



File No.: SS-RZ-2017.3

DATE OF MEETING: December 14, 2021

TO: Salt Spring Island Local Trust Committee

FROM: Geordie Gordon, Planner 2  
Salt Spring Island Team

COPY: Stefan Cermak, Regional Planning Manager

SUBJECT: Rezoning for second dwelling unit.  
Applicant: Jamie Colligan and Robyn Kelln  
Location: 2188 North End Rd.

## RECOMMENDATION

1. That the Saltspring Island Local Trust Committee Bylaw No. 521, cited as "Salt Spring Island Land Use Bylaw, 1999, Amendment No. 4, 2019" be read a first time.
2. That the Saltspring Island Local Trust Committee request that staff refer Bylaw No. 521 to agencies, organizations, and Local Trust Committees, as identified in the staff report dated December 14, 2021.
3. That the Salt Spring Island Local Trust Committee has reviewed the Directives Only Policy Checklist and determined that proposed Draft Bylaw No. 521 is not contrary to or at variance with the Islands Trust Policy Statement.
4. That the Salt Spring Island Local Trust Committee request staff refer the potable water assessment report dated September 2021 to the Ministry of Forests, Lands, Natural Resource Operations & Rural Development for comment, specifically on sustainable yield and the likelihood of hydraulic connection.

## REPORT SUMMARY

This report brings forward well pumping test information that was requested by the Salt Spring Island Local Trust Committee (SS LTC). The report also brings forward a draft bylaw to rezone the subject property to permit an affordable housing dwelling unit with other covenants to follow in subsequent staff reports. Staff recommend giving first reading and referral of the draft bylaw.

## BACKGROUND

The application is proceeding as a result of over a decade of Bylaw Compliance and Enforcement action on the unlawful residential use of an accessory building. The applicant is seeking to make lawful the residential use of the structure through the rezoning process.

The SS LTC has considered the application previously. The following resolutions were passed by the SS LTC at their December 2019 meeting:

**SS-2019-284****It was MOVED and SECONDED,**

that the Salt Spring Island Local Trust Committee request staff to prepare a draft bylaw to amend Salt Spring Island Land Use Bylaw, 1999 to rezone Lot 3, Section 7, Range 1, North Salt Spring Island, Cowichan District, Plan 34166 from Rural to a new Rural zone variant in order to permit a second dwelling unit for affordable housing.

**CARRIED**

**SS-2019-285****It was MOVED and SECONDED,**

that the Salt Spring Island Local Trust Committee request that the applicant provide a report from a Professional Engineer or Professional Geoscientist with relevant experience containing the following:

1. A new pump test conducted confirming adequate supply of potable water with a minimum duration of 12 hours. The pump test should have automatic water level readings during pumping and recovery using a data logger. At least one neighbouring well should be monitored during the entirety of the pump test, including during the recovery period.
2. A qualified professional should confirm that the well head meets the Groundwater Protection Regulation, including that it is appropriately sealed from surface water intrusion, that surface water drains away from the well head, and that the well is not vulnerable to contamination.

**CARRIED**

**SS-2019-286****It was MOVED and SECONDED,**

that the Salt Spring Island Local Trust Committee request staff to enter into a cost recovery agreement with J. Colligan and R. Kelln for Islands Trust legal review of a Housing agreement and Land Title Act Section 219 covenant providing the following requirements:

1. Provision of affordable housing in the dwelling unit at a rate of \$1150 per month plus increases in accordance with the Consumer Price Index for Greater Victoria;
2. Installation and continued use of Environmental Protection Agency WaterSense® certified plumbing fixtures, including bathroom faucet, showerhead, and toilet; and
3. Installation and continued use of EnergyStar® certified appliances, including washer, dryer, dishwasher, refrigerator.
4. Discharge the existing covenant restricting use of the second dwelling.

**CARRIED**

**SS-2019-287****It was MOVED and SECONDED,**

that the Salt Spring Island Local Trust Committee discharge covenant EF117631 from Lot 3 Section 7 Range 1 North Salt Spring Island Cowichan District Plan 34166.

**CARRIED**

Following the above resolutions, staff had difficulty obtaining the information requested in resolution SS-2019-285 (Dec. 2019). At their meeting in February 2021, the SS LTC passed the following resolution:

**SS-2021-046**

**It was MOVED and SECONDED,**

That the Salt Spring Island Local Trust Committee direct staff to work with the applicant of SS-RZ-2017.3 to address issues related to monitoring a neighbouring well.

**CARRIED**

## **ANALYSIS**

### **Policy/Regulatory**

#### ***Islands Trust Policy Statement:***

Staff have reviewed the Islands Trust Policy Statement (ITPS) and highlighted five policies that relate to the application:

- 4.4.2 Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure neither the density nor intensity of land use is increased in areas which are known to have a problem with the quality or quantity of the supply of freshwater, water quality is maintained, and existing, anticipated and seasonal demands for water are considered and allowed for.
- 5.2.3 Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address policies related to the aesthetic, environmental and social impacts of development.
- 5.2.4 Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address any potential growth rate and strategies for growth management that ensure that land use is compatible with preservation and protection of the environment, natural amenities, resources and community character.
- 5.2.5 Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means for achieving efficient use of the land base without exceeding any density limits defined in their official community plans.
- 5.8.6 Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address their community's current and projected housing requirements and the long-term needs for educational, institutional, community and health-related facilities and services, as well as the cultural and recreational facilities and services.

See Appendix 1 for a full assessment of ITPS Directives Only Checklist.

