

**Before a Special Tribunal Appointed under  
Section 202 of the Resource Management Act 1991**

**In the Matter of**                    the Resource Management Act 1991 ("the Act")

**And**

**In the Matter of**                    An application by the New Zealand Fish and Game  
Council and the North Canterbury Fish and Game Council  
on a Water Conservation Order under section 201 of the  
Act

**Statement of Evidence of  
Bruce Murray Yates**

Dated: 23 March 2009

---

---

**Lane Neave L A W Y E E R S**  
Level 15, 119 Armagh Street  
PO Box 13149  
Christchurch  
Solicitor Acting: DC Caldwell  
Phone: (03) 379 3720  
Fax: (03) 379 8370

## Introduction

1. My full name is Bruce Murray Yates. I am the Manager, Engineering Services, with the Hurunui District Council (Council). My role is to manage the infrastructural assets of the Council, including water assets.
2. I have been employed by the Council and its predecessors for 25 years. Prior to that time I held a number of roles with the Ministry of Works. I hold a Bachelor of Engineering (Civil) from Canterbury University and I am a member of IPENZ.
3. This evidence is essentially to provide the Tribunal with information as to the current consents the Council holds for water takes from the Hurunui and associated waterways and groundwater.
4. I do not in this evidence address irrigation and water storage issues. I understand that those issues, and their importance to the District, will be addressed by others.
5. I do however note that large parts of the Hurunui District are drought prone and that the secure and plentiful supply of water is an extremely important issue for the Council.
6. By way of background, water has been identified by the Council as one of the key issues that it faces.
7. The drafted LTCCP 2009-2019 identifies an aim being:  
  
*“To provide a sustainable supply of water that meets the present and future domestic and agricultural fresh water cultural concerns and complies with the New Zealand Drinking Water Standards (2005)”*.<sup>1</sup>
8. The LTCCP addresses water supply under Activity 5 on pages 157-171 of the draft LTCCP. The relevant pages are **attached** to this evidence and marked “A”.

---

<sup>1</sup> Draft LTCCP – 2009-2019, page 157

## **Water Schemes**

9. Council holds consent for water from 23 sources within the District which are used to supply stock and domestic water to most of the Hurunui District. There are 13 Council owned schemes.
10. In relation to the Hurunui River, the Council has 5 consented takes and I now describe those.

### **Kaiwara Rural Water Scheme**

11. This scheme supplies 23,000 hectares (June 1999) of steep hill country in the area north of the Hurunui River, between Lowry and the Amuri Plains and Domett Flats. No urban areas are supplied by this scheme. The scheme supplies 31 properties in the area with 75 tank connections.
12. Water is allocated (as it is on all rural schemes) on a unit basis with one unit being 1800 litres supplied over 24 hours.
13. Delivery is made to a tank at the consumer's property through a flow restrictor device.
14. The source of water for this scheme are 2 (1 duty and 1 standby) wide based shallow bores in the riverbed gravels adjacent to the Hurunui River about 2.5km upstream from the State Highway 1 bridge. The scheme was established in 1967. The pumping rate is 18 m<sup>3</sup> per hour. I **attach** a copy of CRC002016 marked "B".

### **Blythe Rural Water Scheme**

15. This scheme services a section of hill country immediately south of the Hurunui River between State Highway 1 and the coast. It services a block of 4,600 hectares. It is one of four networks in the Cheviot rural water rating area. It services 15 separate consumers with 24 tank connections. The properties served are rural economic units with no settlements or lifestyle blocks. There are 58 units contracted at present.
16. The water for this scheme is drawn from a shallow well (5.8 m x 760mm diameter) on the Hurunui River Flats south of the riverbed and between State Highway 1 and the coast.

### **Hurunui No.1 Water Supply Network**

17. This network services an area of approximately 39,600 hectares from the Hurunui River, south to Waipara and from the coast back to Mt Alexander.
18. This scheme has 374 consumers and includes the urban settlements of Motunau Beach (90), Greta Valley (18), and Scargill (12). There are 452 separate tanks.
19. The water source is from a shallow river gallery on the south side of the Hurunui River about 1 km downstream from the State Highway bridge. Council holds CRC002014 for this take. The take is at a rate not exceeding 26 litres per second, with a daily volume not to exceed 21m<sup>3</sup>. I **attach** a copy of that consent which is marked "C".

### **Peaks Water Supply Network**

20. This covers an area of approximately 3,900 hectares with 22 connections and 37 tanks. It was established in 1964.
21. It draws its water from a shallow bore assisted by a short gallery adjacent to the south bank of the Hurunui Riverbed. The take is just below the Amuri irrigation intake below the Mandamus River confluence.
22. Consent CRC002017 allows for take of no more than 3 litres per second with volume not exceeding 150m<sup>3</sup> per day.

### **Hawarden/Waikari Urban Water**

23. This network services the townships of Hawarden and Waikari, plus the area between and around those towns.
24. This network differs from the others in that it supplies both rural and urban connections as "on demand" rather than flow restricted.
25. There are 409 connections to this network servicing 374 separate properties. 306 of those are urban or lifestyle.
26. The water is sourced from a shallow river gallery in the mid reaches of the Waitohi River at Bakers Ford.

27. The 1997-1998 drought reduced river flows and in February 1998 the gallery was running dry. Severe water restrictions were imposed. Following a community meeting, a supply line was installed from the Hurunui River at Bishells Road. This source was linked to the Bakers Ford pumping shed.
28. The Council holds consents CRC002011 and CRC042081, which are **attached** and marked “D” and “E”. CRC002011 provides for the take from the Waitohi River. This allows a take not exceeding 90m per second with a daily maximum of 1368 cumecs
29. CRC042081 allows for up to 23 litres per second. This imposes a reduction in take when flows fall below certain levels.

#### **Importance of the Schemes**

30. While the takes for these schemes are consented, I am concerned that if a water conservation order is placed over the lower Hurunui River in the terms now sought by some of the submitters, there could be real difficulties in re consenting.
31. The water supply schemes are critical to the members of the community who they service. They have been an integral part of the Hurunui District infrastructure for many years. The alternative sources of water to supply these schemes is limited.
32. For the needs of the community to be met, I consider that the takes outlined are deserving of protection.

B M Yates

23 March 2009

## Activity 5: Water Supply

### Our Aim

To provide a sustainable supply of water that meets the needs of present and future domestic and agricultural/horticultural consumers, and complies with the New Zealand Drinking Water Standards (2005).

### Background

The subject of water is of major importance to the Council. It is an ongoing challenge for Council to provide a plentiful water supply, particularly given the drought prone nature of the Hurunui, and to have water that is of a good drinking standard while at the same time operating an efficient and cost effective service.

Council is required to provide water services in accordance with the Local Government Act 2002. A summary of Council's Water and Sanitary Services Assessment is included in this document as an appendix. Council is responsible for the ongoing maintenance of public infrastructural assets, improving public water supply schemes, and providing water treatment and distribution services. Our water supply is categorised as follows:

On-demand water supply covers the abstraction, treatment and reticulation of potable water (drinking water) to urban communities in the Hurunui District, where water is delivered to consumers' taps under pressure.

Restricted water supply covers the abstraction, treatment and reticulation of stock and domestic water to rural properties in our district, where water is delivered to consumers' tanks at a set rate of flow on a continual basis, as "units" of water.

Proposed detailed levels of service for our water supply are set out in an appendix at the back of this document.

