

<b>Officer responsible</b> Water Supply Manager	<b>Author</b> Eric van Toor
Corporate Plan Output: 9.3.8 Information and Advice - Water Supply, Education Programme	

The purpose of this report is to recommend changes to the Water Supply Publicity and Promotion Programme. It is also intended that this report be presented to the joint Christchurch City Council/Canterbury Regional Council on 20 October 1999 along with any recommendations from this meeting.

#### **BACKGROUND**

The need to review the Publicity and Promotion Programme arose from advice from the Regional Council at the February joint CCC/CRC meeting that annual takes from Christchurch groundwater have now been assessed more accurately than in 1986 and are lower than earlier reported. This means that there is more potential for development than previously suggested.

Minor system improvements as outlined in the September report on 1998/1999 Water Supply issues (RR 10412) have been carried out and the Water Services Unit is confident that City-wide restrictions would be necessary only in exceptional circumstances.

The current situation therefore, is that we can continue to rely on high-quality groundwater to meet all the city's water needs for several decades yet and within reason the infrastructure will support demand without the need for restrictions. It is doubtful that the full costs of the city's current publicity and promotion programme can be fully recovered by savings in running the municipal water supply. So the question must be asked, why encourage the efficient use of water while we are taking significantly less than the rate at which the groundwater is being recharged?

Discussions between staff of the Canterbury Regional Council and Christchurch City Council have continued over the past few months to clarify any confusion that may have arisen from the statements made at the February joint meeting. While it is true that in terms of the water balance abstractions are not likely to exceed inflow for several decades yet there are nevertheless risks associated with demand at less than this level. The risks and environmental effects are minor at this stage but will increase with increasing demand, commercial and industrial growth, and/or a number of dry years in succession. The thrust of the City Council's promotion campaign should be about not taking unnecessary risks with a vital resource. These risks are outlined below:

#### **EFFECTS ON SPRING-FED STREAMS**

While the effect of abstraction from the City Council's wells on stream flows is not huge when compared to natural variations, there is undoubtedly some effect from the combined pumping of wells in the west and northwest areas of the city. Whether this effect is significant in terms of effects on the local environment requires further joint investigations by the two councils. The Regional Council's proposed Waimakariri River Catchment Regional Plan proposes restrictions on groundwater hydraulically connected to the Styx River and under this plan the city's Farrington Street pump station (near Harewood Road) could be subject to regular restrictions in summer.

## **Reversal of Pressure gradients**

High pumping rates from a well inevitably increases the possibility of contamination because for an area around the well the pressures are lower in the pumped aquifer than nearer the surface. The low groundwater levels and subsequent contamination in the Woolston/Heathcote area is a clear example of what can happen under sustained pumping of a particular aquifer.

While the Woolston area has specific resource constraints that do not make it representative of the rest of the Christchurch aquifer system, the situation demonstrates that contamination at other wells arising from sustained pumping is at least possible. This risk is particularly an issue near:

- industrial zones
- many of the dozens of disused landfill sites throughout Christchurch
- the estuary and coastal areas where surface and groundwater is saline

The Christchurch City Council applied to the Canterbury Regional Council last October for consent renewals amounting to almost half the total requirements for the Municipal supply. Although consent conditions have yet to be finalised, the Canterbury Regional Council is carefully considering the issues relating to the interaction with springs and the appropriateness of overall abstraction limits. It is apparent from this process that consents without conditions that will affect water supply operations cannot be taken for granted. Any such conditions will come with an eventual cost (in piping water from further away for example) that must ultimately be borne by the ratepayer.

### **THE PROPOSED MESSAGE**

In addition to resource issues, there are also issues related to water supply infrastructure that should be publicised and specific action promoted. It is suggested that a part of the promotion strategy should in future focus on targeting particular groups of consumers about specific operational and water quality issues. A high priority of this type is to prepare and distribute publicity information about backflow prevention to commercial and industrial consumers.

A more informative campaign than has been used in the past is proposed. Christchurch water would be portrayed as a high-value-for-money service from the Council, but that its quality and low cost cannot be taken for granted. The need for efficient use of water will continue to be a main theme, because there is lower environmental risk with lower demand.

To enable more complex messages to be conveyed than in the past, a series of fact sheets is proposed titled “*H<sub>2</sub> knOw*”, which will allow information on specific aspects of the water supply system, from source to tap to be fully explained. The draft sheet for backflow prevention specifically targeted at commercial users is enclosed, as an example of the format for these fact sheets. Other *H<sub>2</sub> knOw* topics planned to be produced over the next few months include:

- the characteristics (quality) of Christchurch water
- land use practices and contamination risks
- water demands in Christchurch
- overview of the system from source to the tap

In time the fact sheets would replace other water supply promotional booklets as a versatile and readily updateable method for general information and targeted education, as well as providing a convenient source of current information for students and others interested in specific water-related topics. The sheets will also be placed on the Council's web site.

Television and radio advertising would be targeted at increasing awareness as to the value of Christchurch's water supply, stressing the need to use water efficiently to minimise risks. When the Canterbury Regional Council releases its issues and options document for the management of Christchurch groundwater the advertising will be slanted to raise awareness of the issues and options document, and encourage public involvement.

The promotion activities as described above would be funded from the "promotions - water conservation" item in the budget for which \$150,000 has been allocated for the current year.

#### **CANTERBURY REGIONAL COUNCIL RESPONSE**

The consistency of the message from both the Canterbury Regional Council and the Christchurch City Council regarding water use is extremely important for any of the promotion to be effective. The Chairman of the Canterbury Regional Council, Mr Richard Johnson, has had the opportunity to comment on this report, and his response is as follows:

"The Regional Council endorses the promotion campaign, and I note that the Regional Policy Statement includes a policy to promote the efficiency of water use through means such as the conservation of water. The Regional Council offers its assistance to the City Council to ensure that the best technical knowledge of the groundwater resource is made available to the people of Christchurch. Information about the characteristics of the resource and the effects of pumping is one part of the conservation message; the other part is information about the infrastructure to satisfy the water demand. Our regional staff are available to assist in the production of fact sheets and other awareness-raising activities. In addition, the Regional Council offers to assist with the conservation promotion campaign.

I welcome this opportunity to work with the City Council and to jointly communicate with the people of Christchurch."

**Recommendation:** That the City Council supports a promotion and publicity campaign that (a) promotes the good value from Christchurch's water supply while encouraging efficient use to minimise risk and (b) targets specific water supply issues (like backflow prevention) through the production and distribution of fact sheets.

**Chairman's**

**Recommendation:**

1. That the above recommendation be adopted.
2. That a joint officer report be submitted to the CCC/CRC Joint Committee.