

## **Submission to the New Zealand Productivity Commission for Local Body Funding & Finance.**

As an introduction to whom we are. The Halswell River Rating District Liaison Committee responsibilities are to the ratepayers of our districts which own property within selected geographic boundaries of both Christchurch City Council and Selwyn District Council. We collect rates based on land value reflecting the benefit landowners get from a functioning land drainage network and is a case perfect example of the targeted rating system and the “ Benefit Principle “.

We also fund operational expenditure from collected endowment land rental and some general rates from both Christchurch City Council and Environment Canterbury whom collect the rate via the rate payment invoice.

### **Our submission point**

**Our Committee would like considered by way of this submission is that development contributions collected by Territorial Councils be allocated on a justified basis across neighbouring boundaries.**

Our scenario is where the effects of upstream Christchurch City Council discharge increases volumes of groundwater and stormwater and these must be managed by another Territorial or Regional Council catchment in this case ours.

### **Reasoning.**

These additional discharges are predominantly created by land use change from rural to urban and the associated run off from roofing, roading & hardstand areas which increases average and peak flow volumes thru out or drainage district network and into the Huritini/ Halswell River. Further more this compromises land drainage and the frequency and duration of flooding. The river flows into TeWaihora/ Lake Ellesmere, New Zealand's fifth largest lake which operates within the parameters of a National Water Conservation Order and the lake has no natural outlet to the sea.

**Our specific reference point from the draft Local Government Funding & Finance draft document is below.**

Page 149 Draft Document

“Councils often recoup a portion of their infrastructure capital costs from users (usually developers) at the point of new residential or non-residential development by levying development contributions or connection charges. If well implemented, these levies support efficiency. Where new property developments cause the need for new or **extended local infrastructure (such as the three waters or roads)**, making the new residents and businesses bear the costs is efficient (as well as fair).”

Consideration needs to be made here to “Extended local or **cross boundary** infrastructure”

### **Our supporting literature**

As a case study to validate our submission we reference a recent example whereby Christchurch City Council made application to the Canterbury Regional Council to discharge stormwater from its Geographic area into the Halswell Drainage district that our elected Committee are responsible for in tandem with Environment Canterbury.

We made submission requesting conditions on that consent so as to allocate funds to support additional infrastructure or known ponding area retirement, to manage the additional volumes of groundwater & stormwater without placing additional costs on the existing ratepayer.

This is the very reason for which development contributions are collected.

The Christchurch City Council have made considerable investment into stormwater management areas as required conditions stipulated in their former consent CRC120223 and these are reinforced in their replacement consent application CRC190945.

We firmly believe investment made outside the Territorial Council would have more benefit to the whole of the catchment and be less costly than the construction of detention retention systems solely addressing or mitigating the discharges within a individual Territorial Council boundary.

After making our written submission (refer Appendix: A) and appearing at the Hearing, Commisioners made reference to our submission and the decision was announced refer Appendix: B

### **The Decision summarised.**

The Commisioners accepted our submission and made relevant evaluation of matters as conditions of consent. However page 80 references their answer that they “have no jurisdiction as to how funds are spent” also stating “We encourage the Committee to seek additional funding from both the applicant and CRC through the annual plan process to facilitate this.”

The processors proposed by the Commisioners would simply mean existing ratepayers fund upgrades and the cost not born by those creating the need for the upgrade.

The full page 80 point 404 is copied below.

“404 In response to the Liaison Committee’s request that development contributions are used to mitigate effects on land downstream of the catchment, we have no jurisdiction to determine where and how these funds are spent. We encourage the Committee to seek additional funding from both the applicant and CRC through the annual plan process to facilitate this.”

### **Appendix A:**

#### **CONSENT APPLICATION CRC190945.**

- I am Chairman of the Halswell River Rating District Liaison Committee, which liaises with local ratepayers, and makes recommendations to Environment Canterbury regarding works programmes and rating levels. ECan collects the rates and Engineering staff manage the river and drainage system works programme on behalf of the rating district ratepayers.
- I have been living/farming in the Halswell /TaiTapu area for 67 years. Along with the other members of the liaison committee who represent different areas of the scheme, are very familiar

with the rating district drainage system, & its drainage/flood mitigation performance during heavy rainfall events.