### Community Outcomes & Dimensions of Wellness

Council's Water activity is a crucial contributor to the Community Outcome "Essential Infrastructure" and the associated "Infrastructure" dimension of wellness. Water is rated as a top priority for people in the Hurunui. Council is responsible for the water supply in the district, including ensuring that all reticulated systems operate as efficiently as possible, that the conditions of all water permits are complied with, that the average consumption is maintained or reduced providing cost-effective public supplies, and providing adequately located pressured connections for fire fighting.

### Current Situation

The quality and quantity of drinking water in the Hurunui District has been of concern for Council for some time.

There are currently 13 Council owned water schemes in the District, extracting water from 23 different sources. Two are on permanent boil water notices. The schemes are overseen by Water Committees with delegated

responsibilities for the planning and development of their schemes. A schedule of the water schemes is included within this section.

On-demand water is supplied to 8 of the urban communities in the district from 7 high pressure schemes consisting of 9 water intakes and 60 km of pipe.

Other small urban communities (Leithfield, Cheviot, Gore Bay, Rotherham, Greta Valley, Amberley Beach and Motunau Beach) are supplied via tanks from restricted rural supplies. All rural communities in the district are serviced by Council operated restricted-flow water supplies providing water to consumers as "units" of water supplied into individual tanks. One unit is 1800 litres supplied over 24 hours, except for Balmoral and Amuri Plains, where a unit is 1000 litres per day. The Hurunui and Cheviot Rural Water Schemes cover four separate supplies within each of their areas. The Ashley Scheme also has four distinct sources and includes part of the Waimakariri District within its boundaries.

All townships with on-demand supplies, except Leithfield Beach have metered connections and charges are made on actual water consumption.

### Plans for the Future

Of primary consideration for the future, is that the Health (Drinking Water) Amendment Act 2007 came into force on 1 July 2008 which requires Councils to monitor drinking water, take all practicable steps to comply with the drinking water standards and to implement risk management plans. The penalties for failing to comply are very severe (\$200,000 plus for a continuing offence, and \$10,000 for each day of continued non compliance). Accordingly the Council is determined to work with its Ward and Ward Councillors to ensure that the requirements are met within the times specified.

Six of the Council's 23 water supply sources are defined as "minor" supplies, which require compliance with the Act by 1 July 2011. Of these six, five will comply with a small amount of additional monitoring and the preparation and implementation of Public Health Risk Management Plans. The sixth, (Cheviot) will require either a major treatment plant to be installed at the Waiiau intake, or alternatively a new deep water source. Because the latter has not yet been investigated in any detail, provision for capital expenditure of \$579,000 (a subsidy is being sought to offset this) has been included in this plan to provide for a new treatment plant consisting of micro-filtration followed by UV disinfection. The other 17 drinking water sources are categorised as either "small", "neighbourhood" or "rural agricultural" with timeframes of 2012, 2013 or 2013 or later depending on when the standards are awarded, respectively. These supplies have the opportunity to reduce their monitoring costs by demonstrating compliance as a "participating authority". Table 3 in this section tabulates the situation for all of the Council's drinking water supplies.

Council will continue to seek Central Government funding assistance for upgrading its water supplies, to minimize the impact of large capital expenditure on the present consumers' water rates. While a smoothing effect has been applied to water rates over the period of this plan to avoid significantly fluctuating increases and decreases in the rates, in the next year, the Council intends to investigate options for "smoothing out" water rates across the District. Having consumers represented at the local level in Water Committees is considered to be one of the main strengths of the current organisation and there is no intention to diminish the impact and contribution of these committees. However, with rural water rates ranging from \$71 a unit to \$610, and on-demand schemes ranging from \$80 per property to \$184, there is the need to consider if there is a benefit in funding all schemes by a District-wide rate to improve economies of scale.

Council has for some time held concern that a number of areas in the District have water that should be boiled before drinking. Council is committed to focusing on working with the Water Committees to improve drinking water standards, particularly with regard to the Cheviot/Gore Bay urban area where boiled water notices have been in place for many years. Council will support the efforts of the Cheviot Ward Committee to achieve national prescribed drinking water standards by the due date of July 2011. Capital provisions of \$579,000 (dependent on a 50/50 subsidy), have been made for 2010/11.

The Council is also committed to complying with New Zealand Drinking Water Standards for the other schemes in the District and will be working closely with the water committees over the next 3 years to achieve this end. In some cases that will mean making provision for additional monitoring while in others a treatment plant upgrade may be required. The details of whatever is required will become clearer once Council's 'Public Health Risk Management Plans' are written and approved by the Crown Public Health for every supply. These plans will be written over the first year of this plan. In the smallest schemes (known as "neighbourhood schemes") the legislation is not specific as to the standards expected, and will be re-written before 2013 to clarify this point.

Council has been undertaking a pipe replacement programme over the past few years, and due to the extensive nature of the Huronui District, this will continue for some years to come.

This section should be read in conjunction with our Council's "Huronui Water Management Strategy" on page 177.

## Funding

### Capital

Significant Council capital expenditure should be funded by a loan, which is generally taken over 20 years. If loans are not raised then the capital expenditure will be treat-

ed as a fixed cost and funded from annual rates. If any of the Capital Expenditure caters for future growth of the scheme, then that portion of the expenditure that relates to growth will be funded from future users via Development Contributions. Landowners with new connections will pay the cost of connecting to the nearest main plus, if a new subdivider, putting in the sub-main and any levies as specified in the Development Contributions policy. Property owners wanting new connections will pay those costs necessary for the connection

### Loan Repayments

If significant Council capital expenditure is funded by a loan, the length of the loan is generally 20 years. Principal repayments and interest charged on the loan are treated as a fixed cost and will be funded from a local Uniform Annual Charge.

### Operational Costs

Council as a whole is required to generate sufficient revenue to cover all costs including depreciation. The Council will not fund depreciation for water systems but will continue to fund upgrades and replacements through loans and rates. This will mean that users in the future will have to pay for capital replacements as and when these are required. Under this system, routine maintenance and programmed asset replacements will continue and ratepayers are relieved of the burden in the short term of a major rate increase to build up depreciation funds.

Restricted water supply is funded as a local Uniform Annual Charge on water unit entitlement. Unrestricted water supply is funded as fixed costs as a local Uniform Annual Charge. Variable costs are funded as a set price based per cubic metre of water as recorded by the individual water meters.

## Maintenance and Operating

Council intends to retain the ownership of all public water supply assets on behalf of the communities that these facilities serve. Asset management, basic design work, contract documentation, tendering, record keeping, operation and routine repair and maintenance is to be carried out by Council staff. Larger budget capital works are likely to be let as contracts in accordance with Council's Tendering and Purchase Policy. Larger repairs, work across state highways or arterial roads and some emergency works may also be contracted to preferred or available contractors. External consultants will be engaged only for specialised tasks, where skills are not available in-house or where Council or the community seeks such inputs.

Information relating to the overall condition and performance of the assets that make up the water supply networks in the district can be located in Council's Asset Management Plans. Age and condition have an influence

on the maintenance of assets but do not necessarily impact on performance. Breakages can occur due to earthworks, pressure waves (from pumps) or illegal connections that can influence demand for water. Low performance can also arise from an increase in demand from high growth, changes in technology and materials and changing expectations from the community. The Asset Management Plans have been updated recently.

