to supply part of the projected water demand, for example, the Waimea East and Redwoods Valley irrigation schemes (Fenemor & Bealing 2009)

- A sustainability protocol: This could summarise the scheme requirements of water users to achieve and demonstrate efficient and sustainable use of allocated water. Elements may comprise irrigation management to assure efficient use, soil management, nutrient management to minimise nutrient losses, and relevant riparian and biodiversity management;
- Individual water use plans: At a minimum, water use plans for irrigators would require best practice irrigation management approaches such as soil moisture monitoring to schedule irrigation, monitoring of actual water used (likely via meters, as at present), avoidance of drainage losses and remedying of breakdowns to prevent wastage.

An initial assessment has been undertaken of the likely resource consents required for the scheme. The resource consents required can be divided into the two phases of the scheme: construction, and ongoing operation and maintenance. In addition an assessment has been undertaken of the potential changes that may be needed to the Tasman Resource Management Plan to accommodate the scheme.

8. References

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9. Appendices

Appendix 1: Summary of the changes to the Waimea Water Allocation Policies and Rules since 2007 Report

Summary of changes to the policies:

The management objectives for the Waimea River contained in Schedule 30.1 were altered in 2008. The main change is that the requirement to 'increase minimum flows' to protect instream values is now a requirement to 'maintain flows during drought periods'. The management objectives for instream uses and values are now:

- Maintenance of flows during drought periods to:
  - sustain habitat needs of native fish and trout
  - sustain flow in Neiman and Pearl creeks and
  - avoid seawater intrusion
- Protection of recreational activities
- Protection of cultural, spiritual and landscape values

The management objective for other uses and values is now:

- No further reduction in users' security of supply

The need to consider cumulative effects when considering applications for water takes has been introduced to the TRMP.

Changes have been made to the way priority is determined in water management zones that are fully or over allocated. Previously, 'priority in time' was the first determinant (established through waiting lists), and the irrigation needs of Maori perpetual lease land was the second determinant. This order was reversed in 2008, so that the irrigation needs of Maori perpetual lease land are now the first determinant and waiting lists are the second.

Policy 30.2.9 sets out matters that the Council will consider when assessing any application to take water. In 2008, the following new matters were added to this policy:

- measures for monitoring water use
- whether the applicant has reasonable access to water at the site where water is to be used
- whether the applicant already has any existing permits that are not fully exercised
- for any application to take water for community water supplies, the area to be serviced and relevant data used in predicting likely urban growth
- for any application for other uses, including industrial uses, the process where water is necessary, likely volumes to be used in any process and best practice options for efficient water use
- for any application to take water for domestic use, whether Council intends to provide a reticulated community water supply (as identified in the Long Term Council Community Plan)

- whether there is a reasonable alternative supply from which water takes cause less significant adverse effects, including water storage options for that property

Policy 30.2.14 addresses security of supply. This policy was extended in 2008 by requiring a higher security of supply where knowledge about cumulative effects of water abstraction on water bodies is not complete or where demand for water resources is lower.

Summary of changes to the rules

Rule 31.1.3 is a controlled rule for renewals of water permits, Rule 31.1.4 is a controlled rule for new applications for water permits within allocation limits, and Rule 31.1.6 is a discretionary rule for new applications that are within allocation limits but that cannot comply with the conditions for controlled takes. In 2008 a number of matters over which Council reserves its control/discretion were added to these three rules, as follows:

- The effects of any water take and use for frost fighting on the natural flow regime of the river
- In relation to water taken for irrigation or frost protection, the method of application necessary to achieve efficient use of the water and avoid adverse effects through ponding and runoff
- The extent to which the need for water has been demonstrated, including an assessment of the alternative water supply or augmentation options for that property
- Lapsing of the consent (Section 125(1))

Three additional conditions were also added to Rule 31.1.4 in 2008 relating to priority and waiting list procedures.

Rule 36.1.6B is a prohibited water take rule that was introduced in 2008. It states that the taking and use of water by any person in priority to any other person registered on the waiting list is a prohibited activity, unless it is an application for a renewal or all other persons on the waiting list have provided written approval.

Appendix 2: Waimea Water Allocation Policies, Chapter 30, TRMP (27 November 2009 edition)

The following policies are extracted from the Tasman Resource Management Plan (TRMP), as those relevant to water allocation in the Waimea catchment and to a potential water augmentation scheme.

30.1 Issue: Reduced Water Body Flows or Levels

Water Body Management

30.1.1 To maintain and enhance the uses and values of rivers, aquifers, wetlands and lakes that may be adversely affected by reduced water flows or levels including:

(a) the uses and values of water bodies identified in Schedule 30.1, particularly the internationally, nationally and regionally significant uses and values of water bodies;

(b) the customary and traditional uses and values of iwi, including wahi tapu, mahinga kai and other taonga, particularly in relation to sustaining the mauri of the water;

(c) the capacity of water bodies to dilute contaminants;

by taking into account the management objectives specified for each of the water bodies in Schedule 30.1.

30.1.2 To establish a minimum flow regime or minimum water level regime for rivers, wetlands and lakes where there is a threat to uses and values of the water body or a connected water body, taking into account;

(a) the range and significance of the existing and potential water body values and uses;

(b) adverse effects from existing and potential abstractive water users and land use activities affecting water quantity;

(c) natural flow characteristics;

(d) practical monitoring and enforcement needs;

(e) contributions to water flows and levels from dams.

