6.0 Fresh Water

6.1 Introduction

Fresh water includes groundwater and surface water resources. Groundwater is water located under ground, generally in aquifers. Surface water refers to water that flows above ground, and includes rivers, streams, spring fed flows, lakes, wetlands and even artificial resources such as drainage canals and diversions.

The fresh water resources of the Wairau/Awatere plan area are among the region's most important natural assets. The significant groundwater resources of the Wairau aquifers supply drinking water and water for irrigation and industrial use. The Wairau River and its tributaries are the key surface water resource in the area, providing important ecological, recreational, cultural, amenity and commercial values and are the principal source for recharging the Wairau groundwater systems. Appendix A provides a summary of the key surface and groundwater resources of the area, identifying significant values, threats to those values and determining a ranking for each resource.

Maintaining fresh water quality and quantity at levels required to meet ecological, cultural, recreational, social and economic needs is essential for community wellbeing. However, while providing for community wellbeing the Council has a duty to safeguard the life supporting capacity of fresh water, and to avoid, remedy or mitigate any adverse effects of activities on fresh water. Another key responsibility of the Council under the Act is to maintain and enhance water quality. This section sets out the issues, objectives, policies and methods which will enable these duties and community wellbeing to be met.

6.2 Issue

Use of freshwater resources may compromise the life supporting capacity of the resource.

Use of fresh water can adversely affect the life supporting capacity of the resource, through altering the course, quality or quantity of the resource. Uses of fresh water include consumptive and non-consumptive uses and use of the water as a receiving environment for the direct (or point source) discharge of contaminants. Some of the more significant activities which involve the point source discharge of contaminants to water include sewage, processing waste and stormwater. Consumptive uses include activities which both take and consume water, such as crop irrigation, town water supply, domestic and stock water, fire-fighting or industrial processing. Non-consumptive uses include activities that use but do not consume the water, such as fishing, boating, swimming, amenity values, commercial fisheries, hydro generation of electricity and natural habitats. These uses are important to provide for the social, economic and cultural wellbeing of the community.

Indirect discharges from non-point sources, such as contaminated run-off and sedimentation also have the potential to adversely affect water quality. Riparian vegetation and effective riparian management contribute to maintaining and enhancing water quality and the quality of aquatic habitats.

However, these uses have the potential to adversely affect the life supporting capacity of the resource. Consumptive uses can reduce water levels and flows which can have significant effects on the integrity of habitats, and on recreational and amenity values.

Uncontrolled abstractions from groundwater resources could lead to aquifer compaction, salt water intrusion, or a reduction or cessation of spring flows. The direct discharge of contaminants to water, particularly from point sources (such as pipes or drains) can adversely affect water quality. Effects can include increased temperatures, altered pH, increased nutrient and bacteria loads, changes in the colour, and clarity of the water and an increase in the existence of biological growths. Degraded water quality can also adversely affect other users by preventing the safe use of water for drinking or contact recreation. Given the recharge value of the Wairau River it is particularly important that surface water quality is managed to maintain groundwater quality.

It is important that the fresh water resources of the plan area are managed in such a way that existing user demands on the resource can continue to be met without adversely affecting other users or the life supporting capacity of the resource.

6.2.1 Objectives and Policies

Objective 1	**To provide for the taking, use, damming and diversion of fresh water in a manner which safeguards the life supporting capacity of the resource and avoids, remedies or mitigates any adverse effects on the environment.**
Policy 1.1	To maintain surface water flows at levels which safeguard the life supporting capacity of the resource by setting and enforcing Sustainable Flow Regimes (SFRs) in terms of specified river flows.
Policy 1.2	To maintain groundwater levels and flows at levels which safeguard the life supporting capacity of the resource by setting and enforcing Sustainable Flow Regimes (SFRs) in m^3/year.
Policy 1.3	To establish groundwater SFRs to: • Prevent damage to the physical structure of the aquifer such as compaction in the Southern Valleys Water Management Zone; • Prevent reductions in the quality of spring flows eg: Spring Creek from the Wairau Aquifer; • Prevent a landward shift of the seawater/freshwater interface, eg: Rarangi Shallow Aquifer; • Protect the instream habitat and ecology; and • Provide for maintenance or enhancement of water quality.
Policy 1.4	To determine SFRs on the basis of monitoring information. New SFRs and amendments to SFRs will be determined in consultation with representatives from Iwi, Department of Conservation, Fish and Game Council and water users. Amendments to existing SFRs would be achieved through a change to the Plan.
Policy 1.5	To set the SFR for fresh surface waters to: • Protect instream habitat and ecology; • Improve fish passage and spawning grounds; • Protect the natural character of freshwater resources; • Maintain water quality;

- Protect cultural values;
- Maintain amenity values; and
- Provide for aquifer recharge.