Most of the network reticulation is in good repair and operating under a policy of renewal when necessary, reticulation should remain serviceable indefinitely. Pumps, controls, telemetry (data sent back to the office by radio) and water treatment devices are repaired as the need arises and are replaced as the benefits of repair are outweighed by replacement – usually every 12 – 20 years. Reservoirs, weirs, bores, and ponds are maintained on an ongoing basis. Ages of on-demand water networks is quite recent, with the earliest networks dating to 1955 (Amberley).

### Significant Negative Effects

There is potential for significant negative effects on the environmental and cultural wellbeing of the community if there is excessive abstraction of water. Abstraction is managed to minimize the chance of outages or disruption to supply. There are also potential negative public health effects in providing water in some areas that does not meet current drinking water guidelines for biological contaminants. Council currently issues public “boil water” notices when positive samples are detected.

Development contributions are being collected to offset the negative economic effects on ratepayers of upgrades of supplies in the District that are necessary to cater for growth. Such upgrades will help to ensure that the present level of provision of water supply services is sustainable. To the extent possible within economic constraints, the Council will also look to improve the level of provision of these services.

### Assumptions and Risks

Proposed upgrading of water systems, new treatment plants and filtration systems, all assume subsidies from Central Government in order for the work to proceed as budgeted. Effort is ongoing to establish the useful lifespan of underground and fixed water supply assets. Most of the urban reticulation is AC pipe (prior to early 1970’s) and PVC for new sub-divisions and replaced sections.

Pipe material has performed satisfactorily since installation, but renewal is anticipated for much of this over the next 20 years. Expected life for AC is 60 years and 80 years for PVC and polyethylene (PE). Some AC pipe has experienced wall softening, demanding repair or replacement. This effect is localised in all networks, but the frequency of pipe failure is closely monitored to ensure replacement is carried out at the optimum time.

External stresses determine the useful life of all assets. The inability to pin-point these means approximate values are applied to useful service lives. This means renewal priorities are anticipated, rather than confidently known and will be revised during the Hurunui Community Plan reviews as information comes to hand.

Acceptability of water quality and quantity alters also over time, as does expectations for service. These may require improvements to facilities in the future that are not identified in the current financial forecast.

Council recognises risks associated with failure to supply safe drinking water on public health and failure to supply where natural disaster has the capacity to damage reticulation. The rural character of the district means immediate assistance may be limited at such times. Council holds limited pipe and fittings stocks at each depot and has built-in generators or external plugs at some of the main pump stations. Reservoir back-up where intakes are out of commission is very limited (except for Hammer Springs). Operators and plant located at each depot is a first point of call.

It is assumed that for the subsidised projects in this activity to progress, that they will receive the subsidies as identified. All water networks operate under current resource consents to take water. Conditions are set with council utilities staff and are administered by Environment Canterbury. All takes are within consented limits at present, with most consents having been renewed in recent years. It is assumed that future demand will be able to be met with the capital projects planned and that the consents for such will continue to be renewed as necessary and be able to be complied with.

There is potential for significant negative effects on the environmental and cultural wellbeing of the community if there is excessive abstraction of water. Abstraction is managed to minimize the chance of outages or disruption to supply. There are also potential negative public health effects in providing water in some areas that does not meet current drinking water guidelines for biological contaminants. Council currently issues public “boil water” notices when traces of bacteria are detected in samples.

Development contributions are being collected to offset the negative economic effects on ratepayers of upgrades of supplies in the District that are necessary to cater for growth. Such upgrades will help to ensure that the present level of provision of water supply services is sustainable. To the extent possible within economic constraints, the Council will also look to improve the level of provision of these services.

### Assets

Valuations shown for each network are as at 1 July 2008 and are prepared using Council’s historical cost estimates. The values are = to the nearest \$100.

Network/Valuations		
Network	Replacement Cost	Depreciated Values
Amberley	\$2,713,643	\$1,064,875
Leithfield Beach	\$480,266	\$287,027

Ashley	\$11,531,624	\$8,208,230
Culverden	\$1,004,254	\$347,564
Waiau	\$708,093	\$199,831
Amuri Plains	\$1,314,519	\$861,011
Balmoral	\$1,299,086	\$823,182
Waiau RWS	\$2,329,143	\$1,152,624
Kaiwara	\$1,586,549	\$786,179
Parnassus	\$1,087,397	\$579,114
Cheviot Main	\$3,166,730	\$1,446,329
Blythe	\$399,745	\$240,472
Waipara	\$673,783	\$209,652
Hanmer Springs	\$5,752,950	\$3,797,708
Hawarden / Waikari	\$2,742,839	\$833,119
Upper Waitohi	\$2,227,829	\$756,033
Lower Waitohi	\$1,684,368	\$803,952
The Peaks	\$267,939	\$150,592
Hurunui 1	\$5,015,531	\$2,179,250

Table 1 Schedule of On-Demand Water Supplies (Urban)

Major Projects	Year Planned		
	2009/10	2010/11	2011/12
<b>Amberley</b>			
Renew pipework	\$309,000		
Construct additional reservoir		\$406,000	
Electrical renewals			\$5,000
<b>Ashley Rural</b>			
Renew pipes and fittings	\$245,000	\$242,000	\$196,000
<b>Balmoral</b>			
Replace pipes	\$46,000		
Replace pumps		\$4,000	
Renew restrictors			\$16,000
<b>Cheviot</b>			
Renew pipes	\$113,000		
New treatment plant		\$654,000	
Renew pipes, reservoirs			\$141,000
<b>Culverden Township</b>			
Renew pipework	\$8,000	\$5,000	\$5,000
<b>Hanmer Springs</b>			
Renew pipes	\$17,000		
Renew pumps, hydrants		\$243,000	\$256,000

<b>Hawarden/Waikari</b>			
Renew pipes, pumps	\$13,000	\$5,000	\$7,000
<b>Hurunui Rural</b>			
Renew pipes, pumps	\$205,000	\$203,000	\$209,000
<b>Leithfield Beach</b>			
Install new bore		\$110,000	
Construct new pump shed			\$8,000
<b>Waiau Rural</b>			
Relocate main intake	\$197,000		
Renew pipes		\$20,000	\$13,000
<b>Waiau Township</b>			
Replace reservoir roof		\$27,000	
Replace pumps			\$9,000
<b>Waipara Township</b>			
Construct new reservoirs	\$36,000		
Install new alarms		\$2,000	\$2,000

WaterScheme	Description
Amberley	Amberley's 774 consumers use from 500 to 1,800 cubic metres of water per day. Water is drawn from a shallow gallery on the Kowai River and a 123m deep bore near Leithfield (1960's). The network was installed from 1955 onward. The Kowai River supply is aerated and disinfected with UV light. The deep bore water is untreated and quite hard. Peak demand is beginning to exceed available flow, during very dry summers. A new deep bore in the Amberley Domain will provide for future growth, and re-drilling the existing Leithfield bore will improve supply.
LeithfieldBeach	Leithfield Beach's 225 consumers use from 100 to 630 cubic metres of water per day. Water is drawn from a 119m deep bore at the domain, fed into reservoirs and pressure fed to the mains by a cluster of surface pumps. Bore water is reliable but moderately hard. The water is not treated. Growth has had some impact on supply but not in recent years. Supply appears to meet peak demand. Network installed in 1952 and mostly upgraded in 1980.
Culverden	218 consumers use from 200 to 950 cubic metres of water per day. Water is drawn from a bore (12.2m deep), aerated and fed into a single reservoir (90m <sup>3</sup> ). Storage capacity is low. Surface pumps on variable-speed drives supply constant mains pressure. Supply meets demand. Growth is not an issue. New well installed in 2007.

