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Re: Resource Consent Application by Christchurch City Council to Discharge Groundwater, Wastewater and Stormwater (CRC092692)

I wish to be heard in support of this submission.

I worked for Severn Trent Water Limited and its predecessor organisations from 1972 to 2000. My role from 1989 onwards included preparing discharge consent applications and ensuring that the Environment Agency had both sufficient and appropriate information to determine our applications.

I **oppose** Canterbury Regional Council (Ecan) granting Christchurch City Council resource consent to greatly increase the volume and frequency of wastewater discharges to the Avon and Heathcote rivers and their tributaries on a number of grounds:

1. The consent sought for wastewater discharges would further degrade the Avon and Heathcote catchments as habitats. I do not agree that achieving and maintaining a 2 year ARI would not give any "tangible net benefit to the environment". It is one of the steps we need to take towards rehabilitating our rivers to a healthy state.

   Granting consent would not be in accordance with the purpose (s5) of the RMA or the relevant parts of sections 6 and 7 of the Act.

2. Both rivers are widely used for recreational and amenity purposes and greater and more frequent wastewater discharges would be against the duty in the Act (s7 (c)) to maintain and enhance amenity values. They would also increase health hazards.

3. Table 3-1 of the URS report shows that 18 out of the 23 wastewater overflows for which an ARI of 0.5 (2 discharges a year) is sought already perform either at or better than that standard.

   a. The following overflows currently meet or exceed the ARI of 2 years specified in CRC099122: PS20/2 (2.0), PS20/4 (2.0), PS23/1 (3.3), PS11/1 (20), PS10/1 (3.3) and PS42/2 (does not overflow).

      There is, therefore, no justification for relaxing conditions on those that are currently consented or allowing lower standards for those currently unconsented. These wastewater overflows should be consented at current performance to avoid additional pollution and health risks and

PS42/2 should not be consented at this time since its capacity is not expected to be exceeded (i.e. wastewater discharge is not expected to occur) until 2026.

b. An additional 11 of the wastewater overflows in the application (some of which are consented and some not) currently discharge at between 0.6 and 1.8 ARI. The application provides no justification for Ecan to allow them to discharge more frequently.

   According to 2.3 in the URS report the Tennyson Street overflow (20/3) is now being pumped to PS20 and should hence should comply with its consent (2 yr ARI) though current performance is stated to be 1.4 ARI. If this is so, then further work should be carried out so it can comply with the existing consent.

   PS1/21 (Grassmere Street) is stated to discharge on current performance approximately once every 17 months (ARI 1.4) though historical performance (Table 3-5) is said to be 1.2 overflows per year (ARI 0.8) with a mean discharge volume of 1764 m^3 and a mean annual discharge volume of 2470 m^3.

   However, this appears to be contradicted by section 4 of the report (Assessment of Alternatives) which says that achieving a 6-month ARI would require 270 m^3 of storage at a cost of $1.5M, a 1-year ARI (i.e. less than current performance) would cost $12M and to meet a 2-year ARI would require ca. 4200m^3 storage at a cost of $20.1M.

   Which is correct?

c. The remaining 6 wastewater discharges occur either at twice per year (PS19/1) or more frequently. Hence 5 would not comply with the twice per year requested in the application and fall in the "may discharge more frequently than this" category as the application puts it.

   Since PS19 already complies with a 6-month ARI we would like to know why the report states that it would cost $870 000 to bring it up to this standard (URS Report 4.3.2, Table 4.2).

   PS60/1: According to the URS report (2.3) works have been carried out to divert the catchment feeding PS60 to the Southern Relief Sewer so it would appear that this unconsented overflow was known to cause problems and may have been known to Ecan thus triggering expenditure. Despite this the overflow is stated to still discharge (on average) 5 times a year. Is this correct or a typo (0.2 instead of 2.0)? If the ARI is 0.2 then Ecan should require that further work is carried out to enable it to comply with a 2yr ARI.

There is not enough information in the application to assess the impact of the proposals on the receiving watercourses. Consent is being sought for 25 years, i.e. for up to 2034,

and if the projections of the Urban Development Strategy hold true then we can expect an increase in households of well over 30% in the UDS area. Much of this increase will be in the city and the increased wastewater volume generated will place more demands on the network resulting in more frequent and larger spills.

The application does not address this major issue as it only refers to the present situation. Information is therefore needed on the likely effects of development on the frequency of overflows and the volumes discharged. This can be provided by running the council's hydraulic model using inputs from projected growth. Ecan should use its powers under s92 of the RMA to obtain that information so that the Council's proposals can be properly assessed.

Finally, Section 4 of the URS report (Assessment of Alternatives) is inadequate as it is limited to only to straightforward (and expensive) engineering solutions which treat symptoms of the deficiencies in the network rather than the root causes which are not considered. The wastewater reticulation is nominally largely separate and the need to overflow in wet weather is driven by groundwater infiltration and surface water run-off from areas such as hard-standings and roofs which should not discharge to the foul system. Well-resourced programmes of sewer renovation to cut infiltration and separating out surface run-off could well be more cost-effective in reducing wastewater discharge than pump station and sewer upgrades. Ecan should require under s92 that such alternatives be evaluated.

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26/3/2009