Policy 1.6	To set aside a proportion of the abstraction flow, where appropriate, as additional flow for instream values, over and above the SFR.
Policy 1.7	To set the SFR for fresh groundwater resources to: • Prevent damage to the physical structure of the aquifer such as compaction, in particular those areas such as the Southern Valleys Management Zone; • Prevent reductions in the quantity of spring flows, eg. Spring Creek from the Wairau Aquifer; • Prevent a landward shift of the seawater/freshwater interface; • Protect the instream ecology; and • Provide for maintenance or enhancement of water quality.
Policy 1.8	The conditions on all consents to abstract water which were issued prior to this Plan becoming operative may be reviewed under Section 128 (1)(b) of the Act and may be amended to bring the consents into line relative to the SFR's set out in Volume Two.
Policy 1.9	To protect the important values of specified surface water bodies by classifying the damming of these water bodies as a Non-Complying or Prohibited Activity.

The setting of an SFR for the reach of a river is a complex task. The suitability of an environmental habitat is affected by the amount of flow, but is also affected by biological suitability, suspended sediment, water temperature, river bed material and riparian vegetation. SFR's have been set for only those rivers of significant potential abstraction. Even for these rivers further study of all factors is required and programmed to be undertaken in the future. Depending on the results, the SFR's may be amended as a Plan change.

It is not possible to continually monitor flows along the entire length of a surface water body. For this reason, trigger levels are applied where recorder sites have been established, usually in the upper catchment of the surface water body. The intent of the trigger levels is to achieve the SFR and a corresponding flow relative to the SFR for the remainder of the surface water body.

Some water bodies have special values that could be significantly adversely affected by the damming of the water bodies. For this reason, more onerous rules apply.

Objective 2	**To maintain, and where appropriate enhance, existing freshwater quality.**
Policy 2.1	To apply water classifications to all surface water and groundwater resources which reflect the existing values of each freshwater resource and provides for maintenance and enhancement of existing water quality as appropriate (as outlined in Appendix J, Volume Two).
Policy 2.2	To require compliance with the water classification standards, after reasonable mixing, for all new point source discharges to surface water, except where a discharge meets the criteria of exceptional circumstances specified in Section 107 (2) of the Act.
Policy 2.3	To renew existing discharge permits only where the discharge complies with the water classification standards, after reasonable mixing as defined by the mixing zone, or, where in the case of non-compliance the consent holder can demonstrate a reduction in the amount and concentration of contaminants and a commitment to a staged approach for achieving the water classification standard within a period of not longer than 15 years from the date the consent is granted.
Policy 2.4	To encourage the discharge of contaminants to land rather than water where the land is suited to accommodating the discharge i.e. the areas of confined Wairau Aquifer (as shown on Map 216, Volume Three).
Policy 2.5	To investigate the relative effects of point and non-point source discharges on water quality, and to develop and impose additional controls which more equitably address the relative contributions of contaminants from these activities where required.
Policy 2.6	To establish a surface water quality monitoring network which provides baseline information on existing water quality and enables compliance with the water classifications to be measured.
Policy 2.7	To require permit holders, as a condition of a discharge permit, to monitor the effects of their discharge on water quality to determine compliance with the parameters specified for the water classification.
Policy 2.8	Within 24 months of the Plan becoming operative the Council may call in existing discharge permits for those resources where water quality requires enhancement, to impose a condition requiring the monitoring of their discharge effects to determine compliance with the new water classification standard/s.

Use of the water classification system identified in Policy 2.1 is an effective way of managing water quality that enables the maintenance or enhancement of water quality as appropriate. The underlying classifications of Class F for surface water and Class DW for groundwater are consistent with the objectives proposed in the Marlborough Regional Policy Statement. Applying additional water classifications over and above the underlying classifications for particular resources or parts of a resource will enable specific management to protect local values. This is important because the underlying classifications of F and DW have standards that relate only to the protection of the fishery or drinking water aspects of the resource. Other values such as amenity, fish spawning or contact recreation can only be maintained or

enhanced through the use of specific classifications designed to protect those values. Compliance with these water classification standards will ensure that all the values of the resource are protected. The narrative and alphanumeric standards used to implement the water classifications are given in Appendix J, Volume Two.