- Over recent years the committee have become increasingly concerned with the effect of residential ,commercial, industrial development, increased land drainage contribution & stormwater runoff from within the CCC portion of the Halswell River catchment. We believe that both drainage base flows from intercepted groundwater, and stormwater flows from heavy rainfall, have increased, compromising land drainage and the frequency and duration of flooding. This in turn increases drainage maintenance and upgrade requirements, with increased costs for rating district ratepayers.
- The committee understand that the CCC stormwater management guidelines require that development doesn't increase downstream peak flows in the event of a 50 year return period rainfall. We believe that in the case of the Halswell River and tributary drains are fill to capacity in significantly smaller (2 to 5 year return period) rainfall events. Therefore it is critical that stormwater detention systems don't increase downstream peak flows in smaller as well as for the larger rainfall events.
- Also the paving & roofing within these developments reduce rainfall infiltration to groundwater, and therefore increase stormwater runoff volumes. It is understood the CCC stormwater management guidelines do not directly address this, other than to encourage development of infiltration systems, which we believe will not operate effectively in areas with a naturally high water table.
- There is a risk that future development requires temporary (construction) or long term subsurface drainage, which intercepts groundwater and increases downstream base flows. The Longhurst Subdivision is an example of where this has happened.
- We understand that CCC are applying to roll-over existing stormwater consents into the new global consent. These existing consents have a requirement to develop Stormwater Management Plans, which at this stage appear to be the only avenue to address these concerns.
- Our submission is that in the event of existing consents being rolled-over or new consents being granted for land drainage & stormwater discharge into the Halswell river and drainage system, that Resource Consent Conditions and Stormwater Management Plan requirements address the concerns we have raised.

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- We also believe there should be some capital contributions with new developments as the water comes before the extra rating moneys. As CCC take development contributions as part of the subdivision process to fund infrastructure to support a zone change from rural to residential sized allotments. A component of these development contributions funds stormwater management facilities as proposed in this consent application CRC190945. The funds collected for the purpose are only spent within the CCC territorial boundary on the premise we presume that no further effects occur from storm water discharge outside of the CCC boundary or downstream in the Halswell Catchment. The Halswell River Rating Liaison committee ask that as a condition of the consent, a percentage of the Development Contribution be allocated to capital works in lower Halswell catchment also.

- While we support long term planning, we also believe the application for a 35 year consent is too long given that the Halswell catchment is due for a full scheme review and any decisions made should be made in context of the whole river catchment rather than in fragmented way.

Jim Macartney  
Chairman Halswell River Rating Liason Committee

### **Appendix B:**

#### **Applicable reference to our Committee Submission in the decision is copied below, and page numbers referenced**

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Halswell catchment

388 The Halswell River arises in the south-west part of Christchurch City and flows south through the Selwyn District, discharging into Lake Ellesmere. The lake is closed for most of the year and water levels gradually rise, causing flows to back up in the river. The lake is opened at most twice a year, allowing it to drain to the sea. There is a drainage district within the catchment, with properties rated to maintain the drainage system. The Halswell River Rating District Liaison Committee submitted on the application, with Mr Jim Macartney, chairman of the Committee and Ross McFarlane, Committee member representing the upper catchment, speaking to the submission.

389 Mr Macartney and Mr McFarlane explained that the drainage scheme is not a flood control scheme, but, is intended to remove rainwater following 'normal' rainfall. They described how the river and drainage system suffered significant damage during the Christchurch earthquakes.

390 The upper Halswell catchment has seen significant development in recent years. Mr Macartney and Mr McFarlane noted that since the earthquakes, the density of development in the catchment had increased from 10 to 15 houses per hectare. 1,375 homes were built following Plan Change 60. The Committee's concerns were that an increase in both stormwater and land drainage flows (intercepted groundwater from temporary or long term subsurface drainage) compromised land drainage and increased the frequency and duration of flooding. The interception of groundwater increased baseflows in the drains,

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reducing channel capacity. Some drains were historically dry, whereas following development they flowed regularly. An increase in built area meant that the land now absorbed less rainfall. Together, these had caused problems such as bank erosion, trees falling into drains, and widening and deepening of creeks, resulting in an increase in drainage maintenance and upgrades. The submitter was concerned that with ongoing development, drain flows and associated maintenance costs would continue to increase.

391 Mr Norton explained the operation of the detention ponds in the Longhurst subdivision. Prior to development, a 1 in 50 year storm generated in the order of 40,000m<sup>3</sup> of surface water runoff. Post development, 117,000m<sup>3</sup> is generated, 41,000m<sup>3</sup> is released immediately, with the rest being retained and gradually released over four days. The critical flood duration in the catchment is 60 hours, so releasing the water over 96 hours means it is released as flows subside.

