Garrymere Water Supply Advisory Group
Minutes of the Meeting held on 19 December 2018, 5:00pm
In the Council Chambers at the Rangiora Service Centre

1. PRESENT:  Clr. Paul Williams, Clr. Dan Gordon, Duncan Lundy, Chris Prickett, Colin Roxburgh, Kalley Simpson, Christine Levett, Steve Gregory, Amanda Black, Nicky Healey, Gerard Cleary, Denise Clark (minutes), David Edge (Hurunui District Council), Kathryn Russell (CDHB)

2. APOLOGIES:  As crossed out above (Welcome to David Edge from Hurunui District Council).

3. CONFIRMATION OF PREVIOUS MINUTES

3.1 The minutes of meeting held on 27 November 2018 were a true and correct record.

   Moved: Steve Gregory – Seconded: Duncan Lundy

   Carried

4. MATTERS ARISING FROM PREVIOUS MINUTES:

   4.1 Hurunui District Council information Sharing – David Edge to provide information on experience with point of entry treatment system analysis carried out by HDC.

   a) David Edge shared – Section 12 of rural agricultural water standards. Point of entry as a treatment option methodology on their schemes, 21 intakes across the boundary, 5 of these are compliant. Looking at Balmoral – need to provide secular treatment to a scheme... Balmoral doesn’t have that. Options for treatment across the board are – whole of life assessment against treatment costs (up to 40 years). Too many risks for point of use option. No sense of security. Looked at POU but difficult. Life span is only 8 – 10 years. The decision is driven by the community so will look at what they have favoured.

   b) More than 75% of water supply being distributed through agriculture. Majority of water going to irrigation. 2500 litres per drain. Spoke to community about how much stock consumes and that is how they got to 75%.

   c) Other anomalies that came out were sense of sharing responsibility. Can do risk sharing and pass on to end users but to David, this doesn’t make sense. As a service provider you must pick up the changes. The other one is a district targeted rate when schemes are thrown together, however there will be a kick back from the community on this.
Discussion:

d) Ashley rural water scheme – suggest a design point of entry to the worst case scenario. But you can’t run the risk of something slipping through.

e) Chris asked – we don’t have a global rating, would you consider the point of entry is in that 40 years’ time frame? David said it depends who your supplier is, if you had an assured value of costs you would get a better comparison.

f) Colin had an update from Ministry of health about new provisions to the drinking water standards coming into effect in March. Section 12 refers to point of entry which doesn’t exist, but they said the Health Act refers to drinking water standards and they would need to get more advice on this and come back to Colin.

g) Kalley said the above doesn’t refer to agricultural drinking water standards anymore. We have learnt Kaikoura DC has considered using the point of entry to assess their drinking water system. DW Assessors still require council to take over the maintenance of devices to ensure compliance is achieved. Individual property owners would not be able to ensure this so that is why they want the Council to maintain this.

h) Dan said we need to get advice on what this means to us. Colin said the Assessors will meet to discuss point of entry this week. Within LG where do we socialise the topic? Kalley’s Asset Management forum – could put a request out and also Water NZ via Water Services Management group but they don’t meet until April. We could also try the technical lead at Water NZ to see if he is aware of suppliers who have gained rural drinking water compliance.

i) Chris referred to the Balmoral scheme time frame and how Hurunui came about this – 2025/26 was the answer. The planning was agreed with the water assessors, affordability and risk for the district, infrastructure strategy. Colin did the same process as Hurunui. WDC haven’t met the initial time through their Water Safety Plan. Gerard said we are at the end of the programme and 2 weeks ago Oxford Rural No. 1 started on a new supply, so it is just Garrymere and Poyntzs Road left now.

4.2 Item 4.2 – Option E – Connect with Ashley – David Edge to present commentary on feasibility of Garrymere joining Ashley scheme (pressure and flow capacity, development contributions, timing of Ashley DWSNZ compliance, how they would be rated).

j) Hasn’t progressed the opportunity to do some modelling yet. Water charges are cheaper than Garrymere but will be rising. Sitting about $763 per (1.8m³) unit going to $990 per unit by 2024/25. Next year developing a model for the Ashley Scheme with the help of Chris Bacon from WDC. Will come back with some numbers next year.

k) Is the water available? Do we have sufficiency of supply – shared RC with Waimak and there is enough water for the next 20 – 30 years. From a resourcing point of view, there may be some issues.

l) David has been talking to Ecan on water restrictions – relating to Ashley gorge river flows and how many tributaries flowing before it gets to extraction point. We have measuring systems in current bores about 9 metres deep. Ecan are prepared to move levels with only one trigger, but doesn’t imply we are going to have restrictions.

m) The scheme is bacteria compliant but not protozoa compliant.
   * We have some 19 unit schemes so how would you mix ratings with these properties with the others? Would need to look at the costs of installing tanks.

