Rangiora-Ashley Community Board

Wednesday 8 November 2017

7.00pm

Waimakariri District Council Chambers
215 High Street
Rangiora

Members:
Jim Gerard Q.S.O (Chair)
Duncan Lundy (Deputy Chair)
Robbie Brine
Murray Clarke
Keith Galloway
Dan Gordon
Judith Hoult
Sarah Lewis
Greg Miller
Chris Prickett
Paul Williams
AGENDA FOR THE MEETING OF THE RANGIORA-ASHLEY COMMUNITY BOARD TO BE HELD IN THE WAIMAKARIRI DISTRICT COUNCIL CHAMBERS, 215 HIGH STREET, RANGIORA ON WEDNESDAY 8 NOVEMBER 2017 AT 7PM.

Edwina Cordwell
Governance Advisor

RECOMMENDATIONS IN REPORTS ARE NOT TO BE CONSTRUED AS COUNCIL POLICY UNTIL ADOPTED BY THE COUNCIL

BUSINESS PAGES

1 APOLOGIES

2 CONFLICTS OF INTEREST

3 CONFIRMATION OF MINUTES

3.1 Minutes of the Rangiora-Ashley Community Board – 11 October 2017

RECOMMENDATION

THAT the Rangiora-Ashley Community Board:

(a) Confirms the circulated minutes of the Rangiora-Ashley Community Board meeting, held on 11 October 2017, as a true and accurate record.

4 MATTERS ARISING

5 DEPUTATIONS AND PRESENTATIONS

5.1 Update on Carrs Road / Cones Road Intersection Improvements – Bill Rice (Senior Transport Engineer).
6 ADJOURNED BUSINESS

6.1 Applications for Rangiora-Ashley Community Board Discretionary Grant 2017-2018 – Karyn Ward (Community Board Advocate)

MEMO: Trim No. 171027116476
Response to queries regarding Bush Street Kidsfirst Kindergarten’s application to the Board’s Discretionary Grant (October 2017) Karyn Ward, Community Board Advocate.

RECOMMENDATION
THAT the Rangiora–Ashley Community Board:
(a) Receives report No. 170926104076.
(b) Approves a grant of $__________ to Canterbury Westland Kindergarten Association (Kidsfirst Kindergartens Bush Street) towards costs of replacing books and purchase of new large books for group stories.
OR
(c) Declines the application from Canterbury Westland Kindergarten Association (Kidsfirst Kindergartens Bush Street).

7 REPORTS

7.1 Garrymere Water Supply Source Upgrade – Request to consult with community regarding options to meet Drinking Water Standards for New Zealand – Sean de Roo (Project Coordinator) and Colin Roxburgh (Water Asset Manager)

RECOMMENDATION
THAT the Rangiora–Ashley Community Board:
(a) Receives report No. 171025115123.
(b) Recommends to the Utilities & Roading Committee that Council staff begin the community consultation process with the Garrymere community on the basis of the four options presented as being viable (Options A, B, C and D). The community consultation would involve the distribution of an information pamphlet followed by a public meeting.
(c) Notes that the options of on-site treatment, connecting to the Ashley water supply scheme and not upgrading were considered but are not considered to be viable either due to high cost, not complying with the DWSNZ, or both.
(d) Notes that following the community consultation, staff will report back to the Board to provide a summary of the feedback received and to seek endorsement of the recommended option prior to staff reporting back to Council.
7.2 **Board Meeting Dates for 2018 – Karyn Ward (Community Board Advocate)**

**RECOMMENDATION**

**THAT** the Rangiora–Ashley Community Board:

(a) **Receives** report No. 171026116055.

(b) **Resolves** to hold Board meetings at the Council Chambers, Rangiora Service Centre, 215 High Street, Rangiora, commencing at 7.00pm, on the following dates:

- Wednesday 14 February 2018
- Wednesday 14 March 2018
- Wednesday 11 April 2018
- Wednesday 16 May 2018
- Wednesday 13 June 2018
- Wednesday 11 July 2018
- Wednesday 8 August 2018
- Wednesday 12 September 2018
- Wednesday 10 October 2018
- Wednesday 14 November 2018
- Wednesday 12 December 2018

---

7.3 **Ratification of the Rangiora-Ashley Community Board’s Submission regarding the District Plan Review ‘Comments and Issues’ Phase – Edwina Cordwell (Governance Adviser)**

**RECOMMENDATION**

**THAT** the Rangiora-Ashley Community Board:

(a) **Receives** report No. 171009108987.

(b) **Ratifies** the Board’s Submission regarding the Waimakariri District Council’s District Plan Review ‘Comments and Issues’ Phase (Trim 171009108973).

---

8 **CORRESPONDENCE**

**RECOMMENDATION**

**THAT** the Rangiora-Ashley Community Board:

(a) **Receives** the letter regarding Draft Waste Management and Minimisation Plan and Kerbside Options (Trim 171030116729).

(b) **Receives** the request from the Waimakariri Access Group to appoint a representative to the group from the Rangiora-Ashley Community Board. (Trim 171027116507).
9 CHAIRPERSON’S REPORT

9.1 Chair’s Diary for October 2017

RECOMMENDATION

THAT the Rangiora-Ashley Community Board:
(a) Receives report No. 171031117674.

10 MATTERS FOR INFORMATION

10.1 Woodend-Sefton Community Board meeting minutes – 9 October 2017
[Trim No. 171018112702]

10.2 Road Safety Action Plan – Report to Council 24 October
(Trim No. 171004107285)

10.3 Stormwater Drainage Bylaw Review 2017/18 – Report to Council 24 October 2017
(Trim No. 170907097266)

10.4 CAREX Report on Glyphosate - Report to Council 24 October 2017
(Trim No. 171012110892)

10.5 Cam River Enhancement Allocation of Funding – Report to Council 24 October 2017
(Trim No. 170925103162)

RECOMMENDATION

THAT the Rangiora-Ashley Community Board receives the information in items 10.1-10.5.

Note: Matters for Information were circulated separately to members.

11 MEMBERS’ INFORMATION EXCHANGE

The purpose of this exchange is to provide a short update to other members in relation to activities/meetings that have been attended or to provide general Board related information.

12 CONSULTATION PROJECTS

12.1 Dudley Park Shelter Belt Removal
Consultation closes 5pm, 16 November 2017.

12.2 Stormwater Drainage Bylaw
http://www.waimakariri.govt.nz/have-a-say/letstalk/consultations/stormwater-drainage-bylaw

12.3 Williams Street Beach Road Intersection
Consultation closes 5pm, 13 November 2017.
13 **REGENERATION PROJECTS**

Updates on the Rangiora Town Centre projects are emailed regularly to Board members. These updates can be located using the link below:


14 **BOARD FUNDING UPDATE**

14.1 **Board Discretionary Grant**

Balance as at 11 October 2017: $10,564.04.

15 **MEDIA ITEMS**

16 **QUESTIONS UNDER STANDING ORDERS**

17 **URGENT GENERAL BUSINESS UNDER STANDING ORDERS**

**NEXT MEETING**

The next meeting of the Rangiora-Ashley Community Board is scheduled for 7pm, Wednesday 13 December 2017 in the Council Chambers at the Rangiora Service Centre.

---

**Workshop**

1. **Members’ Forum.**
   
   *Opportunity for members to share potential new ideas and initiatives.*
MINUTES FOR THE MEETING OF THE RANGIORA-ASHLEY COMMUNITY BOARD
HELD IN THE COUNCIL CHAMBERS, RANGIORA SERVICE CENTRE, 215 HIGH
STREET, RANGIORA ON WEDNESDAY 11 OCTOBER 2017 AT 7PM.

PRESENT
J Gerard QSO (Chair), D Lundy (Deputy Chair), M Clarke, K Galloway, J Hoult, G Miller,
C Prickett and P Williams.

IN ATTENDANCE
J Millward (Manager Finance and Business Support), C Brown (Community Green Space
Manager), K Ward (Community Board Advocate) and E Stubbs (Minute Secretary).

1 APOLOGIES
Moved J Gerard seconded C Prickett
Apologies were received and sustained from S Lewis, R Brine, and D Gordon for
absence.

CARRIED

2 CONFLICTS OF INTEREST
Nil.

3 CONFIRMATION OF MINUTES
3.1 Minutes of the Rangiora-Ashley Community Board – 13 September 2017
Moved J Hoult seconded P Williams
THAT the Rangiora-Ashley Community Board:
(a) Confirms the circulated minutes of the Rangiora-Ashley Community
Board meeting, held on 13 September 2017, as a true and accurate
record.

CARRIED

4 MATTERS ARISING
D Lundy queried whether the Council had decided to have a stand at the Rangiora
A and P show. K Ward advised M McIlraith, Communications and Engagement
Manager, had decided not to proceed with a presence at this year’s event due to
insufficient communication projects currently underway to fill a site. D Lundy
expressed his opposition to this decision, commenting it was a lost opportunity to
meet face to face with residents.

5 DEPUTATIONS AND PRESENTATIONS
5.1 Citizens Advice Bureau
Beverley Mitchell, Chair, spoke to the work of Citizens Advice Bureau (CAB)
in the Waimakariri District. She noted that CAB was established on the eve
of WWII in Britain, to cope with the trauma and dislocation of war. In New
Zealand there were 82 branches and 2800 volunteers dealing with 0.5 million
client enquiries annually. In 1978 the North Canterbury (NC) branch was
established and it would be their 40th anniversary next year. B Mitchell
advised that 30 branches in New Zealand (including NC) had been chosen by
MBIE to assist with migrant communities. The NC branch had 42 volunteers
and one part-time coordinator.
B Mitchell provided a breakdown of the 700 calls received by the NC CAB over the last two months with topic examples:

- 274 consumer calls – goods/services and online trading, the answers were not always what people wanted to hear
- 78 community calls – neighbour problems, trees, fences, barking dogs, finding clubs
- Education – teachers, bullying (an increasing issue)
- 33 employment and business – hours, wages, lack of written contracts/no contracts (600 calls on this topic alone in the last 2 years) and bullying
- 47 family or personal – relationship breakups, wills, parenting, power of attorney
- 59 finance and benefits – budgeting, mortgage, reverse mortgages, WINZ, scams.
- 50 health – doctors, dentists, and health insurance – A notable topic of advice to migrants was health insurance as they were not covered if in NZ for less than two years. Mental health issues - The CAB handled bookings for the St John Health Shuttle that went from Amberley to Christchurch Monday – Friday, for any medical appointment, not just those at Christchurch Public Hospital
- 19 housing/renting – landlords, tenants, and real estate agents
- 155 legal government – Hold a fortnightly legal clinic which is always fully booked

B Mitchell advised that they had a number of teams; for example:

- The CAB organised the JP Service.
- On Wednesday mornings there is a migrant clinic and migrant connect services to assist the migrant community.
- There is a Civil Defence Team, and CAB had assisted at the Woodend hub after the Kaikoura earthquakes.
- There is a CV team who assisted youth and those re-entering the workforce.
- There is a team that focused on updating information
- There is a team of Trainers

Volunteers received nine months training before ‘going solo’. There was ongoing learning every month for all volunteers. B Mitchell commented the CAB was a busy place and she hoped she had provided an overview of the work they did.

J Gerard asked if they obtained sufficient funding. B Mitchell replied it was with great difficulty. They received central government funding for the work they did with the migrant community, and Rata Foundation assisted with funding also. They were grateful to WDC for provision of rooms and power. They found volunteers time was better spent assisting people than fundraising. J Gerard advised of the Discretionary Grant.

C Prickett referred to issues for clients accessing WINZ and asked if those that approached CAB had gone through appropriate channels first. B Mitchell replied a bit of both. With regard to WINZ the CAB wanted to introduce an advocacy service that would allow CAB volunteers to go to WINZ with clients in order to assist, as it was difficult for some clients to articulate what they needed in the appointment time they were allocated.

C Prickett asked how many requests for assistance came over the phone.

B Mitchell replied a large proportion. The NC branch covered a large area from Kaikoura to Waimakariri. C Prickett asked if other forms of communication such as
Facebook were used and B Mitchell replied that brochure information had been transferred to the website, and confirmed that the CAB is also on Facebook.

C Prickett asked if any clients had expressed frustration at Council services and B Mitchell replied that complaints around trees were very common.

M Clarke asked if volunteers had legal protection. B Mitchell replied that they did have an exemption in insurance. Volunteers are trained to only give advice and options, they did not tell people what to do.

J Hoult asked what qualities are sought in the CAB’s volunteers. B Mitchell advised volunteers were often retired from the business world or education. Computer skills were important. Due to the nature of its work, the CAB had to be selective in their volunteers; Police checks were required.

P Williams commented due to having a CAB volunteer in his family, that he was familiar with the work. He thanked B Mitchell and CAB for the work they did in the community.

J Gerard thanked B Mitchell for speaking to the Board and for the work CAB did in the community.

5.2 Chris Brown, Green Space Manager, spoke to the Parks and Playground Management Plan (the Plan). He advised that staff were preparing for the Long Term Plan (LTP) 2018/2028 and that the budget was due to be finished in November. He spoke to a PowerPoint presentation. The purpose of the presentation was to:

- provide the Boards with information about Levels of Service (LoS) for Green Space, and how those levels of service impacted the LTP
- receive feedback from the Boards on the projects, and timing of those projects, which have been identified by staff to fill gaps in LoS
- receive the Board’s feedback regarding any projects for consideration as part of the LTP.

As background C Brown explained that staff, as part of the preparation for LTP 2018/28, prepared a number of strategies which related to the key asset types of play spaces, toilets, sports facilities and community facilities. The strategies identified current LoS relating to the asset types as well as some new service levels. These LoS then inform the Activity Management Plan which, in turn, informs the LTP. C Brown explained that there are many LoS which relate to the provision and development of reserves. These LoS are different depending on the park type and the catchment area of the park. He advised that there are a number of LoS changes which are being proposed in relation to the strategies which have been prepared.

For playgrounds the changes in LoS include:

- An emphasis on the assessment of play value and a specified age and ability provision linked with park catchment type
  - For example, a local park had the ages 1-5 as a primary focus, as the catchment increased the age range was more broad
- Shade provision and UV protection:
  - Shade sails or structures will be installed at key play spaces
  - High-use, long stay sites will be prioritised particularly junior play areas with no natural shade
  - Guidelines had been added around relocation of large trees for shade where appropriate
- Premium supplementary play assets (skate parks, etc.):
  - Provision of skate parks needed an even distribution across the District’s key activity centres
  - Size and scale should reflect the population catchment
- More emphasis on integrating opportunities for inclusive play into play space general design, rather than specific equipment provision
There would be an emphasis on increasing accessibility to current equipment; for example, removing step-up barriers. C Prickett hypothesised about a family with a 12 year old and 5 year old going to a local park. C Brown advised that was not the funding for every single reserve at the local level to cover the range of ages. There would be more focus on the 5 year old play items at the local park, and there was also more of a focus on natural play items which meant less expenditure and also encouraged use of imagination.

C Prickett commented on the many small parks in Pegasus, and asked if it was better to have slightly less parks so that more could be spent in each. C Brown commented that was preferable.

J Hoult commented that she had had feedback requesting more to keep young ones occupied at the Dudley Skate Park. C Brown commented that the Board had the opportunity to raise ideas, and that there was a LoS to cater for that.

C Prickett noted that LoS for skate parks were based on population, and asked if there was consideration of distance to travel. C Brown commented that was not a consideration; a key activity centre was an urban area, there was not an expectation for a skate park in a rural area. Even if the community wanted to fundraise $200,000 for a skate park, the Council would still need to budget that cost for maintenance and future replacement.

C Brown explained that the implications of the new LoS meant there were several new playground developments required to meet the LoS:

- Elm Green / Kippenberger linkage
- Hurunui Reserve Pegasus
- East Eyreton Domain
- Skate Park in Woodend/Pegasus Area
- Millton Memorial Reserve

D Lundy commented that it could be argued that the East Eyreton Domain was in the middle of lifestyle blocks, and asked if there was a trend or demand from that type of area. C Brown replied there was a trend. Many people had moved into rural residential areas with an expectation of urban facilities. The East Eyreton Domain did not meet LoS but there had been a detailed process over the last 4-5 years to develop a concept plan. There had been development there that had fallen into disrepair. The Domain was currently proposed for development in 10 years, the Council could choose to move it further out.

There was some discussion around the East Eyreton Domain, including:

- increased rates for higher neighbourhood amenity
- development contributions for developments that did not trigger urban LoS until a number of developments were completed

J Gerard asked if a skate park at Woodend/Pegasus would include Ravenswood, and C Brown confirmed this.

C Brown showed a list of playgrounds in order of replacement priority. The priority was based on:

- the age of the playground
- the play value that it provides
- public expectations

There was an aim to complete one or two per year across the ten year LTP.

J Gerard noted there were six to be completed in Kaiapoi-Tuahiwi and C Brown replied that that area had older playgrounds. Rangiora-Ashley had...
two which indicated there were not that many in that part of the District due for upgrades.

P Williams commented on the price of playground equipment. It was expensive due to safety standards. He asked if there was consideration of Council building play equipment themselves. C Brown replied that approach required a producer statement from a qualified engineer certifying manufactured equipment was safe. Currently Council did not employ an engineer with that capability, and consultant engineers’ fees were prohibitive in this context. In addition, there was now a focus on natural play. A child did not care how much play equipment cost and often preferred natural play elements; the use of tracks and wind grass at Elephant Park was an example.

C Brown advised that changes to LoS for toilets included:

- Provision of toilets in Neighbourhood Parks with large catchment areas
  - This came from public feedback
- Unisex and accessible cubicles in new toilets.
- Trend towards having toilets closed at night to prevent antisocial behaviour and vandalism
- Development of a LOS for town centre toilets
- Development of LOS for toilets on or servicing land owned by others; for example, DOC and ECan land at Saltwater Creek
  - The criteria revolved around the benefit to the District, and solving problems on Council land

P Williams asked if putting a public toilet in places like Saltwater Creek would encourage freedom campers. C Brown commented that they would not want to create an issue. Freedom campers were another debate.

C Brown explained that the implications of the new LoS meant there were new toilets required to meet the LoS. These were:

- Mandeville Sports Ground Equestrian
- Rangiora Town Centre
- Millton Memorial Reserve
- West Oxford Reserve

The toilet replacement schedule was:

- Victoria Park Upgrade
- Kairaki Reserve
- Ashley Picnic Ground
- Woodend Beach Domain
- Maria Andrews

To complete these projects would take around 10 years.

The number one complaint regarding LoS was around Rangiora Town Centre (RTC) toilets, which it is on the list for new toilets. The vandalism at Victoria Park toilets was commented on and the historic need for durability over aesthetic quality. A high quality RTC toilet would be better incorporated into a business with set open hours, and there was currently no opportunity for that. New RTC toilets would cost $350,000. An option was to upgrade the Victoria Park toilets including lighting and making them more visible. Because of the large amount of investment of RTC toilets, staff needed to be confident in the decision.

C Brown advised of the location of all the existing public RTC toilets including:

- New World
- Rangiora Library
- Rangiora Town Hall
- The Warehouse
- Centennial Memorial Centre
- Council buildings
• Victoria Park

K Galloway suggested development of an app around locating toilets would assist the public to locate them. C Brown advised that when the Public Toilet Strategy had been approved, the location details could also be provided on the WDC website and passed through to Google.

The vandalism at Victoria Park toilets was commented on and the need for durability over aesthetic quality.

C Brown further commented that there was extensive activity at Millton Memorial Park and consequently was an area where a toilet was appropriate.

An assessment was undertaken to determine what sports facilities would be required over the next 30 years as part of the Plan. It considered:

• sport and recreation trends
• carrying capacity of current fields
• population and demographic projections
• participations trends

Conclusions were:

• No new land was required to cater for projected numbers of sports field users
  - Even with district growth participation numbers for games were remaining relatively static
• A Four Court indoor venue was a high priority
  - There was a trend to playing weeknight games, particularly basketball, rather than weekend sport
• Council should consider a programme of sports field upgrades to increase the usability of fields rather than invest in a further artificial turf
  - Upgrades include increased drainage and sand carpet fields
  - Currently some fields only had a carrying capacity of 4 hours per week which could be improved to over 14 hours
  - Money for an artificial turf would be better spent on improving a number of fields around the District
• Development of softball facility in Kaiapoi

Sand carpet fields were discussed. C Brown advised that an excellent example of sand based fields was Gladstone Park. The advantage was around eight fields across the district could be improved at the same cost as one artificial turf, and a sand carpet field did not have the same replacement cycle as an artificial turf.

C Brown advised there had been other key service enhancements that had been identified by staff or members of the public. The list included:

• Millton Memorial Park concept plan implementation
• old Kaiapoi dump site development
• sealing of the Kairaki Beach car park (half share with ECan)
• development of old pit land at Kaiapoi Lakes
• installation of fully accessible beach viewing platform at Waikuku and Pegasus
• installation of a new surf lifesaving tower at Pegasus Beach

P Williams asked if there were other funding options available for a surf lifesaving tower at Pegasus Beach and C Brown advised staff could look at options.
C Brown provided a Board specific overview of LoS issues within their community area:

- Milton Memorial Reserve Playground, toilet and concept plan implementation
- Elm Green Kippenberger linkage
- Playground Replacements
  - Canterbury Street Reserve
  - Bush Street Reserve
- Toilet Replacements
  - Victoria Park Toilets
  - Ashley Picnic Grounds
  - Maria Andrews
- Rangiora Town Centre Toilet
- Indoor Court Development
- Upgrades to Maria Andrews and Southbrook Park (sand carpet fields, drainage and irrigation)

P Williams asked if the tree side of the department could be more proactive in preventing root damage before it occurred. C Brown advised that staff were currently preparing an answer to that. In short it was cheaper to deal with issues as they arose, rather than instigating an investigation regime. Currently three to four complaints were dealt with annually.

6 ADJOURNED BUSINESS

Nil.

7 REPORTS


C Brown spoke briefly to the report noting that it was in relation to Business 1 and Business 2 areas and the activities that could be carried out in those locations; for example, activities with sandwich boards and hawkers.