Waiau	Waiau's 175 consumers use from 130 to 610 cubic metres of water per day. Water is drawn from a shallow bore adjacent to the Mason/Waiau River fork and treated with UV and chlorine (if water is dirty). Bore pumps pressurise the main and feed into 180m <sup>3</sup> reservoir on the top terrace. Water quality is variable with river conditions. Water storage is minimal. Supply well meets peak demand. Growth is not an issue to contend with. Installed in 1963.
Waipara	Waipara's 114 consumers use from 70 to 190 cubic metres of water per day. Water is drawn from a 29m deep bore on the Waipara River flat, east of SH1. Water quality can alter marginally with river conditions. Water is not treated. Bore pump pressurises mains and feed reservoirs on McKenzie Road. Water storage is minimal. Growth has not been an issue to date, but may alter with increased viticulture in the locality. Supply easily meets demand. The Railway area was installed in 1950, but most of the town in 1966.

Hanmer Springs	Hanmer Springs 1256 consumers use from 350 to 1,350 cubic metres of water per day. Water taken from the Rogerson and Dillons Rivers, west of Hanmer Springs with a 14000m <sup>3</sup> open reservoir to buffer river flood periods. Water is filtered and UV disinfected. Most of the town is gravity fed, but pumps boost pressure to Conical Hill sections. Town storage is adequate. Good storage in open reservoir at intake. Supply easily meets demand. Being a tourist location places emphasis on water quality. Older sections were installed in 1925, with most of town from 1966 onwards. Old pipes have been replaced. Treatment Plant installed in 2008
Hawarden-Waikari	Hawarden and Waikari's 495 consumers use from 300 to 1,200 cubic metres of water per day. Water is drawn from either a shallow gallery (Waitohi River) or 24m deep bore (Hurunui River). Water is UV treated and has chlorine back-up for dirty water conditions. A combination of rural and urban consumers are on restricted supply (Medbury Road). There are some supply issues with the gallery going dry in summer. Deeper bore has better water quality. Some growth in demand but supply is still meeting it. The main installation was done in 1964 with the Hurunui bore added in 1997.

**Table 2 Schedule of Restricted Water Supplies (Rural)**

Water Scheme	Description
Ashley	The Ashley scheme has 1,690 connections which use from 2,300 to 4,500 cubic metres of water per day. The Ashley scheme straddles the Hurunui District and Waimakariri District boundaries but the entire scheme is owned and operated by Hurunui District Council. People who own properties in the Waimakariri District are separately rated for Water by the Hurunui District Council. Water is drawn from several sources. The main intake is a cluster of five shallow bores on Lower Sefton Road. The northern section is fed from two deep bores at Smiths Road (122m), a new bore at Racecourse Rd (126m) and Kowai River Road (129m). There are twelve additional pump booster points on the network, additional to the intake pumps. The network was installed from 1972 onward. The main intake of water river is aerated and disinfected with UV light. Smiths Road water is filtered to remove manganese. The Kowai River Road water is treated to reduce hardness. Peak demand is met with available flow. Growth has been an issue for over a decade with lifestyle sub-divisions.
Amuri Plains	Amuri Plains has 106 connections which use from 390 to 607 cubic metres of water per day. Water is drawn from two shallow bores, close to the Waiau River and pumped to a 270m <sup>3</sup> concrete reservoir located on a ridge to the south. Water gravity flows to all consumers from here. Bore water is reliable and clean. Water is treated by UV light. Growth has had minimal impact on supply. Supply appears to meet the peak demand of rural consumers and the settlement of Rotherham. The network was installed in 1981.
Balmoral	Balmoral has 48 connections which use from 375 to 560 cubic metres per day. Water is drawn normally from a weir on the Awatui Stream, then gravity feeds down to two timber tanks (500m <sup>3</sup> total). Flow is gravity fed to all consumers from here. If the weir flow is unavailable, water is pumped from the Pahau River below the main. Water is chlorinated before any supply points. Supply meets demand. There has been no growth in connections, but some increase in unit sales has occurred. The system was installed in 1982.
Waiau Rural	Waiau has 66 connections which use from 560 to 910 cubic metres of water per day. Water is drawn from a shallow bore adjacent to the Waiau River and is not treated. Surface pumps pressurise a rising main and feed to a 270m <sup>3</sup> concrete reservoir on a ridge to the north of the bore. There are ten separate boost/inline pump stations. Water quality is variable with river conditions. Water storage is minimal for the demand. Supply well meets peak demand. Growth is not an issue to contend with. The system was installed in 1975.

Cheviot	<p>Cheviot has 758 connections with water usage as follows:</p> <ol style="list-style-type: none"> <li>1. Cheviot Main - 595 connections, usage from 790 to 1,320 cubic metres per day</li> <li>2. Parnassus - 66 connections, usage from 180 to 430 cubic metres per day</li> <li>3. Blythe - 24 connections, usage from 70 to 120 cubic metres per day</li> <li>4. Kaiwara - 73 connections, usage from 250 to 380 cubic metres per day</li> </ol> <p>Water is drawn from shallow bores for all 4 networks in this area, with 2 adjacent to the Waiau River and 2 by the Hurunui River. This network also supplies the urban area of Cheviot plus Gore Bay. There are 14 additional boost pump stations across all four areas. Water quality can alter marginally to significantly with river conditions for all intakes. No supply points are treated. Water storage is minimal for all networks. Growth has been minor to date and limited to the Cheviot Main area. Supply meets demand, with some constraint on the Cheviot main supply. Water quality is an issue, with permanent "boil water" notice in place. Installation of all networks took place between 1970 and 1971.</p>
Hurunui	<p>Hurunui has 791 connections with water usage as follows:</p> <ol style="list-style-type: none"> <li>1. Hurunui Main - 460 connections, usage from 1,200 to 1,700 cubic meters per day</li> <li>2. Lower Waitohi - 118 connections, usage from 360 to 550 cubic metres per day</li> <li>3. Upper Waitohi - 179 connections, usage from 600 to 800 cubic metres per day</li> <li>4. Peaks - 34 connections, usage from 60 to 120 cubic metres per day</li> </ol> <p>Water is drawn from shallow bores from the Peaks (Hurunui River) and Lower Waitohi (Waitohi River) networks and from galleries for the Hurunui Main (Hurunui River) and Upper Waitohi (Waitohi River). The Hurunui Main network also supplies the urban areas of Motunau Beach, Greta Valley and Scargill. There are 17 additional boost pump stations across all four areas. Water quality can alter marginally to significantly with river conditions for all intakes, particularly the two galleries. Water is treated with chlorine for the Upper Waitohi network. Water storage is minimal for all networks. Growth has been small over the past 10 years but has increased with new demand around the Waipara area (which affects all networks other than Peaks). Supply meets demand. Water quality is an issue with the Hurunui Main and Upper Waitohi, mainly colour. Installation of the networks occurred from 1967.</p>

**Table 3 Hurunui Drinking Water Supplies-Health (Drinking Water) Act Categories**

Source	Type	Popn.	Category	Effective Date
Amberley Town - Amberley Domain - SH1, Leithfield	Gallery Well	1,200	Minor	2011
Amberley Beach - Kowai	Well	630	Minor	2011
Amuri Plains	Well	400	Small	2011
Ashley Rural - Main intake	Well	3,700	Minor	2011
- Mays	Well	500	Small	2012
- Racecourse Road	Well		Small	2012
Balmoral Rural	Gallery	200	Small	2012
Cheviot Rural - Waiau River	Well	1000	Minor	2011
- Blythe	Well	50	Neighbourhood	2013
- Kaiwara	Gallery	84	Neighbourhood	2013
- Parnassus	Well	100	Neighbourhood	2013
Culverden	Well	475	Small	2012
Hanmer Town	Gallery	1,500	Minor	2011
Hawarden / Waikari	Well	750	Minor	2011
Hurunui Rural - No. 1	Gallery	600	Rural Agriculture	2013*
- Peaks	Well	100	Neighbourhood	2013*
- Upper Waitohi	Gallery	400	Rural Agriculture	2013*
- Lower Waitohi				
Leithfield Beach	Well	150	Small	2012
Waiau Rural	Well	300	Rural Agricultural	2013*
Waiau Town	Well	400	Small	2012
Waipara Town	Well	220	Small	2012

\* or later depending on when standards are amended to explicitly recognise this category of supply.