The Marlborough Regional Policy Statement seeks for the maintenance and enhancement of water quality where it is currently degraded. Policies 2.2 through to 2.4 seek to reduce the existing impact of point source discharges by encouraging improvements in the quality of the discharge, alternative methods of disposal to avoid, remedy or mitigate adverse effects, and the calling in of existing discharge permits within a 24 month period to achieve a resource management regime which deals with new and existing dischargers in an equitable manner. This is particularly important if resource management is to be equitable. The Council recognises the need to require any improvements to a discharge, that may be required of existing dischargers, to be achieved over a reasonable period of time in a manner that does not impose unreasonable economic constraints yet still achieves a continuous improvement in discharge quality.

Defining the reasonable mixing zone for surface water resources is crucial to the efficient and equitable implementation of the water classification management system. Rather than allowing the mixing zone to be determined on a case by case basis the Council will require all mixing zones to meet the prescribed formula to ensure a consistent and equitable approach. The use of a consistent approach for mixing zone definition will also provide greater certainty for plan users.

The lack of comprehensive baseline data for existing surface water quality creates problems for the Council in understanding the actual relative effect of point and non point discharges. Policies 2.5 and 2.6 are designed to address this information gap such that full information will be available in the future which enables use of the most equitable and effective methods to manage the quality of fresh water resources.

Policy 2.7 recognises the importance of self-monitoring in achieving sustainable management of the fresh water resource. Self-monitoring has the dual benefit of educating water users about the effects of their activities and providing additional water quality information that is specific to particular activities. Policy 2.8 recognises the need to treat new and existing discharges equitably.

Objective 3	**To protect and enhance the Mauri of fresh water resources which have very high or high value to iwi.**
Policy 3.1	Consents relating to taking, use, damming or diversion of fresh water classified as high value to iwi will be processed in consultation with iwi.
Policy 3.2	The Council will monitor fresh water resources of cultural importance to iwi.

Protecting the Mauri of fresh water resources will enable the Council to meet its duties under Sections 6, 7 and 8 of the Act.

All water resources identified as being of high value to iwi, will be subject to consultation with iwi.

6.3 Issue

Competing and increasing demands for fresh water resources may lead to inequitable allocation.

With the increases in demand there is potential for increased conflict between different users (eg. between small and large users, industrial and recreational users, and cultural and commercial users) and increased competition for the total resource available. With increased numbers of users there is also potential for abstraction to adversely affect other users.

Adopting objectives and policies which seek to manage the competing and increasing demands for water in a fair and equitable manner will enable the Council to achieve the main purpose incorporated within the Marlborough Regional Policy Statement, which is to "integrate the management of natural and physical resources and provide for the fair and equitable treatment of different activities which may be competing for or affecting resources".

Consent volumes will be allocated on the basis of water allocation guidelines which have been determined for a number of activities by the Council and are listed in the table below:

Crop	Use Allocation Volume (m^3/ha/week)	Application Rate (mm/day over irrigated area)
Crops/potatoes*	400	5.7
Food Crops (eg peas)*	400	5.7
Pasture	350	5.0
Pipfruit/stonefruit (eg apples)	375	5.4
Field crops (eg wheat) *	350	5.0
Deep rooting tree crops (eg olives) *	200	2.9
Grapes**	155	2.2
Domestic	10 m^3/house/day	-
Rural residential allotment	10 m^3/site/day	-

* *Guideline indicates water required 80% of the time, from 1974 to 1996, to keep the soil moisture store full, using recorded evaporation (factored to represent crop evapotranspiration), and recorded rainfall. The relationship between water requirements and crop yields for the Marlborough district has not been optimised.*

** *Guidelines indicate water required, from 1974 to 1996, to provide optimum crop yields for the Marlborough district (based on yield information from the region), using recorded crop evapotranspiration and assuming there is no rainfall. An irrigation application rate of 2.2 mm is equivalent to 12 litres per vine per day based on standard planting density.*

Water permit volumes granted will be clearly stated in the permit conditions and may also include the maximum rate at which water can be extracted. Water volumes will be expressed on permits in one or more of the ways shown in the table below.

Rate Surface	Water Resources	Groundwater Resources
Instantaneous rate (l/s) (normally)	✓	Not necessary unless very limited system
Maximum daily rate (m^3/day)	✓	✓
Maximum weekly rate (m^3/week)	✓	✓

