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**TO:** Regional District of Nanaimo Board      **MEETING:** April 23, 2019  
**FROM:** Paul Thompson  
Manager of Current Planning      **FILE:** Policy B1.21  
**Subject:** Revisions to Policy B1.21 Groundwater assessment requirements for rezoning  
unserved lands and for development permits

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## **RECOMMENDATION**

That the Board endorse the revised Policy B1.21 to improve clarity and streamline requirements for groundwater assessments for rezoning un-served lands and for development permits.

## **SUMMARY**

Regional District of Nanaimo (RDN) Policy B1.21 pertains to groundwater assessment requirements for rezoning un-served lands. The current policy came into effect February 22, 2011. Since that time, there has been direction from the Province through the Water Sustainability Act in terms of providing guidance on groundwater assessments. The current Policy has generated confusion among many applicants and would benefit from a revision to improve clarity.

## **BACKGROUND**

This policy revision was considered by the Electoral Area Services Committee (EASC) at its March 12, 2019 meeting and recommended that the Board endorse the revised policy. The Board considered the policy revisions at its March 26, 2019 meeting. Due to questions regarding the background to support the requirement of 3.5 m<sup>3</sup> per day for new residential lots referred, this policy was referred back to staff. Additional background on the 3.5 m<sup>3</sup> provision is provided on the following page.

The un-served areas of the RDN rely on groundwater as the primary water source to support development. Groundwater conditions vary across the region and site-specific assessments are required to determine if water needs for proposed parcels or uses can be met, while minimizing impact on existing groundwater users, hydraulically-connected streams and the long-term health of the aquifer.

The RDN's existing Policy B 1.21 requires an update to improve clarity and to incorporate new Provincial guidance and requirements under the *Water Sustainability Act*.

The groundwater assessment referenced in this Policy must be performed by a qualified professional with competency in hydrogeology. Generally, a desktop assessment reviewing all available relevant information is sufficient, unless the professional deems a pumping test is

needed in order to satisfactorily provide an opinion on minimum year-round water supply and anticipated impacts or lack thereof.

The RDN's Drinking Water and Watershed Protection (DWWP) program works to improve data availability in our region, pertaining to water resources including groundwater and surface water, through monitoring and scientific study. The information available through the DWWP helps to expedite the assessment process as there is increased background data available to inform desktop reviews.

This policy revision has received the input of the RDN Drinking Water and Watershed Protection Technical Advisory Committee (sub-committee specifically tasked with this review met 3 times), Development Services staff (worked through 9 revisions), and three professional hydrogeologist reviewers.

Key revisions to the policy include:

- Re-ordering of items in the Policy to improve readability and clarity of sequence;
- Flow charts that show when in the zoning amendment process hydrogeological related information is required;
- A checklist based on Provincial guidance documents to outline what is expected to be reviewed in a hydrogeological (groundwater) assessment. This provides clarity for the applicant, the professional and for RDN staff reviewing the report;
- Checklist also applies to development permit applications that require hydrogeological assessments for added consistency;
- Links to information sources to support desktop assessments.

One key item in the policy that is unchanged in this revision is the requirement for confirming 3.5 m<sup>3</sup> (3,500 litres) per day, year-round available per parcel. This figure is not a reflection of anticipated residential water use; rather it is a metric to demonstrate there will be sufficient groundwater available at that site to support future demands. There was much discussion and contemplation on the minimum volume required during the policy revision process. Three main considerations led to the decision to retain 3.5 m<sup>3</sup> per day year-round as the required volume:

1. Quantity requirements from other jurisdictions in BC were reviewed to see how 3.5 m<sup>3</sup> per day compared to other regions' requirements.
  - Required volumes range from 2.2 m<sup>3</sup> per day year-round (Columbia Shuswap Regional District) to 6.5 m<sup>3</sup> per day year-round (Regional District of North Okanagan).
2. With the uncertainty of water availability in a changing climate, requiring a higher volume of water to be proven at time of rezoning means holding the development to a higher burden of proof which will ultimately provide more resilience in the face of regional drought conditions (i.e. 3.5 m<sup>3</sup> per day year-round might be readily confirmed in 2019 but as climate conditions change – including drier winters and longer summer droughts as is

projected and occurring – groundwater availability could potentially turn out to be significantly less than 3.5 m<sup>3</sup> in 2030 and beyond, for example).

3. After re-zoning and subdivision are approved, there is potential for two dwelling units on each parcel and the addition of secondary suites. By maintaining a 3.5 m<sup>3</sup> per day year-round requirement, there is a volumetric safeguard should additional dwellings require water at that site after the re-zoning and subdivision process. The 2.5 m<sup>3</sup> per day required by the Ministry of Transportation and Infrastructure at the time of subdivision is based on one dwelling per lot and does not account for additional dwellings that may be permitted under RDN zoning.

In summary, the revised Policy B1.21 improves the clarity of the groundwater requirements for rezoning applications on un-served lands in the RDN, and maintains a standard of technical information required to provide a qualified opinion on the likelihood of obtaining an adequate supply of potable water without compromising water resource sustainability, existing water users and hydraulically-connected streams.

## **ALTERNATIVES**

1. That the Board endorse the revised Policy B1.21 to improve clarity and streamline requirements for groundwater assessments for rezoning un-served lands and for development permits.
2. That the Board provide alternate direction.

## **FINANCIAL IMPLICATIONS**

There are no financial implications associated with this policy update.

## **STRATEGIC PLAN IMPLICATIONS**

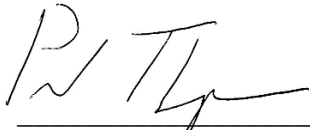
This revised policy helps to achieve several strategic priorities:

*We will ensure our processes are as easy to work with as possible.*

*We recognize the importance of water in supporting our economic and environmental health.*

*We will have a strong focus on protecting and enhancing our environment in all decisions.*

*We will include conservation of resources as a planning factor.*



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April 11, 2019

Reviewed by:

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- G. Garbutt General Manager, Strategic and Community Development
- P. Carlyle, Chief Administrative Officer

Attachment:

1. Policy B1.21 Hydrogeological assessment requirements for rezoning unserved lands and development permits