K Galloway advised that he would like to be considered.

J Gerard advised he would like to be considered and that his understanding was two members could be appointed.

G Miller advised he would like to be considered.

Moved D Lundy seconded M Clarke

THAT the Rangiora–Ashley Community Board:

(a) Receives report No. 170926103979.

(b) Approves Board member K Galloway and G Miller to represent the Rangiora-Ashley Community Board on the Draft Public Domain Policy Review Reference Group.

CARRIED

7.2 Applications for Rangiora-Ashley Community Board Discretionary Grant 2017-2018 – K Ward (Community Board Advocate)

K Ward advised that the report detailed an application by Kids First Kindergarten for funds to replace books. She had been unsuccessful at seeking additional financial information.
J Hoult queried what that information was and K Ward replied it was clarification of the term ‘administrative recharge’ and a full balance statement was not provided to show how much money was in the bank.

Moved K Galloway seconded C Prickett

THAT the Rangiora–Ashley Community Board:

(a) Receives report No. 170926104076.

(b) Lies the report on the table pending further information.

CARRIED

G Miller against

8 CORRESPONDENCE

Moved P Williams seconded M Clarke

THAT the Rangiora-Ashley Community Board:


(b) Receives the invitation from Kaiapoi RSA to attend the centennial commemorative Memorial Service of the Battle of Passchendaele (Trim 170922102696) (previously circulated by email).

CARRIED

9 CHAIRPERSON’S REPORT

9.1 Chair’s Diary for September 2017

Moved J Gerard seconded G Miller

THAT the Rangiora-Ashley Community Board:

(a) Receives report No. 171002105986.

CARRIED

10 MATTERS FOR INFORMATION

10.1 Oxford-Ohoka Community Board meeting minutes – 7 September 2017

(Mtrim No. 170926103789)

10.2 Woodend Sefton Community Board meeting minutes – 11 September 2017

(Mtrim No. 171003106542)

10.3 Kaiapoi-Tuahiwi Community Board meeting minutes – 18 September 2017

(Mtrim No. 170918100755)

10.4 Capital Projects Report for the period ended 30 June 2017 – Report to Audit and Risk Committee 19 September 2017 (Mtrim No. 17090609337).


Moved K Galloway seconded D Lundy

THAT the Rangiora-Ashley Community Board receives the information in items 10.1-10.6.

CARRIED
11  MEMBERS’ INFORMATION EXCHANGE

11.1  G Miller

- Commented that on his trip around Canada he had encountered many small
towns with much the same issues comparable to towns and districts in New
Zealand.
  o Also commented on the beautiful flowers on the main streets of
  Canadian towns and how this is one idea that Rangiora may wish to
  trial.
  o K Galloway noted Rangiora High Street used to have hanging
  petunia baskets.
- Noted the progress of the cycleways.

11.2  C Prickett

- Attended All Boards
- Attended Water Advisory Group meeting regarding Poyntz Road and West
  Eyreton schemes.
  o There was general agreement to a way forward with a second bore
    established 50m from the existing bore as backup.
  o Questions had been raised regarding losing both in the event of an
    earthquake and advice had been given that in previous earthquakes
    effect on bores was non-specific.
  o Poyntz Road raised more issues, as the well did not meet drinking
    water standards.

11.3  J Hoult

- Noted progress of the cycleways project.
- Attended All Boards meeting.
- Timebank is continuing to be established.
  o A community led project, the group had established its own
    Facebook page, set up policies and signed a memorandum of
    understanding with Presbyterian Support for it to act as an ‘umbrella
    group’ until such time Timebank could operate autonomously.
- Creative Communities:
  o a photographic exhibition working with migrants and getting their
    stories is planned.
  o It would be toured around the Waimakariri towns and Christchurch.
- District Plan submission.

J Gerard thanked J Hoult for her work with Timebank. There was a
suggestion to get the Chair along to speak to the board in the future.

11.4  M Clarke

- Croquet Club:
  o the carpark by the ramp needed to be tarsealed as there was
    accessibility issues over the rough shingle.
- Attended Rangiora Promotions evening.
- Attended Central Drainage Committee meeting:
  o real time footage of flooding events had been shown.
- Waimakariri Health Advisory Group (WHAG):
  o The Chair was retiring
  o The position of independent Chair is being advertised.

11.5  K Galloway

- Millton Avenue Dog Park:
  o There is now a gate in the fence off River Road.
Friends of the Millton Ave Dog Parks are fundraising to provide shelters for the park. There will be a Quiz night 7pm on 13 November at Five Stags; the Board was invited to put in a team.

11.6 D Lundy
- Attended Civil Defence training.
- Was unable to attend the Central District Drainage meeting however noted that there was some resolution on the historical McAlpines consent issues.
- There would be a Loburn Reserve Statement regarding the Memorial project.

11.7 P Williams
- Had a meeting with H Warwick, Enterprise North Canterbury (ENC), regarding the value of what the Council put into ENC.
- Attended Summerhill water meeting.
- Commented that he found the 6% rates rise and the increase in council debt levels concerning. J Gerard referred to Council’s strict guidelines around debt levels. J Millward advised that the current 6% increases was the current worst case scenario with everything we are aware of at this stage included. The Staff and Council still had to undertake the review and it was likely to be reduced significantly prior to being consulted on with the community. Part of the issue is still the significance the earthquake expenditure has had on rates and currently being funded by debt and rates.

The Council manages debt well within the statutory limits. Something investors looked at was the ratio interest as a proportion to rates revenue which is being kept well within the Council’s own self-imposed limits and the Local Government limit benchmark. Our forecast debt and cost of interest to rates revenue was also being kept well under these limits. Council had an AA credit rating and it was worth noting its AA Local Government excellence status that was just recently received, understood to be the only AA rating issued in the last review. WDC was sitting at about 7%, with approval that could go to 25% and to 30% with the approval of the Local Government Funding Agency. WDC also had a self-imposed limit of debt, which was to take it within $70 million of that limit, which meant Council could still fund a significant disaster event without insurance, should it not be made available in the market. J Millward commented that the Council did still have a significant debt compared to some others, but it was managed well within the limits allowed under the mandatory reporting limits, disclosed under the LG Financial Reporting Prudence Regulations 2014. The last annual Credit Review undertaken by Standards & Poors audit review maintained WDC with an AA rating, with a positive outlook, which meant they were managing well. J Millward commented that he agreed with P Williams in that Council needed to look at its spend and start prioritising capital projects going into the LTP, and that 6% would most likely be unacceptable to our community.

D Lundy commented on 6% rate rises, over the next four years and stated he did not want staff to increase rates beyond its means and development was costly. J Millward commented that the funding methodology was provided within the Council’s Revenue and Financing Policy. A substantial amount of new growth capital was funded through developments contributions. The WDC rate demand was very detailed on how rate charges were used to ensure transparency to ratepayers for each of the services the ratepayer receives.

K Galloway asked if Council had considered charging for water through metering. J Millward advised that the installation and operating cost of the system would cost more in rates than the current supply and charging
system. The amount of water currently used is a 7% of the total amount of water used in the District and that the conversation benefit to cost was currently costly at this stage.

G Miller asked if Council was borrowing money for operating costs. J Millward replied Council had borrowed money for earthquake operating costs to a degree over the first few years. The Targeted Earthquake rate is progressive increased about 1.2% of total rates annually to an amount where the loan is repaid back over a twenty-five year period.

J Millward advised the Council fully funds the replacement of its Assets and takes a whole of life approach, so that there is sufficient funds available to fund the replacement of its assets. The audit office has been referring to our Councils Infrastructure Strategy as one of the best that was produced for the LTP and refers to it at a number of forums and conferences held thorough New Zealand as a good example of an Infrastructure Strategy.

12 CONSULTATION PROJECTS
12.1 District Plan Review
Consultation closes 5pm, 27 October 2017.

Moved K Galloway seconded J Hoult
THAT the Rangiora-Ashley Community Board:
(a) Resolves that they wish to submit on the District Plan Review Consultation.

CARRIED
P Williams abstain

13 REGENERATION PROJECTS
Updates on the Rangiora Town Centre projects are emailed regularly to Board members. These updates can be located using the link below:

14 BOARD FUNDING UPDATE
14.1 Board Discretionary Grant
Balance as at 11 October 2017: $10,564.04.

15 MEDIA ITEMS
Nil.

16 QUESTIONS UNDER STANDING ORDERS
Nil.

17 URGENT GENERAL BUSINESS UNDER STANDING ORDERS
Nil.
NEXT MEETING
The next meeting of the Rangiora-Ashley Community Board is scheduled for 7pm, Wednesday 8 November 2017 in the Council Chambers at the Rangiora Service Centre.

THERE BEING NO FURTHER BUSINESS THE MEETING WAS CLOSED AT 9.10PM.

CONFIRMED

___________________
Chairperson

___________________
Date
The purpose of this memo is to provide the responses sought by Board members to information requested as part of considering the Bush Street Kidsfirst Kindergarten application to the Board’s Discretionary Fund.

The application was initially presented to the Board at its 11 October 2017 meeting. Members noted that not all financial information had been provided and also queried the nature of the financial element: ‘administrative recharge’ within the presented accounts.

The report was left to ‘lie on the table’ pending clarification of these matters.

KidsFirst advise that the Administration Recharge relates to all costs associated with running the organisation and is calculated on a quarterly basis.

For example:

- Legal
- Professional Development
- ACC
- Computer and computer leases
- Insurance
- Marketing
- Salaries
- Human Resources
- Health & Safety
- Property
- Appointments
- Travel

The additional financial information is provided in Attachment i (Trim 171027116498)
<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
<th>GST</th>
<th>Sub GST Total</th>
<th>GST Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>14/1.4 - 19/1.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/7.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening Balance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 July 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Running Expenses**

**Financial Budget Expenditure Form**

**Term Three 2017**

---

Period: 24/07/2017 - 29/09/2017
THIS IS A TRUE AND ACCURATE STATEMENT OF YOUR TRUST ACCOUNT AS AT 30 SEPTEMBER 2017

[Table with columns for Balance, Debits, Credits, Closing Balance, Opening Balance]
**THIS IS A TRUE AND ACCURATE STATEMENT OF YOUR TRUST ACCOUNT AS AT 31 JULY 2017**

<table>
<thead>
<tr>
<th>Date</th>
<th>Ref</th>
<th>Description</th>
<th>Code</th>
<th>Serial No</th>
<th>Transaction</th>
<th>Type to Pay</th>
<th>TWINBROOKS</th>
<th>COMMUNITY IRC</th>
<th>COMMUNITY TR</th>
<th>COMMUNITY TR</th>
<th>CREDIB</th>
<th>CREDIB</th>
<th>Code</th>
<th>Date</th>
<th>Other Party Name</th>
<th>Transaction Name</th>
<th>Transaction Name</th>
<th>Transactions Code</th>
<th>Transactions Code</th>
<th>Transactions Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/49.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/49.79</td>
<td>49.46</td>
<td>Balance</td>
<td></td>
<td></td>
<td></td>
<td>³</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/30.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>³</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Balance:** $12,380.96

**Opening Balance:** $12,302.77

**Closing Balance:** $12,380.96

ANZ Direct Online

ANZ Bank New Zealand Limited

Report Date: 02 Aug 2017 15:44:11 NZT

CANWES CH

Page: 8

RACHEL
1. SUMMARY

1.1. The purpose of this report is to consider an application for funding received from:

<table>
<thead>
<tr>
<th>Name of Organisation</th>
<th>Purpose</th>
<th>Amount Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canterbury Westland Kindergarten Association (Kidsfirst Kindergartens Bush Street)</td>
<td>Towards costs of replacing books and purchase of new large books for group stories</td>
<td>$300</td>
</tr>
</tbody>
</table>

Total: $300

1.2. Current balance is $10,564.04

Attachments:

i. Application from Canterbury Westland Kindergarten Association (Kidsfirst Kindergartens Bush Street) (Trim 1709816088387)

ii. Spreadsheet showing previous two years grants.

iii. Board funding criteria 2017/2018 (Trim 170627066273)

2. RECOMMENDATION

THAT the Rangiora-Ashley Community Board:

(a) Receives report No. 170926104076.

(a) Approves a grant of $__________ to Canterbury Westland Kindergarten Association (Kidsfirst Kindergartens Bush Street) towards costs of replacing books and purchase of new large books for group stories.

OR
3. ISSUES AND OPTIONS

3.1. Kidsfirst Kindergartens Bush Street is a non-profit organisation that provides education for young children.

3.1.1. It is one of 62 Kindergartens in the Canterbury/Westland area that operate under the umbrella of Canterbury Westland Kindergarten Association (trading as Kidsfirst Kindergartens).

3.1.2. Currently this branch has 30 pre-school aged children attending each day, and a roll of 42 children and their families. An estimated 98% of participants are from the Rangiora-Ashley community area.

3.1.3. Kidsfirst Kindergartens Bush Street is seeking funding to replace old and torn copies of favourite books, and to purchase new large books for group stories.

3.1.4. Fundraising is undertaken throughout the year; for example: Christmas Raffle, Wheel-a-thon, photographs.

3.1.5. A direct benefit to participants will be provided through a wide variety of literary experiences, promote early literacy, and a love of stories for the children and their siblings. Benefits to the organisation include replacing loved books while showing the children how to look after new books. Wider benefits to the wider community include resourcing educational services, local teachers and student teachers with appropriate and useable equipment.

3.1.6. If the application is declined the project will not occur.

3.1.7. Kidsfirst Kindergartens Bush Street has not applied for any Community Board Discretionary Grant within the last 18 months. They have attached financial information, quotes and a letter of support from the Head Teacher.

3.2. The Community Board may approve or decline grants to the applicant in accordance with the grant guidelines.

3.3. The Management Team has reviewed this report.

4. COMMUNITY VIEWS

4.1. Community organisations in applying to the Board’s Discretionary Grant, are seeking to assist sectors of the community.

5. FINANCIAL IMPLICATIONS AND RISKS

5.1. The Annual Plan for 2017/18 includes budget provision for the Rangiora-Ashley Community Board to approve grants to community groups up to a total of $12,264.04. The requested grants for consideration in October 2017 total $300.

5.2. The current balance of the grant fund is $10,564.04.

5.3. The application criteria specify that grants are normally limited to a maximum of $500 in any one financial year (July to June) but the group can apply up to twice in that year, providing it is for different projects.

5.4. GST is paid to appropriately registered groups where applicable above the Board resolved values.
6. CONTEXT

6.1. Policy

This matter is not a matter of significance in terms of the Council’s Significance Policy.

6.2. Legislation

Not applicable.

6.3. Community Outcomes

6.3.1. People are friendly and caring, creating a strong sense of community in our District.

6.3.2. There are wide ranging opportunities for people of different ages to participate in community and recreational activities.

Karyn Ward
Community Board Advocate
Groups Applying for Board Discretionary Grants 2016/2017

Name of Group: Kidsfirst Kindergartens Bush Street

Address: 27 Bush Street, Rangiora

Contact Person within Organisation: Anne Smith

Position within Organisation: Head Teacher

Contact phone number: 03-3135010 Email: anne.smith@kidsfirst.tag.nz

Describe what the project is and what the grant funding be used specifically for? (Use additional pages if needed)

To replace some very old and torn copies of favourite books, purchase new large books for group stories.

What is the timeframe of the project? 4 months

Overall Cost of Project: $333.45 Amount Requesting: $300.00

How many people will directly benefit from this project? 50

Who is the range of people benefiting from this project? (You can tick more than one box)

- People with disabilities (mental or physical)
- Cultural/ethnic minorities
- District
- Preschool
- School/youth
- Older adults
- Whole community/ward

Provide estimated percentage of participants by Ward:

- Rangiora-Ashley 93%
- Woodend-Sefton 1%
- Kaiapoi-Tuahiwi%
- Oxford-Ohoka 1%

Other (please specify): 

If this application is declined will this event/project still occur? ☐ Yes ☑ No

If No – what are the consequences to the community/organisation?
RANGIORA-ASHLEY COMMUNITY BOARD DISCRETIONARY GRANT APPLICATION

What are the direct benefit(s) to the participants?

Providing a wide variety of rich literacy experiences, promoting early literacy, a love of stories for the children and their siblings.

What is the benefit(s) to your organisation?

To replace much loved stories, keeping our books updated and using books in good condition. Sharing children and teaching them how to look after books.

What are the benefit(s) to the Rangiora-Ashley community or wider district?

To provide quality Early Childhood experiences for the tamariki attending kindergarten. The books are also used by families, supporting educational services, local school teachers (visiting) and student teachers.

Is your group applying under the umbrella of another organisation (that is Charity/Trust registered?) □ Yes □ No

If yes, name of parent group

Canterbury Westland Kindergarten Assn (Trading as Kidzfirst Kindergartens)

What is the relationship between your group and the parent group?

The kindergarten is one of 62 kindergartens in the Canterbury/Westland area.

What other fundraising has your group undertaken towards this project/event? List any other organisations you have applied or intend to apply to for funding this project and amount applied for this project:

The kindergarten is supported by families/whānau who organise fundraising throughout the year, keep the kindergarten resourced to provide quality for Early Childhood. Fundraisers have included Christmas Raffle, wheel-a-thon, photographs

Have you applied to the Rangiora-Ashley Community Board or any other Waimakariri Community Board for other project funding in the past 18 months? □ Yes □ No

If yes, please supply details:

Enclosed

☑ Financial Balance Sheet and Income & Expenditure Statement (compulsory – your application cannot be processed without financial statements)

☑ Supporting costs/quotes (not compulsory)

☑ Other supporting information

I am authorised to sign on behalf of the group/organisation making this application.

I declare that all details contained in this application form are true and correct to the best of my knowledge.

I accept that successful applicants will be required to report back to the Community Board by completing a simple Accountability Report.

I accept that information provided in this application may be used in an official Council report available to the public.

PLEASE NOTE - If submitting your application electronically, entering your name in the Signature box below will be accepted as your signature:

Signed: ___________________________ Date: 14.8.2017
3.08.17

Kidsfirst Kindergartens Bush St
27 Bush St
RANGIORA

Board Secretary
Rangiora Community Board
c/- Waimakariri District Council
Private Bag 1005
Rangiora

Dear Sir/Madam,

On behalf of the Kidsfirst Kindergartens Bush St Parent group, teaching staff and children I am writing in support of this grant application.

Kidsfirst Kindergartens Bush St is supported by a very hard working group of parents who organize fundraising events to help resource the kindergarten. The kindergarten will provide $43.47 which is the GST component towards the purchase of new books. We are a nonprofit organization who provides quality education for young children. At present we have 30 children attending each day and have a roll of 42 children and their families who are able to use the kindergarten.

Thank you for considering this grant application.

Yours sincerely,

Anne Smith
Head Teacher
<table>
<thead>
<tr>
<th></th>
<th>This Year Quarter</th>
<th>Year to Date</th>
<th>Last Year Quarter</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Govt Bulk Funding</td>
<td>67,638</td>
<td>304,456</td>
<td>73,983</td>
<td>294,185</td>
</tr>
<tr>
<td>Fees</td>
<td>155</td>
<td></td>
<td>707</td>
<td></td>
</tr>
<tr>
<td>Interest &amp; Dividends Received</td>
<td>21</td>
<td>93</td>
<td>23</td>
<td>109</td>
</tr>
<tr>
<td>Grants</td>
<td>6,235</td>
<td></td>
<td>5,454</td>
<td></td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>67,659</td>
<td>310,939</td>
<td>74,006</td>
<td>300,456</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Staff Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries</td>
<td>47,814</td>
<td>211,814</td>
<td>51,357</td>
<td>212,816</td>
</tr>
<tr>
<td>Teacher Travel</td>
<td>35</td>
<td>87</td>
<td>283</td>
<td></td>
</tr>
<tr>
<td><strong>Property Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rent &amp; Rates</td>
<td>141</td>
<td>1,158</td>
<td>308</td>
<td>1,396</td>
</tr>
<tr>
<td>Repairs &amp; Maintenance</td>
<td>721</td>
<td>4,254</td>
<td>1,560</td>
<td>11,042</td>
</tr>
<tr>
<td><strong>Administration Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications</td>
<td>531</td>
<td>2,250</td>
<td>577</td>
<td>1,636</td>
</tr>
<tr>
<td>Computer Support &amp; Lease of Equip...</td>
<td>120</td>
<td>540</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td>670</td>
<td>3,246</td>
<td>574</td>
<td>3,362</td>
</tr>
<tr>
<td>Kindergarten Running Expenses</td>
<td>6,432</td>
<td>23,389</td>
<td>4,149</td>
<td>20,142</td>
</tr>
<tr>
<td>Resources</td>
<td>177</td>
<td>820</td>
<td>199</td>
<td>803</td>
</tr>
<tr>
<td>Administration Recharge</td>
<td>18,434</td>
<td>60,437</td>
<td>17,336</td>
<td>61,120</td>
</tr>
<tr>
<td><strong>Total Administration Expenses</strong></td>
<td>26,363</td>
<td>90,682</td>
<td>22,836</td>
<td>87,183</td>
</tr>
<tr>
<td><strong>Other Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>75,039</td>
<td>307,942</td>
<td>76,149</td>
<td>312,709</td>
</tr>
<tr>
<td><strong>Surplus / (Deficit)</strong></td>
<td>(7,380)</td>
<td>2,997</td>
<td>(2,142)</td>
<td>(12,263)</td>
</tr>
<tr>
<td><strong>Kindergarten Discretionary Income and Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fundraising/Donations</td>
<td>996</td>
<td>2,425</td>
<td>973</td>
<td>2,043</td>
</tr>
<tr>
<td>Kindergarten Discretionary Spending</td>
<td>(589)</td>
<td>(3,801)</td>
<td>(3,262)</td>
<td>(10,484)</td>
</tr>
<tr>
<td><strong>Total Surplus / (Deficit)</strong></td>
<td>(6,973)</td>
<td>1,621</td>
<td>(4,432)</td>
<td>(20,705)</td>
</tr>
<tr>
<td>Trust Account Balance</td>
<td>3,726</td>
<td></td>
<td>1,834</td>
<td></td>
</tr>
<tr>
<td>Salary % of Bulk Funding</td>
<td>70.69%</td>
<td>69.57%</td>
<td>69.42%</td>
<td>72.34%</td>
</tr>
</tbody>
</table>

This is a true and correct statement of the financial position and the financial results of Kids First Kindergartens for the twelve months ending Thursday, 31 December 2015.