Water Supply Goals and Performance Measures

Year

Community Outcomes (& Dimensions of Wellness) to which this Activity Contributes	Goals	How we will achieve our Goals	Performance Measures	Current Situation	Year			
					09-10	10-11	11-12	12+
"Essential Infrastructure" (Environmental and Cultural Wellbeing, Infrastructure)	Supply water to consumers to meet their needs	To provide a continuous 'on-demand' supply of potable water to urban areas and a restricted supply of water to rural areas	Major faults to water supplies that affect more than 100 consumers are repaired within 24 hours	No such faults were reported during the year	✓	✓	✓	✓
			No water restrictions are imposed during periods of high demand	Water restrictions have not been imposed over recent years but demand is very close to supply in some schemes during summer months	✓	✓	✓	✓
	Relevant aspects of this outcome (as set out in the Community Outcomes section):	Have an Asset Management Plan that can be reliably used to predict future work and maintenance	Asset Management Plan is up to date	This is a new performance measure		✓		
"Water quality and quantity management systems that provide good, clean household drinking water and continuity of supply for agriculture, horticulture and in the event of an emergency"	Provide safe, potable water to consumers	Maintain and build water schemes to comply	A new water scheme is built for Cheviot	This is a new performance measure		✓		
		Develop and implement the Hurunui Water Management Strategy	A water quality improvement programme has been developed	Upgrades in various stages in the District	✓	✓	✓	✓
			Water storage techniques in place	This is a new measure				✓
			All water in the Hurunui District meets NZ Drinking Water Standards	None of the Hurunui schemes presently fully comply with the 2005 NZDWS				✓

<p>Council ensures that all reticulated systems operate efficiently, that the conditions of all water permits are complied with, and the average consumption is maintained or reduced, while providing cost-effective public supplies.</p>	<p>Water is tested for quality</p>	<p>Potable water meets safety standards in:</p> <ul style="list-style-type: none"> <li>- 70% of the district</li> <li>- 80% of the district</li> <li>- 90% of the district</li> <li>- 100% of the district</li> </ul>	<p>This is a new performance measure</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>
	<p>Undertake an annual residents satisfaction survey</p>	<p>% of residents consider the quality of 'on demand' water to be</p> <ul style="list-style-type: none"> <li>- 75%</li> <li>- 80%</li> <li>- 85%</li> <li>- 90%</li> </ul>	<p>67% of residents surveyed were satisfied</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>
		<p>% of residents consider the quantity of water to be satisfactory:</p> <ul style="list-style-type: none"> <li>- 70%</li> <li>- 80%</li> <li>- 85%</li> </ul>	<p>77% of residents surveyed were satisfied</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>	<p>✓</p>

\* See Appendix 4 for more detailed proposed levels of service

	<u>Annual Plan</u> <u>2008/09</u>	<u>Year 1</u> <u>2009/2010</u>	<u>Year 2</u> <u>2010/11</u>	<u>Year 3</u> <u>2011/12</u>
<b><u>Water Supplies</u></b>				
<b><u>Operating Statement</u></b>				
<b>OPERATING REVENUE</b>				
Vested Assets	0	61,500	106,054	93,435
Rates	3,308,061	3,409,043	3,507,313	3,675,072
Development Contributions	265,577	223,953	394,046	365,647
Other Income	169,686	73,646	83,709	85,166
Internal Interest Received	26,921	4,026	1,520	1,184
Council Overheads	0	0	0	0
<b>Total Operating Revenue</b>	<b>3,770,245</b>	<b>3,772,169</b>	<b>4,092,643</b>	<b>4,220,504</b>
<b>OPERATING EXPENDITURE</b>				
Direct Expenditure	2,162,582	2,011,205	2,043,240	2,091,818
Internal Interest Paid	354,666	285,550	314,021	382,018
Council Overheads	682,995	728,356	746,984	769,067
Depreciation	977,654	893,691	905,939	1,041,087
<b>Total Operating Expenditure</b>	<b>4,177,897</b>	<b>3,918,802</b>	<b>4,010,184</b>	<b>4,283,989</b>
<b>Operating Surplus (Deficit)</b>	<b>(407,652)</b>	<b>(146,633)</b>	<b>82,460</b>	<b>(63,486)</b>
<b><u>Capital Statement</u></b>				
<b>CAPITAL EXPENDITURE</b>				
Water Supplies	2,628,802	1,251,703	2,027,445	959,738
<b>Total Capital Expenditure</b>	<b>2,628,802</b>	<b>1,251,703</b>	<b>2,027,445</b>	<b>959,738</b>
<b>FUNDS REQUIRED</b>				
Operating Deficit	407,652	146,633	0	63,486
Capital Expenditure	2,628,802	1,251,703	2,027,445	959,738
Repayment of Internal Loans	570,002	747,058	988,399	977,601
	<b>3,606,456</b>	<b>2,145,394</b>	<b>3,015,844</b>	<b>2,000,825</b>
<b>FUNDED BY</b>				
Operating Surplus	0	0	82,460	0
Non Cash Expenses	977,654	893,691	905,939	1,041,087
Internal Loans	2,628,802	1,251,703	2,027,445	959,738
	<b>3,606,456</b>	<b>2,145,394</b>	<b>3,015,844</b>	<b>2,000,825</b>

# Hanmer Springs Thermal Pools and Spa

## Overview

The Hanmer Springs Thermal Pools and Spa is a stand alone activity, therefore this section only covers the 'Hanmer Springs Thermal Pools and Spa'.

## Our Aim

To be a nationally and internationally recognised quality visitor destination.

## Why is Council Involved?

The Hanmer Springs Thermal Pools and Spa was vested by the Crown in the Council and was gazetted as a recreational reserve on 23 November 1990. Council operates the Hanmer Springs Thermal Pools and Spa under the provisions of the Reserves Act 1977. As well as providing facilities for the social and recreational use of residents, the Hanmer Springs Thermal Pools and Spa makes an important contribution to the local economy by attracting regional, national and international visitors to the district. The Hanmer Springs Thermal Pools and Spa provides a substantial revenue stream to the Council and has made an important financial contribution toward the funding of other reserves in the district. As a result, the pools and spa complex has reduced the cost to the ratepayer. Over the past 5 years, that financial contribution has amounted to \$3.1 million.

