

ADDITIONAL INFORMATION

January 24, 2024 Regular Council Meeting

Item 7. Public Input

Re: Item 11.d)

From: [Lance Geselbracht](#)
To: [District Public](#)
Subject: January 24th, 2024 Council Meeting submission
Date: January 24, 2024 10:42:14 AM

I am writing in regards to Agenda item 11(d); a request to fund a Koers Engineering report to determine available water connections for Lantzville if only the four Harby Rd. aquifer wells are considered. This requested report has already been completed in great detail and specificity with Koer's 2015 report titled "Water Supply and Distribution System Study". Nothing has changed with the well field except new well 6A was drilled to replace the incorrectly constructed original well 6. A new pump test was performed to confirm the Harby Rd. can supply 2400 cubic meters per day which exceeds the highest peak day ever pumped in Lantzville by approximately 1000 cubic meters.

In this report, Table 20 clearly identifies the available number of connections for the "maximum day" using varying pumping rates. "Maximum Day" was used as the design criteria as that was the information available in 2015. Also, storage capacity for the system, at that time, was not factored into the calculations. Since this report, Lantzville has added significantly more water storage in the system with the Foothills reservoirs and piping, and additional capacity with the operating Foothills well. Some of the leaking asbestos cement (AC) piping has been replaced, as well. It was hard in 2015 to accurately gauge how much of the water pumped into Lantzville's water system was leaked back into the ground because the meters associated with the two distribution zones did not equal the sum of the individual service meters. An estimate of 10% to 15% leakage back into the ground was occurring with occasional large leaks associated with a major pipe failure.

Lantzville has over 20 years of "hard" data when no new connections were made to the system to determine what is an acceptable per connection standard; 2320 liters per day is grossly excessive for Lantzville. As shown in the 2015 Koers report, Lantzville's per connection water use is decreasing and with smaller lots in the future, that trend will continue. Also, the new storage capacity in the system has to be taken into account in determining a connection standard.

There is no need to establish an overly conservative connection standard because the indisputable reality is that Lantzville has the "safety valve" of being connected to the Nanaimo water system. The Nanaimo supply reservoir ended this past summer season at 75% total capacity which indicates they have plenty of water. To indicate how insignificant Lantzville's total water use compared to Nanaimo's demand; Lantzville uses less water than Nanaimo Regional Hospital. Conspicuously missing from the Lantzville/Nanaimo Water Agreement is any restriction on the daily flow for connections associated with that Agreement; this was done on purpose as Nanaimo has no need to restrict the amount of water Lantzville can purchase. Quite frankly, the amount paid per cubic meter to Nanaimo per the Agreement is a "steal" and those costs are easily recovered by Lantzville with its sliding scale billing system.

If Lantzville wants to increase the number of connections to the system without using Nanaimo water, then the following should be considered:

- Accelerate the pace of replacing the leaking AC piping; this would probably allow another 100 to 200 connections.
- Add Well 11 to the system for an additional 600 cubic meters of Harby Rd. capacity; this

well has been offered to Lantzville for the District's use on several occasions.

- Install new meters or recalibrate existing totalizing meters on the wells and storage reservoirs such that their sum totals closely align with the sum of service meters in the District. Know where your water is going especially in the summer months.
- Continue negotiating with the Province to obtain water licenses for the newly acquired Clark Rd. production wells. Implementing a defensible water connection standard is a start in the right direction.

Lance Geselbracht

Spence's Way