SIGNED: Mary Wilson
Chief Executive
### Paper Plus Rangiora

186 High Street  
03 313 7812

**Special Order**  
Operator CF .  
**Till 1**  
**Tr#** 182110468  
**Date** 07/06/17  
11:57

**Kids First**

<table>
<thead>
<tr>
<th>Code</th>
<th>Qty</th>
<th>Price</th>
<th>Disc %</th>
<th>Extn</th>
</tr>
</thead>
<tbody>
<tr>
<td>BERENSTAIN BEARS &amp; THE SPOOKY OLD TREE</td>
<td>1</td>
<td>11.00</td>
<td>11.00</td>
<td></td>
</tr>
<tr>
<td>DIGGINGEST DOG BEGINNER BOOKS</td>
<td>1</td>
<td>11.00</td>
<td>11.00</td>
<td></td>
</tr>
<tr>
<td>GREEN EGGS &amp; HAM GREEN BACK BOOK EDIT</td>
<td>1</td>
<td>11.00</td>
<td>11.00</td>
<td></td>
</tr>
<tr>
<td>BEST NEST BEGINNER BOOKS</td>
<td>1</td>
<td>11.00</td>
<td>11.00</td>
<td></td>
</tr>
<tr>
<td>BEARS HOLIDAY</td>
<td>1</td>
<td>11.00</td>
<td>11.00</td>
<td></td>
</tr>
</tbody>
</table>

Total (incl GST of $ 7.15)  
55.00

We'll phone you when your order arrives

*** Duplicate *** Duplicate ***

Quote required for a grant
<table>
<thead>
<tr>
<th>Product Code</th>
<th>Product Description</th>
<th>Options</th>
<th>Qty</th>
<th>Unit Price</th>
<th>Sub Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10004</td>
<td>Big Hungry Bear - Big Book</td>
<td></td>
<td>1</td>
<td>$34.77</td>
<td>$34.77</td>
</tr>
<tr>
<td>10701</td>
<td>Cows in the Kitchen - Big Book</td>
<td></td>
<td>1</td>
<td>$30.43</td>
<td>$30.43</td>
</tr>
<tr>
<td>10699</td>
<td>Dry Bones - Big Book</td>
<td></td>
<td>1</td>
<td>$30.43</td>
<td>$30.43</td>
</tr>
<tr>
<td>10694</td>
<td>Five Little Men in a Flying Saucer - Big Book</td>
<td></td>
<td>1</td>
<td>$30.43</td>
<td>$30.43</td>
</tr>
<tr>
<td>10693</td>
<td>Five Little Ducks - Big Book</td>
<td></td>
<td>1</td>
<td>$30.43</td>
<td>$30.43</td>
</tr>
<tr>
<td>10698</td>
<td>One Elephant Went Out to Play - Big Book</td>
<td></td>
<td>1</td>
<td>$30.43</td>
<td>$30.43</td>
</tr>
<tr>
<td>10682</td>
<td>This is the Bear - Big Book</td>
<td></td>
<td>1</td>
<td>$45.21</td>
<td>$45.21</td>
</tr>
</tbody>
</table>

Payment Terms

20th of the following month

Product Cost: $232.13
Freight: $10.00
Sub Total: $242.13
GST (15%): $36.32
Total (NZD): $278.45

QUOTES VALID FOR 30 DAYS
FREIGHT IS AN ESTIMATE ONLY FOR ORDERS OVER $2500.00
ALL QUOTES ARE SUBJECT TO OUR TERMS & CONDITIONS
## 2016-2017 Community Board Discretionary Grant

<table>
<thead>
<tr>
<th>Month considered</th>
<th>Group</th>
<th>Project</th>
<th>Amount Requested</th>
<th>Amount Granted</th>
<th>Running Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>Pegasus Residents group Inc.</td>
<td>Towards costs for activities at a Christmas event, &quot;Christmas on the Lake&quot;.</td>
<td>$500</td>
<td>$400.00</td>
<td>$2,510.00</td>
</tr>
<tr>
<td>August</td>
<td>Reflections Community Trust</td>
<td>towards the costs of funding Pedalmania to be part of the Waimakariri Light Party 2016 event</td>
<td>$390</td>
<td>$390.00</td>
<td>$2,120.00</td>
</tr>
<tr>
<td>September</td>
<td>Okuku Pony Club</td>
<td>Towards accommodation costs while attending the Springston Trophy event</td>
<td>$500</td>
<td>$500.00</td>
<td>$1,620.00</td>
</tr>
<tr>
<td>February</td>
<td>Woodend Bowling Club</td>
<td>towards the cost to core and solid spike the outdoor bowling green</td>
<td>$449</td>
<td>$-</td>
<td>$1,620.00</td>
</tr>
<tr>
<td>April</td>
<td>Kaiapoi Art Expo and Schools Art Expo</td>
<td>$300</td>
<td>$300.00</td>
<td>$1,320.00</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>Sefton School PTA</td>
<td>towards purchase of a TV &amp; Apple TV box</td>
<td>$500</td>
<td>$500.00</td>
<td>$820.00</td>
</tr>
<tr>
<td>June</td>
<td>The Woodpecker Community Trust</td>
<td>$500</td>
<td>$600.00</td>
<td>$220.00</td>
<td>$9,010.00</td>
</tr>
<tr>
<td>September</td>
<td>Southbrook School PTA</td>
<td>Towards the costs of hiring Ethe &amp; Bethelto run a bingo fundraiser event</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>Vision West Community Trust</td>
<td>Towards the cost of photoelectric smoke alarms in social housing</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>Rangiora Croquet Club Inc.</td>
<td>Towards the part funding of a second set of Quadway Hoops</td>
<td>$500</td>
<td>$500.00</td>
<td>$8,510.00</td>
</tr>
<tr>
<td>September</td>
<td>Okuku Pony Club</td>
<td>Towards accommodation costs while attending the Springston Trophy event</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>Reflections Community Trust</td>
<td>toward the cost of a dog agility display for the Waimakariri Light Party 2016</td>
<td>$350.00</td>
<td>$200.00</td>
<td>$8,310.00</td>
</tr>
<tr>
<td>November</td>
<td>Presbyterian Support Upper South Island</td>
<td>Towards the costs of establishing an outdoor garden area for the Totara Club.</td>
<td>$1,000.00</td>
<td>$500.00</td>
<td>$7,810.00</td>
</tr>
<tr>
<td>Month</td>
<td>Organisation</td>
<td>Purpose</td>
<td>Amount</td>
<td>Subtotal</td>
<td>Total</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------------</td>
</tr>
<tr>
<td>November</td>
<td>Ashley Playcentre</td>
<td>Towards the purchase of a John Deere ride-on tractor.</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$7,310.00</td>
</tr>
<tr>
<td>November</td>
<td>Cust-West Eyerton Playcentre</td>
<td>Towards the purchase of a tablet, Microsoft Office programme and virus protection.</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$6,810.00</td>
</tr>
<tr>
<td>November</td>
<td>Rangiora Playcentre</td>
<td>To purchase a profile holder and a non-slip entrance mat.</td>
<td>$456.21</td>
<td>$456.21</td>
<td>$6,353.79</td>
</tr>
<tr>
<td>February</td>
<td>Rangiora Playcentre</td>
<td>To purchase a profile holder and a non-slip entrance mat.</td>
<td>$456.21</td>
<td>$456.21</td>
<td>$6,353.79</td>
</tr>
<tr>
<td>February</td>
<td>Rangiora and Districts Early Records Society Inc.</td>
<td>Towards the cost of conservation framing of a sale map for the Red Lion Hotel</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$5,473.79</td>
</tr>
<tr>
<td>February</td>
<td>Canterbury Justices of the Peace Association Inc.</td>
<td>Towards the cost of a pull-up banner</td>
<td>$235.75</td>
<td>$235.75</td>
<td>$5,238.04</td>
</tr>
<tr>
<td>April</td>
<td>North Canterbury Riding for the Disabled Inc</td>
<td>Equipment and mounting block for less able riders</td>
<td>$389.00</td>
<td>$389.00</td>
<td>$4,849.04</td>
</tr>
<tr>
<td>April</td>
<td>Kaiapoi Art Expo and Schools Art Expo</td>
<td>Towards running costs - in particular advertising - applied to all boards</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$4,349.04</td>
</tr>
<tr>
<td>April</td>
<td>HomeShare Lunch Group</td>
<td>Towards entry costs for senior citizens participating in the HomeShare Lunch Group to Orana Park</td>
<td>$295.00</td>
<td>$295.00</td>
<td>$4,054.04</td>
</tr>
<tr>
<td>April</td>
<td>North Canterbury Model Railway Club Inc.</td>
<td>Towards the cost of advertising an 'open day' event 18-19 March 2017.</td>
<td>$250.00</td>
<td>$250.00</td>
<td>$4,054.04</td>
</tr>
<tr>
<td>June</td>
<td>Cust Bowling Club</td>
<td></td>
<td>$500.00</td>
<td>$500.00</td>
<td>$3,554.04</td>
</tr>
<tr>
<td>August</td>
<td>Reflections Community Trust</td>
<td>Towards the costs of hiring a clown/street performer for the Waimakariri Light Party 2016</td>
<td>$450</td>
<td>$390</td>
<td>$4,460.00</td>
</tr>
<tr>
<td>August</td>
<td>Vision West Community Trust</td>
<td>Towards the cost of photoelectric smoke alarms in social housing</td>
<td>$500</td>
<td></td>
<td>$4,210.00</td>
</tr>
<tr>
<td>August</td>
<td>Big Brothers Big Sisters of North Canterbury</td>
<td>Towards entry costs to Laserstrike for children being mentored</td>
<td>$500</td>
<td>$250.00</td>
<td>$4,210.00</td>
</tr>
</tbody>
</table>
### 2016-2017 Community Board Discretionary Grant

<table>
<thead>
<tr>
<th>Month</th>
<th>Organization</th>
<th>Description</th>
<th>Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>Kaiapoi Pony Club</td>
<td>Towards training and equipment for the Springfield Trophy event</td>
<td>$500</td>
</tr>
<tr>
<td>September</td>
<td>Kaiapoi Community Garden Trust</td>
<td>Towards advertising costs for the Annual Spring Open Day</td>
<td>$276</td>
</tr>
<tr>
<td>November</td>
<td>You Me We Us</td>
<td>towards the cost of paying for a performer and advertising for a Waitangi Day celebration</td>
<td>$500</td>
</tr>
<tr>
<td>February</td>
<td>Reflections Community Trust</td>
<td>Toward the cost for Kaiapoi Photographic Club to take photos at the Kaiapoi Children’s day for future promotional purposes and archival records</td>
<td>$75.00</td>
</tr>
<tr>
<td>February</td>
<td>Community Wellbeing North Canterbury Trust / Kaiapoi Community Support</td>
<td>Towards the cost of purchasing a commercial chest freezer</td>
<td>$327.43</td>
</tr>
<tr>
<td>March</td>
<td>Canterbury Justices of the Peace Association Inc.</td>
<td>Towards the cost of a pull-up banner</td>
<td>$235.75</td>
</tr>
<tr>
<td>March</td>
<td>Karanga Mai Early Learning Centre</td>
<td>Towards the cost of a new couch for breast-feeding mothers to nurse their babies</td>
<td>$500</td>
</tr>
<tr>
<td>April</td>
<td>Kaiapoi Toy Library</td>
<td>Towards the purchase of board games</td>
<td>$500.00</td>
</tr>
<tr>
<td>April</td>
<td>R13 Youth Development Trust</td>
<td>to enable Chair/Manager to attend a 5 day child protection programme</td>
<td>$700.00</td>
</tr>
<tr>
<td>April</td>
<td>Tuahiwi Community Preschool</td>
<td>towards the creation of a bicultural themed entranceway feature</td>
<td>$500.00</td>
</tr>
<tr>
<td>Month</td>
<td>Organisation</td>
<td>Purpose</td>
<td>Amount Requested</td>
</tr>
<tr>
<td>-------</td>
<td>--------------</td>
<td>---------</td>
<td>-----------------</td>
</tr>
<tr>
<td>April</td>
<td>Waimakariri Arts Trust- Kaiapoi Art Expo</td>
<td>Towards running costs associated with the Kaiapoi Art Expo and Schools’ Art Expo, in particular advertising in the Kaiapoi Advocate and venue clearing costs</td>
<td>$500.00</td>
</tr>
<tr>
<td>June</td>
<td>KHS CACTUS Programme</td>
<td></td>
<td>$500.00</td>
</tr>
<tr>
<td>July</td>
<td>Oxford Area School - Senior Netball team</td>
<td>Towards costs associated with attending the South Island Secondary Schools Netball Tournament in Nelson</td>
<td>$500.00</td>
</tr>
<tr>
<td>July</td>
<td>Little by Little</td>
<td>Towards costs associated with a new community initiative</td>
<td>$250.00</td>
</tr>
<tr>
<td>July</td>
<td>Oxford Play Centre</td>
<td>Towards purchase of a lawn mower</td>
<td>$250.00</td>
</tr>
<tr>
<td>July</td>
<td>Under Our Feet Charitable Trust</td>
<td>Towards the purchase of compost and seedlings</td>
<td>$250.00</td>
</tr>
<tr>
<td>July</td>
<td>North Canterbury Family Violence Network</td>
<td>To fund a presentation to raise family violence awareness among Oxford Area School youth</td>
<td>$500.00</td>
</tr>
<tr>
<td>August</td>
<td>Under Our Feet Charitable Trust</td>
<td>Towards the purchase of compost and seedlings</td>
<td>$250.00</td>
</tr>
<tr>
<td>September</td>
<td>Okuku Pony Club</td>
<td>Towards accommodation costs while attending the Springston Trophy event</td>
<td>$500.00</td>
</tr>
<tr>
<td>September</td>
<td>Eyreton Pony Club</td>
<td>Towards the cost of fencing a learner’s area</td>
<td>$450.00</td>
</tr>
<tr>
<td>February</td>
<td>Canterbury Justices of the Peace Association Inc.</td>
<td>Towards the cost of a pull-up banner</td>
<td>$235.75</td>
</tr>
<tr>
<td>April</td>
<td>Oxford Community Trust- Waimak Kids Oscar</td>
<td>Towards purchase of play equipment from the Big Game Company</td>
<td>$500</td>
</tr>
<tr>
<td>April</td>
<td>Arts in Oxford Printmaking Group</td>
<td>Towards the purchase of reusable equipment to make paper and sculptures</td>
<td>$491</td>
</tr>
<tr>
<td>April</td>
<td>Waimakariri Arts Trust- Kaiapoi Art Expo</td>
<td>Towards running costs of the Kaiapoi Art Expo and Schools’ Art Expo, particularly promotional advertising in the Oxford Observer</td>
<td>$500</td>
</tr>
<tr>
<td>Month considered</td>
<td>Group</td>
<td>Project</td>
<td>Amount Requested</td>
</tr>
<tr>
<td>------------------</td>
<td>-------</td>
<td>---------</td>
<td>------------------</td>
</tr>
<tr>
<td>July</td>
<td>Woodend Spring Flower Show</td>
<td>Towards the purchase of new signs</td>
<td>$500.00</td>
</tr>
<tr>
<td>August</td>
<td>Woodend Playcentre</td>
<td>Towards the cost of a First Aid Course for parents of the playcentre</td>
<td>$700.00</td>
</tr>
<tr>
<td>September</td>
<td>Woodend Before and After School Programme</td>
<td>New sports equipment</td>
<td>$500.00</td>
</tr>
<tr>
<td>October</td>
<td>Ashley Playcentre</td>
<td>Towards the cost of a First Aid Course for parents of the playcentre</td>
<td>$500.00</td>
</tr>
<tr>
<td>December</td>
<td>North Canterbury Neighbourhood Support</td>
<td>To purchase name badges for the committee members</td>
<td>$500.00</td>
</tr>
<tr>
<td>February</td>
<td>Sefton Community Newsletter</td>
<td>Towards costs associated with transition to new printing team</td>
<td>$500.00</td>
</tr>
<tr>
<td>March</td>
<td>Pegasus Bay School PTA</td>
<td>Towards costs for senior playground</td>
<td>$500.00</td>
</tr>
<tr>
<td>April</td>
<td>Waimakariri Arts Trust - Kaiapoi Art Expo</td>
<td>Towards venue hire and music provided for the 2016 Kaiapoi Art Expo and Schools' Art Expo</td>
<td>$500.00</td>
</tr>
<tr>
<td>April</td>
<td>North Canterbury Riding for the Disabled</td>
<td>For three volunteers to undertake an introductory course towards their Assistant Coaches Certificate</td>
<td>$498.00</td>
</tr>
<tr>
<td>June</td>
<td>Woodend Bowling Club Inc.</td>
<td>Towards the upgrading of covered kitchen lighting</td>
<td>$335.80</td>
</tr>
</tbody>
</table>

**Woodend-Ashley Community Board 10.138.100.2410**

**Total** | **$4,110.00**

**Running Balance** | **$6,120.00**
<table>
<thead>
<tr>
<th>Month</th>
<th>Organization</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>International Day of Older Persons Group</td>
<td>Towards costs associated with International Day of Older Persons</td>
<td>$250.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$250.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$5,870.00</td>
</tr>
<tr>
<td>August</td>
<td>The Ashley Lodge No.28</td>
<td>Towards fundraising event for the replacement of defibrillators in each of</td>
<td>$500.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the four ambulances based in Rangiora</td>
<td>$500.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$5,370.00</td>
</tr>
<tr>
<td>August</td>
<td>Reflections Community Trust</td>
<td>Towards the hire of Pedalmania for the Waimakariri Light Part 2015</td>
<td>$375.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$375.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$4,995.00</td>
</tr>
<tr>
<td>August</td>
<td>Rangiora Community Garden</td>
<td>Towards the purchase of materials for 3 new signs</td>
<td>$482.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$482.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$4,513.00</td>
</tr>
<tr>
<td>August</td>
<td>Caring for Carers Inc</td>
<td>Towards annual venue hire and refreshments for meetings of the Rangiora</td>
<td>$388.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support Group</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>Fall Prevention Exercise Group</td>
<td>towards costs associated with establishing an exercise programme for seniors</td>
<td>$500.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$250.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$4,263.00</td>
</tr>
<tr>
<td>October</td>
<td>Ashgrove School PTA - ReStyle Me</td>
<td>Towards venue hire for 'ReStyle Me', a fundraising event for Ashgrove School</td>
<td>$500.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>Ashgrove School PTA – Santa’s Grotto</td>
<td>Gate signage at the Rangiora A&amp;P Showgrounds entrance for Santa's Grotto</td>
<td>$379.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>McAlpines North Canterbury Pipe Band (Inc)</td>
<td>towards new kilts for band members</td>
<td>$500.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$350.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$3,913.00</td>
</tr>
<tr>
<td>October</td>
<td>Ashgrove School PTA – Ashgrove Twilight Gala</td>
<td>To hire deep fryers and cooking oil for the Ashgrove Twilight Gala</td>
<td>$425.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>Rangiora Toy Library</td>
<td>towards advertising costs of a fundraising event as part of its 21st Birthday celebrations</td>
<td>$741.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$350.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$3,563.00</td>
</tr>
<tr>
<td>October</td>
<td>North Canterbury Neighbourhood Support</td>
<td>towards the costs associated with running the 'Old Fashioned Family Picnic'</td>
<td>$250.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$250.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$3,313.00</td>
</tr>
<tr>
<td>December</td>
<td>Rangiora Playcentre</td>
<td>to purchase a new pull up banner</td>
<td>$379.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$379.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$2,934.00</td>
</tr>
<tr>
<td>Month</td>
<td>Organization</td>
<td>Description</td>
<td>Amount</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>February</td>
<td>Rangiora Toy Library</td>
<td>towards the purchase of new toys, specifically, a replacement tractor</td>
<td>$456.25</td>
</tr>
<tr>
<td>April</td>
<td>Waimakariri Arts Trust - Kaiapoi Art Expo</td>
<td>Towards the hire and installation of lighting for the 2016 Kaiapoi Art Expo and Schools’ Art Expo</td>
<td>$500.00</td>
</tr>
<tr>
<td>April</td>
<td>North Canterbury Riding for the Disabled</td>
<td>towards costs associated with relocating to the Millton Memorial Reserve</td>
<td>$500.00</td>
</tr>
<tr>
<td>April</td>
<td>North Canterbury Family Violence Network</td>
<td>towards costs of a Safety and Respect presentation and follow-up barbeque for Rangiora High School and/or Rangiora New Life School secondary students</td>
<td>$500.00</td>
</tr>
<tr>
<td>June</td>
<td>Cat Care Incorporated</td>
<td>Towards the costs of a Microchipping Day</td>
<td>$250.00</td>
</tr>
<tr>
<td>June</td>
<td>Disability, Carers and Friends Group</td>
<td>For the purchase of a trestle table and costs of catering for a Dance Social</td>
<td>$500.00</td>
</tr>
<tr>
<td>June</td>
<td>Rangiora Croquet Club Inc.</td>
<td>For part funding one set of Quadway Hoops</td>
<td>$500.00</td>
</tr>
<tr>
<td>June</td>
<td>The Rangiora and Districts Early Records Society Inc</td>
<td>For costs associated with set up, production and installation of four ACM vinyl signs to replace existing</td>
<td>$327.75</td>
</tr>
<tr>
<td>June</td>
<td>Seftonian Battle Sport</td>
<td>For new sporting and Safety equipment for players, specifically 4 x trebuchets and 2 x armour</td>
<td>$500.00</td>
</tr>
<tr>
<td>June</td>
<td>Social Services Waimakariri</td>
<td>Toward the costs of catering for a community forum event</td>
<td>$200.00</td>
</tr>
<tr>
<td>June</td>
<td>Waimakariri Arts Trust - Kaiapoi Art Expo resubmission</td>
<td>Towards the hire and installation of lighting for the 2016 Kaiapoi Art Expo and Schools’ Art Expo</td>
<td>$500.00</td>
</tr>
<tr>
<td>June</td>
<td>Community College North Canterbury</td>
<td>For the venue hire and supplies of a youth open night</td>
<td>$400.00</td>
</tr>
<tr>
<td>July</td>
<td>You Me We Us</td>
<td>Towards advertising of the September 4th Observance Day</td>
<td>$496.80</td>
</tr>
</tbody>
</table>