Waimea Catchment Extracts from Schedule 30.1:

WATER BODY USES AND VALUES AND WATER MANAGEMENT OBJECTIVES		
Water Body	**Values/Uses Adversely Affected by Reduced Flows or Levels**	**Management Objectives**
(1) All groundwater (All groundwater may have any of these uses and values)	**In Situ Uses and Values**	
	• Contribution to river and spring flows. • Phreatic communities	• Prevention of seawater intrusion. • Maintenance of aquifer pressures (abstraction rates to match recharge rates). • Maintenance of contribution to river or spring flows.
	Other Uses and Values	
	• Human consumption. • Irrigation supply. • Community water supply. • Stock and farm water supply. • Industrial supply.	• Protection of water supply needs of stock and domestic users (provided there is full penetration of any alluvial aquifer). • Maintenance of water users' security of supply at an acceptable level.
Specific Uses and Values of Aquifers		
(2) Upper Confined Aquifer (3) Delta Zone Aquifer (4) Lower Confined Aquifer	**In Situ Uses and Values**	
	• Contribution of flow to the Waimea River. • Contribution of flows to Neiman and Pearl Creeks.	• Maintenance of Waimea River minimum flow. • Maintenance of Pearl Creek minimum flow and flows in Neiman Creek. • Prevention of seawater intrusion. • Maintenance of aquifer pressures (abstraction rates to match recharge rates).
	Other Uses and Values	
	• Human consumption. • Irrigation supply. • Community water supply. • Stock and farm water supply. • Industrial supply.	• Protection of water supply needs of stock and domestic users. • Maintenance of water users' security of supply at an acceptable level.
(8) All surface water bodies (All surface water may have any of these uses and values)	**Instream Uses and Values**	
	• Aquatic ecosystems, wildlife and aquatic plant habitat. • Contact and non-contact recreation activities. • Cultural and spiritual values. • Landscape values. • Contribution to lowland spring flows.	• Maintenance of minimum low flows for instream aquatic values including fisheries values. • Protection of contact and non-contact recreation activities. • Protection of landscape cultural and spiritual values.
	Other Uses and Values	
	• Human consumption. • Irrigation supply. • Community water supply. • Stock and farm water supply. • Industrial supply.	• Maintenance of water users' security of supply at an acceptable level. • Protection of supplies for stock and domestic users.

Specific Uses and Values of Rivers and Wetlands		
(9) Waimea River	**In-stream Uses and Values**	

	• Aquatic ecosystems, wildlife and aquatic plant habitat.
	• Contact and non-contact recreation activities.
	• Cultural and spiritual values.
	• Landscape values.
	• Contribution to lowland spring flows.
	• In-stream native and trout fisheries values and trout passage.
	• Contribution to Neiman and Pearl Creek spring flows.
		• Maintenance of flows during drought periods to:
		  • sustain habitat needs of native fish and trout;
		  • sustain flow in Neiman and Pearl creeks; and
		  • avoid seawater intrusion.
		• Protection of recreational activities.
		• Protection of cultural, spiritual and landscape values.[5]

	Other Uses and Values	
	• Human consumption. • Irrigation supply. • Community water supply. • Stock and farm water supply. • Industrial supply.	• No further reduction in users' security of supply. [6]
(10) Neiman and Pearl Creeks	**In-stream Uses and Values**	
	• Native fish habitat, including the nationally significant native fishery of Neiman and Pearl creeks. • Regionally significant wildlife habitat in Neiman and Pearl creeks.	• Maintenance of minimum flows to protect in-stream and wild life habitats.
	Other Uses and Values	
	• Stock and farm water supply.	
(11) Wai-iti River	**In-stream Uses and Values**	
	• Trout spawning. • Contribution to Waimea River flows. • Contribution to groundwater levels.	• Protection of trout spawning values. • Maintenance of contribution to Waimea River flows and groundwater levels.
	Other Uses and Values	
	• Human consumption • Irrigation supply. • Community water supply. • Stock and farm water supply.	• Maintenance or improvement of users' security of supply to an acceptable level.
(12) Wairoa, Roding and Lee Rivers	**In-stream Uses and Values**	
	• Native fish and trout habitat. • Contribution to Waimea River flows. • Contact and non-contact recreation. • Cultural, spiritual and landscape values.	• Protection of instream values including fisheries and natural values. • Protection of recreation activities in the Lee and Roding Rivers. • Maintenance of contribution to Waimea River flows. • Protection of landscape, cultural and spiritual values.
	Other Uses and Values	
	• Human consumption. • Irrigation supply. • Community water supply. • Stock and farm water supply.	• Maintenance of users' security of supply at an acceptable level.

5 These objectives for the Waimea River will be reviewed if a water augmentation scheme is commissioned or within 10 years of these provisions becoming operative, whichever is the sooner.

6 These objectives for the Waimea River will be reviewed if a water augmentation scheme is commissioned or within 10 years of these provisions becoming operative, whichever is the sooner.

30.1.4 To establish the sustainable yield of aquifers taking into account:

(a) depletion of aquifer yields;

(b) reduction of connected surface water flows, including coastal springs and wetlands;

(c) potential for compression of the aquifer;

(d) potential contamination of the aquifer by seawater intrusion;

(e) potential for excessive drawdown of groundwater levels;

(f) presence and significance of living organisms naturally occurring in the aquifer;

(g) effect of land use activities on recharge of the aquifer; to avoid:

(i) long-term aquifer depletion;

(ii) drying up of surface waters;

(iii) compression of the aquifer;

(iv) irreversible seawater contamination of the aquifer;

(v) over-allocation of water from the aquifer.

30.1.5 To maintain minimum river flow regimes or groundwater levels by establishing trigger levels for initiating rationing regimes for water management zones (as shown on the planning maps).

30.1.6 To ensure that the water allocation limits take into account effects of other activities and events on availability or yield of water, including:

(a) potential water yield reduction effects arising from land cover changes such as changes to tall vegetation or urbanisation;

(b) climate change including changes to drought frequency;

(c) effects of dams and other water augmentation or storage schemes;

(d) effects of gravel extraction.

Water Takes

30.1.7 To manage the allocation of water taken from water bodies so that the cumulative effect of water takes does not exceed:

(a) the stated flow or water level regime;

(b) any allocation limit for water takes for consumptive use for the water body;

(c) the sustainable yield of the aquifer;

provided that harvesting water during times of high flow may be considered, if adverse effects can be avoided, remedied, or mitigated.

30.1.8A To ensure that the connections between groundwater and river flows are fully accounted for when setting and reviewing water allocation limits and minimum flow regimes, and when deciding on applications to take or divert water, in relation to both rivers and their connected groundwater systems.

30.1.14 To avoid excessive localised reductions in bore yields when considering applications to drill bores or applications to take groundwater from an existing bore (provided that in the case of alluvial aquifers, potentially affected neighbouring bores fully penetrate the aquifer), taking into account the:

(a) sustainable yield of the aquifer (see 30.1.4);

(b) depth to the aquifer;

(c) permeability of the aquifer;

(d) distance from other bores;

(e) costs of full penetration;

(f) effects on connected surface water bodies;

(g) other uses of the water;

(h) cumulative effects of water takes from bores, including:

(i) potential adverse effects of water takes from any bore whether any take is permitted or otherwise;

(ii) effects of takes from new bores on existing takes;

(iii) effects of existing water takes on any new take from a bore; and

(iv) risks for potential water users identified on any Council waiting list; and declining an application for new bores where:

(i) bore setbacks and casing requirements for the Moutere Groundwater Zones are not met, except in exceptional circumstances.

