From: Phil Ruffell

To:
Cc: David Light; LGOIMA

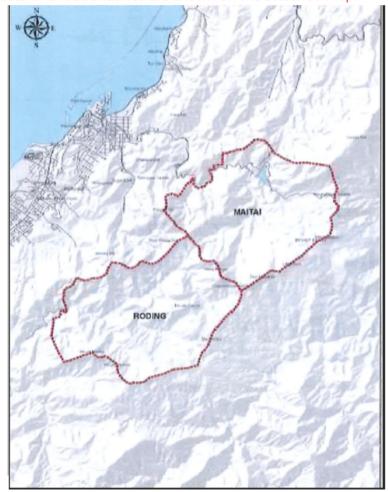
Subject: Nelson Water Supply Questions SR2215345.

Date: Tuesday, 26 April 2022 9:57:38 am

Attachments: image001.png

Good morning , Thanks for your email. I hope the following answers help you. Regards. Phil Ruffell.

• What/where is the catchment area for the Roding river and Maitai River? The catchment boundaries are shown on the attached map.



- How is the water distributed around the city between Saxton Field and The Glen?
   The treated water is supplied to customers via the public reticulation. For the most part this is via gravity pipelines and reservoirs with some booster pumps to service higher areas of the city. You can see a map of the network on Top of the South Maps just turn on the services layer and select the relevant water services.
   https://www.topofthesouthmaps.co.nz/app/
- How is the water extracted from the two surface water sources and how these are connected to the Tantragee Treatment plant? Raw water is abstracted from the South Branch of the Maitai River via a shallow in stream weir and from the dam on the North Branch of the Maitai River via an intake tower. There is a low dam structure on the Roding River that is used as a run of river intake. The water is then transferred to the treatment plant. From the Maitai River intakes the water is mostly piped via a gravity pipeline down the Maitai Valley to the treatment plant. A

duplicate pipeline is available that can use a pump to boost flows when required. From the Roding River all raw water is piped to a pump station in Marsden Valley where it is pumped to a break pressure tank in York Valley and then gravity fed to the treatment plant. More information about the water supply activity can be found in the Water Supply Activity Management Plan 2021-31 on the Nelson City Council website <a href="http://www.nelson.govt.nz/assets/Our-council/Downloads/2021-31-amps/Water-Supply-Activity-Management-Plan-2021-2031-Final.pdf">http://www.nelson.govt.nz/assets/Our-council/Downloads/2021-31-amps/Water-Supply-Activity-Management-Plan-2021-2031-Final.pdf</a> More about how the treatment is carried out? Nelson City Council transports raw water from the intakes on the Maitai and Roding rivers to a central treatment plant at the Tantragee Saddle between the Maitai and Brook valley's. The treatment process consists of passing the water through ultra-filtration membranes to remove organic materials and any protozoa and then adding chlorine before releasing the treated water into the reticulation.

- Is there any updated data on an annual cost of the service? Expenditure information can be found on the Nelson City Council website in the Nelson City Council Long Term Plan 2021-31 <a href="http://www.nelson.govt.nz/council/plans-strategies-policies/long-term-plans/long-term-plan-2021-2031/">http://www.nelson.govt.nz/council/plans-strategies-policies/long-term-plans/long-term-plan-2021-2031/</a> and the Water Supply Activity Management Plan 2021-31 <a href="http://www.nelson.govt.nz/assets/Our-council/Downloads/2021-31-amps/Water-Supply-Activity-Management-Plan-2021-2031-Final.pdf">http://www.nelson.govt.nz/assets/Our-council/Downloads/2021-31-amps/Water-Supply-Activity-Management-Plan-2021-2031-Final.pdf</a>
- The council is responsible for managing the water supply but how is this carried out?
  Council has a Utilities Department with activity engineers, operations engineers and
  capital projects project managers. Each team looks after a specific area of the utility.
  Is certain work contracted out? Yes. The day to day operation of the water supply
  catchments, intakes and treatment plant are contracted out to Fulton Hogan Ltd.
  The reticulation below the treatment plant is operated and maintained by Nelmac
  Ltd.

Who can I contact for further follow-up questions on Nelson's water infrastructure? Please send your queries to the Council Enquiries site Council Enquiries (Enquiry) < enquiry@ncc.govt.nz> where they will be assigned to the appropriate Council officer for a response. If your request is likely to be time consuming it will be treated as a request under the Local Government Official Information and Meetings Act 1987 and a charge will be made for the time spent to prepare the response.

## **Phil Ruffell**

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