#### ***Official Community Plan:***

Staff have provided Official Community Plan policies and analysis in previous staff reports, but re-highlight the following:

- Affordable housing is strongly encouraged and supported to address a variety of housing needs within a framework that limits growth and protects the natural environment.
- Any application that proposes an increase in water use should include evidence that existing wells, springs, and neighbouring uses will not be affected.

- Rezoning applications that propose increased density should address climate change and include energy and water efficient features.

### **Land Use Bylaw:**

Staff have drafted a Rural zone variant bylaw amendment (Appendix 2) to incorporate previous staff report analysis and information including the following Land Use Bylaw definition:

**“dwelling unit, affordable housing”** is a deed restricted and/or a rent controlled dwelling unit that is secured by a housing agreement registered on title, and may include special needs housing and seniors dwelling units.

Previous staff reports considered limiting the floor area of the structure to the existing 70 m<sup>2</sup>. If the LTC wishes to provide more future flexibility to expand this structure, 90 m<sup>2</sup> is consistent with recent bylaws, such as Bylaw No. 512 – though this expanded floor area is predicated on the provision of a potable rainwater collection system and a larger property area.

### **Issues and Opportunities**

#### *Potable Water*

The applicant has provided a new pump test report prepared by Dave Gooding, P. Eng. confirming adequate supply of potable water with a 12 hour pump test conducted by Streamline Plumbing (Appendix 3). The report found:

*“None of the drawdowns of the tested well before, during, or after the pumping test appear to have any effect on the smooth recovery curves of the observation well. There was no observable interference between these two wells.*

*The tested well #44431 has been supplying water to both the residences on the subject property for over 30 years. The proposed rezoning, and allowing continued relatively small domestic use withdrawals from the tested well by the second residence should not have any negative impact on existing neighboring groundwater use.”*

The provided report fulfils the SS LTC resolution requesting such information. While staff do not have obvious concerns with the provided report, in order to facilitate analysis of the provided data, staff consider that referral of the report to Ministry of Forests, Lands, Natural Resource Operations & Rural Development (FLNRORD) for additional comment as noted in the recommendation is judicious and could be conducted during the bylaw referral period.

#### *Affordable Housing*

This application is proceeding primarily on the basis of the provision of affordable housing. As per previous SS LTC direction, the second dwelling unit rent is to be controlled through a housing agreement. At time of this report, staff have submitted a legal services request to determine the cost as a basis for entering into the cost recovery agreement. This legal review also includes the requested Land Title Act Section 219 covenant to ensure certain energy- efficient upgrades are made the second dwelling. A draft bylaw should be presented for SS LTC consideration at the same time as the current bylaw 521 is considered for second reading. The housing agreement bylaw is administrative in nature so it can be given multiple readings at once. No Public Hearing will be scheduled until staff have received a draft housing bylaw and covenant for SS LTC review.

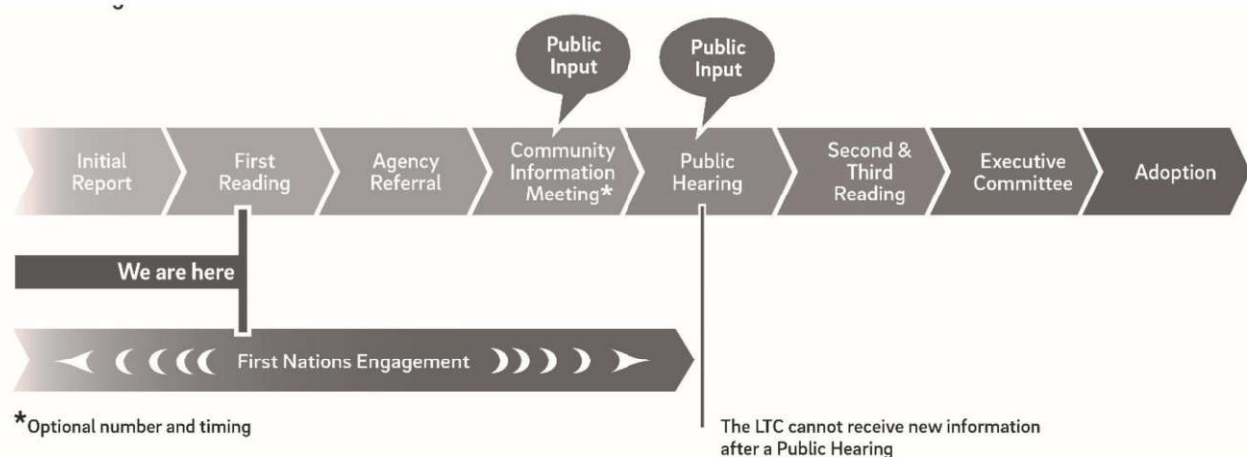
## Consultation

Referrals of rezoning bylaws to agencies, organizations and First Nations typically occur at time of first reading. If given first reading, staff recommend Bylaw No. 521 be referred to the following agencies and groups:

<b>Provincial Agencies</b>	<ul style="list-style-type: none"> <li>▪ BC Assessment Authority</li> <li>▪ Ministry of Municipal Affairs</li> <li>▪ Ministry of Transportation &amp; Infrastructure</li> <li>▪ Ministry of Forest Lands, Natural Resource Operations and Rural Development Water Authorizations</li> <li>▪ BC Transit</li> </ul>
<b>Regional Agencies</b>	<ul style="list-style-type: none"> <li>▪ CRD – All Referrals &amp; K. Campbell (SSI Senior Manager)</li> <li>▪ CRD – SSI Building Inspection</li> <li>▪ CRD – Housing Secretariat</li> <li>▪ Vancouver Island Health Authority</li> <li>▪ Islands Trust Bylaw Enforcement and Compliance</li> </ul>
<b>Non-Agencies/Groups</b>	<ul style="list-style-type: none"> <li>▪ BC Ambulance Service</li> <li>▪ North Salt Spring Waterworks District</li> <li>▪ RCMP</li> <li>▪ SSI Fire-Rescue</li> </ul>
<b>Adjacent Local Trust Committees and Municipalities</b>	<ul style="list-style-type: none"> <li>▪ Galiano Island Local Trust Committee</li> <li>▪ Mayne Island Local Trust Committee</li> <li>▪ North Pender Island Local Trust Committee</li> <li>▪ Thetis Island Local Trust Committee</li> <li>▪ Cowichan Valley Regional District</li> </ul>

## Timeline

If the SS LTC resolves to give first reading to Bylaw 521, the remaining rezoning process is represented by the following graphic:



The SS LTC has previously received correspondence on this application, which is available on the Islands Trust website: <https://islandstrust.bc.ca/island-planning/salt-spring/current-applications/>. No additional

correspondence has been received at the time of preparing this report, but may be received before or during the LTC meeting. Correspondence may be sent to [ssiiinfo@islandstrust.bc.ca](mailto:ssiinfo@islandstrust.bc.ca) .

### **Protocols**

Staff have not identified any Islands Trust, [Islands Trust Conservancy](#) or Local Trust Committee agreements as relevant to the consultation/engagement process (i.e. protocols, MOUs, LOAs).

### **Agencies**

Agency referrals have been noted above.

### **First Nations**

No areas of First Nations interest or concern are known by staff at time of this report. Staff have not identified this bylaw amendment to be of significant interest to First Nations, and in an attempt to be respectful of not over burdening First Nations staff in receiving and responding to a referral, have not recommended referral at this time. Islands Trust planning staff are working with the Islands Trust Senior Governmental Policy Advisor to determine if and when referral to First Nations might be relevant and will update the SS LTC as necessary.

### **Rationale for Recommendation**

The SS LTC has previously asked staff to draft a bylaw, which has been brought forward with this report. Unless the SS LTC has concerns about the provided potable water report, staff recommend advancing first reading of the bylaw.

## **ALTERNATIVES**

The LTC may wish to consider the following alternatives to the staff recommendation:

### **1. Request further information**

The LTC may request further information prior to making a decision. Staff advise that the implications of this alternative are increased processing time and potentially increased cost to the applicant. If selecting this alternative, the LTC should describe the specific information needed and the rationale for this request. Recommended wording for the resolution is as follows:

*That the Salt Spring Island Local Trust Committee request that the applicant submit to the Islands Trust an [report type] completed by a [professional credential], which identifies [impact].*

### **2. Deny the application**

The LTC may deny the application. Staff advise that the implications of this alternative are file closure and resumed Bylaw Compliance and Enforcement activity. If this alternative is selected, the LTC should state the reasons for denial. Recommended wording for the resolution is as follows:

*That the Salt Spring Island Local Trust Committee deny application SS-RZ-2017.3 for the following reasons [insert reasons, e.g. the proposed increased density is contrary to Official Community Plan policies].*

## **NEXT STEPS**

If the SS LTC accepts staff recommendation, the draft bylaw will be referred to the noted agencies and groups.

Submitted By:	Geordie Gordon, Planner 2	November 26, 2021
Concurrence:	Stefan Cermak, Regional Planning Manager	November 30, 2021

**ATTACHMENTS:**

1. ITPS Directives Only Checklist.
2. Draft Bylaw No. 521.
3. Potable water assessment.



Islands Trust

## ISLANDS TRUST POLICY STATEMENT DIRECTIVES ONLY CHECKLIST

File No.: SS-RZ-2017.3

### PURPOSE

To provide staff with the Directives Only Checklist to highlight issues addressed in staff reports and as a means to ensure Local Trust Committees address certain matters in their official community plans and regulatory bylaws, Island Municipalities address certain matters in their official community plans, and to reference any relevant sections of the Policy Statement.

### POLICY STATEMENT

The Policy Statement is comprised of several parts. Parts I and II outline the purpose, the Islands Trust object, and Council's guiding principles. Parts III, IV and V contain the goals and policies relevant to ecosystem preservation and protection, stewardship of resources and sustainable communities.

There are three different kinds of policies within the Policy Statement as follows:

- Commitments of Trust Council which are statements about Council's position or philosophy on various matters;
- Recommendations of Council to other government agencies, non-government organizations, property owners, residents and visitors; and
- Directive Policies which direct Local Trust Committees and Island Municipalities to address certain matters.

### DIRECTIVES ONLY CHECKLIST

The Policy Statement Directives Only Checklist is based on the directive policies from the Policy Statement (Consolidated April 2003) which require Local Trust Committees to address certain matters in their official community plans and regulatory bylaws and Island Municipalities to address certain matters in their official community plans in a way that implements the policy of Trust Council.

Staff will use the Policy Statement Checklist (Directives Only) to review Local Trust Committee and Island Municipality bylaw amendment applications and proposals to ensure consistency with the Policy Statement. Staff will add the appropriate symbol to the table as follows:

- ✓ if the bylaw is consistent with the policy from the Policy Statement, or
- ✗ if the bylaw is inconsistent (contrary or at variance) with a policy from the Policy Statement, or
- N/A if the policy is not applicable.