## Background

Council is committed to managing the Hanmer Springs Thermal Pools and Spa not only for the benefit and enjoyment of the public, but to leverage the profit to develop other reserves in the district. Because of the importance of the thermal pools and spa, Council has a special committee to oversee the management and business operation. This committee - The Hanmer Springs Thermal Pools and Spa Management Committee - strives to increase visitor numbers and improve our national standing, and manage the operation profitably so that there is a financial surplus to assist in funding for the district's reserves.

The thermal pools are unique and an important role for Council is to protect, maintain and enhance the reserves natural and historic features, and manage the geothermal resource for everyone to enjoy now and for future generations. The total return to Council in terms of surpluses available totals \$27 million across the 10-year forecast period. Council intends to leverage these surpluses to the maximum to fund the developments and improvements of other reserves throughout the district in accordance with the Reserves Act.

## Community Outcomes & Dimensions of Wellness

The Council's Hanmer Springs Thermal Pools and Spa activity contributes to the Community Outcome "A

desirable place to live, work and play", as the reserve is a special area to New Zealand and provides a place for relaxation and recreational activities to members of the public. The activity encourages people to participate in leisure and cultural activities, while promoting the area as a great place to live in and visit, contributing to the wellness of the District in terms of Social, Cultural, and Economic Wellbeing, and Individual and Community Lifestyle.

## Current Situation

The Hanmer Springs Thermal complex is one of New Zealand's premier tourist attractions and has received several awards in recent years. The complex won the 'Best Visitor Attraction Award', from the New Zealand Tourism Industry Association, for 3 years from 2004 to 2006 and was the winner of the 2006 Distinction Award. In 2008 it won the 'Best Natural Bathing Spa' award from the Australasian Spa Association.

The thermal pools and spa has undergone extensive upgrades and renovations in the past 2 years to upgrade facilities that had become outdated and inadequate. The complex now consists of 11 thermal pools and associated streams, 6 private pools, 2 steam rooms and 2 sauna rooms, a 25-metre freshwater lap pool and a children's activity pool including water toys and waterslides. All pools are contained in a natural landscape of rocks, alpine plants, paved and lawn areas. A health and beauty centre and café are also available at the complex. The health centre named, 'The Spa' offers a range of massage and beauty treatments and has a team of specialist staff. The café premises are owned by Council but the occupancy to run and operate a café/restaurant is leased to a private provider.

The Hanmer Springs Thermal Pools and Spa Management Committee, attends to the long term direction and planning of the pools complex and surrounds. The Committee is made up of various members to represent not only the best interests of the thermal pools, but also the local Hanmer Springs people. The Committee membership comprises of some elected members of Council, a Hanmer Springs Community Board member and external representatives.

The thermal pools and beauty centre are operated as a profitable business and funds generated are used to augment the maintenance, development and promotion of the reserve, with surpluses produced being used to assist funding of other reserves in the district. In its most recent full year, 2007/08, the complex has had an increase in visitor numbers of 2% and a surplus of \$1.51m was achieved. A total of \$980,000 was transferred from the thermal pools surplus for the funding of district wide reserves.

## Plans for the Future

Although upgrades to the pools and spa complex have been undertaken during the past 2 years, further development stages are planned for the future. This is to

address present concerns of capacity limitations, to offset the increasing competition from new water entertainment facilities in Christchurch and elsewhere, and to continue the thermal pool's award winning reputation as New Zealanders leader in water sensations and recreation. The upgrades and renovations that have been completed went only as far as the current thermal pools site would allow. Further development has been dependent on obtaining additional land into what was the Queen Mary site (formerly the hospital land run by the Canterbury District Health Board). The Crown is now vesting 5.5 hectares of the Queen Mary site to the Council and approximately 0.5 hectares of this of it has been identified as suitable to expand the pools complex. For more information about the Queen Mary site, read the Council Activity named 'Reserves' on page 90.

Concept plans are being developed for a comprehensive development project to commence from the 2009/10 year. The developments are proposed to include a new freshwater pool and a new waterslide, a children's aqua play area complete with fountains, water wheels and other water driven toys to entertain the children. The proposal will include this area being turned in to an ice skating rink in winter thereby utilizing the area twelve months a year. In addition, a second bore will be drilled to source thermal water. The thermal pool has one bore at present which will eventually run out of thermal water. The final component of the expansion includes the installation of a new water sensations pool using water features all modelled on leading international examples. These features will provide another unique selling point for our customers. The costs of the developments have been assessed at \$7.5 million with the physical works expected to begin in the 2009/2010 year and be completed in the 2011/2012 year. These proposals have been factored into the budget included in this document.

Under the proposed arrangements the pools complex will borrow the money from the council to fund these major upgrades and improvements. The council will charge the pools interest at a higher rate than it can borrow for normal infrastructure. The difference will be used by the council to offset general rate expenditure. This revenue interest will have the effect of reducing the coming year's general rate increase by more than 3% to just 0.26%.

The Thermal Pools and Spa has also proposed a \$7.5 million development of the Chisholm block, (one of the buildings on the Queen Mary site vested in Council) to turn it into a luxury spa. This proposal has not been incorporated into Council's long term budget. Council is unwilling to commit to a proposal until all options for the buildings on the Queen Mary site have been explored. The current plan is to 'mothball' the buildings, but once the formal vesting is finalised, Council will start to develop a Reserves Management Plan for the historic Queen Mary Reserve. This Plan will incorporate appropriate consultation and submission processes to draw in the widest possible field of community and commercial interests and views.

Timing will be approximately late 2009 through late 2010. Council is prepared to consider the Thermal Pools and Spa concept for developing the Chisholm block, alongside other proposals on the basis of the best return to the District at large. Before any developments occur, extensive consultation would take place.

## Funding

The thermal pools and spa are funded 100% by user charges and generate an annual surplus for Council. Major capital works are funded through the Thermal Pools and Spa borrowing from the Council pursuant to the Council's Internal Financing Policy. The interest rate set at the greater of: 3% above the Official Cash Rate; 3% above the Council's external borrowing rate; or 3% above the floating business rate as supplied by the Council's banking providers. Minor capital works are funded through the Thermal Pools and Spa's retained earnings. The additional interest derived from the internal financing to the Thermal Pools and Spa (\$30,000 per \$1 million of borrowings) provides a good return for the Council that contributes toward lower rates. The risk to Council and ratepayer of borrowing money to fund capital works for the Thermal Pools and Spa is that, should it not be able to return the anticipated profit, the Council would be liable for the debt and would need to pass this on to ratepayers. The risk is considered low as the Thermal Pools and Spa has performed consistently and based future predictions of surpluses on very conservative assumptions, reflecting the current economic downturn.

## Use of income derived from the Thermal Pools and Spa

The Thermal Pools and Spa are situated on a Recreation Reserve which has been vested in the Council under the Reserves Act 1977. Pursuant to the Reserves Act, the Council is only able to apply any surpluses derived from the Thermal Reserve to other reserves administered by the Council. The Council actively uses these surpluses to fund the costs relating to other District Reserves, Cemeteries, Public Toilets, and as the District Library has been built on a Reserve, the costs associated with the Library function is also subsidised by the surpluses from the Thermal Reserve.

With the proposed expansion of the Pools & Spa operation and its' funding by way of internal loan finance, pursuant to the Council's Internal Financing Policy, the interest costs incurred by the Hanmer Springs Thermal Pools & Spa creates a distinct flow of income that is derived from the use of the funds that the Council is investing, rather than from the use of the Recreation Reserve.