6.3.1 Objectives and Policies

Objective 1	**To achieve equitable allocation and use of surface water and groundwater resources.**
Policy 1.1	To provide for the taking, use, damming and diversion of water with only minor adverse effects on freshwater resources as Permitted Activities.
Policy 1.2	To establish and apply a triple class permit system for the taking of water and to set and enforce maximum allocations for each class.
Policy 1.3	To issue water permits to take and use water for a period of 10 years where water resources are either fully allocated or over-allocated relative to the allocation limits set in this Plan or where water is to be taken from a resource for which no SFR has been established in the Plan. To issue discharge permits for a maximum period of 15 years for resources where the existing water quality is to be maintained and to issue discharge permits for a maximum period of 10 years in resources where the existing water quality requires enhancement.
Policy 1.4	To set water permit volumes, initially and at either review or renewal, on the basis of water allocation guidelines or actual use as indicated by water meter readings.
Policy 1.5	To use enforcement provisions of the Act where consent conditions are breached.
Policy 1.6	To cancel water and discharge permits, subject to Sections 357 and 358 of the Act, where a resource consent has been exercised, but is not exercised for a continuous period of two years, and where reasonable justification for the lapse in use cannot be given.
Policy 1.7	To ensure that new bores, intakes and dams are located and operated to avoid, remedy or mitigate interference effects on other water users.
Policy 1.8	To require water metering by an accepted method as a condition of all water permits involving the taking and use of water.
Policy 1.9	To review existing water permits for priority areas within 24 months of the Plan becoming operative, to impose a new condition on those permits requiring water metering and where necessary bring allocation into line with crop guidelines.
Policy 1.10	To provide for an individual's reasonable domestic needs, the reasonable needs of an individual's animals for drinking water and for firefighting purposes as a priority over other users where there is no adverse effect on the environment.
Policy 1.11	To ensure cross boundary issues in relation to a particular resource system are dealt with in a consistent manner.

Policy 1.12	In the 5 years following the operative date of this plan the Council will undertake resource reviews on the Southern Valley Management Zone, Awatere River and Waihopai River.
Policy 1.13	In the 10 years following the operative date of this plan resource reviews will be carried out on the Wairau River, Wairau Aquifers and fresh water resources.
Policy 1.14	Following completion of the investigations required as conditions of the resource consent for the operation of the Branch River hydro electric scheme (Marlborough District Council file U990161), and the completion of any other investigations undertaken in respect of this consent, and in any event no later than 1 June 2011, the Council will undertake a review for the Branch River downstream of the Branch hydro electric power intake weir for the purpose of determining the minimum sustainable flow requirements of the river. Amenity values will not be considered in this review.

Domestic water extraction up to 10 m^3 per day is exempt from requirements for metering or water permits. For non-domestic extraction the term of water permits will be 10 years where the cumulative volume of water allocated through individual water permits has reached the Class A and (where there is a Class B limit set) Class B allocation limits. This will allow the adverse effects of abstraction in a situation of full or over-allocation to be addressed in a timely fashion. A 10 year term is also appropriate where water is to be taken from a water resource for which no SFR has been established due to the uncertainty over the cumulative effects of water extraction in these circumstances.

The full and over allocation of water resources are issues being addressed through the review of the Wairau/Awatere Resource Management Plan. A water allocation framework that directs how these issues are to be resolved will be notified before December 2014, as required by the National Policy Statement Freshwater Management 2011. It is likely that the implementation of this framework will remove the need to limit duration in the manner set out in Policy 6.3.1.1.3.

Resource reviews will be undertaken every 5 or 10 years depending on location, to ensure ongoing sustainable and equitable management of the resource. The interval of resource review is related to the level of understanding for the particular resource. The longer the interval between reviews for example 10 years, the greater the understanding of the resource and less potential there is for adverse effects.

Users will not be required to apply for renewal of consent at either the 5 or 10 year interval as terms will be granted for 30 year periods. Instead, the Council will use monitoring information gathered over the 5 or 10 year period to determine the appropriateness of the existing quota volumes.

Where monitoring information indicates that allocation management is not sustainable, consent volumes will be reduced on a pro rata basis across all existing water permits for that resource. Monitoring information can also indicate situations where more users can be granted permits. Individual monitoring information gathered from water meter readings will be used to consider the appropriateness of an individual's allocation volume. Modifications could include reducing allocation volumes.

It should be noted that to date, renewal of a water permit for the Wairau Aquifer has not been refused given the availability of supply.

Water will be allocated on a 'first come, first served' basis through the triple class permit system of allocation. This framework allows a certain quantity of water to be allocated to users. This quantity is called a Class and, as successive permits are issued,

the allocation available within the class reduces and eventually becomes fully allocated. No further allocations will be made in that class except in the following cases:

- *Where the existing full allocation volume is reassessed and is increased, or a resource is assessed as having a larger safe yield, as a result of more information being available;*
- *Where part of the existing full allocation volume becomes available following a permit renewal which reduces the volume attached to an existing permit;*
- *Where part of the existing full allocation volume becomes available following the revoking of an existing permit.*

Three classes of water permit exist for each of the water resources, Class A, Class B and Class C. Allocation moves sequentially through each of the classes, from Class A to Class C (for further explanation of the triple class allocation system refer to the General Rules in Volume Two). Applications for allocations may be made outside of the triple class system but are Non-Complying activities unless they are Prohibited.