4.3 Colin Roxburgh to present information from research (as requested at previous meeting). Refer attachment below for background information on the bill before parliament, conversations with a Gore District Council staff member, and the relevant section of the Local Government Act:
Key Notes:

a) The scheme is not currently treated for Protozoa. No plans in place to achieve compliance.

b) Discussion: Question about the process - it goes into a ballot.

BILLS DIGEST

Digest No. 2559

Gore District Council (Otama Rural Water Supply) Bill 2018 (78-1)
(Local Bill - Mark Patterson)

Date of Introduction: 23 July 2018
Select Committee: As at 31 July, 1st reading not held
Published: 31 July 2018
by Renae Roddell-Gemer, Editor

Purpose

The purpose of the bill is to provide for a process the Gore District Council can follow to lawfully authorise a transfer of the Otama Rural Water Supply scheme from the Gore District Council to Otama Rural Water Limited, a company owned by the relevant users.

Background

The Otama Rural Water Supply scheme was initiated and built by farm users in the early 1970s. It is governed by the Otama Rural Water Supply Committee (eight users appointed by other users, and an elected councillor). The Council considers it has legal responsibility for the scheme, though ownership is unclear.

In May 2017, almost 76% of responding voters voted in support of the ownership of the scheme being transferred to a new company owned by the users. The Council supports this move, however, the law prevents the Council from agreeing to divest itself of responsibility for providing water services.1

Commencement

The Act would commence the day after receiving Royal assent (clause 2).

Main Provisions

The process for the Council to obtain authorisation to transfer the scheme’s ownership is based on sections 131-136 of the Local Government Act 2002, which provide for a process to transfer smaller schemes. The bill provides that the Council must transfer the scheme to the company if:

• the transfer is supported, in a referendum conducted under section 9 of the Local Electoral Act 2001 using the First Past the Post electoral system, by more than 50% of the votes cast by the eligible voters (Part 2, clause 5(1)).

1 Section 130, Local Government Act 2002.
4.4 Three Waters Review Update – Colin Roxburgh

Key notes:

a) On 20 November a Cabinet Paper released: Future state of the three waters system: regulation and service delivery.

b) This paper was said to present a road map for decisions on future state of three waters. It identified a problem of communities not being able to be certain of water being safe. The key issues identified include funding, capability within the sector, and weak regulation. A key conclusion was that the status quo is not sustainable.

c) In June 2019 Ministers will report back to cabinet with detailed policy proposals for regulation in all three waters. With regard to drinking-water, this will include “system wide reform of regulation of drinking water, along with a new risk management regime for sources”. There will be more compliant schemes in the future.

d) In late 2019 the Minister of Local Government will report back to Cabinet with a policy proposal for service delivery arrangements. This will consider the three options:

   i. Proceed with regulatory reform only.

   ii. Establish a three waters fund to support voluntary service delivery improvements.

   iii. Create an aggregated system of dedicated providers

   iv. Will have more information on this late next year.

e) Conclusion: A strong steer given that regulatory change is coming. Less clear at this stage however about the nature of service delivery changes. The Government can change the DW standards at any time and there is a 5 year process with this. They have said there will be another provision out mid next year and goes to consultation first.

f) Councillor Williams said he met with the Minister and it seems she thinks it will be too political to do anything about it. Clr. Williams’ view is that not much will change in the near future. There was an indication of stronger regulations but they are unknown at this stage. No time frames given. Gerard agreed with this statement and he felt the Minister won’t be undertaking huge structural reform, but the regulation change and requirements may lead to this. Feedback from the Minister was that she was impressed with the knowledge of the staff.