Total: $6,120.00
<table>
<thead>
<tr>
<th>Month</th>
<th>Organisation</th>
<th>Activity Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>Hinemoa-Kaiapoi Hockey Club</td>
<td>Towards assisting team members with the cost of travel to a tournament in Fiji</td>
<td>$500.00</td>
</tr>
<tr>
<td>August</td>
<td>Canterbury Youth Development Programme</td>
<td>Towards providing breakfast three mornings per week for eight weeks and food for the Longest Day Challenge</td>
<td>$500.00</td>
</tr>
<tr>
<td>September</td>
<td>Arthritis New Zealand</td>
<td>Towards venue hire and advertising associated with running self-management sessions and workshops in Kaiapoi</td>
<td>$500.00</td>
</tr>
<tr>
<td>September</td>
<td>Kaiapoi District Historical Society Incorporated</td>
<td>Towards the cost of installing updates of PastPerfect (a museum programme) and linking four computers for volunteers to work on at the same time</td>
<td>$500.00</td>
</tr>
<tr>
<td>November</td>
<td>You Me We Us</td>
<td>For advertising of Kaiapoi’s 2016 Waitangi Day celebrations</td>
<td>$500.00</td>
</tr>
<tr>
<td>December</td>
<td>North Canterbury Neighbourhood Support</td>
<td>Towards costs associated with running the ‘Old Fashion Family Picnic’</td>
<td>$300.00</td>
</tr>
<tr>
<td>March</td>
<td>Kaiapoi Photographic Club Inc</td>
<td>Toward printing costs for Club members involved in a photographic exhibition - “Waimakariri - from the Mountains to the Sea”</td>
<td>$500.00</td>
</tr>
<tr>
<td>March</td>
<td>Satisfy Food Rescue</td>
<td>To purchase a sandwich board to identify Satisfy Food Rescue in the community</td>
<td>$350.00</td>
</tr>
<tr>
<td>March</td>
<td>Waimakariri Arts Trust - Kaiapoi Art Expo</td>
<td>Towards the hire and installation of lighting for the 2016 Kaiapoi Art Expo and Schools’ Art Expo</td>
<td>$500.00</td>
</tr>
<tr>
<td>March</td>
<td>You Me We Us</td>
<td>Towards advertising costs for a ‘Pop Up cinema’ event</td>
<td>$500.00</td>
</tr>
<tr>
<td>Month</td>
<td>Organization</td>
<td>Description</td>
<td>April</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>April</td>
<td>Social Services Waimakiriri</td>
<td>towards catering costs for a community forum to discuss establishing a Community House and capacity for a Children's Team for the community</td>
<td>$200.00</td>
</tr>
<tr>
<td>April</td>
<td>North Canterbury Family Violence Network</td>
<td>towards the costs associated with a presentation to Kaiapoi High School about family violence and a bbq to follow</td>
<td>$500.00</td>
</tr>
<tr>
<td>November</td>
<td>Waimakiriri Arts Trust - Kaiapoi Art Expo</td>
<td>Towards running costs, in particular, the music provided over the weekend for 2016 Kaiapoi Art Expo.</td>
<td>$300.00</td>
</tr>
<tr>
<td>November</td>
<td>Oxford Table Tennis</td>
<td>Towards the purchase of tables</td>
<td>$250.00</td>
</tr>
<tr>
<td>November</td>
<td>Keep Oxford Beautiful</td>
<td>for a photo and information panel about the Oxford Historic Jail</td>
<td>$250.00</td>
</tr>
<tr>
<td>November</td>
<td>Friends of Oxford Hospital</td>
<td>towards the purchase of a Lazy Boy recliner chair and disability aids for patients</td>
<td>$350.00</td>
</tr>
<tr>
<td>November</td>
<td>Oxford Pony Club</td>
<td>towards the cost of running a two day show jumping course for its club members</td>
<td>$250.00</td>
</tr>
<tr>
<td>November</td>
<td>North Canterbury Neighbourhood Support</td>
<td>towards costs associated with running the 'Old Fashion Family Picnic'</td>
<td>$250.00</td>
</tr>
<tr>
<td>November</td>
<td>West Eyreton School</td>
<td>purchase of a banner-stand</td>
<td>$345.00</td>
</tr>
<tr>
<td>November</td>
<td>Oxford Tennis Club</td>
<td>Towards two weather shelters for the new courts</td>
<td>$500.00</td>
</tr>
<tr>
<td>November</td>
<td>View Hill Improvement Society</td>
<td>To purchase three alloy framed umbrellas for use at the View Hill Domain</td>
<td>$477.00</td>
</tr>
<tr>
<td>April/May</td>
<td>Waimakiriri Arts Trust - Kaiapoi Art Expo</td>
<td>towards the floral arrangements for the 2016 Kaiapoi Art Expo and Schools’ Art Expo</td>
<td>$500.00</td>
</tr>
<tr>
<td>Date</td>
<td>Organisation</td>
<td>Description</td>
<td>Amount 1</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>April/May</td>
<td>Oxford Community Trust</td>
<td>for stationery and art supplies for Oscar School Holiday programme</td>
<td>$ 560.03</td>
</tr>
<tr>
<td>April/May</td>
<td>Oxford Area School - Senior Netball team</td>
<td>towards costs associated with attending the South Island Secondary Schools Netball Tournament in Nelson</td>
<td>$ 500.00</td>
</tr>
<tr>
<td>April/May</td>
<td>Friends of Oxford Hospital</td>
<td>towards purchase of window screen blinds for patients rooms</td>
<td>$ 250.00</td>
</tr>
<tr>
<td>April/May</td>
<td>Little by Little</td>
<td>towards costs associated with a new community initiative</td>
<td>$ 250.00</td>
</tr>
<tr>
<td>April/May</td>
<td>Oxford Netball Club</td>
<td>for the purchase of two portable netball goals</td>
<td>$ 199.90</td>
</tr>
<tr>
<td>April/May</td>
<td>Oxford O.S.C.A.R.</td>
<td>for First Aid training of staff</td>
<td>$ 175.00</td>
</tr>
<tr>
<td>April/May</td>
<td>West Eyreton School</td>
<td>towards graphic design work for a banner</td>
<td>$ 295.00</td>
</tr>
<tr>
<td>April/May</td>
<td>Social Services Waimakariri</td>
<td>towards costs of catering for a community forum event</td>
<td>$ 200.00</td>
</tr>
<tr>
<td>April/May</td>
<td>Oxford Play Centre</td>
<td>towards purchase of a lawn mower</td>
<td>$ 250.00</td>
</tr>
<tr>
<td>April/May</td>
<td>Oxford Plunket</td>
<td>for the purchase of child safety gates and new toys for the Oxford Plunket Rooms</td>
<td>$ 500.00</td>
</tr>
<tr>
<td>April/May</td>
<td>Cust Netball Club</td>
<td>Towards the purchase of uniforms and equipment to enable childrens' participation</td>
<td>$ 500.00</td>
</tr>
<tr>
<td>April/May</td>
<td>Under Our Feet Charitable Trust</td>
<td>Towards the purchase of compost and seedlings</td>
<td>$ 250.00</td>
</tr>
</tbody>
</table>
**Information to assist groups with their application**

The purpose of the Board discretionary grants is to assist projects that enhance community group capacity and/or increase participation in activities.

When assessing grant applications the Board consider a number of factors in their decision making. These include, but are not limited to; type of project, time frame, benefits to the community and costs being contributed. The more information you as a group can provide on the project and benefits to participants the better informed the Board is. You are welcome to include a cover letter as part of your application. The decision to grant funds is the sole discretion of the Board.

The Board cannot accept applications from individuals. All funding is paid to non-profit community based organisations, registered charities or incorporated societies. Council funding is publicly accountable therefore the Board need to demonstrate to the community where funding is going and what it is being spent on. This is one of the reasons the Board require a copy of your financial profit/loss statements and balance sheet for the previous/current financial year. Staff cannot process your application without financial records.

The Board encourages applicants, where practically possible, to consider using local businesses or suppliers for any services or goods they require in their application. The Board acknowledges that this may result in a higher quote.

It would be helpful to the Board to receive an expense summary for projects that cost more than the grant being requested to show the areas funds are being spent and a paragraph on what fund raising the group has undertaken towards the project, or other sources considered (ie voluntary labour, businesses for supplies).

<table>
<thead>
<tr>
<th>Examples (but not limited to) of what the Board cannot fund:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ Wages</td>
</tr>
<tr>
<td>✗ Debt servicing</td>
</tr>
<tr>
<td>✗ Payment for volunteers (including arrangements in kind eg petrol vouchers)</td>
</tr>
<tr>
<td>✗ Stock or capital market investment</td>
</tr>
<tr>
<td>✗ Gambling or prize money</td>
</tr>
<tr>
<td>✗ Funding of individuals (only non-profit organisations)</td>
</tr>
<tr>
<td>✗ Payment of any legal expenditure or associated costs</td>
</tr>
<tr>
<td>✗ Purchase of land and buildings</td>
</tr>
<tr>
<td>✗ Activities or initiatives where the primary purpose is to promote, commercial or profit-oriented interests</td>
</tr>
<tr>
<td>✗ Payment of fines, court costs or mediation costs, IRD penalties</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples (but not limited to) of what the Board can fund:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ New equipment</td>
</tr>
<tr>
<td>✓ Toys/educational aids</td>
</tr>
<tr>
<td>✓ Sporting equipment</td>
</tr>
<tr>
<td>✓ Safety equipment</td>
</tr>
<tr>
<td>✓ Costs associated with events</td>
</tr>
<tr>
<td>✓ Community training</td>
</tr>
</tbody>
</table>
Criteria for application

- Grant applications will be considered every second month by the Rangiora-Ashley Community Board: July, September, November 2017 and February, April, June 2018. Applications are recommended to be received three weeks prior to Board meeting dates for processing.

- Generally funding grants will be a maximum of $500 in any one financial year (July 2017 to June 2018) but the group can apply up to twice in that year, providing it is for different projects.

- The grant funding is limited to projects within the Board area or primarily benefiting the residents of the ward.

- Applications will only be accepted from non-profit community-based organisations, registered charities or incorporated societies.

- The group should have strong links with the Rangiora-Ashley community.

- The applications should clearly state the purpose for which the money is to be used.

- The applicants should submit a 1-2 page balance sheet and an income and expenditure statement which shows their current financial assets and liabilities. Applications cannot be processed until financial information is received.

- Where possible, or feasible, applicants must declare other sources from which funding has been applied for, or granted from, for the project being applied to the Rangiora-Ashley Community Board.

- The Board support a wide range of community activities but the application will only be considered if it is deemed of the nature listed in the table of examples of what the Board can fund (see previous page).

- An accountability form must be provided to Council outlining how the funds were applied, within six months of the grant being allocated, when funds are spent, or prior to a new application. A new application will not be accepted until the previous accountability form has been completed and returned. The group should maintain accurate records around the grant including, but not limited to: receipts, banks statements and invoices. In the event that funds are not spent on the project or activity applied for the recipient may be required to return the grant funding to the Council.

What happens now?

Return your completed application form (with financial records and any supporting information which you believe is relevant to this application) to:

Governance Advisor
Rangiora-Ashley Community Board
C/- Waimakariri District Council
Private Bag 1005
Rangiora 7440

Or hand deliver to either

- Rangiora Service Centre, 215 High Street, Rangiora.
- Ruataniwha Kaiapoi Civic Centre, 176 Williams Street, Kaiapoi.

What happens next?

- Your application will be processed and presented to the Board at the next appropriate meeting.
- Following the meeting a letter will be sent to notify you of the Board decision and if successful an invoice and your organisation’s bank account details will be requested.
- On receipt of this information payment will be processed to your organisation’s bank account.
Groups Applying for Board Discretionary Grants 2017/2018

Name of Group: 

Address: 

Contact Person within Organisation: 

Position within Organisation: 

Contact phone number:  Email: 

Describe what the project is and what the grant funding be used specifically for? (Use additional pages if needed)

What is the timeframe of the project? 

Overall Cost of Project: $  Amount Requesting: $

How many people will directly benefit from this project? 

Who is the range of people benefiting from this project? (You can tick more than one box)

- People with disabilities (mental or physical)
- Cultural/ethnic minorities
- District
- Preschool
- School/youth
- Older adults
- Whole community/ward

Provide estimated percentage of participants by Ward:

- Rangiora-Ashley
- Woodend-Sefton
- Kaiapoi-Tuahiwi
- Oxford-Ohoka

Other (please specify): 

If this application is declined will this event/project still occur?  Yes

If No – what are the consequences to the community/organisation?
What are the direct benefit(s) to the participants?

What is the benefit(s) to your organisation?

What are the benefit(s) to the Rangiora-Ashley community or wider district?

Is your group applying under the umbrella of another organisation (that is Charity/Trust registered?)

If yes, name of parent group

What is the relationship between your group and the parent group?

What other fundraising has your group undertaken towards this project/event? List any other organisations you have applied or intend to apply to for funding this project and amount applied for this project:

Have you applied to the Rangiora-Ashley Community Board or any other Waimakariri Community Board for other project funding in the past 18 months?

If yes, please supply details:

Enclosed

Financial Balance Sheet and Income & Expenditure Statement (compulsory – your application cannot be processed without financial statements)

Supporting costs/quotes (not compulsory)

Other supporting information

I am authorised to sign on behalf of the group/organisation making this application.

I declare that all details contained in this application form are true and correct to the best of my knowledge.

I accept that successful applicants will be required to report back to the Community Board by completing a simple Accountability Report.

I accept that information provided in this application may be used in an official Council report available to the public.

PLEASE NOTE - If submitting your application electronically, entering your name in the Signature box below will be accepted as your signature:

Signed: ___________________________  Date: ___________________________
1. SUMMARY

1.1. The purpose of this report two-fold:

1. To update the Rangiora-Ashley Community Board on the options for upgrading and funding the upgrade of the Garrymere water supply scheme to achieve compliance with the Drinking Water Standards for New Zealand (DWSNZ).

2. To seek endorsement from the Rangiora-Ashley Community Board for the proposed basis of consulting the Garrymere community on the upgrade options, including funding and rating impacts of each option. Following the consultation process staff will recommend an option to Council to upgrade the Garrymere water supply scheme.

1.2. The following options were considered to upgrade the Garrymere water supply scheme to achieve compliance with the DWSNZ:

1.2.1. Option A - Treatment of Existing Source.

The option of treating the existing source has been investigated by Opus International Consultants Ltd and is deemed to be viable through the installation of a pre-filtration system followed by ultra violet (UV) disinfection. The estimated capital cost for this option is $390,000.

1.2.2. Option B – Drill New Well at Garrymere.

This option would involve drilling and developing a new deep well up to 300m deep within the Council easement at 70 Garrymere Road, close to the existing Garrymere headworks to find a secure water source with adequate capacity for the scheme. This option is deemed to have a high risk that the well may be unsuccessful with the deepest wells in the area being no more than 80m deep and all yielding less than the required capacity for the scheme. The capital cost estimate for this option is $880,000.

1.2.3. Option C – Connect to Summerhill Water Supply

This option would involve connecting into the Summerhill water supply scheme from the existing pipe at the old Summerhill intake at the Ashley River. This intake
is located at the end of Campions Road to the western end of the Garrymere scheme. Approximately 2.9km of pipe would be required to be installed. This work will involve two river crossings; one across the Ashley River and one across the Garrymere River. This would also include additional upgrade works at the West Eyerton water supply headworks and within the Summerhill scheme to cater for the additional demand. This results in this option being the highest cost option, with an estimated capital cost of $1,800,000.

1.2.4. Option D – Connect to Summerhill Water Supply and Decrease Allocated Demand

This option is similar to Option C in that it also involves a connection into the Summerhill scheme from the existing pipe at the old intake. This option is different to Option C however in that, in order to minimise capacity upgrades within the West Eyerton and Summerhill schemes, it would involve measures to decrease demand within the Garrymere scheme. This would be achieved by changing the semi-restricted (13 litres per minute) connections to 3 unit (2 litres/min) restricted connections with a tank and pump to decrease the scheme demand. This would decrease the required capacity cost within the West Eyerton and Summerhill schemes for capacity upgrades, but would add some additional capital cost to install the private tanks and pumps in order to convert the existing semi-restricted connections to full restricted connections. This option has an estimated capital cost of $1,049,000.

1.3. The following additional options were initially considered but discounted due to not achieving compliance with the DWSNZ:

1.3.1. Option E – Onsite Treatment as per Schedule 12 DWSNZ, Rural Agricultural Drinking Water Supplies.

There is a section in the DWSNZ in which Rural Agricultural Drinking Water Supplies are defined, and which allows alternative treatment systems (such as individual on-site treatment systems) to be considered. The Garrymere scheme however does not meet the criteria for defining a Rural Agricultural Drinking Water Supply, and therefore this option was discounted. In order to qualify for a Rural Agricultural Drinking Water Supply, it must be able to be demonstrated that 75% of water on the scheme is used for agricultural purposes. Garrymere does not meet these requirements in terms of the proportion of demand for agricultural use.

1.3.2. Option F – Connecting to the Ashley Water Supply Scheme

The option of connecting the Garrymere scheme to the Ashley water supply scheme was considered initially but discounted due both to the significant cost of at least $1,200,000 and the Ashley scheme currently not meeting the DWSNZ.

1.3.3. Option G – Do Nothing.

This option of not upgrading the scheme was discounted due to the current scheme being uncompliant with the DWSNZ as it only treats for bacteria through chlorination but does not treat protozoa. There is a legislative requirement for Council to take all practicable steps to comply with the DWSNZ under the Health Act, so not complying is not an option that can be considered.

1.4. It is recommended that Council consult with the community on all viable options to the (Options A, B, C and D). It is proposed that the community be provided information on these options and be asked to provide feedback and indicate their preferred option.

1.5. The rating impact of all the options considered is summarised on the table below. Also shown are the existing rates as a basis for comparison:
Table 1: Proposed rating impact of all options

<table>
<thead>
<tr>
<th>Option</th>
<th>Capital Cost</th>
<th>Projected Rate for 2-unit Property</th>
<th>Projected Rate for 19-unit property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Rates (17/18)</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A – Treat Existing</td>
<td>$387,490</td>
<td>$2,602</td>
<td>$3,689</td>
</tr>
<tr>
<td>B – Drill Well</td>
<td>$878,724</td>
<td>$2,813</td>
<td>$3,988</td>
</tr>
<tr>
<td>C – Connect to Summerhill</td>
<td>$1,812,304</td>
<td>$6,831</td>
<td>$4,819</td>
</tr>
<tr>
<td>D – Connect to Summerhill and Convert Semi-Restricted Connections</td>
<td>$1,048,901</td>
<td>$3,384</td>
<td>$3,579 *</td>
</tr>
</tbody>
</table>

*This rate is for connections that are currently 19 unit connections that would be converted to 3 unit connections under this option.

Attachments:
- Maps showing extent of works for option C and D
- Draft Consultation material
- Opus concept design report for treatment option (TRIM reference 171026115522)
- Southern Geophysical report on drilling option (TRIM reference 171026115523).

2. RECOMMENDATION

THAT the Rangiora-Ashley Community Board:

(a) Receives report No. 171025115123.

(b) Recommends to the Utilities & Roading Committee that Council staff begin the community consultation process with the Garrymere community on the basis of the four options presented as being viable (Options A, B, C and D). The community consultation would involve the distribution of an information pamphlet followed by a public meeting.

(c) Notes that the options of on-site treatment, connecting to the Ashley water supply scheme and not upgrading were considered but are not considered to be viable either due to high cost, not complying with the DWSNZ, or both.

(d) Notes that following the community consultation, staff will report back to the Board to provide a summary of the feedback received and to seek endorsement of the recommended option prior to staff reporting back to Council.

3. ISSUES AND OPTIONS

Background

3.1. The Garrymere Water Supply Scheme has been identified for a proposed upgrade to be completed by June 2019 to provide a source that meets the water quality requirements of the Drinking Water Standards for New Zealand (DWSNZ). This upgrade was identified as part of the 2015-25 Long Term Plan and was also identified as part of the Garrymere Public Health Risk Management Plan (PHRMP) in 2013. PHRMPs are now referred to as Water Safety Plans (WSPs) and are required under the Health Act in order to either demonstrate how compliance with the DWSNZ is achieved, or where it is not achieved to demonstrate the plan for how it will be achieved. At the time this document was produced it was indicated that this source upgrade project would be completed in 2017.

3.2. The Garrymere water supply scheme is supplied by a well within the headworks site on private property at 70 Garrymere Road which is secured by an easement. The well is 30m deep and has multiple screens with the shallowest screen starting at just 2.5m below ground level. The existing well is consented to take no more water than 389 cubic meters
of water per day with enough capacity within the well to cater for the next projected 50 year’s worth of growth within the scheme.

3.3. At present, the raw water is disinfected with chlorine before exiting the headworks and entering the supply. This treatment system does achieve bacterial compliance with the DWSNZ but provides little or no protection against protozoa contaminants such as giardia and cryptosporidium, and therefore does not comply with the protozoal requirements of the DWSNZ. Bacterial contamination (e. coli) has been found in the raw source water in the past, which indicates that the source is influenced by activities on the ground surface due to being a shallow unsecure bore.

3.4. The lack of protection against protozoa contaminants, and the shallow unsecure nature of the source means that it does not comply with the DWSNZ, and presents a public health risk.

Options

3.5. The following options were considered to upgrade the Garrymere water supply scheme to achieve compliance with the DWSNZ:

3.6. **Option A - Treatment of existing source.**

3.6.1. The option of treating the existing source has been investigated by Opus International Consultants Ltd and is deemed to be viable through the installation of a pre-filtration system followed by ultra violet (UV) disinfection. The estimated capital cost for this option is $390,000.