The SFRs set shall form the basis of maximum allocation of water. The formula shall be applied as follows:

- *The maximum allocation shall be determined on the five year, seven day, low flow of the water body less the SFR of this waterbody if set, otherwise on a case by case basis.*

Not all activities will be required to fit water meters as a condition of a water permit. Non-consumptive diversions for example may be required to monitor and record water levels being diverted by some other appropriate means. However, water meters will be a condition of all abstraction consents. Where a damming consent is required in addition to abstraction consent a water meter may not be required. Where damming is able to occur without abstraction consent and is not a Permitted Activity, a water meter will be required at the outflow point.

Priority areas include Waihopai River, Awatere River and Southern Valleys Water Management Zone.

6.4 Issue

The inefficient use of fresh water resources can compromise the sustainability of the resource.

Efficiency relates to both the use of water resources and administrative efficiency. Section 7(b) of the Act requires the Council to have particular regard to the efficient use and development of natural and physical resources. In addition to a statutory requirement, it is an effective way for meeting increasing demand for water in water short management zones without compromising the sustainability of the resource. In the longer term, efficient water use is essential if equity and sustainability of resource use are to be achieved in Marlborough.

6.4.1 Objectives and Policies

Objective 1	**To establish an efficient resource use regime and support sustainable management of the freshwater resource.**
Policy 1.1	To enable more efficient use of fresh water resources through implementation of a triple class water permit system.
Policy 1.2	To allocate water on the basis of guidelines.
Policy 1.3	To encourage water storage in water short areas, for use during low flow and level periods, by exempting water retained in storage from

	any conditions on use, and when flows are high allowing water to be drawn off for storage purposes.
Policy 1.4	To encourage use of groundwater resources in preference to surface water resources, where groundwater is of sufficient quantity. This particularly applies to Gibsons Creek, Omaka River Valley Aquifers and the Fairhall River Gravels Aquifer.
Policy 1.5	To cancel water and discharge permits subject to Section 357 and 358 of the Act, where a resource consent has been issued, but is not given effect to (for example by installation of infrastructure, or use of water or by undertaking discharging) for a continuous period of two years, and where reasonable justification for the lapse of the consent cannot be given
Policy 1.6	To discourage the diversion and transport of water out of water short catchments, especially the Southern Valleys Aquifer Management Zone.

The policies will enable and encourage more efficient watercourse use throughout the water management zones covered by this Plan. This will be achieved in a number of ways.

A more efficient, flexible triple class water allocation system, which will more closely match water demand and supply, enabling more efficient water allocation use, while still providing an efficient SFR to protect the sustainability of the resource. This will be particularly important for surface water systems, where excess flow during wetter periods is currently lost to the system (for an explanation of the triple class allocation system refer to Volume Two).

The provision of incentives for the storage of water should encourage users to abstract water during wetter periods for storage and subsequent use during drier periods.

Allocation will be based on water allocation guidelines which have been determined for a number of activities through research. This will enable the Council to share water equitably between users and will provide a mechanism which prevents users "tying" up water for possible market gain.

Similarly, where choice exists the Council will encourage use from groundwater resources instead of surface water resources when the former have greater capacity and when the adverse impacts associated with use of groundwater systems will be less. This approach is justified because groundwater resources have a built in storage.

The Council will permit the transfer of water permits between users within a water management zone, where the environmental effects are generally minor. However, the diversion or transport of water out of a water management zone can have significant adverse environmental effect and will require a resource consent. Given the limited quantity of water in the Southern Valleys Water Management Zone, the Council will prohibit the diversion or transport of water out of that zone. Discharge permits may not be transferred from site to site within a catchment. Section 137 of the Act permits only the transfer of a discharge permit to any owner or occupier of a site in respect of which the permit is granted, where notice is given to the Council.

6.5 Issue

Water use during periods of low flow and levels can create adverse effects on fresh water systems.

Although the Wairau catchment has a large groundwater resource, the rivers and streams in the Wairau/Awatere plan area can be affected by very dry seasons which result in reduced flows and in some cases no flow at all. This creates a problem where

water users do not have access to groundwater resources as an alternative supply to surface water.

Given the fact that periods of low flow generally coincide with maximum periods of use for irrigation, there is considerable potential for the taking, use, damming or diversion of water to create adverse environmental effects on the fresh water ecosystem, in addition to the potential to create increased conflict between users. The discharge of contaminants to surface water during periods of low flow or levels can have considerable adverse effects on the environment and on other users by degrading water quality so that existing uses cannot be met, as there is less water available to dilute the contaminant.

