



District of Lantzville Community Update

SPECIAL EDITION: Community Water Supply Expansion Update
ATTEND THE TOWN HALL MEETING 6:00 pm, Thursday, June 2, 2016 at Costin Hall

May 2016

You're invited to a Town Hall Meeting!

Council invites you to attend a Town Hall meeting that will update the community on the steps taken to date and future steps planned related to the proposed expansion of the municipal water supply in Lantzville.

Join Council and staff from **6:00 pm to 8:00 pm** on **Thursday, June 2, 2016 at Costin Hall, 7232 Lantzville Road**. The Town Hall meeting will begin with a presentation starting at 6:00 pm which will conclude at 6:30 pm. Council, staff, and consultants will be prepared to answer questions from 6:30 pm until the conclusion of the Town Hall meeting at 8:00 pm.

The presentation will include an overview of the:



- Water system history
- Current water system
- Council's initiatives since September 2015
- Proposed Water Master Plan
- Next Steps

Are you interested in the availability of municipal water service for residents in the District of Lantzville? Don't miss this important Town Hall meeting!

District Public Participation Policy

The Town Hall meeting on Community Water Supply Expansion complies with the District of Lantzville Public Participation Policy including:

1. **Access:** Accurate information made available to residents
2. **Transparency:** Open Access
3. **Engagement:** Opportunity to Participate
4. **Communications:** Timely and accurate
5. **Respect:** Open, unbiased information sharing
6. **Integrity:** Decisions based on input from all parties and sound, factual information

Water for our future!



Municipal Water for Lantzville

Attend the Town Hall meeting to hear more about the:

Water System History

- Water Studies (1972 – present)
- Well Drilling Program
- Lantzville/Nanaimo Emergency Agreement
- Lantzville/Nanaimo Water Agreement
- Potential Capacity Increase in the Wellfield
- Well Rehabilitation
- Investigation into current water connection design standards

Water Studies (1972-Present)

A multitude of studies on water issues in the Lantzville area have been completed during the last 40 years for various entities, including:

- Regional District of Nanaimo
- Lantzville Improvement District
- District of Lantzville

Studies have reviewed water supply, storage, treatment and distribution aspects as the District has evolved from a rural settlement to a more urbanized community. The studies reviewed various improvement options within the community including:

- Assessment of groundwater supply
- Investigation of surface water sources
- Connections to neighbouring communities
- Improvements to the storage and distribution system

Common Theme: the District will require more water to allow for new connections.

Water Standards – Current water standards used for planning within the District Water System:

3,400 liters per day per connection

Note: Council is in the process of reviewing current standards.

The current standard:

- Is conservative which results in a theoretical deficit
- Limits the ability to extend the system to meet the proposed service area noted in the Official Community Plan (OCP) boundaries.

Council Initiatives September 2015 to May 2016

1. Requested amendments to the Lantzville/Nanaimo Water Agreement – *Status: Waiting for City of Nanaimo response*
2. Requested staff to re-drill Well #6 and rehabilitate three other wells – *Status: Well #6 completed*
3. Requested staff to review current Water Connection Standards – *Status: To May 25th Council meeting*
4. Developed and issued a Request for Proposals for Water Master Plan 2016 – *Status: RFP closes June 10th*

Well Drilling Program

- Substantial number of wells have been drilled throughout the entire District, including those drilled by developers
- The locations range from the west end of Southwind Drive to the east end of Clark Drive East
- While increased water has been found in the act of well drilling, finding a well with adequate supply and in an accessible location has been difficult

Connection to the City of Nanaimo

The District looked south to Nanaimo and requested an emergency connection that could be used on a temporary basis only. An emergency water connection agreement was developed in 2005 (expiry July 2017), which consisted of two separate underground flush-outs at the District's boundary on Schook Road that can be connected with a metered assembly on an as-needed basis. This connection is meant to meet limited residential demands only, and discussions on a more permanent connection continued.

Nanaimo and Lantzville signed an Agreement in 2014 to allow for water connections with a number of conditions attached (*Amendments requested in 2016*).

Potential Capacity Increase in Wellfield

Field testing and computer modelling resulted in an updated hydrogeologist study which identified a potential increase in the capacity of the Wellfield (2015).

The Wellfield has more capacity than originally thought, and the suggested maximum capacity was estimated to be 2,424 cubic meters per day.

To utilize this supply, replacement of Well #6 and the rehabilitation of the other Wells (works ongoing) was recommended.

Current System

Piping and Storage – Currently the District has: **25** km. of water pipe; **2** storage reservoirs; **4** groundwater supply wells; **2** pressure zones; **1** pressure reducing valve; and **1** booster pump station and chlorination facility.

Connections – There are currently **855** connected customers of which approximately **90%** of the customers are single-family residential dwellings.



Supply System – The District's Harby Road Wellfield is located north of Highway 19. There are 4 main production wells that pump through a dedicated line to the Ware Road Reservoir, which provides gravity flow to the lower pressure zone. Water is chlorinated at the Reservoir prior to distribution and consumption. A booster pump delivers water to the Aulds Road Reservoir, which provides gravity flow to the upper pressure zone. The District's Wellfield is estimated to be able to provide a maximum flow of 2,424 cubic meters per day on a sustainable basis (subject to redevelopment and testing and current standards).

Estimate to Provide Water to Households in the Local Cost Area (Class D Costing: +/- 40%)

Based on the 2015 Water Supply & Distribution System Study by Koers & Associates Engineering Ltd., estimated Class D costing (+/- 40%) to provide water to a household in the local cost area is approximately \$30,000 per household based on 124 households participating and no developer or grant funding. For this example of estimated Class D potential costs, the local cost area includes 124 households in the area of Northwind, Southwind, Westwind and Eastwind. Estimated Class D costing would change based on changes in the variables, e.g. number of households included, developer or grant funding available, etc.

NEXT STEPS

1. What is a Water Master Plan?
2. What will the Water Master Plan identify?
3. What are the limitations of the Water Master Plan?

Attend the June 2, 2016 Town Hall meeting at 6:00 pm at Costin Hall, to hear more about the Water Master Plan.