3.6.2. The advantages and disadvantages of this option are summarised below:

3.6.3. Advantages:

- Lowest capital cost option.
- Can be completed within existing capital budget provisions.
- All works can be completed within the headwork's compound (no need to obtain additional land).
- This option treats protozoa (no risk of future non-compliance due to a secure well becoming unsecure).

3.6.4. Disadvantages:

- High operating cost.
- Additional operator input including more monitoring and sampling.
- As treatment is relied upon for compliance, there is a potential risk of something operationally going wrong with the treatment system causing temporary non-compliance until resolved.
- There will be no back up well with this option (although this may be able to be added at a future date for relatively low cost).

3.7. **Option B – Drill new well at Garrymere.**

3.7.1. This option would involve drilling and developing a new deep well up to 300m deep within the Council easement at 70 Garrymere Road, close to the existing Garrymere headworks to find a secure water source with adequate capacity for the scheme. This option is deemed to have a high risk that the well may be unsuccessful with the deepest wells in the area being no more than 80m deep and all yielding less than the required capacity for the scheme. The capital cost estimate for this option is $880,000.
3.7.2. The estimated required depth for the well of 300m is based on advice obtained from Southern Geophysical Ltd. They have advised that in order to strike the type of material that may result in a sufficiently high yielding well, drilling down to the Kowai Formation would be required. This is the hydrological basement of North Canterbury and is approximately 300m deep. There is still no guarantee that a suitable source would be found at this depth as there are no existing wells in the area known to exist at this depth.

3.7.3. The advantages and disadvantages of this option are summarised below:

3.7.4. Advantages:

- Second lowest rating impact option.
- Low operational costs.
- All works can be completed within the headwork’s compound (no need to obtain additional land)
- Assuming well is successful, no reliance on successful operation of a treatment system to achieve compliance (less chance of ‘operator error’).
- Additional resilience with the existing source providing an emergency back-up well.

3.7.5. Disadvantages:

- Risk that sufficient source may not be found. The only moderate depth wells within the area (approx. 60 – 80m deep) are yielding less than 1 l/s with the scheme needing at least 6 l/s. This is due to low porosity at these depths.
- High cost to determine whether a suitable source could be found in a deep well, and if this well is unsuccessful this would be a high sunk cost.
- No treatment of protozoa so a minor risk of a bore thought to be secure becoming non-secure in the future and requiring treatment.

3.8. **Option C – Connect to Summerhill Water Supply**

3.8.1. This option would involve connecting the Garrymere scheme into the Summerhill water supply scheme from the existing pipe at the old Summerhill intake at the Ashely River. This intake is located at the end of Campions Road to the western end of the Garrymere scheme. Approximately 2.9km of pipe would be required to be installed. This work would involve two river crossings; one across the Ashley River and one across the Garrymere River. This would also include additional upgrade works at the West Eyerton water supply headworks and within the Summerhill scheme to cater for the additional demand. This results in this option being the highest cost option, with an estimated capital cost of $1,800,000.

3.8.2. Advantages

- Connecting into scheme that already complies with the DWSNZ means there is low risk of the option being unsuccessful.
- A larger rating base to fund future upgrades at the source.
- Additional resilience with the existing source providing an emergency back-up well.

3.8.3. Disadvantages

- Risk of loss of supply due to the new pipeline under the Ashley River or the Garrymere River getting washed out.
- Additional operational works to maintain another Booster Station on the Summerhill scheme.
- No treatment of protozoa so a minor risk of a bore thought to be secure becoming non-secure in the future and requiring treatment.
• Joining Garrymere to Summerhill will fast track future growth works within the Summerhill reticulation and at the West Eyerton headworks.
• This option would rely on the old intake line from the old Summerhill intake as part of the connection between the schemes. The condition of this pipe (1990 PVC) would need to be assessed and confirmed as suitable prior to confirming the viability of this option (it is unlikely to be an issue based on its age, but would require confirmation as it has not been in service for some time).
• This has the highest operational due to pump upgrades, pipework, river crossings and the new booster pump station being required.

3.9. **Option D – Connect to Summerhill Water Supply and decrease allocated demand**

3.9.1. This option is similar to Option C in that it also involves a connection into the Summerhill scheme from the existing pipe at the old intake. This option is different to Option C however in that, in order to minimise capacity upgrades within the West Eyerton and Summerhill schemes, it would involve measures to decrease demand within the Garrymere scheme. This would be achieved by changing the semi-restricted (13 litres per minute) connections to 3 unit (2 litres/min) restricted connections with a tank and pump to decrease the scheme demand. This would decrease the required capacity cost within the West Eyerton and Summerhill schemes for capacity upgrades, but would add some additional capital cost to install the private tanks and pumps in order to convert the existing semi-restricted connections to full restricted connections. This option has an estimated capital cost of $1,049,000.

3.9.2. The advantages and disadvantages of this option are the same as for Option C, with the following additions:

3.9.3. Advantages:

• This option has a decrease in operational costs due to the existing headwork becoming a back-up site (as water would be pumped directly from the Summerhill scheme into the Garrymere reticulation).

3.9.4. Disadvantages:

• Potential complications due to carrying out works on private property to install tanks and pumps to reduce semi-restricted connections to fully restricted 3 unit connections.
• There may be some residents who utilise their existing 19 unit connections to its full extent and so may not support a reduction in their allocation.

3.10. In addition to the four options outline above, several other options were considered but deemed not to be viable due to not achieving compliance with the DWSNZ.

3.11. **Option E – Individual Onsite Treatment as per Schedule 12 DWSNZ, Rural Agricultural Drinking Water Supplies**

3.11.1. There is a section in the DWSNZ in which Rural Agricultural Drinking Water Supplies are defined, and which allows alternative treatment systems (such as individual on-site treatment systems) to be considered. In order to qualify as a Rural Agricultural Drinking Water Supply, it must be able to be demonstrated that 75% of water on the scheme is used for agricultural purposes.

3.11.2. If the proportion of agricultural consumption relative to domestic consumption cannot be measured, it can be assumed that domestic consumption is 2,500 L per property per day. This would require a total average daily flow for the scheme of 10,000 L per property per day. The Garrymere scheme has an average daily flow...
of 3,350 L per property per day, so using this method does not meet the criteria for a Rural Agricultural Drinking Water Supply.

3.11.3. An alternative method considered to determine the proportion of agricultural versus domestic use, the demand on other domestic schemes within the district was calculated and compared to Garrymere’s demand. Using this method, based on flow on the Fernside water supply scheme being typical domestic demand for sections of a similar size to Garrymere (approximately 4 ha), it was calculated that Garrymere’s proportion of agricultural demand may be in the order of 50%. Therefore it is concluded that Garrymere does not meet this requirements to qualify as a Rural Agricultural Drinking Water Supply. Option E therefore would not comply with the DWSNZ.

3.11.4. In addition to the above, it is understood that it would be challenging to achieve compliance with the DWSNZ using onsite treatment systems on the Garrymere scheme, even if it did meet the requirements to qualify as a Rural Agricultural Drinking Water Supply. There would have to be systems in place to ensure that all 41 individual treatment systems were functioning correctly, and were maintained correctly. This would mean maintenance works being carried out on private property, as well as there being a means of alarming the systems if there was a fault with any one of the 41 treatment systems such that operators could respond to these events.

3.12. **Option F – Connecting to the Ashley Water Supply Scheme**

3.12.1. The option of connecting the Garrymere scheme to the Ashley water supply scheme was considered initially but discounted due to the significant cost of at least $1,200,000 and the Ashley scheme currently not meeting the DWSNZ.

3.12.2. At a minimum this would require the construction of a booster pump station, and approximately 6.5km of main to connect. This alone would require a capital cost of approximately $1.2m. This cost would be higher still if hydraulic analysis within the Ashley scheme (that has not been carried out) indicated that there would be further upgrades within the Ashley scheme, or if there were development contributions that may be required to be paid in order to connect. Further to the above, the Ashley scheme at present does not comply with the DWSNZ.

3.13. **Option G – Do nothing.**

3.13.1. The option of not upgrading the scheme was discounted due to the current scheme being non-compliant with the DWSNZ as it only treats for bacteria through chlorination but does not treat protozoa (therefore not meeting the protozoal requirements of the DWSNZ). There is a legislative requirement for Council to take all practicable steps to comply with the DWSNZ under the Health Act, so not complying is not an option that can be considered.

**Proposed Way Forward**

3.14. It is proposed that the project be progressed according to the timetable below:
Table 2: Proposed project plan

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Complete by</th>
<th>Agenda by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rangiora Ashley Community Board provide recommendation to Utilities and Roading Committee to proceed with community consultation, and provide feedback on draft consultation material.</td>
<td>8th November 17</td>
<td>27th October 17</td>
</tr>
<tr>
<td>2</td>
<td>Draft consultation material updated (based on RACB feedback).</td>
<td>24th November 17</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Approval from U&amp;R Committee to consult community on recommended upgrade options</td>
<td>12th December 17</td>
<td>1st December 17</td>
</tr>
<tr>
<td>4</td>
<td>Consultation commences (1 month period)</td>
<td>8th January 18</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Public meeting</td>
<td>Early February 2018</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Consultation closes</td>
<td>8th February 18</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Staff report to RACB with results of community consultation and to seek endorsement of recommended upgrade option</td>
<td>Mar-18</td>
<td>Feb-18</td>
</tr>
<tr>
<td>11</td>
<td>Staff report to Council to seek endorsement to proceed with recommended upgrade option</td>
<td>April-18</td>
<td>Mar-18</td>
</tr>
<tr>
<td>12</td>
<td>Design</td>
<td>Apr-18</td>
<td>July-18</td>
</tr>
<tr>
<td>13</td>
<td>Tender</td>
<td>August-18</td>
<td>September-18</td>
</tr>
<tr>
<td>14</td>
<td>Construction</td>
<td>October-18</td>
<td>January-18</td>
</tr>
</tbody>
</table>

3.15. The Management Team has reviewed this report and supports the recommendations.

4. **COMMUNITY VIEWS**

4.1. It is recommended that community consultation take place in the form of an information pamphlet being distributed to each property owner outlining the issues with the existing supply, the options to upgrade the source and the cost and rating implications. Following that, a public meeting would be held to address any questions or concerns from the public.

4.2. Following the community consultation above Council staff will report back to the Rangiora Ashley Community Board with the results, to seek guidance on the pathway forward.

4.3. It is noted that if either Option C or D (join with Summerhill) were favoured by the Garrymere community and/or the Community Board, wider consultation would be required with the Summerhill and West Eyreton scheme members, as well as the relevant water supply advisory boards and community boards representing those areas. This wider consultation is not proposed to be undertaken at this stage, as the rating implications of these options indicate that they are unlikely to be favoured by the Garrymere community.

5. **FINANCIAL IMPLICATIONS AND RISKS**

5.1. A total budget of $500,000 has been allocated, as part of the Council 2017/18 Annual Plan to fund the proposed source upgrade.

5.2. This budget forms a multiyear project. With $50,000 already allocated to the previous financial year (2016/17) which funded investigation works to determine viable options, $250,000 allocated to this financial year (2017/18) to fund consultation, design, tender and commencement of construction works and $200,000 allocated to the 2018/19 financial year to fund the completion of the construction works.

5.3. The total expenditure to date is approximately $28,000 spent on investigation works.

5.4. It is noted that of the options considered, only the treatment option (Option A) could be completed within the current allocated budget. If one of the other options is preferred, staff would require that Council allocate additional funding.
5.5. The budget this has been proposed as part of the Draft 2018-28 Long Term Plan (LTP) is based on the capital and operating costs associated with the treatment option, as this is seen as the most likely option to proceed at this stage. The confirmation of the preferred option will take place in April 2018, prior to the final adoption of the 2018-28 Long Term Plan, so this would provide the opportunity to amend the budget if necessary prior to the adoption of the LTP.

5.6. The capital cost and projected rating impact of all viable options considered are summarised on the table below.

<p>| Table 3: Preliminary Assessment of Rating Impact to Garrymere Water Supply Scheme |</p>
<table>
<thead>
<tr>
<th>Option A - TREATMENT</th>
<th>B – DRILL WELL</th>
<th>C – CONNECT TO SUMMERHILL</th>
<th>D – CONNECT TO SUMMERHILL AND REDUCE DEMAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Cost</td>
<td>$387,490</td>
<td>$878,724</td>
<td>$1,812,304</td>
</tr>
<tr>
<td>Change in Operational Cost (2018/19 year)</td>
<td>$29,440</td>
<td>$1,817</td>
<td>$31,970</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating Implications</th>
<th>Existing Rates</th>
<th>Increase in Rates</th>
<th>New Rate</th>
<th>Increase in Rates</th>
<th>New Rate</th>
<th>Increase in Rates</th>
<th>New Rate</th>
<th>Increase in Rates</th>
<th>New Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed rate ($/conn/year)</td>
<td>$1,270</td>
<td>$1,204</td>
<td>$2,475</td>
<td>$1,405</td>
<td>$2,674</td>
<td>$3,427</td>
<td>$4,697</td>
<td>$1,723</td>
<td>$2,993</td>
</tr>
<tr>
<td>Variable Rate ($/unit/year)</td>
<td>$33</td>
<td>$31</td>
<td>$64</td>
<td>$36</td>
<td>$69</td>
<td>$89</td>
<td>$121</td>
<td>$162</td>
<td>$195</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rate Impact based on different allocations of units currently on the scheme</th>
<th>Existing Rates ($/year)</th>
<th>Increase in Rates ($/year)</th>
<th>New Rate ($/year)</th>
<th>Increase in Rates ($/year)</th>
<th>New Rate ($/year)</th>
<th>Increase in Rates ($/year)</th>
<th>New Rate ($/year)</th>
<th>Increase in Rates ($/year)</th>
<th>New Rate ($/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 units (24 properties)</td>
<td>$1,893</td>
<td>$1,796</td>
<td>$3,689</td>
<td>$2,094</td>
<td>$3,988</td>
<td>$4,937</td>
<td>$6,831</td>
<td>$2,210</td>
<td></td>
</tr>
<tr>
<td>38 units (1 property)</td>
<td>$2,517</td>
<td>$2,387</td>
<td>$4,904</td>
<td>$2,784</td>
<td>$5,301</td>
<td>$6,563</td>
<td>$9,080</td>
<td>$7,895</td>
<td>$10,412</td>
</tr>
<tr>
<td>4 units (1 property)</td>
<td>$1,401</td>
<td>$1,329</td>
<td>$2,730</td>
<td>$1,550</td>
<td>$2,951</td>
<td>$3,654</td>
<td>$5,055</td>
<td>$2,373</td>
<td>$3,774</td>
</tr>
<tr>
<td>3 units (1 property)</td>
<td>$1,368</td>
<td>$1,298</td>
<td>$2,666</td>
<td>$1,514</td>
<td>$2,882</td>
<td>$3,568</td>
<td>$4,937</td>
<td>$2,210</td>
<td>$3,579</td>
</tr>
<tr>
<td>2 units (14 properties)</td>
<td>$1,336</td>
<td>$1,267</td>
<td>$2,602</td>
<td>$1,477</td>
<td>$2,813</td>
<td>$3,483</td>
<td>$4,819</td>
<td>$2,048</td>
<td>$3,384</td>
</tr>
</tbody>
</table>

5.7. It is noted that on schemes such as Garrymere with ‘fixed-variable’ rating charges (i.e. a fixed ‘per connection’ rate as well as a variable ‘per unit’ cost), the fixed charges cover 75% of total costs against the scheme, while the variable charges cover the remaining 25% of costs against the scheme. This has the result that as the number of units that a property has increases, the rates do not increase directly proportionally to the additional volume of water being supplied, which is evident in the table above.

5.8. It is noted that for Options C and D which involve connecting to the Summerhill water supply scheme, it has been assumed that the schemes would remain financially separate following the physical joining. The rates presented above are based on Garrymere paying the proportional share of the operating costs on the Summerhill and West Eyreton schemes to provide water to the Garrymere scheme. Therefore, any rating impact to the Summerhill and West Eyreton scheme would be minor (less than $5 per connection per
year). This would be a similar system to the Summerhill and West Eyerton schemes presently, which are both sourced from West Eyerton.

5.9. There is a financial risk to the community if Option B (drill new well at the Garrymere headworks) is the preferred option. This is due to the possibility that a well is drilled to a depth of approximately 300m and a source either of insufficient quantity or quality is found. This has financial risk of approximately $400,000 (the potential cost to drill to this depth). If this scenario eventuated the community would be required to cover this cost in addition to the cost to proceed with one of the alternative options.

5.10. Option A (treatment of the existing source) is indicated as being the most likely option to be preferred following the community consultation. This is based on being the lowest risk option and being projected as having the lowest impact on rates to the community.

6. CONTEXT

6.1. Policy

This matter is not a matter of significance in terms of the Council’s Significance Policy.

6.2. Legislation

The Health (Drinking Water) Amendment Act is relevant in this matter.

6.3. Community Outcomes

This project is related to the following community outcomes:

- There is sufficient clean water to meet the needs of communities and ecosystems.
- Core utility services are provided in a timely, sustainable and affordable manner.
Option C - Connect to Summerhill Water Supply

- Existing Garrymere retic made up of 41 properties and 529 allocated units (includes 24 properties on semi on demand connection at 13 l/min).
- Installation of 3,500 m of new 125 PE water main to connect Garrymere Water Supply into Summerhill. Including crossing Garrymere stream and Ashley River.
- Connect new 125 PE into Bomm PVC abandon Summerhill intake line. Recommission this line from point connection all the way back to Hunters Glen headworks.
- Upgrade the well pump at West Eyerton headworks.
- Install a new pump and upgrade manifold at Davies Street Pump Station.
- Install a new Booster Station on the deliver main at Cust.

Option D – Connect to Summerhill Water Supply and decrease

- Existing Garrymere retic made up of 41 properties and 529 allocated units. This demand is reduced through this option by changing the 24 properties on semi on demand connections at 13 l/min and provide 3 unit restricted connection. This will change the schemes allocation to 145 units.
- Supply 25 to 30,000 L tanks and pumps installed on 24 private properties to convert connections from semi on demand to 3 unit restricted connections.
- Installation of 2000 m of new 125 PE water main to connect Garrymere Water Supply into Summerhill. Including crossing Garrymere stream and Ashley River.
- Connect new 125 PE into Bomm PVC abandon Summerhill intake line. Recommission this line from point connection all the way back to Hunters Glen headworks.
Garrymere Supply Scheme – Source Upgrade

The Garrymere Water Supply Scheme requires an upgrade to comply with New Zealand Drinking Water Standards.

We have identified four possible solutions and would like to get your feedback around which option your household prefers.
**What’s the issue?**

The existing Garrymere supply draws water from a shallow bore. The water supply is chlorinated but this is not a sufficient treatment to remove all potential contaminants such as protozoa. Protozoa are organisms such as giardia and cryptosporidium that can be harmful to humans.

Because of this, the water supply does not comply with national drinking water standards and must be upgraded.

**What are the options?**

There are four main options for providing good quality water to the existing Garrymere community.

**Option A – Treatment of Existing Source.**

This option involves the additional treatment of the existing shallow well through the installation of a pre-filtration system, followed by ultra violet (UV) disinfection. This will further treat any potential contaminants that survive the current chlorine treatment.

**Option B – Drill new well at Garrymere.**

In this option, we would drill and develop a new deep well up to 300m deep within the Council easement at 70 Garrymere Road, close to the existing Garrymere headworks. The aim would be to find a secure water source with adequate capacity for the scheme. This option has a high risk that the new well may be unsuccessful. The deepest wells currently in the area are no more than 80m deep and yield less than the required capacity for the scheme.

**Option C – Connect to Summerhill Water Supply.**

This option would involve connecting the Garrymere scheme into the Summerhill water supply scheme from the existing pipe at the old Summerhill intake at the Ashley River. Construction would involve two river crossings; one across the Ashley River and one across the Garrymere River and require approximately 2.9km of pipe. This would also include additional upgrade works at the West Eyreton water supply headworks and within the Summerhill scheme to cater for the additional demand.

**Option D – Connect to Summerhill Water Supply and decrease allocated demand**

This option is similar to Option C in that it involves a connection into the Summerhill scheme from the existing pipe at the old intake at the Ashley River. However, in order to minimise capacity upgrades within the West Eyreton and Summerhill schemes, demand would need to be decreased within the Garrymere scheme. This would be achieved by changing the semi-restricted (13 litres per minute) connections to 3 unit (2 litres per minute) restricted connections. This would decrease the costs within the West Eyreton and Summerhill schemes for capacity
upgrades, this will include the installation of tanks and pumps on these properties in order to convert the existing semi-restricted connections to fully-restricted connections.