It is therefore important that the Council develops a water allocation system which specifically outlines the process to be followed to achieve the equitable management of competing demands and sustainable management of freshwater resources during periods of low flow. This system will need to incorporate the cessation of point source discharges at specified levels to protect the life supporting capacity of the resource and enable other consumptive and non-consumptive uses to be met. Cessation of discharges will be set at levels to enable the water classification standards to be met, in all but exceptional circumstances.

6.5.1 Objectives and Policies

Objective 1	**To achieve sustainable, equitable and efficient allocation of water during periods of low surface water flows or low groundwater levels.**
Policy 1.1	To set flows and levels for the following freshwater resources which indicate when imminent rationing of water taking is necessary, when point source discharges must cease, and when rationing and suspension of take is required to stay above the SFR. Resource systems for which rationing levels will be defined include: • Awatere River ; • Omaka River Valley Catchment; • Waihopai River; and • Fairhall River Gravels Aquifer.
Policy 1.2	To include conditions on new water permits requiring users to reduce and suspend takes when specified flows or levels are reached.
Policy 1.3	To include conditions on new discharge permits requiring users to cease point source discharges when specified flows are reached.
Policy 1.4	To review existing water permit conditions within 24 months of this Plan becoming operative, at which time conditions will be imposed requiring the rationing of water where unrestricted use could otherwise result in a breach of an SFR.
Policy 1.5	To review existing discharge permit conditions within 24 months of this plan becoming operative, to impose conditions requiring cessation of discharge at specified levels.
Policy 1.6	To establish Water User Groups for the following fresh water resources to encourage water users to reach voluntary agreements

	to achieve an overall reduction in the take, use, damming or diversion of water: • Awatere River; • Omaka River Valley Catchment; • Waihopai River; and • Fairhall River Gravels Aquifer.
Policy 1.7	To ensure that priority is given to "an individual's reasonable domestic needs, the reasonable needs of an individual's animals for drinking water and for fire fighting purposes" during rationing.

The objectives and policies proposed here are designed to establish a formal rationing strategy which will apply to all water resources and water users in the district, to ensure that resource use remains sustainable. Incorporating the rationing strategy in the Plan will ensure that a consistent and equitable management strategy is implemented. This will reduce the potential for conflict associated with ad hoc decision making at times of low flows or levels.

The rationing strategy is outlined in Volume Two of this Plan. The strategy includes the formula used by the Council to determine a range of rationing trigger levels and the level at which point source discharges must cease. Conditions will need to be imposed on consents so that compliance with the rationing policy can be required. It is also important that the rationing system is flexible enough to allow for rostering and other voluntary agreements between users to achieve the desired reduction on a particular resource. To achieve this Water User Groups will be established to implement and manage the rationing systems for particular resources.

The SFRs set shall form the basis of maximum allocation of water. The formula shall be applied as follows:

- *The maximum allocation shall be determined on the five year, seven day, low flow of the water body less the SFR of this waterbody if set, otherwise on a case by case basis.*

6.6 Issue

The abstraction of water from the Waihopai into Gibsons Creek is a special case.

The Gibsons Creek channels (beneath the terrace upstream of Renwick) are old Waihopai distributory channels. Prior to 1916 the Waihopai River regularly flowed down these channels and into the Upper Opawa River. This was of benefit to riparian users for stockwater and groundwater recharge. In 1916 river flood control works blocked off this distributory channel from the Waihopai.

In 1960, as flood control compensatory work, a new abstraction gate and channel from the Waihopai was constructed. This was permitted to take up to 2.8 m^3/sec from the Waihopai, and water rights have since been given from this abstraction.

The importance of the abstraction has decreased in recent years due to moves away from pastoral farming and improvements to pumps increasing groundwater take from the Wairau aquifer.

Objective 1	**To recognise that Gibsons Creek channels are old distributory channels of the Waihopai and to provide for:** • **The aesthetic and ecological values of Gibsons Creek;** • **The existing legal water right users and; supply water for groundwater recharge where it is most effective.**
Policy 1.1	Continue to operate the Gibsons Creek abstraction from the Waihopai River within practical limitations.
Policy 1.2	To set an SFR for the Gibsons Creek channels to provide for the ecological and aesthetic values of Gibsons Creek channels upstream of Blenheim Street.
Policy 1.3	To provide adequate water for Class A water permit users (under the new triple class water permit system) as existing legal water right users.
Policy 1.4	To recharge the groundwater aquifer in the "Woodbourne" reach downstream of Blenheim Street, and from the Omaka confluence down to Jacksons Road.
Policy 1.5	To maximise the groundwater recharge in the "Woodbourne" reach by supplementing flows with Class C water permit abstraction to the extent limited by the current practical size of the Gibsons Creek system.