392 This management approach was not in place in subdivisions prior to 2003. To mitigate these effects, the South-West SMP contains plans for significant retrofitting, so that a proportion of

stormwater generated in older subdivisions is also detained. Within the Halswell catchment, 44 hectares of existing urban area is included in retrofitting plans.

393 The Halswell River Rating District Liaison Committee was critical of what they considered to be a lack of management of the increased volume of stormwater run-off. Infiltration systems were encouraged but would not operate effectively where there is a high water table. Mr Macartney also noted that the requirement in the previous City Plan for collection of roof rainwater in the catchment (Rule 8.1.38, in the Living G (Halswell West) Zone), to mitigate run-off had not been carried over to the new City Plan.

394 Mr Macartney and Mr McFarlane acknowledged that detention basins were a good approach to flood management, but argued that if there were frequent rain events, there was no time for flow from the detention basins to pass down the network before the next event, so they were ineffective.

395 The Liaison Committee sought that a percentage of development contributions collected for new developments were spent outside the applicant's boundary, to mitigate effects of the development on land further downstream. Mr Macartney suggested that these funds could pay for retirement of land more severely impacted by flooding, to be used as additional flood detention areas.

396 A memorandum from Jolene Irvine, CRC Engineering Planning Advisor, and Matthew Surman, CRC Asset Management Engineer, dated 24 March 2016

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was appended to Mr Law's evidence. The memorandum outlined the challenges of providing efficient and economic land drainage in the catchment, given the flat gradient and the ongoing increases in stormwater discharges from developments. It noted that the expected flow increase in the catchment is not quantified in the application. While additional flood detention in the upper catchment would manage peak flow (and so was supported), it would not reduce the total volume of the discharge. A number of mitigation options were suggested for consideration, following the completion of a hydraulic model for the catchment. This model is currently being developed.

397 Ms Irvine and Mr Surman made several recommendations, including managing flood volume, which we have discussed earlier. Other recommendations included requiring consultation with the CRC Regional Engineer and the River Liaison Committee during the review of the SMP in the Halswell and Little River Rating Districts, and that conditions provide for review of the consent conditions if there is an increased duration or extent of flooding, reduced drainage, increase drainage maintenance costs or bank erosion resulting from the exercise of the consent.

398 In his evidence, Mr Harrington re-iterated that land drainage discharges are not covered by this consent application. He also questioned whether they lead to significant increased flooding in major events. In theory, the drainage brings sub-surface flow to the surface at a point higher in the catchment than would normally occur, but, does not increase it. This may reduce spring flow lower in the catchment, but does not increase the total volume of water flowing through the catchment, and therefore should not increase flooding volumes downstream.

399 He also considered that the drained land would absorb more rainfall, as long as the absorption rate was not limited, thereby reducing rainfall run off.

400 He noted that similar concerns were raised in the hearing for the South-West stormwater consent, and resulted in additional water level monitoring points being installed. Data from these

points will enable an objective assessment of flooding impacts which can be incorporated in to the next SMP.

401 We visited the catchment and observed the land drainage flow and stormwater pond discharges immediately downstream of the Longhurst subdivision. We also saw a number of large pines that has collapsed across one of the drains as a result of channel erosion, and the subsidence at Sabys Road. These were all highlighted in the Liaison Committee's evidence.

#### Evaluation

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402 We acknowledge the full attenuation target for this catchment, and agree that this is best practice. We accept that there is a particular issue with the volume of discharge in this catchment, not just the rate, and we have decided earlier that consideration should be given to including a volume target in the SMP when it is reviewed.

403 We also accept that land drainage discharges are not managed by this consent. However, they reduce the capacity of the drains into which stormwater will flow and consideration should be given in future subdivisions to managing these discharges more appropriately.

404 In response to the Liaison Committee's request that development contributions are used to mitigate effects on land downstream of the catchment, we have no jurisdiction to determine where and how these funds are spent. We encourage the Committee to seek additional funding from both the applicant and CRC through the annual plan process to facilitate this.

405 The applicant proposes to review the SMP in 2021 and we consider this appropriate. We agree that consultation with the CRC Regional Engineer and the River Liaison Committee would be beneficial during the review of the SMP and that appropriate review conditions are included, as requested by Ms Irvine and Mr Surman. To that end, we have amended Condition 4 to require this. Condition 63 already provides for review of the consent on the basis of adverse effects which may arise. Overall, we consider the stormwater quantity effects are appropriately addressed.

#### **A link to the 175 page decision**

Full Decision of the Hearing Commissioners can be viewed at:

<https://api.ecan.govt.nz/TrimPublicAPI/documents/download/3637142>