4.5 Item 4.5: Glentui Scheme Update – Colin Roxburgh

Key notes:

a) Glentui scheme designed for daily flow approx. 1.7 L/s to serve approximately 30 properties (compared to Garrymere with Peak daily flow of 2.7 L/s and 41 connections).

b) A filtration and UV plant is being constructed at an estimated cost of $112,000. The scheme is similar to Garrymere, but a slightly smaller population and lower flow. The scheme is also gravity fed, so does not require pumping at present. They may need to pump to push water through their filters though.

c) Similar design to Garrymere, we may want to look at the Glentui Scheme.

d) The source of water is thought to be a shallow infiltration source rather than a well, but Colin didn’t get this confirmed at the time.

e) Colin said happy to share more information on the Glentui scheme if requested.

4.6 UV Treatment Rate

Clr. Gordon to present update from December Council meeting.
a) The Council has opted to put this forward to the Annual Plan and will be consulted. There is modelling to be done on what the impacts will be. Wouldn’t rely on some of the earlier figures. Clr. Gordon is in favour of this being consulted on as part of the Annual Plan. There will be an impact on some schemes. Kaiapoi and Rangiora will be impacted the most but Garrymere will be favourable from this outcome.

b) Gerard stated there is a substantial cost involved. It will be too premature to give any figures this early on however, the information is available on our website. The figures are indicative only. Any treatment options means Garrymere will be double the cost. We will post the AP in late January and will be brought back to this meeting with the figures. Reports to AP are considered on last week of January then out to consultation after that. Action: Kalley to send the report to the group members.

c) The decisions will be made in July.

4.7 Consent Information from Property Upstream of Garrymere well

Staff to present information

a) A property with a consent to take irrigation up to 220 hectares. (76 L/s - Couldn’t find farming activity consent but Colin asked about activities and orange nutrient allocation zone, if nitrogen lost is less than 20kg per hectare per annum. As long as they have a farm environment plan.

b) Clr. Williams stated people have concerns that there is going to be a dairy farm proposed. Martin Ashby has said there will not be a dairy farm and maybe just a space to dry off stock. Steve said lots of money for little return if it is dry stock. Martin doesn’t believe a dairy farm will comply. David has been involved in the consent process.

c) If 76 l/s is taken how will it impact on the Garrymere flow and will it impact the shallow well? Colin said they would have had to go through a process through Ecan to prove there wouldn’t be an impact on others. Gerard also said as an example, we had gone through a rigorous process with the Oxford Rural No. 1 and this process for such a minor effect.

d) 40 l/s can be taken at any one time from the 76 l/s. On 15 June 2018 the consent commenced and they would have had to do some more work earlier in the year to demonstrate there will be little or no effect on the environment. WDC will also need to be satisfied with the consent.

e) Action: Colin to approach Ecan for more information prior to next meeting.

4.8 Colin presented a slide show on Options Investigation

Colin Roxburgh to present overall options analysis summary, covering the following options:

a) A. Treat existing source at existing headworks
b) B. Drill a new deep well with aim of finding secure source
c) C. Connect with Summerhill scheme
d) D. Treat using ‘point-of-entry’ treatment systems
e) E. Join with Ashley scheme.

Key Points:

f) There is a clear message from the community we need to do more work. Colin will get started on the first option.
- Option A – Treat existing source
Key features:

i. Building extension
ii. New pre-treatment storage
iii. New pump to overcome filter head loss
iv. 2 x cartridge filters
v. UV unit
vi. Electrical / Control modifications

Cost Breakdown:

vii. Costs differ slightly from the Opus Report.
viii. $223k total construction
ix. Professional fees of $45k (had assumed 20%)
x. Funding contingency $80k - which is 30% of project cost.
xi. Total budget estimate is $390k
xii. Key Benefits:
xiii. Most straightforward conventional option
xiv. Moderate cost but may be opportunity to refine
xv. Can be accommodated within existing site

Risks:

xvi. Scheme still reliant on single bore
xvii. Operational costs will depend on raw water quality
xviii. Question: If more farmers are taking more water will that have an effect on water quality? Colin said no, it is more dependent on weather patterns for turbidity to increase.

Option B – To drill a deep well

i. Aim to find secure source to comply with DWSNZ without any additional treatment.
ii. Advice that bore may need to be in order of 300m deep to strike suitable layer.
iii. Still carries risk of whether or not source will be found.
iv. May require further treatment in future if standards change.

