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Freepost 178
Our Community Plan Christchurch Otautahi
Christchurch City Council
PO Box 237
CHRISTCHURCH

Re: Rural Rate Sector Differential

~~I wish to talk about the main points in my submission at the hearings to be held between Tuesday 11 June and Friday 17 June 2004.~~

My written submissions are as follows;

1. Rural Sector Rates Differentials Vol. 3 Page 40

The explanation of why there are Rural Sector Rates Differentials needs to be expanded by a further bullet point as follows.

- Rural areas provide benefits to Christchurch in the form of landscape values, recreational areas and dilution of air pollution.

The 75% relationship appears too high when all costs and benefits arising from Rural Properties are assessed. I partook in the apportionment exercise many years ago and would welcome reviewing how the various benefits and costs are apportioned today. Please advise if this is possible.

2. Vol. 3 Page 112 Sector C – Rural Properties

The definition of a Rural Property should not be based on the sole or principal use of the land. It should be based on the zoning, the degree of servicing provided by the City Council, and what the majority of the land use is. These three factors need to be considered as a whole so that obviously rural properties are not reclassified as residential properties. I propose that the following be the criteria.

"Includes any rating unit which is zoned rural, zoned residential, or zoned rural residential under the transitional district plan administered by the Council and is situated outside of the seweraged area, and where the rating unit has

- (a) At least 75% of the land area is used for rural purposes or
- (b) Vacant land not otherwise used

Does not include any rating unit which is

- (i) Used principally for industrial (including quarrying) or commercial purposes (as defined in Sector A above); or
- (ii) Used for residential purposes where the house and its associated landscaped areas occupy more than 25% of the land area of the property"

Yours faithfully

A handwritten signature in black ink, appearing to read 'W. Lewis', written over a horizontal line.

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21 April 2004

Freepost 178
Our Community Plan Christchurch Otautahi
Christchurch City Council
PO Box 237
CHRISTCHURCH

Dear Sirs

Re: Our Community Plan Christchurch O-Tautahi 2004/14 Waterways and Land Drainage

I wish to talk about the main points of my written submission at the hearing to be held between 01 June and 11 June 2004 as follows.

Waterways and Land Drainage

I have noted for some time and now read in the above plan on Page 60 of Volume 1 that "The Council intends to rely more on open waterways (including pond areas), for managing stormwater in the future. This will reduce the reliance on lined and piped drains, and provide opportunities for increasing other values such as ecology and recreation".

Such a policy sounds good but may in fact lead to more flooding. It would appear that this policy is driven by the desire to save the cost of full maintenance of the infrastructure and the cost of increasing the size of the infrastructure to cope with the increased size of the City as it grows. Such a policy could be dangerous for the following reasons.

1. Intensive computer analysis has in the past, and is at present, being carried out to justify not having to widen streams and rivers as they City grows. Such analysis are only as good as the inputs and in many cases such inputs. In many cases such inputs have to be simplified and in some cases the inputs can be wrong. An example of the effect of this are the mistakes made in preparation of the City Plan Variation No. 48.
2. Safety margins can be accommodated better by new pipes, river widening and stream widening than for ponding areas or naturalization of existing timbered and concrete lined drains.
3. Pipes and widened waterways do not prolong floods, with their after effects, whereas ponds and naturalized waterways do.
4. Ponds and naturalized waterways prolong floods making the waterways more susceptible to longer duration floods, or sequential intense storms, with consequent increased flooding.

5. Naturalization or landscaping of waterways is at present being carried out without first widening the waterway. This has the effect of reducing the capacity of the waterway by
 - (a) Reducing the waterway area.
 - (b) Increasing the roughness of the waterway thereby reducing the velocity of the water.
6. There will be more blockages of the waterways where edge landscaping slumps into the waterways, or is washed downstream to another constriction.
7. The lack of maintenance, such as clearing out silt from the Heathcote River is gradually reducing the capacity of the waterways.
8. The engineering of ponds and naturalized waterways to prevent flooding as a City enlarges is relatively new and not tested the same as conventionally engineered stormwater networks. In some cases large errors have been already been made by designers and Council checking i.e. Milns Court subdivision.

It is my opinion that there are places where ponds and wide naturalized waterways are of benefit for not only ecological and landscape values but also for protection from flooding. However, the main streams and rivers still require increased capacity to deal with flooding that other measures cannot cope with as the City expands. Planning of this increased capacity should have been carried out already and implementation started.

Maintenance of ponds and naturalized waterways has been under-estimated in the past and the depreciation of conventional stormwater assets have been over-estimated. The combined effect of these two factors has been used to promote ponds and naturalized waterways by the Christchurch City Council staff rather than increasing the size of the infrastructure.

Variation No. 48 is an illustration of the flooding that will happen if a stormwater network is not maintained and enlarged, as it is required. However, the Variation 48 maps only show the flooding adjacent to the major rivers and streams. What is not shown is the flooding associated with all the minor waterways banked up by the major streams and rivers. I feel it reflects badly on the present Council that they permit planning for flooding rather than expand the infrastructure to prevent flooding.

If the present policy is not changed then I fear the Christchurch City will wake up one day in the future to the reality that huge sums of money need to be spent to provide the stormwater network upgrades that the present Council's have neglected to provide. The problems due to the network failure of mercury energy power cables in Auckland, or the problems of transport needs in Auckland at the present time, could be small compared to the problems of flooding that Christchurch City is at present creating.

Yours faithfully



Warren R. Lewis