The policies will aid understanding of the particular circumstances relating to Gibsons Creek, the practical limitations on abstraction and the potential for groundwater recharge, while protecting aesthetic and ecological values.

6.7 Methods of Implementation

Rules	Rules are used to ensure that the taking, use, damming and diversion of water does not adversely affect the life supporting capacity of the resource while still providing for the social, economic and cultural wellbeing of the community. Rules incorporate the setting of SFR and the application of water classifications to all fresh water resources. All activities are required to comply with the SFRs and water classifications. Rules are also used to achieve the equitable and efficient management of freshwater resources, particularly during periods of low flow or levels.
Education	Inform water users of techniques and equipment which are most effective at conserving water. This campaign will apply to domestic and commercial water users. Run programmes to educate the community about fresh water resources in the District, and the associated values and uses of those resources, and the importance of complying with water classification standards and SFRs to protect those values. Require self-monitoring of abstraction and discharges to educate users about the effects of their activities on the water resource.

	Inform water users about the effects of their activity on other users, in particular the adverse effects associated with location and operation of bores, intakes and dams, and the inequity associated with water allocations above that reasonably required by the user.
Public Information	Publicise appropriate flow and level information during dry periods via the media to inform water users when rationing is imminent and when point source discharges should cease and when rationing is required.
Liaison	Continue to liaise with iwi, Nelson-Marlborough Fish and Game Council, Department of Conservation, water users and the community regarding the value assigned to resources in terms of their cultural, recreational and ecological requirements. This information will be considered when reviewing and establishing SFRs and reviewing the water classification standards. To encourage water users to reach voluntary agreements, the Council will establish Water User Groups for resource systems where rationing levels have been set, these being: • Awatere River; • Omaka River Valley Catchment; • Waihopai River; and • Fairhall River Gravels Aquifer. Where other resource systems begin to experience water shortages rationing trigger levels and Water User Groups will be established. This will be implemented by way of a plan change. Liaise with Water User Groups during rationing periods to ensure rationing of consent allocations is consistent with the Council's rationing strategy, yet still sustainable (ie; prevents SFRs from being breached by abstractions). Liaise with bordering district and regional councils, in particular Canterbury Regional Council, to ensure that cross boundary issues are dealt with in a consistent manner
Incentives	Use incentives to encourage the efficient use of water. Incentives will include Controlled Activity classification for some water permits, and will include exemption of water retained in storage from controls, particularly controls during rationing periods. The Council will also make some permits available to those users with existing storage when permits are renewed.
Research	Commission research into drought planning for the region. Continue research to better determine efficient water use requirements for different activities. Also undertake specific research to determine the actual daily consumption of water from domestic properties for reasonable use. This information will be used to guide land management decision making in water short management zones.

	Support further research into the in-stream requirements of fresh water resources.
Monitoring	Undertake enhanced surface water quality monitoring to determine the relative contributions of point and non-point source discharges, and to determine baseline water quality across the planning area. Use district wide surface flow and groundwater level monitoring information and climatic data to identify the points at which rationing is imminent and required. Use water meter readings to determine actual use requirements. These will be used together with the results of scientific studies of the water use requirements of specific crops or land-use systems, to allocate water more efficiently. Use water meter readings to determine the appropriateness of quota on water permits and to measure compliance during rationing periods. The Council will keep a register of bore, intake and dam locations to ensure new bores and intakes do not adversely affect existing users. Continue to monitor the flows and levels of fresh water bodies, paying particular attention to those which are nearing full allocation. Information will be gathered to determine the ongoing sustainability of existing SFRs and to set sustainable SFRs for other resources.
Enforcement	Undertake enforcement during the period when rationing is required, by monitoring use from meter readings and undertaking spot checks of users to ensure that local water restrictions are not being breached. Enforcement provisions in the Act will be used to deter offenders.
Riparian Management Strategy	The Council will prepare, in consultation with relevant parties, a Riparian Management Strategy to provide further guidance on the appropriate management of riparian margins so that their habitat, water quality, amenity and public access benefits are recognised and enhanced.
Identification of the values of water bodies	The natural and human use values supported by surface water bodies within the Plan area are identified in Appendix A of Volume One of the Plan. These values include ecological, habitat, recreational and natural character values. Regard can be had to these values when considering resource consent applications required as a result of rules in this Plan. As more is learnt about the values supported by water bodies in South Marlborough, it is possible to add to Appendix A by way of plan change.