30.1.15 In times of low flows, to use rationing regimes, including rostering, as mechanisms to avoid, remedy or mitigate the adverse effects of water takes.

Water Damming

30.1.17 To avoid, remedy or mitigate the adverse effects of water damming either by itself or cumulatively with other dams, including adverse effects on:

(a) the flow regime or water levels in rivers, lakes and wetlands;

(b) passage of fish and eels;

(c) other water users;

(d) aquatic ecosystems and riparian habitat;

(e) water quality;

(f) groundwater recharge; and

(g) adverse effects of dam failure on (a) to (f) above.

(See also 30.3.2)

Investigations and Monitoring

30.1.30 To avoid, remedy or mitigate the adverse effects of taking water in the Upper Catchment, Reservoir, Waimea West, Golden Hills, Delta and Upper Confined Aquifer zones by:

(a) declining any new resource consent application to take water, except where water is taken at times of high flow;

(b) declining any application for site-to-site transfer of water permits or parts of water permits in circumstances that result in an increase in irrigated areas;

(c) reducing allocations of water wherever possible;

(d) co-ordinating and supporting development of a sustainable water augmentation scheme; and to review this management regime when an augmentation scheme is in operation or within 10 years of these provisions becoming operative.

30.1.31 To mitigate adverse effects of droughts on instream values and water users by adopting a drought management regime for any takes of water from the Reservoir, Waimea West, Golden Hills, Delta and Upper Confined Aquifer zones that:

(a) maintains flows in the Waimea River at times when river flows are declining to avoid risk of seawater intrusion and to maintain flows in Pearl Creek;

(b) manages the decision to impose rationing and management of progressive rationing steps in consultation with the Dry Weather Task Force;

(c) imposes rationing steps in these zones at the same time;

(d) makes most efficient use of abstracted water according to established priority.

30.2 Issue: Allocation of Fresh Water Between Competing Water Users

Equitable Water Allocation

30.2.1 During times of low flow beyond the provisions of any rationing or rostering regime or when implementing a water shortage direction under Section 329 of the Act, Council will give priority to the following uses, whether they are authorised by a permit or through a rule in the Plan (in order of priority from highest to lowest) in requiring reduction or greater restrictions, including cessation for authorised takes:

(a) water for the maintenance of public health;

(b) prevention of significant long term or irreversible damage to the water resource or related ecosystems or specified significant instream values;

(c) water necessary for the maintenance of animal health;

(d) uses for which water is essential for the continued operation of a business, such as irrigation of horticultural crops or water essential to industrial activities; and the following uses will not be authorised during such a drought:

(e) irrigation and other uses not associated with commercial production such as irrigation of amenity plantings;

(f) non-essential uses such as recreational use, e.g. swimming pools and car washing.

30.2.3 To recognise and provide for the existing and potential future water needs of communities by:

(a) taking into account the effects of future community growth on available or potentially available water supplies, within the limits of any applicable allocation limit, especially in the Waimea Water Management Zones, and the Hau, Marahau and Moutere Surface Water Zones when making decisions on resource consent applications for subdivision or Plan changes to zoning;

(b) assigning priority for available water to the water supply needs for the maintenance of public health during times of drought;

(c) reserving water within any allocation limit for future expected community growth;

(d) investigating and adopting, if appropriate, according to Policy 30.3.3, other options, including water augmentation, water use reduction, and water re-use and recycling, for ensuring water demand for future growth is able to be met.

(e) declining applications for subdivision or zoning change if sufficient reliable and potable water is not available;

(f) taking into account the potential effects of severe drought in the stated level of service objectives in the Council's asset management plan for water supply.

30.2.4 To continue to allocate water on the basis of priority in time for any application for a water permit where there is still water available for allocation.

30.2.5 To reserve water within the sustainable allocation limits of the water body for the following uses:

(a) irrigation needs in respect of Maori perpetual lease lands under perpetual leasehold terms (where Maori landowners are unable to directly influence authorised access to water for irrigable land through lease arrangements); and

(b) community water supply needs, taking into account expected demand until 2026, and to enable temporary use of the reserved water by other users until it is required for the reserved purpose.

30.2.6 In water management zones where there is no water available for allocation, to guide the allocation or re-allocation of any water that may become available in that zone by assigning priority for potential water users and by establishing waiting lists. Priority is assigned according to the following criteria in descending order of priority:

(a) first, to the irrigation needs of Maori perpetual lease lands reserved under Policy 30.2.5(a);

(b) next to potential water users who are registered on a Council-established waiting list.

Where (a) and (b) do not apply, then priority will be assigned according to:

(c) whether a need for water can be demonstrated;

(d) whether there is compliance with relevant Plan rules;

(e) new users before existing permit holders;

(f) underground takes (which will normally be preferred over takes from surface water);

(g) priority uses as listed in Policy 30.2.1;

(h) any remaining registrations assigned priority by chance.

30.2.7 To regularly review rates of water use specified on water permits, including those that are deemed permits under Section 386 of the Act, to ensure that levels, flows, rates or standards established for any water body or management zone will be met.

30.2.8 To set a common expiry date for water permits to take water in each water management zone, to ensure consistent and efficient management of the resource.

30.2.9 When assessing any application to take water, to take into account:

(a) any provisions that may exist for the reservation of water;

(b) effects on other water users, including drawdown of groundwater in neighbouring bores;

(c) measures taken for water conservation and to ensure efficient water use;

(d) measures for monitoring water use;

(e) whether the applicant has reasonable access to water at the site where water is to be used;

(f) whether the applicant already has any existing permits that are not fully exercised;

(g) for any application to take water for irrigation:

(i) the location and area of land to be irrigated and the soil water-holding characteristics of the soil being irrigated;

(ii) the influences of climate on crop water demand;

(iii) measures to monitor soil moisture levels;

(h) for any application to take water for community water supplies, the area to be serviced and relevant data used in predicting likely urban growth;

(i) for any application for other uses, including industrial uses, the process where water is necessary, likely volumes to be used in any process and best practice options for efficient water use;

(j) for any application to take water for domestic use, whether Council intends to provide a reticulated community water supply (as identified in the Long Term Council Community Plan);

(k) whether there is a reasonable alternative supply from which water takes cause less significant adverse effects, including water storage options for that property.