**How much will it cost?**

<table>
<thead>
<tr>
<th>Rate Impact by Number of Units</th>
<th>Option A - TREATMENT</th>
<th>B - DRILL WELL</th>
<th>C - CONNECT TO SUMMERHILL</th>
<th>D - CONNECT TO SUMMERHILL AND REDUCE DEMAND</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Cost</strong></td>
<td>$387,490</td>
<td>$878,724</td>
<td>$1,812,304</td>
<td>$1,048,901</td>
</tr>
<tr>
<td><strong>Operational Cost (2018/19 year)</strong></td>
<td>$29,440</td>
<td>$1,817</td>
<td>$31,970</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rate Impact by Number of Units</th>
<th>Existing Rates</th>
<th>Increase in Rates</th>
<th>New Rate</th>
<th>Increase in Rates</th>
<th>New Rate</th>
<th>Increase in Rates</th>
<th>New Rate</th>
<th>Increase in Rates</th>
<th>New Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 units (24 properties)</td>
<td>$1,893</td>
<td>$1,796</td>
<td>$3,689</td>
<td>$2,094</td>
<td>$3,988</td>
<td>$4,937</td>
<td>$6,831</td>
<td>$6,831</td>
<td>$6,831</td>
</tr>
<tr>
<td>38 units (1 property)</td>
<td>$2,517</td>
<td>$2,387</td>
<td>$4,904</td>
<td>$2,784</td>
<td>$5,301</td>
<td>$6,563</td>
<td>$9,080</td>
<td>$7,895</td>
<td>$10,412</td>
</tr>
<tr>
<td>4 units (1 property)</td>
<td>$1,401</td>
<td>$1,329</td>
<td>$2,730</td>
<td>$1,550</td>
<td>$2,951</td>
<td>$3,654</td>
<td>$5,055</td>
<td>$2,373</td>
<td>$3,774</td>
</tr>
<tr>
<td>3 units (1 property)</td>
<td>$1,368</td>
<td>$1,298</td>
<td>$2,666</td>
<td>$1,514</td>
<td>$2,882</td>
<td>$3,568</td>
<td>$4,937</td>
<td>$2,210</td>
<td>$3,579</td>
</tr>
<tr>
<td>2 units (14 properties)</td>
<td>$1,336</td>
<td>$1,267</td>
<td>$2,602</td>
<td>$1,477</td>
<td>$2,813</td>
<td>$3,483</td>
<td>$4,819</td>
<td>$2,048</td>
<td>$3,384</td>
</tr>
</tbody>
</table>

*note assumed all 19 unit connections converted to 3 unit connections.

If you are already connected to the supply, the additional cost will be recovered through your water rate. The rates in the table above show how much you would pay for each of the options.

For example - Bob Jones has a property with a 19 unit connection (*19,000 litres per day allocation*), he currently pays $1,893 for his water rate.

Under **Option A - Treatment**, the new water rate for Bob’s property would be $3,689, an increase of $1,796.

In comparison, if **Option B - Drill Well** was the preferred option, Bob’s new water rate would be $3,988, an increase of $2,094.

The costs presented above are based on our best estimates for the infrastructure and operating costs required for each option. The final rates will be based on actual costs of the project, and may differ from those presented above.

**What are the risks?**

There are two main risks associated with the options being considered.
• **If Option B – Drill Well** is adopted, the well may not be successful in striking a water source of the required quality and capacity. If this were the case, the scheme would have to not only cover the costs of the unsuccessful well, but also the costs of one of the alternative options.

• **All options**: Construction costs may be higher than the Council has estimated, which would increase the impact on rates. This risk is arguably higher for Option C and D (connecting to the Summerhill water supply scheme) as these two options involve a substantially greater amount of construction.

**How will the Council decide?**

Feedback from the community will be collated and presented to Council along with a report from Council staff on the various options. After carefully considering the feedback from the community, Council will choose an option to proceed with. We will notify you once the decision has been made, which is expected to be in April 2018.

**Public Information Meeting**

You can find out more and ask questions at our public information meeting at the Loburn Domain Pavilion on Thursday 1 February, 7-9pm.

**What now?**

Tick which option you prefer and return this form to the Council no later than Thursday 8 February 2018.

- Option A – Treatment of Existing Source
- Option B – Drill new well at Garrymere
- Option C – Connect to Summerhill Water Supply
- Option D – Connect to Summerhill Water Supply and decrease allocated demand

You can also give us your feedback online - waimakariri.govt.nz/letstalk

If you have any questions, or if you would like further information, phone 0800 965 468 or email your feedback to records@wmk.govt.nz

**Make sure your feedback reaches us by Thursday 8 February 2018.**
Garrymere Water Supply Source Upgrade – Feedback

Name:____________________________________
Address:__________________________________
_________________________________________
_________________________________________
Telephone: _______________________________
Email: ___________________________________

For the upgrade of the community on the Garrymere water supply, please indicate your preferred option:

☐ Option A – Treatment of Existing Source.
☐ Option B – Drill new well at Garrymere.
☐ Option C – Connect to Summerhill Water Supply.
☐ Option D – Connect to Summerhill Water Supply and decrease allocated demand

Comments:

__________________________________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________________________________
Options Report

Garrymere Water Supply – Headworks Source Upgrade
Options Report

Garrymere Water Supply - Headworks Source Upgrade

Prepared By
Murray Petrie
Principal Environmental Engineer

Reviewed By
Natalie Veale
Infrastructure Team Leader

Opus International Consultants Ltd
Dunedin Office
Opus House, 197 Rattray Street
Private Bag 1913, Dunedin 9054
New Zealand

Telephone: +64 3 471 5500
Facsimile: +64 3 474 8995
Date: 31 January 2017
Reference: 6-CO036.00
Status: Draft

© Opus International Consultants Ltd 2017
# Contents

Executive Summary ........................................................................................................ i

1 Introduction ............................................................................................................... 1

2 Okuku Community ................................................................................................. 1

3 Garrymere Drinking-Water Supply ...................................................................... 1

4 Water Supply Demand ........................................................................................... 2

5 Existing Water Quality .......................................................................................... 2

6 Treatment Options ............................................................................................... 4
  6.1 Drawing Layouts ................................................................................................. 5

7 Preferred Option for Garrymere Headworks Source Upgrade ....................... 6

8 Upgrade Costs ....................................................................................................... 7

9 NPV Analysis ........................................................................................................ 8

10 Recommendation ................................................................................................ 8

Appendix A – Drawing Layouts ............................................................................. 9

Appendix B – NPV ................................................................................................. 10
Executive Summary

Opus International Consultants were engaged by Waimakariri District Council (WDC) to investigate options to upgrade the existing Garrymere water supply headworks, situated in the North Canterbury community of Okuku. The 30 metre deep bore is not secure and chlorination only is currently provided, therefore the upgrade is required in order to fully comply with the New Zealand Drinking Water Standards 2005 (Revised 2008) (DWSNZ).

As the Garrymere water supply provides water to only 103 people the scheme qualifies as a Small Drinking Water Supply under the New Zealand Drinking Water Standards, which allows alternative compliance criteria to meet the DWSNZ. The treatment options under Section 10 of the DWSNZ for Small drinking water supply are:

- Option 1: Microfiltration (≤1 µm absolute) followed by chlorine disinfection.
- Option 2: Microfiltration (≤5 µm nominal) followed by UV disinfection.

From a water treatment process viewpoint the elevated and varying turbidity levels in the bore water are the factors that govern the optimum treatment system. These necessitate additional filtration ahead of the cartridge filtration which is a component of the treatment stream required for compliance. Prevention of the blocking of the cartridge filters is important. Also the use of a coagulating chemical for filtration is to be avoided because of dosing and backwashing disposal issues.

The preferred option for the Garrymere water supply upgrade, on a treatment process basis, is Option 2C which comprises 25 µm cartridge filtration followed by 5 µm cartridge filtration followed by UV disinfection.

Process flow diagrams, storage layouts, and headworks layouts for each option, were produced. In addition, 25 year NPV analyses were undertaken and these showed that Option 2C, microfiltration using 25 µm and 5 µm cartridge filters ahead of low pressure lamp UV disinfection, was the most economic option.

It is recommended that the Garrymere Water Supply Source Headworks be upgraded using Option 2C, microfiltration with 25 µm and 5 µm cartridge filters ahead of low pressure lamp UV disinfection, at a capital cost of $188,000.
1 Introduction

Opus International Consultants were engaged by Waimakariri District Council (WDC) to investigate options to upgrade the existing Garrymere water supply headworks, situated in the North Canterbury community of Okuku. The upgrade is required in order to comply with the New Zealand Drinking Water Standards 2005 (Revised 2008) (DWSNZ).

This report discusses the proposed options for treatment and the treatment plant, including the associated costs. It builds on the following previous reports:

- Garrymere Water Supply System Assessment, 2013;
- Garrymere Water Supply Scheme Activity Management Plan, 2015; and

2 Okuku Community

The Garrymere Headworks are located on Garrymere Road in Okuku, North Canterbury, which is approximately 50 kilometres north-west of Christchurch (see Figure 1). The community has a current population of 103 residents and is mainly farmland.

3 Garrymere Drinking-Water Supply

As outlined in the “Garrymere Water Supply System Assessment, November 2013” report, the Garrymere water supply sources its drinking-water from the well located at 70 Garrymere Road, in the vicinity of the headworks. The well is 30 metres deep and is not secure.

No reservoir exists for storage. A pump is present at the well, installed in 2009. There are also two surface pumps at the headworks for pumping to the reticulation.

The current consent for taking groundwater from the wells, which is valid until April 2032, states that a maximum rate of 4.5 L/s is permitted, not exceeding 389 m$^3$/day.
4 Water Supply Demand

The WDC Garrymere Water Supply Scheme Activity Management Plan (AMP) projections allow for 14% growth on the Garrymere scheme, despite a 0% demand increase. However, a 10% growth has been recommended by the WDC Water Asset Manager to allow for future developments that are not anticipated in the AMP projections. The existing and future water supply parameters given in the design brief are shown in Table 1 below.

Table 1: Water Supply Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Existing</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connections</td>
<td>41</td>
<td>62</td>
</tr>
<tr>
<td>Average Daily Flow</td>
<td>134 m³/day</td>
<td>147 m³/day</td>
</tr>
<tr>
<td></td>
<td>1.6 L/s</td>
<td>1.7 L/s</td>
</tr>
<tr>
<td>Peak Daily Flow</td>
<td>245 m³/day</td>
<td>270 m³/day</td>
</tr>
<tr>
<td></td>
<td>2.9 L/s</td>
<td>3.1 L/s</td>
</tr>
<tr>
<td>Peak Hourly Flow</td>
<td>654 m³/day</td>
<td>710 m³/day</td>
</tr>
<tr>
<td></td>
<td>7.6 L/s</td>
<td>8.2 L/s</td>
</tr>
</tbody>
</table>

Of the existing 41 connections, 24 connections are semi restricted and 17 are fully restricted.

It has since been agreed that the Peak Daily Flow should be 389 m³/day (4.5 L/s) for the treatment of the water, as this is the maximum consented abstraction rate. This report provides costs and cost comparisons for the maximum abstraction rate flow only as the cost difference for water treatment between the existing demand and the maximum abstraction demand is minimal.

5 Existing Water Quality

The results of raw water quality analyses of the Garrymere well carried out in 2013, and more recently, show a groundwater of reasonable quality, but with elevated and varying turbidity levels. Table 2 below outlines the guideline values in the DWSNZ for water quality to compare with the 2013 and more recent test results.

Table 2: Water Quality Values

<table>
<thead>
<tr>
<th>Parameter</th>
<th>DWSNZ Guideline</th>
<th>Garrymere Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>10 TCU</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Iron</td>
<td>0.2 mg/L</td>
<td>0.019 mg/L</td>
</tr>
<tr>
<td>Manganese</td>
<td>0.04 mg/L</td>
<td>&lt; 0.005 mg/L</td>
</tr>
<tr>
<td>Nitrate Nitrogen</td>
<td>10 mg/L</td>
<td>0.12 mg/L</td>
</tr>
<tr>
<td>UV Transmittance</td>
<td>Validated UV reactor %, but &gt;80% minimum</td>
<td>93% - 98%</td>
</tr>
</tbody>
</table>

Results from control monitoring of the headworks between March 2013 and July 2016 for pH and Turbidity show the following:

pH Analysis Results

The pH has ranged from 6.3 to 7.9 with an average value of 7.1. As the water has an alkalinity of around 43 mg/l the average free carbon dioxide levels are around 9 mg/l. This shows that the water
will be corrosive, a fact recognised by the issuing of two plumbosolvency public health warnings each year. These warnings ensure compliance with the DWSNZ.

**Turbidity Results**

For the turbidity samples collected from the headworks from 2013 to 2017, the turbidity has ranged from 0.0 NTU to 23.9 NTU. Readings exceeding 1 NTU have occurred frequently. As the bore is 1 kilometre from the nearest river the bore water is possibly being affected from the surrounding ground. Attention to the bore head may improve the turbidity levels. The stock-proof fence has already been extended to provide sufficient clearance and a concrete apron sloping away from the bore casing should also constructed.

There are no Priority 2 determinands assigned to the Garrymere well water.
6 Treatment Options

The Garrymere bore is 30 m deep and is screened over five intervals between 2.5 m and 28 m. As there are two screens in the first 10 m depth a 3-Log protozoal treatment only for DWSNZ compliance is not permissible. Treatment using UV disinfection only is therefore not a possible option. The protozoal treatment required would be at least 4 Log credits and possibly 5 Log credits, and more extensive treatment is required.

However, as the Garrymere Water Supply provides water to only 103 people, the scheme qualifies as a Small Drinking Water Supply under the New Zealand Drinking Water Standards. This allows alternative compliance criteria to meet the DWSNZ. This will reduce the treatment costs and this approach has therefore been used to assess suitable treatment options and determine costs.

The applicable catchment type in Table 10.1 from section 10 of the DWSNZ is “Unprotected catchment with septic tanks and/or sewage discharges from human habitations and/or intensive livestock operations harbouring gatherings of pre-weaned and juvenile stock, eg non-secure bore water drawn from a depth of less than 10 m, or a spring, lake or reservoir, stream or river.”

The minimum microbial treatment requirements for such a catchment are bacterial and 4-Log protozoal treatment provided by:

Either:

Option 1 Microfiltration (≤1 µm absolute) followed by chlorine disinfection

Or:

Option 2 Microfiltration (≤5 µm nominal) followed by UV disinfection

6.1 Option 1

The process flow diagram for this option is shown on Sheet C01 in Appendix A. With the elevated and varying turbidity levels in the bore water, it will be necessary to have filtration ahead of the 1 µm cartridge filtration in order to avoid excessive operating costs from replacement of blocked cartridges. Direct filtration is proposed, with a flocculation tank and a pressure sand filter. A filtration rate of 8 m/h is proposed.

A minimum chlorine contact time of 30 minutes without short-circuiting is required. The maximum flow rate is 16.5 m³/h and 30 minutes contact requires a volume of 8.3 m³/h. However, as a tank with a normal pipe inlet and outlet has a T₁₀/T ratio of only 0.1 then the actual required volume is to be greater than 83 m³. Three additional tanks, each of 30m³ capacity would be required. To minimise costs the number of tanks could be reduced to two, if the nearest consumers are on a fully restricted supply, recognising that 17 of the 41 connections are fully restricted and thus will have on-site storage.

There are disadvantages associated with this option. First, a coagulating chemical needs to be used. In addition to the cost is the issue of matching the dose rate to the level of turbidity. This would require considerable manual input for a start until a dosing algorithm could be developed and run automatically. There is also the risk of cartridge blockage (with expensive replacement) if a dosing-turbidity mismatch occurred. Secondly the pressure filter also needs to be backwashed on a regular

---

basis. This would require on-site treatment, or storage and regular removal, because of the location of the treatment plant. Both handling options would be expensive.

6.2 Option 2

The elevated and varying turbidity levels in the bore water also affect this treatment option. To protect the 5 µm cartridge from rapid blockage additional filtration ahead of the cartridge would be provided. This could be done in three ways.

As above, a flocculation tank and pressure filter are proposed. The pressure filter could be of a smaller diameter as a much greater filtration rate could be used (20 m/h) because the turbidity only has to be reduced to 1 NTU for the subsequent UV disinfection. Alternatively the flocculation tank could be removed and the large pressure filter used at the reduced filtration rate of 8 m/h. Both of these methods suffer from the same disadvantages mentioned above of a coagulating chemical being required with its consequent dosing and backwashing disposal issues.

The third method is to use a 25 µm cartridge to provide filtration ahead of the 5 µm cartridge. This would remove most of the turbidity from the bore water and allow the 5 µm cartridge to attain a reasonable length of operation without blocking up. There are no dosing or backwashing issues as the cartridges are disposed of when they are no longer capable of filtering.

Therefore there are three alternatives for option 2 as follows:

- Option 2A: Direction filtration using a flocculation tank and small diameter filter + microfiltration (1 µm cartridge) + UV disinfection.
- Option 2B: Direct filtration using a large diameter filter + microfiltration (5 µm cartridge) + UV disinfection.
- Option 2C: Microfiltration (25 µm cartridge) + microfiltration (5 µm cartridge) + UV disinfection.

As chlorine is not necessary in Option 2 for disinfection, there is no need for the additional tanks which are required for Option 1 to provide chlorine contact time. The chlorine dosing for the Option 2 alternatives is only to provide a chlorine residual in the reticulation.

6.3 Drawing Layouts

The layouts for the proposed headworks upgrade are shown on the drawings enclosed in Appendix A, and are based on a design flow of 4.5 L/s which is the agreed Peak Daily Flow.

- Sheet C01 shows the process flow diagrams for the DWSNZ section 10 applicable treatments.
- Sheet C02 shows the storage layouts for the two DWSNZ section 10 options. Additional pipework to hydraulically balance flows through the tanks has been provided.

Sheet C11 outlines the proposed headworks layout for Option 1, the microfiltration + chlorine disinfection option. This option requires an additional two 30m³ storage tanks for chlorine contact as mentioned above, if on-site storage requirements are met for the closest consumers. Otherwise three 30m³ storage tanks will be needed.

Sheets C21, C22 and C23 outlines the proposed headworks layouts for Option 2, the microfiltration + UV disinfection options. For these layouts, the Wedeco Spektron 30e low pressure lamp UV system has been displayed and uses the two existing 23 m³ storage tanks.
The existing pipes as noted on the as-builts are DN50 pipes. An increase in flow requires the pipes to increase in size to DN65 pipes. In addition to this, the Wedeco Spektron 30e UV system requires a DN80 connection and the CUNO cartridge filtration requires a DN100 connection.

Valves are included ahead of the cartridge filters and UV systems to provide isolation when maintenance is required. A flow meter is proposed after treatment for treatment compliance. A Krohne Waterflux electromagnetic flow meter has been proposed as this meter does not require specific distances upstream and downstream for measurement accuracy. As minimum pipe lengths do not have to be used, a smaller building extension can be utilised.

In both options, the existing headworks building remains. There is very limited space in the existing treatment rooms therefore a new building extension is required for all options presented.

### 6.3.1 Building Extension

The building extension is proposed as a timber framed, profiled steel clad building, with internal plywood lining. This is considered suitable in the location and will minimise cost.

All options have single door access.

Table 3 below outlines the approximate building areas for the new building.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Microfiltration + chlorine disinfection</td>
<td>11.0</td>
</tr>
<tr>
<td>2A</td>
<td>Microfiltration + UV disinfection</td>
<td>15.0</td>
</tr>
<tr>
<td>2B</td>
<td>Microfiltration + UV disinfection</td>
<td>16.5</td>
</tr>
<tr>
<td>2C</td>
<td>Microfiltration + UV disinfection</td>
<td>13.0</td>
</tr>
</tbody>
</table>

The microfiltration + chlorine disinfection option has a smaller area than the microfiltration + UV disinfection options, as more plant can be situated outside the building. It should be noted that an alternative low pressure lamp UV system for Option 2 is the Trojan Telos 120i. This system will require a building area of up to 22.0 m².

Sheet C31 (Appendix A) shows the comparison of the two UV systems for Option 2C.

### 7 Preferred Option for Garrymere Headworks Source Upgrade

From a water treatment process viewpoint the elevated and varying turbidity levels in the bore water are the factors that govern the optimum treatment system. These necessitate additional filtration ahead of the cartridge filtration which is a component of the treatment stream required for compliance. As prevention of the blocking of 1 µm cartridges requires greater treatment than for 5 µm cartridges then the options for microfiltration followed by UV disinfection are favoured over the Microfiltration followed by Chlorine disinfection option.

Of the microfiltration followed by UV disinfection options, those which employ sand filtration suffer from the disadvantages mention above of a coagulating chemical being required with its consequent
dosing and backwashing disposal issues. Thus the preferred option for the Garrymere water supply upgrade, on a treatment process basis, is Option 2C which comprises 25 µm cartridge filtration followed by 5 µm cartridge filtration followed by UV disinfection.

Due to the small scale of the Garrymere water supply and the quantity of storage available, standby equipment is not justified and thus only single units are proposed for the UV reactor and the cartridge filtration housings.

8 Upgrade Costs

Table 4 shows the capital costs for Options 1 and 2C. All costs exclude GST.

<table>
<thead>
<tr>
<th>Table 4: Capital Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>Civils</td>
</tr>
<tr>
<td>Building</td>
</tr>
<tr>
<td>Pumping storage</td>
</tr>
<tr>
<td>Pumps &amp; piping</td>
</tr>
<tr>
<td>Direct filtration</td>
</tr>
<tr>
<td>Cartridge filtration</td>
</tr>
<tr>
<td>UV disinfection</td>
</tr>
<tr>
<td>Electrical / Controls/SCADA</td>
</tr>
<tr>
<td>Chlorination</td>
</tr>
<tr>
<td>Test &amp; Commission</td>
</tr>
<tr>
<td>TOTAL</td>
</tr>
</tbody>
</table>

Annual Operating costs are shown in Table 5. All costs exclude GST.

<table>
<thead>
<tr>
<th>Table 5: Operating Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Microfiltration + Chlorine Disinfection</td>
</tr>
<tr>
<td>Opex Total</td>
</tr>
</tbody>
</table>

The operating costs do not include the existing plant operating costs (chlorination, soda ash dosing, and pumping power), which do not affect comparisons.
9 NPV Analysis

A Net Present Value (NPV) analysis was undertaken to determine the whole of life costs for each option over a 25 year period.

Capital costs were determined for each item of plant, as well as costs associated with installation; electrical/controls/SCADA; siteworks and building foundation; building extension; and testing and commissioning of the plant.

Operational costs were determined including power costs; replacement costs for UV lamps, cartridge filters and filter media; coagulant costs and labour costs. Labour costs for options 1, 2A and 2B are based on an operator being on-site two days a week due to ensure the coagulant is dosed correctly. The labour cost for Option 2C is based on an operator being on-site once a week during summer months and once a fortnight during winter months, as per the current arrangement.

The whole of life costs for each option are outlined in Table 6.