### PART III: POLICIES FOR ECOSYSTEM PRESERVATION AND PROTECTION

CONSISTENT	No.	DIRECTIVE POLICY
	<b>3.1</b>	<b>Ecosystems</b>
N/A	<b>3.1.3</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and protection of the environmentally sensitive areas and significant natural sites, features and landforms in their planning area.
N/A	<b>3.1.4</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning, establishment, and maintenance of a network of protected areas that preserve the representative ecosystems of their planning area and maintain their ecological integrity.
N/A	<b>3.1.5</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the regulation of land use and development to restrict emissions to land, air and water to levels not harmful to humans or other species.
	<b>3.2</b>	<b>Forest Ecosystems</b>
N/A	<b>3.2.2</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of unfragmented forest ecosystems within their local planning areas from potentially adverse impacts of growth, development, and land-use.
	<b>3.3</b>	<b>Freshwater and Wetland Ecosystems and Riparian Zones</b>
✓	<b>3.3.2</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means to prevent further loss or degradation of freshwater bodies or watercourses, wetlands and riparian zones and to protect aquatic wildlife.
	<b>3.4</b>	<b>Coastal and Marine Ecosystems</b>
N/A	<b>3.4.4</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of sensitive coastal areas.
N/A	<b>3.4.5</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning for and regulation of development in coastal regions to protect natural coastal processes.

### PART IV: POLICIES FOR THE STEWARDSHIP OF RESOURCES

CONSISTENT	No.	DIRECTIVE POLICY
	<b>4.1</b>	<b>Agricultural Land</b>
N/A	<b>4.1.4</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and preservation of agricultural land for current and future use.
N/A	<b>4.1.5</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the preservation, protection, and encouragement of farming, the sustainability of farming, and the relationship of farming to other land uses.
N/A	<b>4.1.6</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the use of adjacent properties to minimize any adverse affects on agricultural land.
	<b>4.1.7</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the design of road systems and servicing corridors to avoid agricultural lands unless the need for roads outweighs agricultural considerations, in which case appropriate mitigation measures shall be required to derive a net benefit to agriculture.
N/A	<b>4.1.8</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address land uses and activities that support the economic viability of farms without compromising the agriculture capability of agricultural land.
N/A	<b>4.1.9</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the use of Crown lands for agricultural leases.
	<b>4.2</b>	<b>Forests</b>
N/A	<b>4.2.6</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the need to protect the ecological integrity on a scale of forest stands and landscapes.
N/A	<b>4.2.7</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the retention of large land holdings and parcel sizes for sustainable forestry use, and the location and construction of roads, and utility and communication corridors to minimize the fragmentation of forests.
N/A	<b>4.2.8</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the designation of forest ecosystem reserves where no extraction will take place to ensure the preservation of native biological diversity.
CONSISTENT	No.	DIRECTIVE POLICY

	<b>4.3</b>	<b>Wildlife and Vegetation</b>
	<b>4.4</b>	<b>Freshwater Resources</b>
✓	<b>4.4.2</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure neither the density nor intensity of land use is increased in areas which are known to have a problem with the quality or quantity of the supply of freshwater, water quality is maintained, and existing, anticipated and seasonal demands for water are considered and allowed for.
✓	<b>4.4.3</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address measures that ensure water use is not to the detriment of in-stream uses
	<b>4.5</b>	<b>Coastal Areas and Marine Shorelands</b>
N/A	<b>4.5.8</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the needs and locations for marine dependent land uses.
N/A	<b>4.5.9</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the compatibility of the location, size and nature of marinas with the ecosystems and character of their local planning areas.
N/A	<b>4.5.10</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the location of buildings and structures so as to protect public access to, from and along the marine shoreline and minimize impacts on sensitive coastal environments.
N/A	<b>4.5.11</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address opportunities for the sharing of facilities such as docks, wharves, floats, jetties, boat houses, board walks and causeways.
	<b>4.6</b>	<b>Soils and Other Resources</b>
N/A	<b>4.6.3</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of productive soils.

## PART V: POLICIES FOR SUSTAINABLE COMMUNITIES

CONSISTENT	NO.	DIRECTIVE POLICY
	<b>5.1</b>	<b>Aesthetic Qualities</b>
N/A	<b>5.1.3</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the protection of views, scenic areas and distinctive features contributing to the overall visual quality and scenic value of the Trust Area.
	<b>5.2</b>	<b>Growth and Development</b>
N/A	<b>5.2.3</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address policies related to the aesthetic, environmental and social impacts of development.
✓	<b>5.2.4</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address any potential growth rate and strategies for growth management that ensure that land use is compatible with preservation and protection of the environment, natural amenities, resources and community character.
✓	<b>5.2.5</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address means for achieving efficient use of the land base without exceeding any density limits defined in their official community plans.
N/A	<b>5.2.6</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of areas hazardous to development, including areas subject to flooding, erosion or slope instability, and strategies to direct development away from such hazards.
	<b>5.3</b>	<b>Transportation and Utilities</b>
N/A	<b>5.3.4</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the development of a classification system of rural roadways, including scenic or heritage road designations, in recognition of the object of the Islands Trust.
N/A	<b>5.3.5</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the impacts of road location, design, construction and systems.
N/A	<b>5.3.6</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the designation of areas for the landing of emergency helicopters.
N/A	<b>5.3.7</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the development of land use patterns that encourage establishment of bicycle paths and other local and inter-community transportation systems that reduce dependency on private automobile use.
	<b>5.4</b>	<b>Disposal of Waste</b>
N/A	<b>5.4.4</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of acceptable locations for the disposal of solid waste.
CONSISTENT	NO.	DIRECTIVE POLICY