(See also 30.1.9)

30.2.9A When considering any application to change the water use specified on a water permit, to take into account any adverse effect of the change on water body uses and values, including maintenance of minimum flows, other water users, and water quality and including:

(a) effects of the alteration to the patterns of water use over time, including changes from seasonal use to water takes occurring throughout the year or changes from season to season;

(b) effects of any changes to the rates of take;

(c) compliance with any relevant reservation policies and provisions.

30.2.10 To regularly review permits to ensure the allocation authorised by the permit reflects what is actually needed by:

(a) encouraging permit holders to relinquish permits or, if relevant, to transfer the point at which water is taken, and/or lease or permanently transfer permits wholly or in part to another person if the water allocated is no longer being used, except in over-allocated zones where the transfer is likely to lead to an increase in irrigated area or amount of water used; or

(b) reducing allocations to reflect bona fide use.

30.2.10A To provide for water permit transfers including temporary transfers from site to site, including within the Wai-iti Dam Service Zone, that:

(a) enable more efficient use to be made of water available for abstractive use;

(b) enable water users to obtain more reliable supplies of water;

(c) where applicable, contribute to the efficient and sustainable operation of the Wai-iti dam augmentation scheme.

30.2.11 To require water meters to be used by water permit holders:

(a) to ensure compliance with permit allocations or allocation limits; or

(b) when there is full allocation of water in a zone; or

(c) when there is a need for water use data to assess effects of abstraction on a water resource or in relation to an allocation limit; or

(d) in any zone where there is a rationing trigger; or

(e) to require efficient use of water.

Security of Supply

30.2.14 To seek to maintain or establish a minimum security of supply for all abstractive water users by establishing allocation limits and trigger levels for rationing whereby, for all except community water supplies, a reduction in 35 percent of the allocated amount is expected during a 10-year drought for permits to take water from surface or ground water bodies during summer periods, and to adopt a higher security of supply where knowledge about cumulative effects of water abstraction on water bodies is not complete or where demand for water resources is lower.

30.2.15 To encourage taking of water for storage during high flow and to acknowledge that some water users can improve their security of supply above the minimum level through the storage or augmentation of water.

Efficient Water Use

30.2.17 To promote, encourage and require, as appropriate, water conservation practices in the use of water through:

(a) water use practices which minimise losses of water;

(b) water use practices that use water more efficiently;

(c) encouraging water users to use less water;

(d) encouraging the re-use of water;

(e) requiring the storage of water for any new dwelling not connected to a reticulated water supply.

30.2.18 To regulate the site-to-site transfer of water takes and changes to conditions on water permits according to the potential for adverse effects arising from the transfer or change, taking into account:

(a) the level of knowledge about the water body;

(b) the monitoring of water use;

(c) whether the transfer is within the same water management zone;

(d) the level of allocation within the zone;

(e) whether water has been reserved for any purpose in the zone in which the water is being transferred;

(f) whether the transfer of water facilitates access to water that is augmented from a water augmentation scheme.

30.3 Issue: Freshwater Augmentation

30.3.1 To encourage augmentation schemes such as water harvesting in dams and reservoirs, which avoid, remedy or mitigate adverse effects on water availability downstream or on values and uses of the river, especially in zones where there is an over-allocation of water.

30.3.2 To recognise the beneficial effects of water augmentation, including harvesting in dams and reservoirs when considering water permit applications, including beneficial effects on:

(a) aquatic habitat and ecosystems;

(b) increased water availability;

(c) downstream water bodies;

(d) other water users.

(See also 30.1.17 – Water Damming)

30.3.3 To support investigation and construction of water augmentation schemes, including water reticulation schemes where there is public benefit and to establish the level of support according to the following criteria:

(a) The extent to which a water supply is augmented or the level to which the security of supply for water users is enhanced.

(b) The nature or extent of benefits for habitat values of aquatic organisms.

(c) The nature or extent of benefits for recreational uses.

(d) The extent of any public health benefits.

(e) The extent to which adverse effects of water or land use activities can be mitigated.

(f) The extent to which there are other community benefits such as beneficial effects on landscapes, tourism, etc.

(g) The extent of any benefits for increasing knowledge or understanding of the nature or extent of a water resource.

(h) The extent to which adverse effects of water allocation policy on water users need to be mitigated.

(i) The scale of the proposal, especially in relation to benefits and costs of any alternative option.

30.3.20 Methods of Implementation

(b) Works and Services

(i) Support of water augmentation schemes according to the established criteria.

(ii) Co-ordination of, and financial and technical support for, the Waimea Water Augmentation project.

Appendix 3: Waimea Water Allocation Rules, Chapter 31, TRMP (27 November 2009 edition)

The following rules are extracted from the TRMP, as those relevant to water allocation in the Waimea catchment and to a potential water augmentation scheme.

31.1.2 Permitted Activities (Coastal Water and Freshwater Take, Diversion or Use)

The taking, diversion or use of water, including freshwater, coastal water or water stored in a dam, for any purpose, including for domestic water supply, is a permitted activity that may be undertaken without a resource consent, if it complies with the following conditions:

(a) The amount taken and used for stock drinking water is not limited.

(b) Where water is taken and used for any domestic water supply within any water management zone, during periods of water rationing in that zone there is no watering of lawns or other decorative plants.

(c) Except as provided for in conditions (d) and (e), the amount of water taken or diverted and used per property is in accordance with Figure 31.1A.

(d) There is no new take occurring after 3 November 2001 from:

(i) the coastal margin of the Delta Zone;

Figure 31.1A: Maximum Permitted Water Takes or Diversions in All Zones and of Inshore Coastal Water

WATER MANAGEMENT ZONE	MAXIMUM PERMITTED QUANTITY OF WATER PER DAY PER POINT OF TAKE PER PROPERTY (ONE TAKE PER PROPERTY) (CUBIC METRES PER DAY)
Waimea Zones	
All zones [except as provided in (d)(i)]	5
Note: New bores in the Marahau Zone and in the coastal margins of the Delta and Hau Plains zones are also not permitted.	