Table 6: Whole of Life Costs

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Whole of Life Cost (25 year NPV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Microfiltration + Chlorine Disinfection</td>
<td>$1,475,900</td>
</tr>
<tr>
<td>2A</td>
<td>Microfiltration + UV Disinfection</td>
<td>$1,428,400</td>
</tr>
<tr>
<td>2B</td>
<td>Microfiltration + UV Disinfection</td>
<td>$1,430,900</td>
</tr>
<tr>
<td>2C</td>
<td>Microfiltration + UV Disinfection (Wedeco)</td>
<td>$864,100</td>
</tr>
</tbody>
</table>

An alternative UV system was also analysed for Option 2C, using the Trojan Telos 120i low pressure lamp system. This option was analysed as the building area would be larger than that of the Wedeco Spektron 30e 2C option.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Whole of Life Cost (25 year NPV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2C</td>
<td>Microfiltration + UV Disinfection (Trojan)</td>
<td>$875,400</td>
</tr>
</tbody>
</table>

The option with the lowest whole of life cost over 25 years is Option 2C using the Wedeco Spektron 30e UV system, while the highest cost is Option 1 – using chlorine disinfection.

10 Recommendation

It is recommended that the Garrymere Water Supply Source Headworks be upgraded using Option 2C, microfiltration with 25 µm and 5 µm cartridge filters ahead of low pressure lamp UV disinfection, at a capital cost of $188,000.
<table>
<thead>
<tr>
<th>SHEET</th>
<th>DESCRIPTION</th>
<th>REVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>C01</td>
<td>PROCESS FLOW DIAGRAMS</td>
<td>A</td>
</tr>
<tr>
<td>C02</td>
<td>STORAGE LAYOUTS</td>
<td>A</td>
</tr>
<tr>
<td>C11</td>
<td>OPTION 1</td>
<td>A</td>
</tr>
<tr>
<td>C21</td>
<td>OPTION 2A</td>
<td>A</td>
</tr>
<tr>
<td>C22</td>
<td>OPTION 2B</td>
<td>A</td>
</tr>
<tr>
<td>C23</td>
<td>OPTION 2C</td>
<td>A</td>
</tr>
<tr>
<td>C31</td>
<td>OPTION 2C</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>ALTERNATIVE SYSTEM LAYOUTS</td>
<td></td>
</tr>
</tbody>
</table>

WAIMAKARIRI DISTRICT COUNCIL
GARRYMERE ROAD, OKUKU
HEADWORKS SOURCE UPGRADE

CONCEPT

Project No: 6-CO036.00
Date: 27/01/2017
TREATMENT OPTIONS

1. MICROFILTRATION + CHLORINE DISINFECTION

2. MICROFILTRATION + UV DISINFECTION

EXISTING 23m³ STORAGE TANK

EXISTING 23m³ STORAGE TANK

PROPOSED 30m³ STORAGE TANK

PROPOSED 30m³ STORAGE TANK

EXISTING BUILDING

PROPOSED BUILDING AREA
(INDICATIVE ONLY)

KEY

EXISTING FENCELINE

CONCEPT
MICROFILTRATION + UV DISINFECTION

Note: Dimensions approximate only.

Scale: 1:50 (A3)
KEY

- PUMP
- FLOW METER
- VALVE
- PROPOSED BUILDING
- CLEARANCE
- EXISTING FENCE
- Na₂CO₃
- SODA ASH DOSING
- Cl₂
- CHLORINE DOSING
- UV CC
- UV CONTROL CABINET

NOTE: DIMENSIONS APPROXIMATE ONLY

WEDECO SPEKTRON 30E UV SYSTEM

Scale: 1:50 (A3)

TROJAN TELOS 120I UV SYSTEM

Scale: 1:50 (A3)

BUILDING AREA = 13.0m²

BUILDING AREA = 22.0m²

NOTE: DIMENSIONS APPROXIMATE ONLY

CONCEPT

TROJAN TELOS 120I UV SYSTEM

WEDECO SPEKTRON 30E UV SYSTEM

Weedco Spektron 30E UV System

Trojan TeLos 120I UV System
Appendix B – NPV
# Budget Costs Estimate

**Option 1: Microfiltration (1 micron) + Chlorine Disinfection**

<table>
<thead>
<tr>
<th>Year</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
<th>2031</th>
<th>2032</th>
<th>2033</th>
<th>2034</th>
<th>2035</th>
<th>2036</th>
<th>2037</th>
<th>2038</th>
<th>2039</th>
<th>2040</th>
<th>2041</th>
<th>2042</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Capital</td>
<td>$4,988</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Inflation</td>
<td>2.08%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Power Cost</td>
<td>$3,477</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Total**
  - **Capital Replacement Schedule**
    - **Coagulant Replacement**
      - **Costs**
        - **BUDGET COSTS ESTIMATE**
          - **General Inflation**
            - **Cost of Capital**
              - **Total**
                - **Whole of Life**
                  - **Return on Equity**
                    - **PV**
### Option 2A: Direct Filtration (Small Diameter) + Microfiltration (5 micron) + UV Disinfection

#### Cost of Capital
- **6.50%**

#### General Inflation
- **2.50%**

#### Annual Power Cost
- **38.85%**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEX Total</td>
<td>$7,004</td>
<td>$7,177</td>
<td>$7,298</td>
<td>$7,527</td>
<td>$7,731</td>
<td>$8,024</td>
<td>$8,312</td>
<td>$8,605</td>
<td>$8,965</td>
<td>$9,399</td>
<td>$9,886</td>
<td>$10,431</td>
<td>$10,997</td>
<td>$10,997</td>
<td>$10,997</td>
<td>$10,997</td>
<td>$10,997</td>
<td>$10,997</td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td>$1,428,395</td>
<td>52,869</td>
<td>84,135</td>
<td>85,301</td>
<td>86,563</td>
<td>87,804</td>
<td>89,008</td>
<td>90,177</td>
<td>91,345</td>
<td>92,501</td>
<td>93,644</td>
<td>94,776</td>
<td>95,896</td>
<td>96,997</td>
<td>97,997</td>
<td>97,997</td>
<td>97,997</td>
<td>97,997</td>
<td></td>
</tr>
<tr>
<td>Whole of Life - No CAPEX</td>
<td>$53,330,395</td>
<td>4,428,395</td>
<td>52,869</td>
<td>84,135</td>
<td>85,301</td>
<td>86,563</td>
<td>87,804</td>
<td>89,008</td>
<td>90,177</td>
<td>91,345</td>
<td>92,501</td>
<td>93,644</td>
<td>94,776</td>
<td>95,896</td>
<td>96,997</td>
<td>97,997</td>
<td>97,997</td>
<td>97,997</td>
<td>97,997</td>
</tr>
</tbody>
</table>

#### Filter Media Replacement Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter Media Replacement</td>
<td>$77,606</td>
<td>$80,109</td>
<td>$81,535</td>
<td>$84,105</td>
<td>$86,699</td>
<td>$87,804</td>
<td>$92,636</td>
<td>$92,902</td>
<td>$94,917</td>
<td>$98,342</td>
<td>$102,566</td>
<td>$105,113</td>
<td>$106,988</td>
<td>$110,413</td>
<td>$113,192</td>
<td>$116,250</td>
<td>$119,922</td>
<td>$123,039</td>
<td>$126,502</td>
</tr>
<tr>
<td>OPEX Total</td>
<td>$77,606</td>
<td>$80,109</td>
<td>$81,535</td>
<td>$84,105</td>
<td>$86,699</td>
<td>$87,804</td>
<td>$92,636</td>
<td>$92,902</td>
<td>$94,917</td>
<td>$98,342</td>
<td>$102,566</td>
<td>$105,113</td>
<td>$106,988</td>
<td>$110,413</td>
<td>$113,192</td>
<td>$116,250</td>
<td>$119,922</td>
<td>$123,039</td>
<td>$126,502</td>
</tr>
<tr>
<td>Whole of Life - PV</td>
<td>$53,330,395</td>
<td>4,428,395</td>
<td>52,869</td>
<td>84,135</td>
<td>85,301</td>
<td>86,563</td>
<td>87,804</td>
<td>89,008</td>
<td>90,177</td>
<td>91,345</td>
<td>92,501</td>
<td>93,644</td>
<td>94,776</td>
<td>95,896</td>
<td>96,997</td>
<td>97,997</td>
<td>97,997</td>
<td>97,997</td>
<td>97,997</td>
</tr>
<tr>
<td>Whole of Life - No CAPEX</td>
<td>$53,330,395</td>
<td>4,428,395</td>
<td>52,869</td>
<td>84,135</td>
<td>85,301</td>
<td>86,563</td>
<td>87,804</td>
<td>89,008</td>
<td>90,177</td>
<td>91,345</td>
<td>92,501</td>
<td>93,644</td>
<td>94,776</td>
<td>95,896</td>
<td>96,997</td>
<td>97,997</td>
<td>97,997</td>
<td>97,997</td>
<td>97,997</td>
</tr>
</tbody>
</table>
### Option 2B: Direct Filtration (Large Diameter) + Microfiltration (5 micron) + UV Disinfection

<table>
<thead>
<tr>
<th>Year</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
<th>2031</th>
<th>2032</th>
<th>2033</th>
<th>2034</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter Media Replacement Schedule</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>UV Lamp Replacement Schedule</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
<td>$15,000</td>
</tr>
</tbody>
</table>

#### Whole of Life - PV

<table>
<thead>
<tr>
<th>Year</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
<th>2031</th>
<th>2032</th>
<th>2033</th>
<th>2034</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 2B: Direct Filtration (Large Diameter) + Microfiltration (5 micron) + UV Disinfection</td>
<td>$1,190,792</td>
<td>$68,224</td>
<td>$240,105</td>
<td>$73,470</td>
<td>$1,987</td>
<td>$560</td>
<td>$6,498</td>
<td>$80,837</td>
<td>$7,660</td>
<td>$2,543</td>
<td>$719</td>
<td>$649</td>
<td>$2,543</td>
<td>$719</td>
<td>$2,543</td>
<td>$719</td>
</tr>
<tr>
<td>Option 2C: Direct Filtration (Large Diameter) + Microfiltration (5 micron) + UV Disinfection</td>
<td>$1,145,891</td>
<td>$69,848</td>
<td>$230,776</td>
<td>$72,164</td>
<td>$2,037</td>
<td>$651</td>
<td>$6,684</td>
<td>$85,343</td>
<td>$7,684</td>
<td>$2,543</td>
<td>$720</td>
<td>$651</td>
<td>$2,543</td>
<td>$720</td>
<td>$2,543</td>
<td>$720</td>
</tr>
</tbody>
</table>

#### Whole of Life - No Capex

<table>
<thead>
<tr>
<th>Year</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
<th>2031</th>
<th>2032</th>
<th>2033</th>
<th>2034</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 2B: Direct Filtration (Large Diameter) + Microfiltration (5 micron) + UV Disinfection</td>
<td>$1,190,792</td>
<td>$68,224</td>
<td>$240,105</td>
<td>$73,470</td>
<td>$1,987</td>
<td>$560</td>
<td>$6,498</td>
<td>$80,837</td>
<td>$7,660</td>
<td>$2,543</td>
<td>$719</td>
<td>$649</td>
<td>$2,543</td>
<td>$719</td>
<td>$2,543</td>
<td>$719</td>
</tr>
<tr>
<td>Option 2C: Direct Filtration (Large Diameter) + Microfiltration (5 micron) + UV Disinfection</td>
<td>$1,145,891</td>
<td>$69,848</td>
<td>$230,776</td>
<td>$72,164</td>
<td>$2,037</td>
<td>$651</td>
<td>$6,684</td>
<td>$85,343</td>
<td>$7,684</td>
<td>$2,543</td>
<td>$720</td>
<td>$651</td>
<td>$2,543</td>
<td>$720</td>
<td>$2,543</td>
<td>$720</td>
</tr>
<tr>
<td>Year</td>
<td>Labour</td>
<td>UV Lamp Replacement</td>
<td>Cartridge Replacement Schedule (5 micron)</td>
<td>Cartridge Replacement Schedule (25 micron)</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>---------------------</td>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>$73,411</td>
<td>$1,660</td>
<td>$2,691</td>
<td>$4,159</td>
<td>$13,671</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>$75,922</td>
<td>$1,705</td>
<td>$2,735</td>
<td>$4,240</td>
<td>$13,622</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>$78,432</td>
<td>$1,750</td>
<td>$2,779</td>
<td>$4,321</td>
<td>$13,678</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>$80,943</td>
<td>$1,795</td>
<td>$2,823</td>
<td>$4,402</td>
<td>$13,730</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>$83,453</td>
<td>$1,840</td>
<td>$2,877</td>
<td>$4,483</td>
<td>$13,783</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>$85,963</td>
<td>$1,885</td>
<td>$2,931</td>
<td>$4,564</td>
<td>$13,836</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>$88,473</td>
<td>$1,930</td>
<td>$2,985</td>
<td>$4,645</td>
<td>$13,888</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>$90,983</td>
<td>$1,975</td>
<td>$3,039</td>
<td>$4,726</td>
<td>$13,940</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2025</td>
<td>$93,493</td>
<td>$2,020</td>
<td>$3,093</td>
<td>$4,807</td>
<td>$13,992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2026</td>
<td>$95,983</td>
<td>$2,065</td>
<td>$3,157</td>
<td>$4,888</td>
<td>$14,045</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2027</td>
<td>$98,483</td>
<td>$2,110</td>
<td>$3,221</td>
<td>$4,970</td>
<td>$14,097</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2028</td>
<td>$100,983</td>
<td>$2,155</td>
<td>$3,285</td>
<td>$5,051</td>
<td>$14,149</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2029</td>
<td>$103,483</td>
<td>$2,200</td>
<td>$3,350</td>
<td>$5,133</td>
<td>$14,202</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>$105,983</td>
<td>$2,245</td>
<td>$3,415</td>
<td>$5,214</td>
<td>$14,254</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2031</td>
<td>$108,483</td>
<td>$2,290</td>
<td>$3,480</td>
<td>$5,296</td>
<td>$14,307</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2032</td>
<td>$110,983</td>
<td>$2,335</td>
<td>$3,545</td>
<td>$5,377</td>
<td>$14,360</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2033</td>
<td>$113,483</td>
<td>$2,380</td>
<td>$3,610</td>
<td>$5,459</td>
<td>$14,412</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2034</td>
<td>$115,983</td>
<td>$2,425</td>
<td>$3,675</td>
<td>$5,540</td>
<td>$14,465</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2035</td>
<td>$118,483</td>
<td>$2,470</td>
<td>$3,740</td>
<td>$5,622</td>
<td>$14,517</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2036</td>
<td>$120,983</td>
<td>$2,515</td>
<td>$3,805</td>
<td>$5,703</td>
<td>$14,569</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2037</td>
<td>$123,483</td>
<td>$2,560</td>
<td>$3,870</td>
<td>$5,785</td>
<td>$14,621</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2038</td>
<td>$125,983</td>
<td>$2,605</td>
<td>$3,935</td>
<td>$5,867</td>
<td>$14,673</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2039</td>
<td>$128,483</td>
<td>$2,650</td>
<td>$4,000</td>
<td>$5,949</td>
<td>$14,725</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2040</td>
<td>$130,983</td>
<td>$2,695</td>
<td>$4,065</td>
<td>$6,031</td>
<td>$14,777</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2041</td>
<td>$133,483</td>
<td>$2,740</td>
<td>$4,130</td>
<td>$6,113</td>
<td>$14,829</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2042</td>
<td>$135,983</td>
<td>$2,785</td>
<td>$4,195</td>
<td>$6,195</td>
<td>$14,881</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Whole of Life - No CAPEX: $678,479

Option 2C: Microfiltration (25 micron) + Microfiltration (5 micron) + UV Disinfection

Budget costs estimate:

- **Whole of Life - No CAPEX**: $678,479
- **Whole of Life - PV**: $664,064
- **Annual Cost - PV**: $36,061
- **CAPEX Total**: $38,405
- **OPEX Total**: $45,602
- **Total**: $84,007
Overview:
Southern Geophysical Limited (SGL) was engaged by the Waimakariri District Council (WDC) to compile existing geophysical and geological information that could be useful for water resource planning (Figure 1). The first site is east of View Hill, on McPhedrons Road, between the Raineyes Road and Watsons Reserve Road intersection. The second site is at Garrymere Road, near the confluence of the Garry River and the Ashley River. Several PhD and MSc thesis dissertations have been written on the geology of the area. In addition, the surface geology and regional geologic structures have been mapped by Geologic and Nuclear Sciences (GNS) and other academic groups. There are also third party reports provided by the WDC, and numerous borehole well logs from the Environment Canterbury (ECAN) database.
Garrymere Road

The area north of the Ashley River and east of the Okuku River is geological controlled by the East-West striking Ashley and Loburn Fault systems (Jongens et al. 2012; Mahon 2015). The Ashley Fault trace passes through Garrymere Road, parallel to the Loburn Fault trace which is approximately 1.5 km north (Map 1). Fault movement on both faults is considered to be transpressional dextral strike-slip (Mahon 2015). East of the Okuku River, the Ashley Fault is south-side down, and the Loburn Fault is north-side down (Jongens et al. 2012). This has created a low relief topographic high between the two faults. The fault structure west of the Okuku River and east of the Makerikeri River is not well constrained, and the relationship between the Ashley-Loburn Faults and the Cust Anticline structure is not well defined (Mahon 2015). There are several seismic reflection survey lines, acquired near Garrymere Road by Indo-Pacific Energy Ltd in 1999. While these were designed for petroleum prospects and do not image the near surface (<300 m depth) in detail, they do show the overall geology and fault structures underlying the site (Figure 2) (Jongens et al 2012, Mahon 2015).

At Garrymere Road, Quaternary river deposits form the surficial geologic unit (Forsyth et al. 2006) (Map 1). The clay and silt in the Pliocene Kowai Formation prevent water from flowing easily through it, and the Kowai Formation is effectively the hydrologic basement in North Canterbury. Most of the wells in the area appear to be drawing water from sandy or clean gravel lenses (aquifers) bounded above and below by claybound gravels or clay layers (aquitards) (Clemence 2017). See Figure 3 for a description of the soil types in North Canterbury. Many of these aquifers are likely to be discrete, buried paleo-channels, with a

Figure 2 Indo-Pacific Energy Ltd Seismic Line IP99-106 (Jongens et al 2012).
thin lens like character. Water movement in the Quaternary gravels is also likely to be controlled by the dip of the Kowai surface and by tectonic deformation of the Quaternary sediments.

The objective of any new geophysical investigations at Garrymere Road should be to firstly identify the depth and structure of the Kowai Formation, which is likely to be the maximum depth of extractable water resources (hydrological basement). Based on the results of other surveys undertaken in the area, the maximum depth is expected to be 300 m deep, but the dip direction and overall structure of the surface is unknown. Secondly, the survey should be designed to image sub surface aquifer geometry across the site, with the aim of locating a number of possible targets for drilling, such as paleochannels and aquifers.

![Figure 3 Soil types in North Canterbury and their water bearing properties (Finnemore 2004).]
McPhedrons Road:
The council has indicated three potential drilling sites along McPhedrons Road, between the intersections of Raineys Road and Watsons Reserve Road. The overall geology and known hydrology of the area has already been well summarised in a third party report (PDP, 2016). In addition, several postgraduate (PhD and MSc) thesis and papers have been written on the general area (i.e. Mahon, 2015; Sewell 1988), and there are a number of shallow seismic reflection lines nearby (Map 2). The potential drilling sites are likely on the upthrown (southeast) side of the View Hill Fault system, with basement rock dipping southeast. The hydrological basement in the area is most likely the surface of the Kowai Formation.

The primary benefit of any further geophysical survey would be to add geological context to the water investigations, including depth to the Kowai Formation, the depth to the Palaeocene volcanics, and the dip and overall structure of the Quaternary gravel formations.

Recommendations:
Shallow seismic reflection is the recommended method for identifying buried channels and aquifer structures in the Quaternary gravels above the Kowai Formation or in the upper Kowai Formation, and for imaging near-surface (< 500 m) geological structure. The method uses reflected seismic waves to image the subsurface, and is commonly used in oil and gas exploration for imaging deep geological structures and lithology.

At Garrymere, there are existing seismic lines which image deep geological structures in good detail. These lines, however, were not designed to image the very near surface (<300 m) in detail, and the structure of the Quaternary gravels is therefore poorly constrained. It may be useful to conduct some new surveys across the proposed well site, designed to image the near-surface in greater detail. Some possible lines have been marked on Map 1.

The site at McPhedrons Road is lacking in geological context. While there are numerous bores in the area, none of them penetrated through to bedrock (Palaeocene volcanic deposits) and some have not been logged in detail. There are regional seismic surveys, but none of these are close enough to provide context. The main benefit of seismic work at the site would be to add geological context to the groundwater bores, including depth to basement rock, dip of the quaternary sediments, and the location of paleochannels where present.
For more information:
Please contact us at any time for further information or for hard copies of the resources referenced in this report.

Christian Rüegg (MSc)
Project Manager, Geophysicist
christian@southerngeophysical.com

Michael Finnemore (PhD)
Director, Geophysicist
mike@southerngeophysical.com

References:


Disclaimer:
This document has been provided by Southern Geophysical Ltd subject to the following:

Non-invasive geophysical testing has limitations and is not a complete source of testing. Often there is a need to couple non-invasive methods with invasive testing methods, such as drilling, especially in cases where the non-invasive testing indicates anomalies.

This document has been prepared for the particular purpose outlined in the project proposal and no responsibility is accepted for the use of this document, in whole or in part, in other contexts or for any other purpose. Southern Geophysical Ltd did not perform a complete assessment of all possible conditions or circumstances that may exist at the site. Conditions may exist which were undetectable given the limited nature of the enquiry Southern Geophysical Ltd was retained to undertake with respect to the site. Variations in conditions often occur between investigatory locations, and there may be special conditions pertaining to the site which have not been revealed by the investigation and which have not therefore been taken into account. Accordingly, additional studies and actions may be required by the client.