	<b>5.5</b>	<b>Recreation</b>
N/A	<b>5.5.3</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the prohibition of destination gaming facilities such as casinos and commercial bingo halls.
N/A	<b>5.5.4</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the location and type of recreational facilities so as not to degrade environmentally sensitive areas, and the designation of locations for marinas, boat launches, docks and anchorages so as not to degrade sensitive marine or coastal areas.
N/A	<b>5.5.5</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification of sites providing safe public access to beaches, the identification and designation of areas of recreational significance, and the designation of locations for community and public boat launches, docks and anchorages.
N/A	<b>5.5.6</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification and designation of areas for low impact recreational activities and discourage facilities and opportunities for high impact recreational activities.
N/A	<b>5.5.7</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the planning for bicycle, pedestrian and equestrian trail systems.
	<b>5.6</b>	<b>Cultural and Natural Heritage</b>
N/A	<b>5.6.2</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the identification, protection, preservation and enhancement of local heritage.
N/A	<b>5.6.3</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address the preservation and protection of the heritage value and character of historic coastal settlement patterns and remains.
	<b>5.7</b>	<b>Economic Opportunities</b>
N/A	<b>5.7.2</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address economic opportunities that are compatible with conservation of resources and protection of community character.
	<b>5.8</b>	<b>Health and Well-being</b>
✓	<b>5.8.6</b>	Local Trust Committees and Island Municipalities shall, in their official community plans and regulatory bylaws, address their community's current and projected housing requirements and the long-term needs for educational, institutional, community and health-related facilities and services, as well as the cultural and recreational facilities and services.

	<b>POLICY STATEMENT COMPLIANCE</b>
✓	<b><i>In compliance with Trust Policy</i></b>
	<b><i>Not in compliance with Trust Policy for the following reasons:</i></b>

# DRAFT

## SALT SPRING ISLAND LOCAL TRUST COMMITTEE BYLAW NO. 521

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### A BYLAW TO AMEND SALT SPRING ISLAND LAND USE BYLAW, 1999

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The Salt Spring Island Local Trust Committee, being the Trust Committee having jurisdiction in respect of the Salt Spring Island Local Trust Area under the *Islands Trust Act*, enacts as follows:

1. Citation

This bylaw may be cited for all purposes as “Salt Spring Island Land Use Bylaw, 1999, Amendment No. 4, 2019”.

2. Salt Spring Island Local Trust Committee Bylaw No. 355, cited as “Salt Spring Island Land Use Bylaw, 1999,” is amended as follows:

- 2.1 By inserting in Subsection 9.10.4 - Exceptions in Particular Locations - the following new Rural Zone Variation (q) - R(q) after Zone Variation R(p):

“Zone Variation – R(q)

- (24) In addition to the regulations of Section 9.10.1, on lands zoned R(q), the following use is allowed:

1 *affordable dwelling unit* with a *floor area* not exceeding 70 m<sup>2</sup> is permitted as an *accessory* use:

- (25) Despite the provisions of Section 3.13, on lands zoned R(q), *bed and breakfast* operations are not permitted within an *affordable dwelling unit*.”

And by making consequential numbering alterations to effect this change.

- 2.2 By changing the zoning classification of Lot 3, Section 7, Range 1, North Salt Spring Island, Cowichan District, Plan 34166 from Rural (R) to Rural (q), as shown on Plan No. 1 attached to and forming part of this bylaw, and by making such alterations to Schedule “A” of Bylaw No. 355 as are required to effect this change.