(e) The taking or diversion of water does not cause any stream or river flow to cease.

(f) Fish and eels are prevented from entering the reticulation system.

(g) The taking or diversion of water does not prevent any other individual from taking water for their domestic or stock drinking water supply needs.

(k) The taking, using or diversion of water does not cause erosion of land or the bed or banks of any river.

31.1.3 Controlled Activities (Water Take, Diversion or Use from Rivers, Aquifers and Inshore Coastal Water)

The taking, diversion or use of water from surface water, aquifers or inshore coastal water that does not comply with the conditions of Rule 31.1.2 is a controlled activity, if it complies with the following standards and terms:

(a) The applicant for the water taking and use is the holder of a water permit that is due for renewal and section 124 applies except:

(i) where the permit has been transferred for a limited period from another point of take in the same management zone under the provisions of Rule 31.5.1 or 31.5.1A;

or

(ii) the permit has been issued for taking and use of water that has been reserved for the purposes set out in Schedule 31.1D under the provisions of Policy 30.2.5.

(b) Except as provided in condition (c), for any rationing of consumptive water uses required to maintain minimum water flows or levels specified in Schedule 31.1C, reduction in usage comprises a series of cuts in authorised usage from the maximum weekly authorised as shown in Figure 31.1B:

Figure 31.1C: Rationing Steps

WATER MANAGEMENT ZONE	RATIONING STEPS
All water management zones except for the Riwaka Zone	Step 1 – Allocation less 20% = (quantity) m^3 per week Step 2 – Allocation less 35% = (quantity) m^3 per week Step 3 – Allocation less 50% = (quantity) m^3 per week
Wai-iti Zone	Rationing in the Wai-iti Dam Service Zone will be through rostering implemented by the Wai-iti Zone Water User Committee in accordance with the trigger and low flow specified in Schedule 31.1C
Note: If minimum water flows or levels given in Schedule 31.1C decrease beyond the provisions of these rationing steps, the Council may issue water shortage directions in accordance with Policy 30.2.1.	

Progression from steps 1 to 3 are at the discretion of the Council during times of low water flows or levels, in consultation with current water user committees. Step 1 rationing may be introduced once the specified trigger for rationing *(see Schedule 31.1C)* is reached. The need for steps 2 and 3 will be subject to the extent and duration of the low flow period.

(c) For any taking and use of water for community water supply, any rationing required to maintain minimum water flows or levels specified in Schedule 31.1C, comprises the following series of cuts in authorised usage from the maximum weekly authorised;

Step 1: Reduce usage to 10 percent less than the actual average monthly amount used in the same month in the most recent year that no rationing was imposed.

Step 2: Reduce usage authorised after implementing Step 1 by a further 7.5 percent.

Step 3: Reduce usage authorised after implementing Step 2 by a further 7.5 percent.

(d) Except as provided for in (da) or (daa), the amount taken and used for irrigation of field crops is the least of:

(i) the relevant rate given in Figure 31.1D; or

(ii) any lesser rate applied for; or

(iii) the level of bona fide use; or

(iv) the sustainable yield of the bore; or

(v) the quantity specified on the permit being renewed.

Figure 31.1D: Irrigation Rates

SOIL TYPES	RATE (CUBIC METRES/HA/WEEK)	RATE (MILLIMETRES/WEEK)
Braeburn	250	25
Dovedale	300	30
Mapua and Rosedale	190	19
Waimea	300	30
Richmond and Wakatu	270	27
Riwaka, Maori, Sherry	300	30
Ranzau, Motupiko and Hau	350	35

Up to 20 percent more than the rate specified may be allocated provided there is acceptable scientific evidence provided with the application that the crop and soil type being irrigated requires the higher amount. This evidence must include analysis of the soil's water holding capacity; information on the nature and scale of soil variability over the property, including depth of soil, stoniness etc.; crop water requirement information, including rooting depth and cover; climate information relevant to the property; and water metering data. The 20 percent allowable increase will only apply to crops already being irrigated as at 29 January 2005.

(d) The amount taken in the Wai-iti Dam Service Zone following commencement of the discharge from the Wai-iti Community Water Augmentation Scheme, and provided the scheme continues to be in operation, is:

(i) no more than the quantity able to be yielded from the bore where the take is from groundwater; and

(ii) no more than the quantity specified on the permit being renewed; and

(iii) no more than the relevant rate given in Figure 31.1D for irrigation use takes;

or

(iv) any lesser rate applied for.

(daa) Condition (d) does not apply in the Waimea water management zones (except the Wai-iti Zone and the Wai-iti Dam Service Zone).

(e) For any taking and use of water for community water supply, the amount taken is the least of:

(i) the level of bona fide use; or

(ii) any lesser rate applied for; or

(iii) the sustainable yield of the bore; or

(iv) the amount specified on the permit being renewed;

or if an increase in the amount specified on the permit being renewed is sought then it is:

(v) provided for in Schedule 31.1D and subject to provisions of any waiting list; and

(vi) is no more than the amount needed to satisfy the likely water demand for the duration sought for the consent.

Schedule 31.1D: Reservation of Water

TABLE 2 **RESERVATION OF WATER: COMMUNITY SUPPLY**					
Water Reticulation Scheme/Supply	**(A) Amount Currently Allocated**	**(B) Total Required (Calculated) in 2026**		**(C) Amount Reserved**	
	(l/sec)	**(l/sec)**	**m^3/day**	**(l/sec)**	**m^3/day**
Wai-iti Zone					
Groundwater – Wakefield reticulation	15	19.3	1670	4.3	370

(f) For uses other than those provided for in (d) and (e), the amount taken and used is the least of:

(i) the level of bona fide use; or

(ii) any lesser rate applied for; or

(iii) the sustainable yield of the bore; or

(iv) the amount specified on the permit being renewed.

A resource consent is required, and may include conditions on the following matters over which Council has reserved control:

(1) The quantity, rate and timing of the take not otherwise specified above, including rates of take, rostering or rationing steps required to implement conditions (b), (c) and (d), and any other requirements to maintain any minimum flow or level given in Schedule 31.1C.

(2) The location of the point of take or yield of any bore, including taking into account required spacing between bores *(see Schedule 16.12A)* and aquifer characteristics such as depth, permeability, yields required, and yields available in existing adjacent bores.