As a result, the Council has two distinct streams of income generated from the Pools and Spa operation: one from internal interest, which the Council uses to offset General Rates (in accordance with the Council's funding policies);

and the other, being on-going surpluses, which is utilised to fund costs relating the reserves (in accordance to the provisions of the Reserve Act 1977).

### Maintenance and Operating

The Hanmer Springs Thermal Pools and Spa is 100% owned by Council and this is intended to continue. The pools and spa complex contains The Spa at Hanmer Springs, which is also owned by Council. The operation of the pools is by salaried staff overseen by an appointed Manager. The café on site is not owned or operated by Council.

Once the renovations of the thermal complex have been completed, ongoing maintenance costs will be contained for several years. The pools and plant are maintained to a very high standard and a maintenance programme is in place.

### Significant Negative Effects

This activity attracts significant numbers of tourists into the township. An increase in tourism and hence, people to the area, results in an increase in waste, air and noise pollution, traffic, and pressure on water and sewerage schemes as identified previously.

The increasing population and number of houses and businesses being developed in Hanmer Springs, has created an increase in the cost of housing and competition to local businesses, and thus impacted on the current and future cultural, social and economic wellbeing of the local community through the threat to rural identity and the disadvantage to long term residents who moved into the area before the growth.

The challenge for sustainable management will be to channel some of the undeniable benefits to economic wellbeing from this activity into initiatives that compensate for these negative effects and maintain our ideal of district and community wellness.

### Emergency Management

The Council is developing a business continuity plan to detail the procedures that are to be followed in an emergency. This is to enable essential services to continue to function to the fullest possible extent, even though this may be at a reduced level, during major breakdowns or during and after any civil emergency. The Thermal Pools and Spa is not considered in this context to be an essential service, but has its own plans in place to cope with emergency situations.

### Assumptions and Risks

It has been assumed that the Thermal Pools and Spa complex will continue to attract national and international visitors, and continue to rate as a national icon. It is assumed that the Hanmer Springs Thermal Reserve and Spa's revenue will increase due to predicted increases in both patronage and price. Profit margins are based on the developments to the complex being completed on time. Sales revenue has been forecast conservatively, taking into account present tourism trends and challenges, and the projected outlook for the domestic economy, especially in the immediate years.

The biggest risks to the complex include the bore drying up, or an earthquake causing significant damage to the bore thus preventing the extraction of water. The bore is continually monitored and extraction rates limited to ensure the resource is preserved. A second bore is planned to be drilled in 2009 with the key objective being to find hotter water.

Major Projects	Year Planned		
	2009/10	2010/11	2011/12
Second bore drilled to provide the complex with a second source of thermal water	\$500,000		
Develop the pools to include a new freshwater pool and waterslide, aqua play area/ice rink and water sensations pool	\$3,647,000	\$3,458,000	\$435,000

Hanmer Springs Thermal Pools and Spa Goals and Performance Measures Year

Community Outcomes (& Dimensions of Wellness) to which this Activity Contributes	Goals	How we will achieve our Goals	Performance Measures	Current Situation	09	10	11	12
					10	11	12	+
<p>"A Desirable Place to Live, Work and Play" (Social and Cultural Wellbeing)</p> <p>Relevant aspects of this outcome (as set out in the Community Outcomes section):</p> <p>The thermal reserve is a special area to New Zealand and provides a place for relaxation and recreational activities to members of the public.</p>	<p>Manage and operate the thermal pools and spa complex to attract local, national and international visitors</p>	<p>Advertise, market and promote the thermal pools and spa complex</p>	<p>National and international customer numbers to the pool will have increased by 2% per annum</p>	<p>Customer numbers have increased by 3.5%</p>	✓	✓	✓	✓
		<p>Ensure the pools and spa are accessible and affordable to people within the Hurunui district</p>	<p>Local people utilise the thermal pools and spa annually:</p> <ul style="list-style-type: none"> <li>- 16,000</li> <li>- 18,000</li> </ul>	<p>This is a new performance measure</p>	✓	✓	✓	✓
		<p>Survey customers to assess their levels of satisfaction with the complex</p>	<p>Customers are satisfied with the thermal pools and spa facilities:</p> <ul style="list-style-type: none"> <li>- 90%</li> <li>- 95%</li> </ul>	<p>88% of our customers find our facilities are satisfactory or better</p>	✓	✓	✓	✓
		<p>Continue to develop and upgrade the thermal pools and spa facilities</p>	<p>A new water slide and freshwater pool is completed</p> <p>An aqua play area/ice rink and water sensations pool is completed</p>	<p>These are new performance measures.</p>	✓	✓	✓	✓

<p>"A Thriving Local Economy" (Economic Wellbeing): Relevant aspects of this outcome (as set out in the Community Outcomes section): Attracting visitors to the area, while growing visitor numbers in a sustainable manner.</p>	<p>Manage the pools and spa profitably</p>	<p>Operate the complex to an approved business plan</p>	<p>The thermal complex achieves an annual cash surplus (before interest &amp; depn) of:</p> <ul style="list-style-type: none"> <li>- \$2.28 million</li> <li>- \$2.77 million</li> <li>- \$3.20 million</li> </ul>	<p>The cash surplus (before interest &amp; depreciation) for the 2007/2008 financial year was \$2.1 million</p>	✓	✓	✓	✓
			<p>Bore water consumption levels are within consent parameters at no more than 11 litres per second</p>	<p>Average consumption rate for the last 12 months in 8.04 litres per second</p>	✓	✓	✓	✓
			<p>Water quality is better than the national water standard (which is NZS 5826 2000)</p>	<p>We exceed the industry standard 99% of our operating time. The industry standard is 85%</p>	✓	✓	✓	✓
<p>The Council ensures that the thermal water supply is managed sustainably to ensure ongoing supply.</p>	<p>Protect the thermal water for future use to ensure ongoing supply</p>	<p>Monitor and test the water and take appropriate remedial action if necessary</p>	<p>Drill a second bore to supply a second source of thermal water in order to ensure continuity of supply and to find hotter water.</p>	<p>There is currently one bore which is not likely to provide thermal water indefinitely. A second bore is needed to future-proof the supply.</p>	✓	✓	✓	✓
		<p>Ensure an ongoing supply of thermal water</p>				✓	✓	✓

## Resource Consent Details

<b>RecordNo</b>	CRC002016		<b>Consent Summary</b>
<b>Type</b>	Consent		
<b>Source</b>	Applic /New		
<b>Section</b>			
<b>FileNo</b>	CO6C/16935		
<b>ClientName</b>	Hurunui District Council		
<b>To</b>	to take groundwater, via bore N33/0095 at or about map reference NZMS 260 N33:149-139 and via bore N33/0096, at or about map references NZMS 260 N33:149-139, for community and stockwater supply.		
<b>Location</b>	Crown River Reserve, BETW.DOG HILL RD & HURUNUI RVR		
<b>Events</b>	07 Aug 2000	Given Effect To	
	07 Aug 2000	Consent Commenced	
	07 Aug 2002	Lapse Date if not Given Effect To	
	07 May 2007	1st Status Query Letter	
	04 Aug 2035	Consent Expires	

Subject to the following conditions:

- 1 The combined rate at which water is taken from bore N33/0095, 760 millimetres diameter and 6.09 metres deep and bore N33/0096, 760 millimetres diameter and 5.79 metres deep, shall not exceed 10 litres per second, with a combined volume not exceeding 500 cubic metres per day.
- 2 When requested in writing by the Canterbury Regional Council, the rate at which water is taken shall be measured to within an accuracy of 10 percent, and the measurement and the hours during which water is taken shall be recorded. A copy of the records shall be provided to the Canterbury Regional Council in accordance with the request.
- 3 The Canterbury Regional Council may, on any of the last five working days of June and November each year, serve notice of its intention to review the conditions of this consent for the purposes of: (a) dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or (b) complying with the requirements of a relevant rule in an operative regional plan.
- 4 Charges, set in accordance with section 36 of the Resource Management Act 1991, shall be paid to the Regional Council for the carrying out of its functions in relation to the administration, monitoring and supervision of resource consents and for the carrying out of its functions under section 35 of the Act.