READ A FIRST TIME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_

READ A SECOND TIME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_

PUBLIC HEARING HELD THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_

READ A THIRD TIME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_

APPROVED BY THE EXECUTIVE COMMITTEE OF THE ISLANDS TRUST THIS

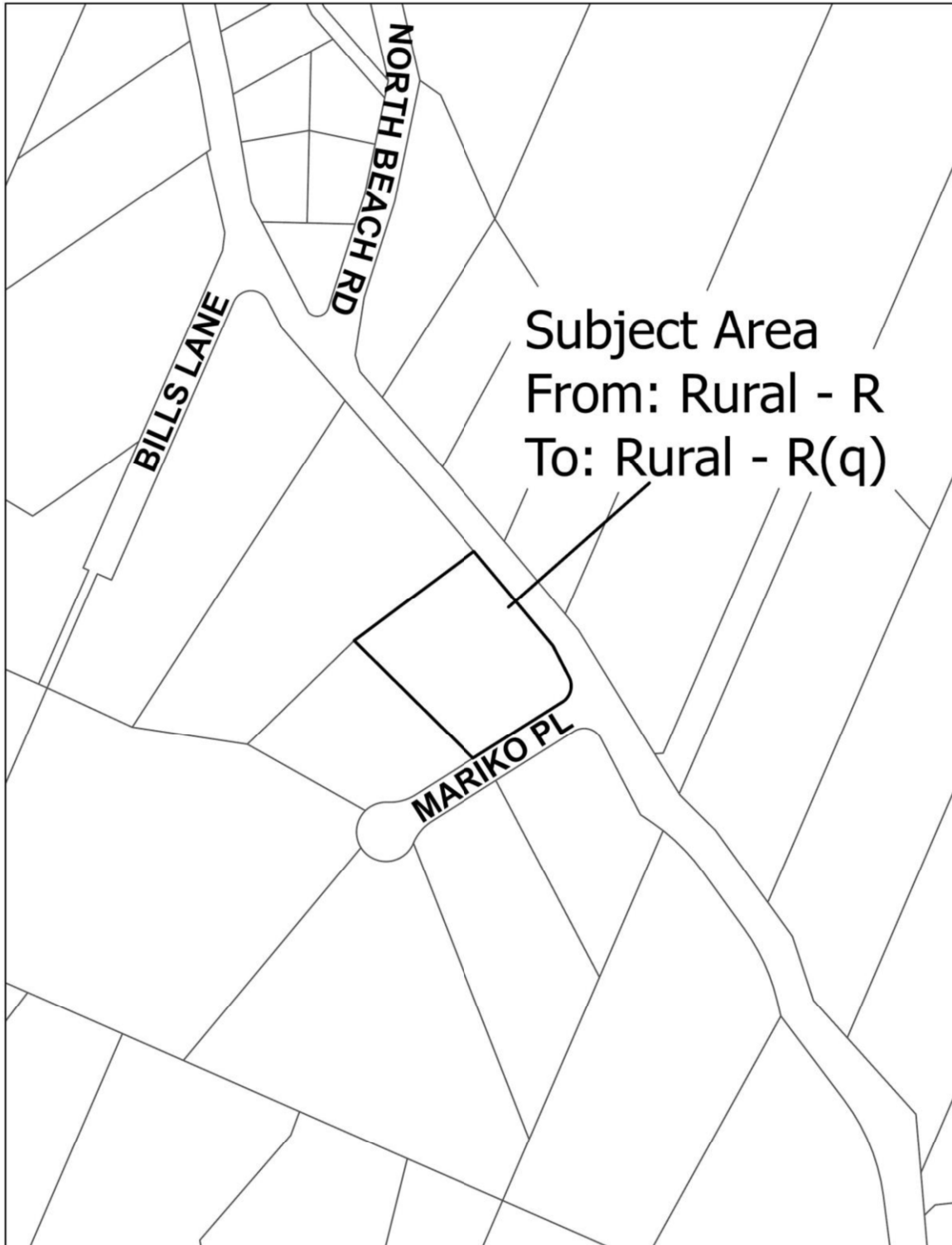
\_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_

ADOPTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_

\_\_\_\_\_  
Chair

\_\_\_\_\_  
Secretary

PLAN NO. 1



**Gooding  
Hydrology**



**POTABLE WATER ASSESSMENT  
On Well #44431 at  
2188 N End Road, SSI**

**For  
Robyn Kelln**



**By  
Dave Gooding, P.Eng.  
Gooding Hydrology  
Saltspring Island**

**September 2021**

## Background

The property at 2188 North End Road has a second smaller residence, constructed around 35 years ago, which is not legal under the Islands Trust (IT) bylaws. In order to retain this second residence, and to commit it to low income housing use, one of the requirements given by IT is that there must be an adequate potable water supply for two rural residential lots. IT bylaw 355 sets this amount at 1600 liters/day (L/day) per lot. The amount which must be proved is therefore 3200 L/day, or 2.2 L/min.

Gooding Hydrology was retained to do additional testing of the well (tag #44431) on 2188 North End Road, which has been utilized by both residences. A previous four hour well pumping test was done by H2O Environmental, with Streamline Plumbing. Islands Trust raised concerns about the short duration of the pump test, and about potential effects of use of the well by two residences on neighboring wells.

Well #44431 was drilled in 1980 to 350 ft (106.7 m) through sandstone with shale seams, shale, sandstone with shale seams, and ending in shale. The well driller estimated yield at 1 US gallon/minute (GPM). Well log from the BC Groundwater database is attached as appendix 1.

## Test Method

Pressure depth sensors were installed August 4, the day before the pump test, in both well #44431 being tested and in a monitoring well #46504, located approximately 65 m to the northwest on neighboring 2190 N End Rd. Well #46504 was monitored to determine if withdrawals from the tested well #44431 had an effect on water levels in neighboring wells. The monitored well #46504 is 325 feet deep, into similar lithology of black and brown shale as the well being tested. The well log from the BC Groundwater database is attached as appendix 2.

The 12 hour pump test was performed by Streamline Plumbing from 9 a.m. to 9 p.m. August 5 at a constant flow of 3 Lpm. Standard manual water level drawdown readings were taken for the 12 hour test and 2 hours initial recovery. After a brief additional 1 hour pump the data loggers were removed at around 2 p.m. the following day August 6. The manual drawdown measurements data sheet is attached as appendix 3.

Due to a miscommunication between the pump test techs and the property owner, normal water use by the household was resumed at around 7 p.m. the day of the test, resulting in steep drawdowns in the tested well. Therefore only just under 10 hours of the drawdown data from the pump test was valid and utilized.

During the period the loggers were installed the observation well at 2190 N End Rd was drawn down up to 40 m to fill their cistern. These drawdowns can also be used to determine if there is interference between the two wells, if withdrawals from one well affect levels in the other.



## Results

The full manual readings drawdown and recovery data is attached as appendix 3. Graphs of both the manual and pressure sensor derived drawdown and recovery of the pumping test are shown below.