Costs:

v. Total cost of construction is $586k
vi. Total budget estimate is $880k

Benefits:

vii. If successful high quality source water is desirable,
viii. Lower operating costs
ix. Redundancy as current source would become backup
Risks:

x. Well may not be successful
xi. DW standards may change
xii. High Capital Cost
xiii. Kalley stated that there is a bore

○ Option C - Connect with Summerhill

i. Aim to connect to another compliant scheme, rather than upgrade existing scheme
ii. Would involve approximately 2-5 km of pipe to be installed to join schemes including 2 river crossings, plus 1.6km upgrade within Summerhill and a new booster pump station.
iii. Would require wider consultation with existing schemes, who would likely require a contribution to buy in to existing scheme
iv. Another scheme also looking at joining. Have been given go ahead to consult if Poyntz's Road Scheme joins West Eyreton Scheme

Costs:

v. Standard contractor insurance costs - $70k. Assumed 10% of construction
vi. $350k cost of a new pump station as need to acquire land
vii. New bore pump for West Eyreton and new pump at Davis Road - $28k
viii. Total construction costs - $1,150,000 total budget of $1,755,000 could reduce to $1,050,000 if demand reduced

Benefits:

ix. Ease of operating one large scheme
x. Redundancy if existing well retained as back up

Risks:

xi. High capital costs
xii. Costs may increase further if required to buy into existing scheme
xiii. Another scheme also looking at joining
xiv. Consents for river bed crossing add uncertainty and time
xv. Risk of loss of primary source if pipe damaged beneath river.

○ Option D – Point of Entry Treatment – Legislation

i. Health Act Legislation - noted
ii. Drinking water standards for NZ – noted – Section 12 of the 2008 revision of the standards were never written.
iii. Rural Agricultural drinking water supply guidelines – noted.
iv. Colin is going to seek more clarity on the DW standards and what they mean.

○ Questions:

v. Q: Does the scheme meet the threshold of agricultural / domestic use?
vi. A: Initial assessments indicate it is close but it does not currently, however if better data was available this may give a different answer.

vii. Q: Would the Council still meet its obligations under the Health Act of taking all practicable steps to comply with the DWSNZ by following this approach?

viii. A: Uncertain when an option to fully comply has been identified.

ix. Q: If the answers to questions 1 and 2 above are yes, would it be cost effective?

x. A: The advice from the Government points out some districts use separate rating for separate water supplies creating artificial barriers. Hurunui argue the whole Council doesn’t have the money to upgrade so it is a genuine barrier.

xi. Steve clarified that the 75/25 split is based on actual usage.

Costs:

xii. Total construction costs - $246,600 which includes supply of units, Comms centre for alarms, filters, upgrade pumps to overcome head loss and installation.

xiii. Total Budget estimate $311,600 – which includes professional fees, (no funding contingency) and expenditure to date.

xiv. Estimated supply of units - 41 units x $3,235 = $132,600

xv. Colin has left out operating costs at this stage as it would be hard to quantify at this stage.

xvi. Clr Gordon asked if anyone thinks we should be connecting with Ashley? Financially not capable but advantages in ongoing costs spread out.

○ Option E: To connect with the Ashley

i. Minimum 4.2 km pipeline from extent of Ashley scheme to extent of Garrymere.

ii. Likely booster pump station required

iii. Development contributions required to be paid

iv. Available capacity yet to be confirmed

Costs

v. Total Construction $653,000

vi. Total estimate $1,016,000

Summary

i. Clr Gordon said come up with some preferred options

ii. Need advice on New DWS

iii. Advice Property upstream from Ecan

iv. Canterbury District Health board advice – Colin said what do we want advice on specifically;

v. B, C, E are not an option or realistic financially

vi. A and D are the two options to work on going forward for the group.

5. NEXT MEETING
5.1 Agreed to look at next meeting mid-February (possibly Wednesday 20th) about 5pm – To be advised. Cllr. Gordon to coordinate with Sarah Nichols.

Moved: Steve Gregory – Seconded: Amanda Black
Carried

6. GENERAL BUSINESS

6.1 Kathryn Russell is on holiday so can’t make it to tonight’s meeting but will be able to attend future meetings. Colin to confirm before confirming next meeting date.

6.2 The group would like to thank Colin for all of his information he has provided and prepared.

6.3 Meeting closed at 7.30 pm