### Disclaimer:

This database is updated from time to time and is used for Environment Canterbury's own administrative purposes. While every care is taken to ensure its accuracy it is not a formal record for any statutory purpose. Environment Canterbury does not rely on this record for its own use in any legal forum or for the analysis of one party's rights in comparison with another such for determining priority to any hearing. Any person wishing to see such information should ask to view the relevant files kept at the offices of Environment Canterbury or contact Customer Services

## Resource Consent Details

**RecordNo** CRC002014

### Consent Summary

**Type** Consent

**Source** Applic /New

**Section**

**FileNo** CO6C/16933

**ClientName** Hurunui District Council

**To** to take and use water.

**Location** Hurunui River, HURUNUI

<b>Events</b> 30 May 2001	Given Effect To
30 May 2001	Consent Commenced
30 May 2003	Lapse Date if not Given Effect To
07 May 2007	1st Status Query Letter
29 May 2036	Consent Expires

Subject to the following conditions:

- 1 The rate at which water is taken from the Hurunui River, at or about map reference, NZMS260 N33:185-119, shall not exceed 26 litres per second, with a volume not exceeding 2100 cubic metres per day.
- 2 Water taken shall only be used for domestic and stockwater purposes.
- 3 The taking of water in terms of this permit shall cease for a period of up to 48 hours on notice from the Canterbury Regional Council, to allow measurement of the flow in the Hurunui River.
- 4 If required by notice in writing by Canterbury Regional Council measurements of the rate of abstraction to within an accuracy of 10 percent shall be taken for the period specified and the measurements of the hours of abstraction shall also be recorded. A copy of the records shall be provided to the Canterbury Regional Council in accordance with the requirement.
- 5 The Canterbury Regional Council may, on any of the last five working days of June each year, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage.

### Disclaimer:

This database is updated from time to time and is used for Environment Canterbury's own administrative purposes. While every care is taken to ensure its accuracy it is not a formal record for any statutory purpose. Environment Canterbury does not rely on this record for its own use in any legal forum or for the analysis of one party's rights in comparison with another such for determining priority to any hearing. Any person wishing to see such information should ask to view the relevant files kept at the offices of Environment Canterbury or contact Customer Services

## Resource Consent Details

**RecordNo** CRC002011

**Consent Summary**

**Type** Consent

**Source** Applic /New

**Section**

**FileNo** CO6C/03554

**ClientName** Hurunui District Council

**To** to take and use water.

**Location** Bakers Road And Bakers Ford, HARWARDEN

<b>Events</b> 30 May 2001	Consent Commenced
01 May 2003	Given Effect To
30 May 2003	Lapse Date if not Given Effect To
29 May 2036	Consent Expires

Subject to the following conditions:

- 1 The rate at which water is taken from Waitohi River, at or about map references(s), NZMS260 M33:796-153, shall not exceed 19 litres per second, with a volume not exceeding 1,368 cubic metres per day.
- 2 Water taken shall only be used for domestic and stockwater purposes.
- 3 If required by notice in writing by Canterbury Regional Council measurements of the rate of abstraction to within an accuracy of 10 percent shall be taken for the period specified and the measurements of the hours of abstraction shall also be recorded. A copy of the records shall be provided to the Canterbury Regional Council in accordance with the requirement.
- 4 The taking of water in terms of this permit shall cease for a period of up to 48 hours on notice from the Canterbury Regional Council, to allow measurement of the flow in the Waitohi River.
- 5 The Canterbury Regional Council may, on any of the last five working days of June each year, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage.

### Disclaimer:

This database is updated from time to time and is used for Environment Canterbury's own administrative purposes. While every care is taken to ensure its accuracy it is not a formal record for any statutory purpose. Environment Canterbury does not rely on this record for its own use in any legal forum or for the analysis of one party's rights in comparison with another such for determining priority to any hearing. Any person wishing to see such information should ask to view the relevant files kept at the offices of Environment Canterbury or contact Customer Services

## Resource Consent Details

**RecordNo** CRC042081

**Consent Summary**

**Type** Consent

**Source** Applic /New

**Section**

**FileNo** CO6C/14379

**ClientName** Hurunui District Council

**To** To take and use water.

**Location** Bishells Road, HAWARDEN

<b>Events</b> 24 May 2004	Consent Commenced
19 Mar 2008	Given Effect To
30 Jun 2009	Lapse Date if not Given Effect To
21 May 2039	Consent Expires

Subject to the following conditions:

- 1 Water shall only be taken from bore M33/0227, 300 millimetres diameter and 24.7 metres deep, at or about map reference NZMS 260 M33:7895-2020, at a rate not exceeding 23.5 litres per second.
- 2 Whenever the mean flow (expressed in cubic metres per second) in the Hurunui River, as estimated by the Canterbury Regional Council from measurements at the Mandamus recorder site (map reference M33:725-240), for the 24 hour period ending at noon on any one day falls below the following flows, the taking of water for domestic use shall not exceed 250 litres per day per person residing in a dwelling served by the water supply system Month: JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC Flow: 10 10 10 10 10 10 10 11 13 17 16 11.5
- 3 Water shall be used only for public supply and stockwater purposes, as described in the application.
- 4 This consent shall not be exercised concurrently with consent CRC981583.
- 5 The consent holder shall take all practicable steps to avoid leakage from pipes and structures.
- 6 The consent holder shall, within 12 months of the commencement of this consent, install, or provide for the installation of: (a) an easily accessible straight pipe, of a length at least 15 times the diameter of the pipe, or (b) a water flow measurement device which will measure the rate at which water is taken to within an accuracy of plus or minus five percent, as part of the pump outlet plumbing or within the mainline distribution system.
- 7 If required by notice in writing by the Canterbury Regional Council a water flow measurement and recording device that will measure the volume at which water is taken (from which a rate of take can be determined) to within an accuracy of plus or minus five percent, shall be installed as part of the pump outlet plumbing or within the mainline distribution system; and the measuring and recording device shall be used to measure the volume of water abstracted per specified time interval. The rate of abstraction, volume abstracted and hours of operation shall be recorded either electronically or in a log kept for that purpose stating the date and time of measurement. The measuring and recording device and the records of abstraction shall be available for inspection on request by the Canterbury Regional Council for at least 12 months from the date of recording; and The measuring and recording device shall be installed and maintained throughout the duration of the consent in accordance with the manufacturer's instructions, if any.
- 8 The lapsing date for the purposes of section 125 shall be 30 June 2009.
- 9 The Canterbury Regional Council may, on any of the last five working days of May and November each year, serve notice of its intention to review the conditions of this consent for the purpose of dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage.

### Disclaimer:

This database is updated from time to time and is used for Environment Canterbury's own administrative