Rules are essential for ensuring that use of water is reduced and suspended during periods of low flows to prevent the SFR levels from being breached. Rules will also enable enforcement procedures provided under the Act to be utilised to avoid or mitigate behaviour or activities which could result in significant adverse environmental effects.

To achieve effective compliance with the rationing strategy, the Council will need to undertake a comprehensive public information and education campaign to inform users of the effects of takes during dry periods, in addition to providing practical guidance which enables users to actually reduce their take. The monitoring information collected during the dry period should be used to teach people about their water consumption patterns. Being proactive in gaining community support is seen as a major priority in this process.

Given the potential for dry periods to affect different water resources in different ways, the rationing strategy may need to be adapted, as appropriate, to allow the most efficient possible rationing of water on a resource by resource basis.

It is also important that water permits are used within a reasonable time period to ensure that water is not being unfairly withheld from other users. The Act allows the Council to revoke a water permit, in full or in part, when the permit has not been used within two years of granting, to enable the consent quota to be pooled for reallocation. The Council intends to actively do this. This is particularly important in the water short areas.

Review of consents is essential for achieving equitable allocation of water, particularly within irrigation water short management areas, such as the Southern Valley's Water Management Zone. The Council is aware that a number of existing allocations are in excess of actual need and are unreasonably tying up water which could be used by other users. At the 5 or 10 year review periods, and at renewal, permit volumes will be assessed and amended to provide only for the maximum actual need of the users. This will enable a more equitable allocation of water.

The Council will use incentives, education and research to encourage the more efficient use of water. These are seen as effective ways of encouraging a change in behaviour which will result in the more efficient use of water. Education will be of assistance to users who may not be aware of how to make efficient use of their allocations.

Monitoring is needed to enable the Council to achieve equitable and sustainable allocation of the fresh water resources. Monitoring will provide important data on maximum actual use which will enable quota on renewed permits to be determined. The Council will not seek to unfairly restrict consumption of water. Therefore there will be no need for users to manipulate water meter readings. Monitoring will also enable compliance with rationing restrictions to be assessed.

One of the roles of the riparian management strategy is to investigate the appropriateness of existing riparian management detailed in this and other chapters and the rules contained in Volume Two of the Plan. If, following this investigation, changes to plan provisions are required then those changes will be pursued through the plan change process.

6.8 Anticipated Environmental Results

- Maintenance of flows in surface water systems, and levels in groundwater systems which do not breach the SFR;
- Maintenance of freshwater quality for resources which currently meet water classifications;
- Enhancement of freshwater quality to enable progress towards the water classifications which cannot currently be met;
- Protection of in-stream habitat and ecology;

- No lessening of the in-stream value classifications set out in Appendix A;
- Maintenance of natural character of high and very high value fresh water resources;
- Avoidance of reductions in spring flows;
- Prevention of landward shift of the marine and fresh water interface;
- Prevention of damage to the physical structure of aquifers;
- Reduced conflict between users reported to the Council;
- Reduced interference between neighbouring bores;
- Adequate provision of SFRs measured by fish number surveys, including protection of fish passage and spawning grounds;
- Protection of the Mauri of specified fresh water resources;
- Less feedback to the Council that allocations are not being fully used;
- Maintenance or enhancement of amenity values;
- Protection of significant indigenous vegetation and significant habitats of indigenous fauna;
- Social, economic and cultural well-being of the communities; and
- Improved understanding of existing freshwater quality and the effects of point and non-point discharges on water quality.

The following Policies have been added to this plan as directed by the National Policy Statement Freshwater management 2011 in accordance with Section 55 of the Resource Management Act 1991.

6.9 Water Quality

1. When considering any application for a discharge the consent authority must have regard to the following matters:

   a) the extent to which the discharge would avoid contamination that will have an adverse effect on the life-supporting capacity of fresh water including on any ecosystem associated with fresh water and

   b) the extent to which it is feasible and dependable that any more than minor adverse effect on fresh water, and on any ecosystem associated with fresh water, resulting from the discharge would be avoided.

2. This policy applies to the following discharges (including a diffuse discharge by any person or animal):

   a) a new discharge or

b) a change or increase in any discharge –

of any contaminant into fresh water, or onto or into land in circumstances that may result in that contaminant (or, as a result of any natural process from the discharge of that contaminant, any other contaminant) entering fresh water.

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

7.0 Water Quantity

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

   a) the extent to which the change would adversely affect safeguarding the life-supporting capacity of fresh water and of any associated ecosystem and

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

2. This policy applies to:

   a) any new activity and

   b) any change in the character, intensity or scale of any established activity –

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

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