

Officer responsible Water Services Manager	Author Eric van Toor
Corporate Plan Output: Supply of Water	

The purposes of this report are to recommend a response to any request by the Canterbury Regional Council to reduce demand over the coming summer, and to address the issues regarding the enforcement of restrictions by installing a restrictor on an individuals supply.

BACKGROUND

At the August Council meeting the Council resolved:

1. That water restrictions be imposed either when demand is placing stress on the city pumping and reticulation systems or when the Regional Council advises that specified aquifer pressures have fallen to pre-determined trigger levels.
2. That intermediate trigger levels specified and publicised by the Regional Council be responded to with publicity, education and appeals for voluntary reduction.
3. That water Services Unit officers be authorised to pursue with the Regional Council a joint project focussed on the Christchurch West-Melton area with the objectives of addressing the key strategic water issues.
4. That the Regional Council be requested, in addition to convening a Users Group of extractors in the Woolston area, to carry out a review of extraction consents in the area with the purpose of limiting the future extraction to current levels.

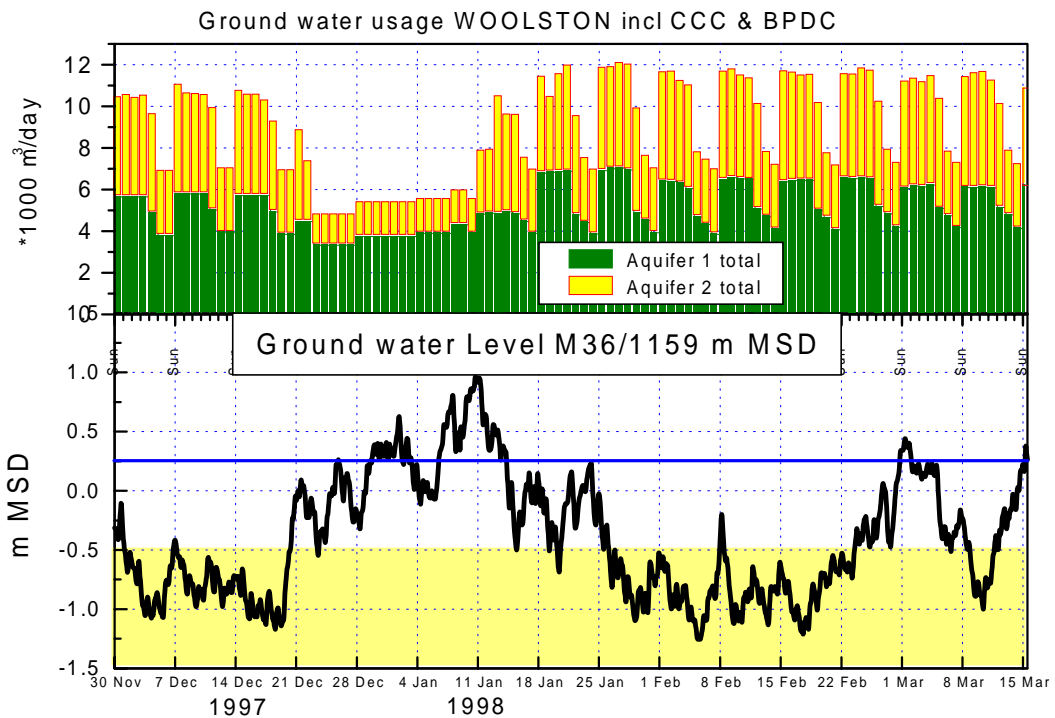
It was also resolved that the Water Services Unit would report back to the September City Services Committee meeting on:

1. Details of restrictions that would be imposed if necessary.
2. The proposed use of restrictors and any implications for the Council in the event of a fire at properties where restrictors are installed.

REGIONAL COUNCIL TRIGGER LEVELS

It is the Regional Council's intention that a Users Group with an agreed management plan for groundwater users in the Woolston Area be in place from 1 November 1998. The 10 major users of groundwater in the area will be expected to co-operate to minimise the amount of time that groundwater levels in the area are below mean sea level.

Over the past four years groundwater levels have dropped below mean sea-level each year. There is typically a recovery of 1.5 m during the Christmas holiday period when most of the industrial uses ceases, as shown in the following chart, supplied by the Regional Council.