(3) The effects of the take on other uses or values of the water body or coastal water, including those given in Schedule 30.1.

(3A) The effects of any water take and use for frost fighting on the natural flow regime of the river

(4) The effects of the take on other water users.

(5) The need for backflow prevention for any takes from groundwater.

(6) The effects of the take either by itself or in combination with other existing takes on aquatic and riparian ecosystems, including fish and eel habitat and flows in rivers or coastal streams affected by takes from groundwater.

(7) Except in relation to any take in the Wai-iti Dam Service Zone, a reduction in allocation where a bona fide review shows that water use is less than the amount of water allocated.

(7A) The amount taken and used in any Waimea water management zone (except the Wai-iti Zone and the Wai-iti Dam Service Zone) in relation to:

1. bona fide use,
2. relevant rates given in Figure 31.1D,
3. sustainable yield of the bore,
4. the rate applied for,
5. the quantity specified on the permit being renewed, and
   the likelihood of a water augmentation scheme designed to service the relevant zone, proceeding.

(8) Installation of water meters as provided for in Schedule 31.1B or in Policy 30.2.11.

(9) Information to be supplied and monitoring requirements.

(10) Measures to achieve efficient water use or water conservation including sealing of artesian bores, preparation of property water management plans, and measures to monitor water use.

(10A) The extent to which the need for water has been demonstrated, including an assessment of the alternative water supply or augmentation options for that property.

(11) The duration of the consent (Section 123 of the Act) as provided for in Schedule 31.1A, timing of reviews and purposes of reviews (Section 128 of the Act).

(11A) Lapsing of the consent (Section 125(1)).

(12)Financial contributions, bonds and covenants in respect of the performance of conditions and administration charges (Section 108 of the Act).

Notes:

This rule does not apply in situations where a resource consent application is made after a permit has expired.

The exception given in matter (7) applies only as long as the Wai-iti Community Water Augmentation Scheme is in operation.

31.1.4 Controlled Activities (Water Take, Diversion or Use within Allocation Limits)

The taking, diversion or use of water that does not comply with the conditions of Rule 31.1.2 or the standards and terms of Rule 31.1.3 is a controlled activity, if it complies with the following standards and terms:

(a) The water is taken or diverted in a water management zone with an allocation limit specified in Figure 31.1E.

(b) Subject to condition (ba), the amount of water taken or diverted on its own or in combination with other authorised takes does not exceed the relevant allocation limit specified in Figure 31.1E.

(ba) Where the water was being taken or diverted and used for farm dairy wash-down and milk cooling purposes before 3 November 2001 in any water management zone, the relevant allocation limit specified in Figure 31.1E does not apply.

Figure 31.1E: Allocation Limits for Freshwater Takes

WATER MANAGEMENT ZONES	ALLOCATION LIMITS (LITRES PER SECOND)
Wai-iti Zones	
Wai-iti Dam Service Zone following commencement of the discharge from the Wai-iti Community Water Augmentation Scheme, provided the scheme is in operation.	515 l/sec
Wai-iti Zone (not including the Wai-iti Dam Service Zone.)	Subject to condition (c)
Waimea Zones	
Upper Catchments (Wairoa, Lee and Roding Rivers)	3
Hope and Eastern Hills	97
Lower Confined Aquifer	230

Notes:
(1) For any zone or water body within a zone not listed here, Rule 31.1.6 applies.
(2) Allocation limits in litres per second for takes for consumption use are for the period November to April. They are calculated as the sum of weekly permit allocations, and refer to surface water or groundwater takes, but do not include takes from storage (see Rule 31.1.5). Annual allocation limits have also been established for the Moutere Groundwater Zones and both limits must be complied with.
(3) The Tadmor limit includes the 50 litres per second allocated to the Tadmor Valley Irrigation Society from the combined Tadmor/Hope diversion flow.
(4) The allocation limits do not apply to takes subject to condition (ba)

(c) The water is not taken during November to April (inclusive) from:

(i) the coastal margin of the Hau Plains Zone;

(ii) the coastal margin of the Delta Zone;

(iii) the Wai-iti Zone.

(d) The amount of water taken on its own or in combination with other authorised takes is available after the quantities specified in column (c) of both Tables 1 and 2 of Schedule 31.1D have been allocated for the purposes specified.

(e) Conditions (b), (c), (d) [other than (d)(iii)], (da) and (e) in Rule 31.1.3.

(f) In any Water Management Zone where Council maintains a waiting list, the taking or use of water is by a person who is on the waiting list and who has been informed by

Council that they have priority to make an application, in the order of registrations on that waiting list.

(g) In any Water Management Zone where Council maintains a waiting list, the taking or use of water is by a person who does not have priority under condition (f), but the person wishing to take and use the water has the prior written approval of all other persons with prior registrations on the waiting list.

(h) Where the water is to be taken and used for the purposes specified in Schedule 31.1D, the amount of water taken on its own or in combination with other takes reserved for that purpose does not exceed the relevant limit specified in that Schedule.

A resource consent is required, and may include conditions on the following matters over which Council has reserved control:

(1) The quantity, rate and timing of the take not otherwise specified above including rates of take, rostering or rationing steps required to implement condition (f) and any other requirements to maintain any minimum flow given in Schedule 31.1C.

(2) The location of the point of take or yield of any bore, including taking into account required spacing between bores (*see Figure 16.12A)* and aquifer characteristics such as depth, permeability, yields required, and yields available in existing adjacent bores.

(3) The effects of the take on other uses or values of the water body, including those given in Schedule 30.1.

(3A) The effects of any water take and use for frost fighting on the natural flow regime of the river.

(3B) In relation to water taken for irrigation or frost protection, the method of application necessary to achieve efficient use of the water and avoid adverse effects through ponding and runoff.

(4) The effects of the takes on other water users.

(5) The need for backflow prevention for any take from groundwater.

(6) The effects of the take either by itself or in combination with other existing takes on aquatic and riparian ecosystems including fish and eel habitat and flows in rivers or coastal streams affected by takes from groundwater.

(7) Except in relation to any take in the Wai-iti Dam Service Zone, a reduction in allocation where a bona fide review shows that water use is less than the amount of water allocated.

(8) Installation of water meters as provided for in Schedule 31.1B or in Policy 30.2.11.