Figure 1: Well test manual readings btoc

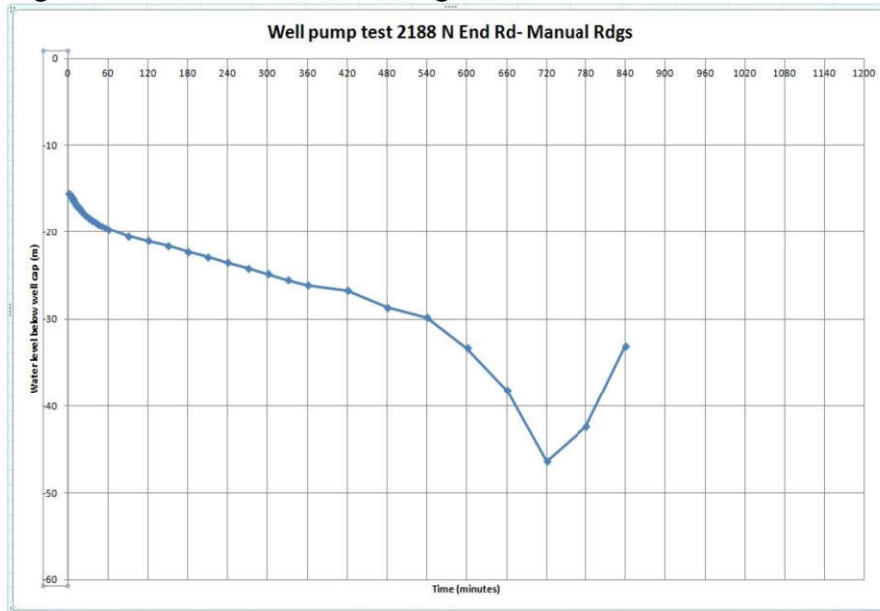
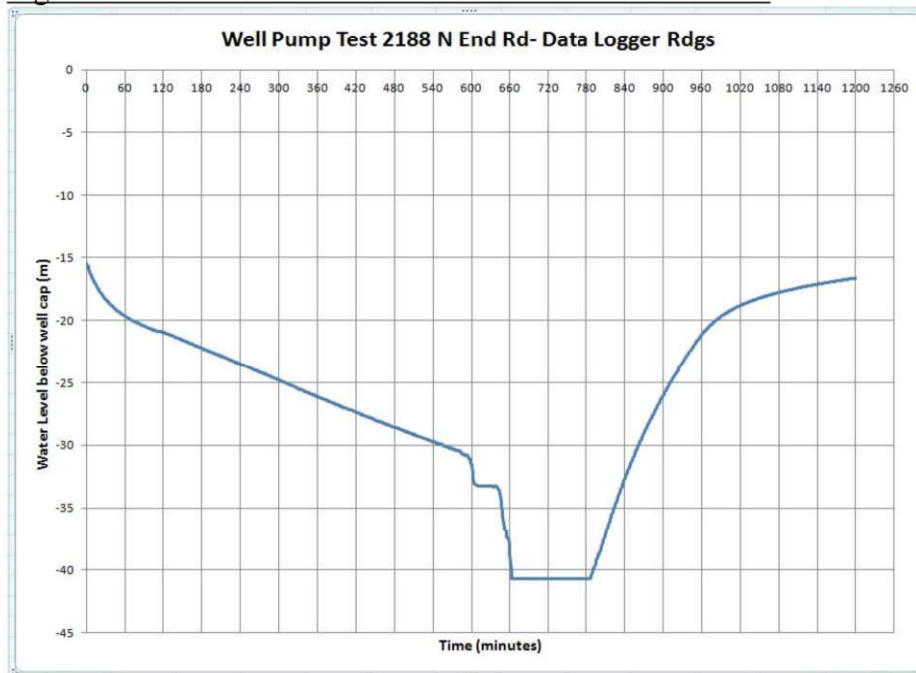


Figure 2: Pressure sensor derived well test water levels btoc



Note that pressure sensor readings show household withdrawals just before the 600 minute/10 hour manual reading, giving an invalid 10 hour manual reading. In order to

have a longer period of valid test data, of just less than 10 hours, (595 min) the pressure sensor derived data is used for the calculation of the well's specific capacity and the 100 day extrapolation. Static level at the beginning of the pump test was 15.5 m btoc. Water level at 595 minutes into the pump test was 30.87 m btoc, giving a drawdown of  $30.87 - 15.55 = 15.32$  m.

#### Recovery

From manual rdg data, the maximum drawdown of 46.37 m below top of well casing (btoc) – 15.5 m btoc static level = 30.87 m, resulting from both the 3 Lpm test flow and household use, is shown on the upper manual rdgs graph. From sensor data, the well recovered to 26.5 m btoc in the first three hrs, or  $46.37 - 26.5 = 19.8$  m. This is  $\frac{2}{3}$  of the max drawdown, a moderate recovery rate.