It is therefore very likely that the Regional Council will ask users in the Woolston area to reduce abstraction for a significant part of this summer. The reduction necessary to maintain groundwater levels at a satisfactory level could be in the order of 3,000 m³ per day. The city currently takes between 2,000 and 4,500 m³ per day from the area during the summer months.

The City Council, with the new infrastructure as outlined in the August report will be able to reduce abstraction from Woolston by about 1500 cu.m per day, by pumping from the Central Zone through a new booster pump. The city will therefore be able to make a major contribution to reducing strain on the aquifer system without putting an undue burden on its water consumers. Constraint by consumers connected to the Council's reticulation for a considerable distance outside the Woolston area will however be advisable to ensure the city can provide the additional water for on-pumping for as much of the day as possible.

Banning day-time irrigation will not improve the situation and may require more pumping from the Woolston aquifers than from a more even irrigation demand. It is expected that the change in pumping patterns along with a public explanation and an appeal to reduce demand as much as possible will be sufficient in the first instance. Restrictions should only be considered if demand was at a level where the Water Services Unit was unable to make savings agreed with the Canterbury Regional Council.

Although the time-frame is tight, the Water Services Unit is making every effort to have the new infrastructure operational this summer. Provided this is achieved, the need for restrictions similar to those of last year is not expected. If restrictions are imposed this summer, they should only be as a response to an unlikely and extreme situation. Such restrictions would be to avoid a real risk of significant environmental damage and total ban on all hosing would be appropriate in this case.

The Canterbury Regional Council expects to have an agreed management strategy for the Woolston groundwater users by 1 November 1998. We understand they also intend

to have trigger levels related to flows from springs in the west of the city, but we have little information on these at this stage.

To summarise, the city should respond to trigger levels set by the Canterbury Regional Council by managing pumping patterns and calling for restraint from consumers through extensive advertising. For short durations and as a last resort a complete ban on all irrigation apart from hand-held watering cans should be imposed.

RESTRICTORS

The restricting of a consumers supply for repeated violations of restrictions was proposed in the August report as an alternative to prosecution. This option is being investigated because prosecution was perceived as having a low deterrent value, takes several months to effect and because of the difficulty in proving the person being prosecuted was in control of the watering device.

The “Christchurch City Water Related Services Bylaw” gives the Water Supply Manager the authority to “stop or restrict the supply to any premises where a consumer ... permits or suffers water to run to waste or be misused”. It is the opinion of the Legal services Manager that “misuse” includes the non-compliance of a water restriction.

The concern was expressed at the August meeting that the restricting of an individual’s supply for non-compliance of restrictions would increase that individuals vulnerability in the advent of fire.

The matter has been raised with Fire Safety Advisory Service Ltd. Their advice is to “call the Fire Service and get out of the house” and not to return to the seat of the fire, with or without a garden hose. The time required to go outside, turn on a garden hose and bring it back to the fire makes it a dangerous practice that should be discouraged. Toxic fumes from modern household items when they burn can be more dangerous than the flames. There are also real dangers from using water near electrical wiring which has been damaged by the fire or even be the cause of the fire.

The Legal Services Manager advises that he does not believe the Council would not have any legal liability for any fire damage occurring to a property while its supply was restricted.

Mitigation could be offered to those restricted by ensuring a fire extinguisher is on site or by installing a hose connection at the meter for emergencies only (notwithstanding the concerns expressed above).

If restricting the supply for repeated violation of restrictions is considered unacceptable by the Council for fire related purposes, the Water Services Unit should be advised under what conditions the restriction of supply is acceptable and the Bylaw amended accordingly. For example the restricting of a supply for failing to remedy water flowing to waste is currently being considered. As the Water Services Unit cannot guarantee continuous supply at all times, consideration should also be given to vulnerability from fires during other planned or unplanned cessation of supply.

- Recommendation:**
1. That requirements by the Canterbury Regional Council to reduce abstraction from specific locations be met by altering pumping patterns and requests for voluntary savings through extensive advertising, and that a total hosing ban be the only restrictive measure used, only if other methods fail.
 2. That it be noted that the Water Services Manager currently has the authority to restrict supply where a consumer “permits or suffers water to run to waste or be misused”.

Chairman’s

Recommendation: That the above recommendation be adopted.