(9) Information to be supplied and monitoring requirements.

(10) Measures to achieve efficient water use or water conservation, including sealing of artesian bores, preparation of property water management plans, and measures to monitor water use.

(10A) The extent to which the need for water has been demonstrated, including an assessment of the alternative water supply or augmentation options for that property.

(11) Except as provided for in (e) above, the duration of the consent as provided for in Schedule 31.1A (Section 123 of the Act), timing of reviews and the purposes of reviews (Section 128 of the Act).

(12) Financial contributions, bonds and covenants in respect of the performance of conditions and administration charges (Section 108 of the Act).

Note: The exception given in matter (7) applies only as long as the Wai-iti Community Water Augmentation Scheme is in operation.

31.1.6 Discretionary Activities (Inshore Coastal Water and Freshwater Take, Diversion or Use from Surface Water, Groundwater and Storage)

The taking, diversion or use of water that does not comply with the conditions of Rule 31.1.2 or the standards and terms of Rules 31.1.3, 31.1.4, or 31.1.5, is a discretionary activity, if it complies with the following standards and terms:

The total amount taken, either by itself or in combination with other authorised water takes in the relevant water management zone does not exceed the total allocation limit for the relevant zone as shown in Figure 31.1F.

Figure 31.1F: Allocation Limits for Coastal Water and Freshwater Takes

WATER MANAGEMENT ZONE	ALLOCATION LIMIT	(LITRES PER SECOND)
Wai-iti Zones		
Wai-iti Dam Service Zone following commencement of the discharge from the Wai-iti Community Water Augmentation Scheme, provided the scheme is in operation.	515 l/sec	
Wai-iti Zone (not including the Wai-iti Dam Service Zone.)	Subject to condition (d)	
Waimea Zones		
Upper Catchments	3	
Hope and Eastern Hills	97	
Lower Confined Aquifer	230	
Motueka/Riwaka Plains Zones		
Central Plains Zone	795	
Central Plains Subzone	344	
King Edwards	135	
Umukuri – Groundwater – Brooklyn River	133 62	
Swamp – Groundwater – Little Sydney River	73 31	
Hau Plains	228 [subject to condition (d)(ii)]	
Riwaka – Groundwater – Surface Water	30 170	
Moutere Zones		
Moutere Coastal Groundwater	41	354,240
Moutere Eastern Groundwater	116	1,002,240
Moutere Southern Groundwater	48	414,720
Moutere Western Groundwater	52	449,280
Upper Motueka Zones		
Baton	54	
Stanley Brook	1.05	
Dovedale – Groundwater (to 8 metres) – Surface water	13.2 26.8	
Middle Motueka Zone	550	
Wangapeka	265	
Motupiko	110	
Tadmor (total augmented flow)	56	
Tapawera Plains	515	
Abel Tasman Zones		
Marahau Plains	43	
Marahau Coastal	1.6	
Otuwhero	29	
Holyoake	21	
All Other Zones	No limit but refer to Policies 30.1.9–30.1.12	
Inshore Coastal Water	No limit	
Notes: (1) Allocation limits in litres per second for consumptive use are for the period November to April. They are calculated as the sum of weekly permit allocations, and refer to surface water or		

groundwater takes, but do not include takes from storage (see Rule 31.1.5). Annual allocation limits have also been established for the Moutere Groundwater Zones and both limits must be complied with.
(2) The Tadmor limit includes the 50 litres per second allocated to the Tadmor Valley Irrigation Society from the combined Tadmor/Hope diversion flow.
(3) The allocation limits do not apply to any diversion, including any associated with the generation of hydro-electric power

(b) The amount of water taken on its own or in combination with other authorised takes is available after the quantities specified in column

(c) of Table 1 of Schedule 31.1D has been allocated for the purposes specified.

[Standard (c) deleted]

(d) The water is not taken during November to April (inclusive) from:

(i) the Moutere Surface Water Zone;

(ii) the coastal margin of the Hau Plains Zone;

(iii) the coastal margin of the Marahau Zone; D 1/05

(iv) the Wai-iti Zone; V36 4/04

(v) the Reservoir, Waimea West, Golden Hills, Delta and Upper Confined Aquifer zones.

(e) Conditions (b) (rationing), (c), (d) (rate of take) [other than (d)(iiii); and except in relation to the allowance for a 20 percent increase in the maximum rate specified] and (da) in Rule 31.1.3.

(f) In any Water Management Zone where Council maintains a waiting list, the taking or use of water is by a person who is on the waiting list and who has been informed by Council that they have priority to make an application, in the order of registrations on that waiting list.

(g) In any Water Management Zone where Council maintains a waiting list, the taking or use of water is by a person who does not have priority under condition (f), but the person wishing to take and use the water has the prior written approval of all other persons with prior registrations on the waiting list.

A resource consent is required. Consent may be refused or conditions imposed, only in respect of the following matters to which Council has restricted its discretion:

(1) The quantity, rate and timing of the take not otherwise specified above, including rates of take, rostering or rationing steps required to implement condition (e) and any other requirements to maintain any minimum flow given in Schedule 31.1C.

(2) The location of the point of take or yield of any bore, including taking into account required spacing between bores (see Figure 16.12A) and aquifer characteristics such as depth, permeability, yields required, and yields available in existing adjacent bores.

(3) The effects of the take, use or diversion on other uses or values of the water body or coastal water, including those given in Schedule 30.1.

(3A) The effects of any water take and use for frost fighting on the natural flow regime of the river.

(3B) In relation to water taken for irrigation or frost protection, the method of application necessary to achieve efficient use of the water and avoid adverse effects through ponding and runoff.

(4) The need for backflow prevention for any take from groundwater.

(5) Effects on other water users.

(6) The effects of the take, use, or diversion, including takes from groundwater, either by itself or in combination with other existing takes, on aquatic and riparian ecosystems, fish and eel passage and flows in rivers, coastal streams or coastal water, including in estuaries.

(7) Except in relation to any take in the Wai-iti Dam Service Zone, a reduction in allocation where a bona fide review shows that water use is less than the amount of water allocated.

(7A) The annual allocations for water takes from the Moutere Groundwater Zones calculated on the basis of a maximum of 24 weeks of usage at the long term yield (annual recharge).

(8) Installation of water meters as provided for in Schedule 31.1B or in Policy 30.2.11.

