

Tamara Dakic  
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June 18, 2026

Re: Development Variance Permit PL-DVP-2026-0162

Dear Trustees and Community Members,

We are writing to express our opposition to the proposed Development Variance Permit PL-DVP-2026-0162 to allow the siting of a residential septic system designed and installed by a Registered Wastewater Technician and professional engineer, not less than 22 meters from our well at 5405 Campbell Road.

We have several questions and concerns regarding the application. Since we are not engineers or hydrogeologists, we relied heavily on available government resources and credible Internet sources to research how the proposed setback variance could affect our well and our health.

Here is the list of our questions and concerns. We feel each one is serious enough to warrant rejection of this application.

**1. Why is the proposed system of Type 1 and not of Type 3?**

We were surprised that the proposed septic system is a Type 1 system. In 2009, we retained a professional engineer to design our septic system. Our installation did not require any setback variances. Although our property presumably has very similar conditions (*the soil thickness above bedrock is thin* was even noted in the groundwater engineer's report) to the property next door, the retained engineer concluded that a Type 3 treatment system was the only appropriate option for the site conditions. Based on that professional assessment, we proceeded with the installation of a Type 3 system, which has been in place since then.

Given that history, we would appreciate an explanation of what has changed in terms of regulatory requirements, design criteria, or treatment standards that now makes a Type 1 system appropriate for this property.

**2. Why were analytical equations used for determining our well capture zone when the government Well Protection Toolkit specifies that they should not be used in our aquifer?**

A BC Government document: <https://apps.nrs.gov.bc.ca/gwells/aquifers/438> specifies that the type of the bedrock in our aquifer (aquifer 438) is fractured sedimentary rock.

Another government document: [https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/water-wells/well-protection-toolkit/well\\_protection\\_toolkit\\_step\\_2.pdf](https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/water-wells/well-protection-toolkit/well_protection_toolkit_step_2.pdf) specifies:

*Analytical equations are suitable for sand and gravel aquifers where conditions are uniform and there is sufficient information on the pumping rate, aquifer transmissivity, and water table slope. This method may not work well for fractured bedrock aquifers.*

On page 7 of the same document there is a flowchart on *Figure 2.6 Criteria for Selecting Capture Zone Delineation Methods* which specifies that for fractured bedrock aquifer a professional practitioner should choose:

*Hydrogeological mapping or numerical modelling\* or choose a larger area such as a watershed boundary or boundary of the aquifer as the protection area.*

This leads us to conclusion that our well capture zone was determined using inappropriate methods. Are we missing something?

**3. Failure to identify data for our well and unsubstantiated extrapolation of data.**

Unfortunately, there is no available data for our well. Our repeated attempts to contact Fyfe Well Services in Qualicum Beach, whose sticker is on our well shaft, were all unanswered.

Knowing the data for our well is crucial for even attempting to determine its capture zone and ensuring our health and safety. Instead of investigating our well, the authors extrapolated data of the neighbouring wells without specifying the method used or providing any other scientific explanations.

**4. Clearcutting the land may pose water pollution risks from decaying root systems.**

The applicants recently clearcut the trees and removed all underbrush directly atop the conglomerate bedrock where they now propose to install the septic field. In doing so, the applicants have initiated a biological process where the remaining underground root

networks will inevitably rot and decay within the rock fractures. As these roots decompose, they leave behind open underground channels (preferential flow paths). These channels will allow septic effluent to travel to unknown depths and in unknown directions.

There is no mention of this, or of any assurance that a conventional septic system will operate safely on this altered slope, in the report.

**5. Failure to provide a list of references to sources and methods used in the report.**

For example, how was the estimate of the water table depth of 13m made? How was the depth of our well approximated using the depth of the other wells?

The applicant's report includes a diagram identical to the one found in Step 2 of the BC Government's Well Protection Toolkit, but without a formal citation or adaptation to our specific site conditions. This suggests the report may not have taken into account the unique complexities of conglomerate formations.

**6. Failure to investigate other possible locations for the septic system.**

It seems to us that there is a possible location for the septic field that does not violate any well setbacks.

We would also like to note that the data for 3 of the 5 neighbouring wells is readily accessible, but the authors chose not to ask for the setback variance to one of these. Instead, they chose to position their septic system so it violates the setbacks requirements to the well for which they have no data, which makes the proof of the impact on the health and safety of the proposed septic system questionable.

**7. Discrepancies between the well locations in the submitted documents and the GWELLS database.**

There are discrepancies of the well locations between the submitted documents and the government's GWELLS database:

[https://apps.nrs.gov.bc.ca/gwells/?search=5400%20campbell%20road&result\\_columns=wellTagNumber,identificationPlateNumber,ownerName,streetAddress,legalLot,legalPlan,legalDistrictLot,landDistrict,legalPid,diameter,finishedWellDepth&limit=10&offset=0&ordering=-well\\_tag\\_number&map\\_centre=49.504135,-124.638288&map\\_zoom=16](https://apps.nrs.gov.bc.ca/gwells/?search=5400%20campbell%20road&result_columns=wellTagNumber,identificationPlateNumber,ownerName,streetAddress,legalLot,legalPlan,legalDistrictLot,landDistrict,legalPid,diameter,finishedWellDepth&limit=10&offset=0&ordering=-well_tag_number&map_centre=49.504135,-124.638288&map_zoom=16)

We do not know which of the two sources specify the correct locations of the wells.

In conclusion, we want to emphasize that we are not trying to act as competing technical experts. We are simply pointing out that the applicant's report contains clear, verifiable gaps when measured against BC Provincial standards and the physical reality of the site:

- It applies simplified equations meant for sand and gravel to Aquifer 438, which the Province explicitly classifies as fractured rock.
- It bypasses the mandatory Well Protection Toolkit flowchart requiring advanced mapping or modeling for this specific geology.
- It utilizes recycled, un-attributed government diagrams rather than site-specific fieldwork.
- It does not take into account the unique complexities of a fractured rock system.
- It fails to account for how the applicant's own recent clearcut will create underground channels as the root systems decay beneath the proposed septic field.
- It inappropriately approximates our well data which is then used in critical decisions that can impact our health.

We respectfully request that the approving authority deny or at least defer this application until the applicants submit an additional independently reviewed hydrogeological assessment that reflects the true, dynamic ground water conditions of this site. We also ask that the reviewer be approved by the Islands Trust.

Sincerely,

Tamara Dakic

Stephan Wehner