We collected our data and based our report on information which was collected at a specific point in time. The passage of time affects the information and assessment provided by Southern Geophysical Ltd. It is understood that the services provided allowed Southern Geophysical Ltd to form no more than an opinion of the actual conditions of the site at the time the site was visited and cannot be used to assess the effect of any subsequent changes for whatever reason. Where data is supplied by the client or other sources, including where previous site investigation data have been used, it has been assumed that the information is correct. No responsibility is accepted by Southern Geophysical Ltd for incomplete or inaccurate data supplied by others. This document is provided for sole use by the client and is confidential to that client and its professional advisers. No responsibility whatsoever for the contents of this document will be accepted to any person other than the client. Any use which a third party makes of this document, or any reliance on or decisions to be made based on it, is the responsibility of such third parties. Southern Geophysical Ltd accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this document.
WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO: GOV-26-11-06/ 171026116055

REPORT TO: Rangiora-Ashley Community Board

DATE OF MEETING: 8 November 2017

FROM: Karyn Ward, Community Board Advocate

SUBJECT: Board Meeting Dates for 2018

SIGNED BY:

1. SUMMARY

1.1. The purpose of this report is to adopt the meeting dates for the period from January 2018 to December 2018. The dates are based on meeting each month on the second Wednesday of the month. The appropriate meeting venue is recommended to be the Council Chambers, Rangiora Service Centre; however this does not preclude other venues within the community if the need arises.

2. RECOMMENDATION

THAT the Rangiora-Ashley Community Board:

(a) Receives report No. 171026116055.

(b) Resolves to hold Board meetings at the Council Chambers, Rangiora Service Centre, 215 High Street, Rangiora, commencing at 7.00pm, on the following dates:

- Wednesday 14 February 2018
- Wednesday 14 March 2018
- Wednesday 11 April 2018
- Wednesday 16 May 2018
- Wednesday 13 June 2018
- Wednesday 11 July 2018
- Wednesday 8 August 2018
- Wednesday 12 September 2018
- Wednesday 10 October 2018
- Wednesday 14 November 2018
- Wednesday 12 December 2018

3. ISSUES AND OPTIONS

3.1. All scheduled meetings are advertised and operate under the Local Government Official Information and Meetings Act 1987 (LGOIMA).

3.2. Since the start of the triennial term 2016-19 term the Community Board has met on the second Wednesday of the month at 7pm in the Council Chambers, Rangiora Service Centre. It is recommended that this pattern continue for 2018 as it dovetails with other Council, Committee and Community Board meetings. In past years, the Board has not met in January and this is recommended to continue.
3.3. The proposed May 2018 meeting is scheduled on the third Wednesday of the month, as an exception in 2018, due to the Long Term Plan (LTP) submission hearings occurring that week. The 2018 LTP hearings utilise the Council Chambers in the evening and will also conflict with the four Rangiora-Ashley Ward Councillors meeting schedule, and staff resourcing.

3.4. Briefings and workshops are generally held after the Board meeting where possible, however if a significant timeframe is anticipated a separate meeting at a mutually agreed time will be scheduled.

3.5. The most appropriate facility recommended for meetings occur is the Council Chambers, Rangiora Service Centre, 215 High Street, Rangiora. Nonetheless occasional meetings occurring in other areas of the community, should there be topical items of interest on the agenda, are feasible and can be conducive to greater accessibility for the public to observe democracy and transparency.

3.6. In the event of insufficient business for any one month, the Board may wish to hold a workshop on topical matters, in consultation with the Chairperson. It is the responsibility of the Chairperson to cancel any meeting, in consultation with Council staff.

3.7. The Management Team has reviewed this report and supports the recommendations.

4. COMMUNITY VIEWS

4.1. The established pattern of the Community Board meetings has generally worked well for members, taking into account other community commitments. Other Community Board meetings start either at 4.00pm or 7.00pm.

4.2. Community views were not sought. We are not aware of any adverse comments from the public on meeting times.

5. FINANCIAL IMPLICATIONS AND RISKS

5.1. All meetings are serviced from existing Council budgets. Meeting venues are generally Council owned assets and are not charged. The remuneration payable to the Community Board members is based on an annual sum set by the Remuneration Authority.

6. CONTEXT

6.1. Policy

This matter is not a matter of significance in terms of the Council’s Significance and Engagement Policy.

6.2. Legislation

Local Government Act 2002 schedule 7 clause 19.

6.3. Community Outcomes

There are wide ranging opportunities for people to contribute to the decision-making by local, regional and national organisations that affect our District.

Karyn Ward
Community Board Advocate
1. SUMMARY

1.1. The purpose of this report is to seek the Board’s ratification of its submission regarding the Waimakariri District Council’s District Plan Review ‘Comments and Issues’ Phase.

Attachments:

i. The Rangiora-Ashley Community Board’s Submission to the Waimakariri District Council (Trim 171009108973).

2. RECOMMENDATION

THAT the Rangiora-Ashley Community Board:

(a) Receives report No. 171009108987.

(b) Ratifies the Board’s Submission regarding the Waimakariri District Council’s District Plan Review ‘Comments and Issues’ Phase (Trim 171009108973).

3. ISSUES AND OPTIONS


3.2. Board members informally agreed to submit with a formal decision to this effect being made at the Board’s meeting of 11 October 2017.

3.3. A discussion session was held on 10 October 2017 and an initial draft circulated for comment on 11 October 2017.

3.4. The submission was approved by the Board Chairperson in order to meet the deadline of 27 October.

3.5. The Management Team has reviewed this report.
4. COMMUNITY VIEWS


5. FINANCIAL IMPLICATIONS AND RISKS

5.1. Not applicable.

6. CONTEXT

6.1. Policy

This matter is not a matter of significance in terms of the Council’s Significance Policy.

6.2. Legislation

Not Applicable.

6.3. Community Outcomes

There are wide ranging opportunities for people to contribute to the decision making that affects our District.

Edwina Cordwell
Governance Advisor
District Plan Comments and Issues Phase - October 2017

Rangiora-Ashley Community Board

The Board discussed a range of matters and topics related to the current District Plan, the 6 Issues and Options Papers and various socio-economic and other factors affecting life and work in the Waimakariri District over the next 10 to 30 years.

The Board would urge those developing the Draft District Plan to do this in the context of a ‘vision’, not only based on aspirations for living and working in the District of the future, but also recognising the impact of technology and other factors directly affecting and influencing the way in which we might live and work in the future.

The District Plan may need to recognise these and either a decision made to accept and provide a supportive mechanism to assist such elements or in turn might determine that some factors are ‘unhelpful’ to the ‘vision’ for the District and would affect community wellbeing, vibrant local living, community connectedness and human interaction. The DP might then be constructed with ‘rules’ to hinder or prevent such ‘negative’ factors.

The Board would urge a much more innovative and non-traditional approach be taken given the rapid pace of change that is evident, rapidly increasing and impacting on society, our behaviours and attitudes.

The District must also be able to interconnect with Christchurch and the wider region specifically transport infrastructure and connections which may be based on modern or wholly new technology.

Examples include:

- Increasing use of technology to support extensive home working, home shopping, home deliveries.
- Technology is encouraging home based entertainment, virtual reality experiences for sport, recreation and even ‘home based’ travel. The home becomes an attractive ‘cocoon’ detached from reality.
- Sustainability and the drive for electric vehicles
- Driverless technology for individual cars or to be used for mass transit solutions
- Other technology for mass transit used in other cities in the world – trams, mono rail and magnetic rail
- Increase in smaller dwellings and self-contained energy generation sources
- Water capture and re-use for self sufficiency
- Economic development to retain the workforce within the District
- Increasing and ageing population linked to associated housing, social, medical, public and personal transport needs including mobility scooters and accessibility within and outside of buildings.

The following further comments are offered:

**Housing, vibrancy, inspiring community ‘ownership’**

There are many older properties that will require significant renewal/rebuilding over the next 10 to 20 years.
There is a need for ‘balanced’ housing rather than concentrated groupings of the same type of dwelling. Social housing should be integrated rather than separated but in a ‘pepperpot’ manner and with extremely careful and sensitive urban design learning from the experiences of other modern social housing developments. High density living may not be conducive to achieving good social outcomes. Similarly there should be an intention for inter-generational housing mixtures to support community spirit and neighbourliness.

Need for variety and to inspire residents to enjoy their homes whatever the size and to care for and protect their local environment.

Some linkage between the ‘hard elements’ of a housing development may need to be linked to pro-active community development and engagement to assist residents to a new subdivision to develop a sense of community and to engage and meet with their neighbours.

Housing styles should not be prescriptive but guidelines are needed to ensure sufficient greenspace and open landscapes even on smaller sections.

Positioning of dwellings should be carefully considered to minimise the need for fencing and offer sunlight and privacy in areas other than the front/road elevation.

Continuous fencing adjacent to the pavement/road (River Road) should be prohibited. Perhaps permitting 50% of a frontage to be fenced and for this to be ‘open style’ fencing. Guidelines for height, style and length need to be developed. ‘See through’ fencing makes people feel safer.

**Water/Drainage**

The increasing population and accompanying housing developments will place further pressure on drains, reticulated water and sewage facilities.

Self-sufficiency should be encouraged even for smaller urban sections utilising grey water and solar water heating.

**Fertile land use restrictions**

The Board believes that fertile land and soils should be identified and protected from subdivision and/or development.

Such land cannot be restored once it has been lost.

**Public Transport**

It is imperative that the Council insists that Environment Canterbury modernise its thinking and rapidity of response to society and community needs.

District wide Public transport is increasingly essential to link our communities together, support our younger and older residents and underpin economic development within the district, rather than outside of it.

This achieves a reduction in fossil fuels and improved sustainability.

The situation is immediate and critical for the District and must be resolved. If Environment Canterbury are unwilling or unable to support the District’s current and developing public transport needs then the Council must develop alternatives which are responsive, go to where people live and work and offer a real alternative to the car.
Cycle and walkways enticing and attractive to children and young people should be actively considered linked to the larger cycle and walkways to encourage safe and healthy active lifestyles.

**Rangiora Airport expansion and other private airstrips and operators**

The airport and surrounding land needs to be formally protected and zoned to enable future expansion. Land acquisition to enable the development of a sizeable domestic airport is crucial. Noise contour definition for a large passenger terminal is required to ensure that ‘reverse sensitivities’ are avoided.

Engagement with CIAL, the Christchurch City Council and other air operators needs to be on going and opportunities identified to encourage airport usage and extension of service to a modern high capacity domestic airfield.

This could stimulate the local economy in a variety of ways in the long term.

There are also a number of private air strips and smaller aviation operators in the district and consideration should be given to the ‘classification’ of the ‘aviation/airport’ activity and its location and effects under the District Plan.

The Board is not aware of whether consent needs to be given for such operators nor how noise and other effects are monitored and enforced.

**Transport**

SH1 and the arterial roads connecting the District to the wider network and Christchurch are all influenced and impacted by decisions made by CCC, NZTA and Kiwi Rail.

It is essential that a transport infrastructure plan is developed which integrates and recognises the priorities of these entities and their own ‘future’ transport visions. Multiple visions are unhelpful.

Policies for traffic management, parking, electric vehicles, mass transport solutions developed by CCC could impact significantly.

CTOC was established to ensure coordination across Greater Christchurch. Potentially some strategic entity ought to be created to enable an innovative ‘blue sky’ approach to transport and life in the area in 20 years’ time and the plan to achieve it. Pooling of expertise and resources including funding may be required.

Land adjacent to the existing rail corridor needs to be protected.

**The 6 Issues and Options papers**

The following are offered for each of the 6 Issues and Options papers.

**1 Transport and Utilities**

An orbiter style bus service connecting the townships is essential. (Cust, Loburn, Oxford, Rangiora, Pegasus, Ravenswood, Woodend etc.)

Key connecting roads need to be identified and prioritised for maintenance and potentially widening or other enhancement. A higher standard of maintenance to encourage usage and withstand high volumes of vehicles.

Petrol and diesel storage within the district is needed to future proof for extreme emergency situations. There are no district based emergency supplies at present.
The reliance placed on electricity is increasing and thought needs to be given to large scale electrical storage and how supply can be sustained.

Ground based heat pumps or other high efficiency methods need to be mandated for new sub divisions/new builds.

The option of super conductors in this regards needs to be acknowledged.

Resource consents should be minimised wherever possible by increasing the clarity of what is permitted.

The Board suggests that too many ‘common’ aspects of alterations to a dwelling currently require a permit of some kind and could now be exempt and thus encourage take up of sustainable options. For example installation of solar panels, rainwater storage.

Utilities should be installed underground as much as is practical to enable increased resilience.

2. Heritage and Open Space

The Board believes that the current Heritage list for buildings and the criteria for inclusion are appropriate. Care should be taken to ensure good examples of our history of settlement in all its variety should be included and retained. This information to be added to buildings’ LIM.

There is a need to define criteria to protect trees, whether on private or council land. This list needs to be easily maintained and kept up to date without the need for a formal and costly ‘plan change’.

The Board believes that the Iwi Management Plan ensures appropriate cultural protection.

Zoning of parks needs to be carefully considered so as not to prevent change of use as deemed essential by the Council in the future. Existing iconic parks such as Dudley Park should have stricter protection.

The A and P Showgrounds should be protected as well as key Sports Grounds and Golf Courses.

3. Rural Zones

The board has previously submitted with regard to 4Ha lifestyle blocks and the need to ensure that any ‘rural’ activities undertaken are clearly and explicitly defined. The Board is supportive of an activity based plan which also recognises and controls effects.

Any change of land use from rural should be publicly notified.

The board recommends that restrictions be placed on subdividing where fertile or other soils have been identified. Retention of larger farms needs to be encouraged and the land formally protected.

Land may need to be ‘reserved’ or acquired around existing townships, for example Kaiapoi to support planned growth.

Future Infrastructure requirements should be identified and planned for.

Specific areas should be identified where sub division of existing 4Ha blocks is to be permitted which should take into account the impact on existing services such as water, drainage and sewers. Subdivision should be prohibited where it generates or contributes to a future increased cost for the Council /other ratepayers to maintain or extend a current scheme. An economic appraisal approach.

Whole scale subdivision should not be permitted.
4. Natural Environment

Decibel ratings should be stated for boats and jet boats to reduce or eliminate unwanted noise affecting other recreational users or wild life.

The Ashley/Rakahuri Estuary should be formally protected. Perhaps as a National landscape of significance.

Christchurch City Council, WDC and Selwyn need to have consistent rules as far as possible for the use and protection of the Waimakariri River and the enforcement of these rules.

It is noted that trail bikes and 4WD can cause significant damage and disturbance to flora and fauna and also materially affect water quality by churning up the river bed and silt. This has serious consequences for biodiversity and protection of species.

Fishing has also been shown to impact on the aquatic environment detrimentally.

Biodiversity needs to be ensured and protected and strictly enforced.

It is noted that nitrate levels and water quality are currently being addressed via NZ Legislation.

Ways to ensure large scale storage of water rather than to continue individual permit takes for irrigation.

Improvements to measure the moisture content of soil should be encouraged which will reduce water takes and improve retention and levels of aquifers and ground water sources.

Riparian margins need formal protection. Such areas being formally ‘required’ on an on-going basis.

Linking margins as much as possible to achieve bird corridors should be considered and enabled.

Consideration should be given to creating more natural open water corridors to support bio diversity as well as recreational use.

Consideration could also be given to ways in which water drain capacity could be increased to minimise flooding in major weather events. Whether some form of technology to control selected drains would be possible?

Planting of larger trees should be encouraged where appropriate to improve the landscape and support the environment.

5. Retail, Commercial and Industrial Activities

Retailing activity will alter with the introduction of further on-line shopping and new ways for rapid home delivery (Amazon drones).

Existing town centres must be retained and vibrancy assured to attract shoppers and for the ‘offer’ to be distinctive. This cannot be left to the market to decide.

Big Box should be carefully controlled and assessed and complement not detract from the town centres and village centres. BB offerings should not conflict or detract from the existing or perceived town centre ‘offer’.

Shopper habits need to be continually assessed – for example how far will people walk and will Big Box parking cause shoppers to stay in the Big Box area and bypass the town centres even if it is only 50 metres away. What will attract BB shoppers to the adjacent town centre areas?
BB retailers must NOT be allowed to get a foothold inadvertently. Extreme care must be taken to assess the economic viability of the surrounding area with projections over the short, medium and long term.

The DP needs to be strong and clear in this regard. Town centres can die very easily as is evident overseas with dire social and economic consequences.

*The DP can and must ensure the vision for our towns and villages is achieved. The vagaries of the ‘market’ and the ‘current attractive development opportunity’ will not.*

Out of Town growth is to be avoided.

Attracting tourists, shoppers and visitors should be continually reviewed and planned for. Whether this be Hotel accommodation and where this ideally should be located and permitted or where parking is required so as to prove an attractive destination.

It is noted that vehicles will be a reality for years to come regardless of fuel source.

Already the expansion of the BB area adjacent to Rangiora Town Centre is proving attractive as it has huge parking capacity as compared with the town centre itself.

BB shoppers driving to and from the BB car park rather than in and out of the town.

Town centre public facilities need to be attractive including extensive provision of public toilets. Pavements need to accommodate street furniture, prams, pushchairs and mobility scooters.

Older and young alike need to be able to easily access the town centre and be only a short distance from the car.

Tourism needs to be part of the mix of town centre vibrancy – perhaps enabling and supporting Events and entertainment.

The establishment of the new cycleways provides a unique opportunity to increase the ‘offer’ of hotels, events and attractions in a sustained and strategic manner. We need to keep tourists in the District and not just provide a path through it.

### 6. Residential Zones

Township boundaries need to be properly defined including areas for growth over the next 20 to 50 years.

Central government should be lobbied to introduce or support subsidies for sustainable energy sources.

Town centre apartments should be encouraged (over shops) to support township vibrancy and community ownership and a sense of identity.

*Jim Gerard QSO - Chairperson*
Ref: SHW-13-05/171030116729

30 October 2017

Mr Gerard
Rangiora/Ashley Community Board
Private Bag 1005
Rangiora 7 440

Dear Mr Gerard

Draft Waste Management and Minimisation Plan and Kerbside Options

On behalf of the Council I would like to thank you for your interest in, and time taken to prepare your submission on the draft Waste Management and Minimisation Plan. The Hearing Panel valued the opportunity to hear submissions from whose who presented their submission in person. The Panel also noted the widely divergent community opinions about rural recycling services, multiple bin collections and the collection and composting of organic waste.

The Hearing Panel has recommended to Council that Option C (four service choices for kerbside collections) be included in the draft Long Term Plan 2018-2028 for further consultation, and also recommended that residents have the choice to 'opt-in' to receive bin collection services. The Council will consider the Hearing Panel recommendation at their meeting on 7 November 2017.

The draft Waste Management and Minimisation Plan will be amended to reflect the Council's decision at their November meeting. The final Waste Management and Minimisation Plan will be presented to Council for adoption on 5 December 2017.

Thank you for your interest in, and contribution to, the development of our District's Waste Management and Minimisation Plan.

Yours sincerely

Kitty Waghorn
Solid Waste Asset Manager
The Chairperson
Rangiora - Ashley Community Board
3 Golding Avenue
Rangiora
7400

14/10/17

Dear Mr Gerard

The Waimakariri Access Group is a voluntary group of people with a high level of expertise in the area of accessibility issues in the community.

The Waimakariri Access Group (WAG) is a group that advises the council on accessibility issues in the district.

The purpose of the Group is to:

Promote access to public places and facilities in the district and a barrier free environment for all people in the community by:

1) Identifying factors in the social and physical environments in the District which restrict people from carrying out normal activities.
2) Being a point of contact for people with concerns about mobility and/or access in public places in the district.
4) Provide appropriate training on disability and accessibility issues
5) Work collaboratively with the council providing expertise and experience with accessibility issues both environmental and attitudinal.

We would like to invite a person from your board to attend our meetings so we can work together towards a fully inclusive barrier free environment for all people in the community. Our meetings are held on the second Tuesday of the Month at 11 am at the Meeting Room at the Council. Our next meeting is on November 14th.

Yours sincerely

Jill Waldron
Chair’s Report

WAIMAKARIRI DISTRICT COUNCIL

REPORT

FILE NO and TRIM NO: GOV-26-11-06/ 171031117674

REPORT TO: Rangiora-Ashley Community Board

DATE OF MEETING: 8 November 2017

FROM: Jim Gerard, Chairperson Rangiora-Ashley Community Board

SUBJECT: Chair’s Diary for October 2017

1. SUMMARY

<table>
<thead>
<tr>
<th>DATE</th>
<th>EVENT / MEETING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday 30 September</td>
<td>• Seftonian Battle Sports Day</td>
</tr>
<tr>
<td>Sunday 8 October</td>
<td>• Rotary Book Fair</td>
</tr>
<tr>
<td>Tuesday 10 October</td>
<td>• Community Board Chair’s meeting Kaiapoi</td>
</tr>
<tr>
<td></td>
<td>• Rangiora Promotions Association Committee</td>
</tr>
<tr>
<td></td>
<td>• District Plan Review Board Submission workshop</td>
</tr>
<tr>
<td>Thursday 12 October</td>
<td>• Lay wreath at Passchendaele Memorial Service</td>
</tr>
<tr>
<td>Wednesday 18 October</td>
<td>• Timebank Rangiora</td>
</tr>
<tr>
<td>Thursday 19 October</td>
<td>• Community Board Chair’s meeting (District Plan Review)</td>
</tr>
<tr>
<td>Saturday 21 October</td>
<td>• Northern A &amp; P show</td>
</tr>
<tr>
<td>Wednesday 25 October</td>
<td>• With Keith Galloway to inspect sewerage/stormwater</td>
</tr>
<tr>
<td></td>
<td>• Wellbeing North Canterbury AGM</td>
</tr>
<tr>
<td></td>
<td>• Last Wednesday Club</td>
</tr>
<tr>
<td></td>
<td>• Neighbourhood Support AGM</td>
</tr>
<tr>
<td>Thursday 26 October</td>
<td>• Meetings with Staff re District Plan</td>
</tr>
<tr>
<td>Monday 30 October</td>
<td>• Mayor, Board Chairs re Youth Community Scholarships</td>
</tr>
</tbody>
</table>

2. RECOMMENDATION

THAT the Rangiora-Ashley Community Board:

(a) Receives report No. 171031117674

Jim Gerard QSO
CHAIRPERSON