(9) Information to be supplied and monitoring requirements.

(10) Measures to achieve efficient water use or water conservation, including sealing of artesian bores, preparation of property water management plans, and measures to monitor water use.

(10A) The extent to which the need for water has been demonstrated, including an assessment of the alternative water supply or augmentation options for that property.

(10B) For water takes that are not for consumptive use, the extent to which water is returned to the water body including rate, timing and location.

(11) The duration of the consent as provided for in Schedule 31.1A (Section 123 of the Act), timing of reviews, and the purposes of reviews (Section 128 of the Act).

(11A) Lapsing of the consent (Section 125(1)).

(12) Financial contributions, bonds and covenants in respect of the performance of conditions and administration charges (Section 108 of the Act).

(13) Any effects of coastal water take, use or diversion on water quality, the life-supporting capacity of ecosystems and their intrinsic values, and general sustainability issues relating to natural resources, including fisheries resources.

(14) The nature, scale and distribution of beneficial effects resulting from the proposed water take, use or diversion.

Note: The exception given in matter (7) applies only as long as the Wai-iti Community Water Augmentation Scheme is in operation.

31.1.6A Non-Complying Activities (Inshore Coastal Water and Freshwater Take, Diversion or Use from Surface Water, Groundwater and Storage)

The taking, diversion or use of water that does not comply with the standards and terms of Rule 31.1.6 is a non-complying activity.

A **resource consent is required**. Consent may be refused or conditions imposed.

31.1.6B Prohibited Activities (Waiting Lists)

In any Water Management Zone where the Council maintains a waiting list, the taking and use of water by any person in priority to any other person with a prior registration on the waiting list made under the provisions of method 30.2.20(a)(iv) is a prohibited activity for which no consent can be granted except that this rule does not apply to the following:

(a) Applications made under rule 31.1.3 (applications to take water where the applicant for the take is the holder of a permit due for renewal);

(b) Applications to which condition (g) of rules 31.1.4 and 31.1.6 apply.

31.5.1A Controlled Activities (Site-to-Site Transfer of Water Take in the Wai-iti Dam Service Zone)

The transfer, including a transfer for a limited period (being a period less than the duration of the water permit in question) to another site of all or part of the interest in any water permit to take or use water is a controlled activity, if it complies with the following standards and terms:

(a) Both the point of take to be transferred and the new point of take are within the Wai-iti Dam Service Zone.

(b) The sum of any new quantities authorised as a result of the transfer does not exceed the original amount authorised to be taken.

(c) There is no more than 0.25 metre additional drawdown in groundwater level for any adjacent authorised groundwater take. This requirement need not apply provided the owner of any affected bore agrees in writing to some other drawdown effect.

A resource consent is required. Consent may be refused or conditions imposed, only in respect of the following matters to which Council has restricted its discretion:

(1) Compliance with relevant rules concerning the setback requirements between bores and the quantity, rate and timing of the take not otherwise specified above, including provisions for rostering, and rationing.

(2) Any relevant conditions on the original permit.

(3) The effects of the take either by itself or in combination with other existing takes on flows and water body values of the Wai-iti River and effects on other users.

(4) Installation of water meters.

(5) Information to be supplied, and monitoring requirements.

(6) Measures to achieve efficient water use or water conservation, including sealing of artesian bores, preparation of water management plans, and measures to monitor water use.

(6A) Limitations on the exercise of all or part of each water permit that is subject to a site-to site transfer for a limited period of time,

(7) The duration of the consent (Section 123 of the Act), timing of reviews, and the purposes of reviews (Section 128 of the Act).

(8) Financial contributions, bonds and covenants in respect of the performance of conditions and administration charges (Section 108 of the Act).

Note: Rules 16.12.2 and 16.12.3 apply to construction of any new bores.

31.5.1 Discretionary Activities (Site-to-Site Transfer of Water Takes)

The transfer, including a transfer for a limited period (being a period less than the duration of the water permit in question) to another site of all or part of the interest in any water permit to take or use water is a discretionary activity, if it complies with the following standards and terms:

(a) Where water is to be transferred to an area where rules specify different rates of use, then the different rate will apply to the transfer, provided that the sum of any new quantities authorised does not exceed the original amount authorised to be taken.

(b) The transfer is not in the Moutere Surface Water Zone, the Reservoir, Waimea West, Golden Hills, Delta and Upper Confined Aquifer zones except where the total area irrigated before and after the transfer does not increase.

(c) The transfer is not out of a water management zone.

(d) The transfer is not water taken and used to irrigate Maori perpetual lease land that is reserved under Table 1 of Schedule 31.1D.

A resource consent is required. Consent may be refused or conditions imposed, only in respect of the following matters to which Council has restricted its discretion:

(1) Compliance with relevant rules concerning the setback requirements between bores and quantity, rate and timing of the take, including provisions for rostering, rationing and rates of take.

(2) The need or appropriateness for the transfer, including any changes of use.

(3) Other water supply options for water users in the affected zones.

(4) Whether the water body from which the water is to be taken is changed.

(5) Whether water has been reserved for specified purposes in the zone.

(6) Any relevant conditions on the original permit.

(7) The effects of the take on other users or values of the water body.

(8) The effects of the take either by itself or in combination with other existing takes, on aquatic and riparian ecosystems, including fish and eel habitat, and flows in rivers, wetlands or coastal springs affected by takes from groundwater.

(9) A reduction in allocation where a bona fide review shows that water use is less than the amount of water allocated.

(10) Installation of water meters as required in the relevant zone and shown in Figure 31.1D.

(11) Information to be supplied, and monitoring requirements.

(12) Measures to achieve efficient water use or water conservation, including sealing of artesian bores, preparation of water management plans, and measures to monitor water use.

(12A) Limitations on the exercise of all or part of each water permit that is subject to a site-to site transfer for a limited period of time.

(13) The duration of the consent (Section 123 of the Act), timing of reviews, and the purposes of reviews (Section 128 of the Act).

(14) Financial contributions, bonds and covenants in respect of the performance of conditions and administration charges (Section 108 of the Act).

31.5.2A Non-Complying Activities (Site-to-Site Transfer of Water Takes)

The site-to-site transfer of a water take that does not comply with the standards and terms of Rule 31.5.1 is a non-complying activity.

A resource consent is required. Consent may be refused or conditions imposed.