#### Long term yield by 100-day extrapolation

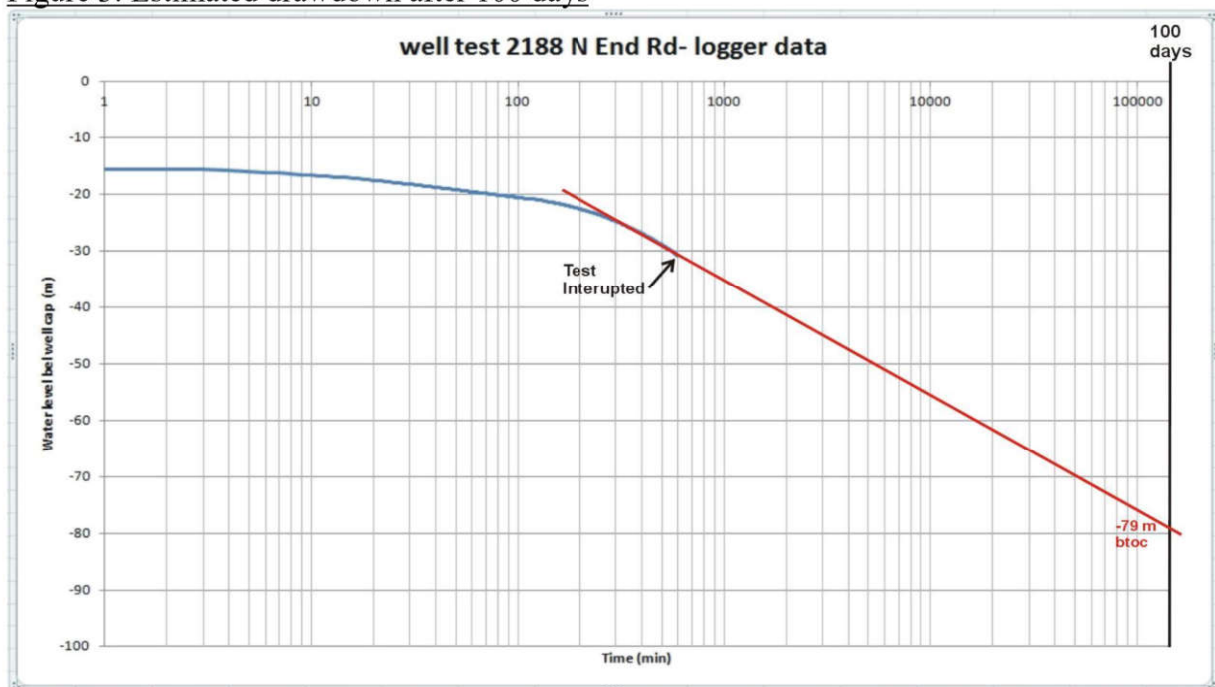
From the H2O Env'tal report, the well pump is at approximately 104 m btoc. With a static level at the start of test of 15.55 m btoc, this gives an available drawdown of 88.45 m. A semi-log graph of the well test data is extrapolated to 100 days, and the drawdown at 100 days estimated. Specific capacity, in Lpm/meter, is calculated by dividing the test flow rate by the 100 day drawdown. Multiplying the specific capacity by 70 % (safety factor) of the available drawdown gives a theoretical well capacity. If this is above the tested flow rate, the long term yield or well capacity is rated as the well test flow rate.

100 day drawdown = 79 m btoc - 15.55 m btoc static level = 63.45 m from figure 3 below.

Average pump rate = 3 Lpm

Specific capacity = Avg pump rate / 100 day drawdown =  $3 / 63.45 = 0.047$  Lpm/m

Figure 3: Estimated drawdown after 100 days



Long term well capacity = specific capacity x available drawdown x 70%  
= 0.047 Lpmin/m x 88.45 m x 0.7 = 2.93 Lpmin

2.93 L/min is 4215 L/day, which is significantly higher than the quantity required by bylaws for two rural residential properties of 3200 L/day. Note that this test was performed near the end of a relatively extreme drought period.

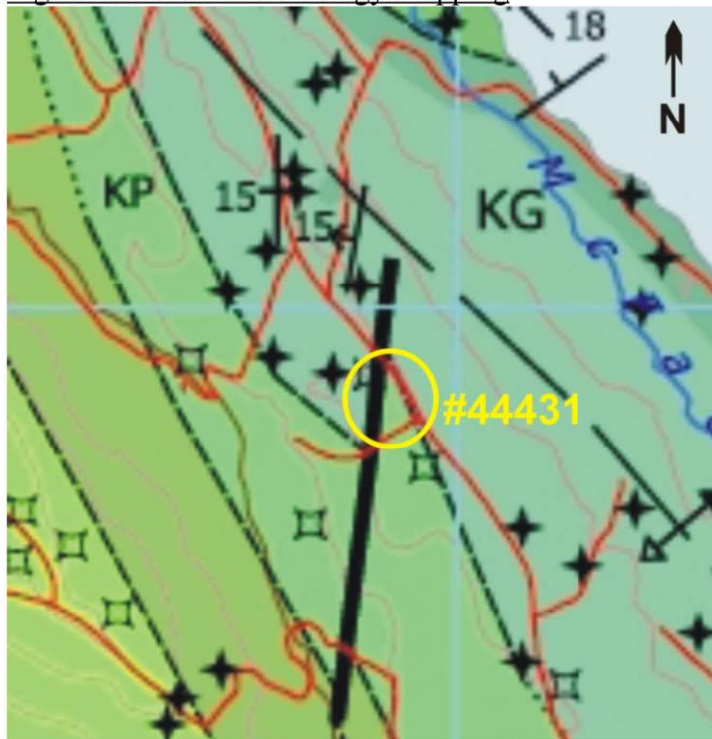
### Conclusions on Water Quantity

2.93 L/min is 4215 L/day, which is significantly higher than the quantity required by bylaws for two rural residential properties of 3200 L/day. Note that this test was performed near the end of a relatively extreme drought period.

### Effects on Existing Groundwater Use

A portion of the BC Geological Survey mapping, file 2009-11, HJ Greenwood et al is shown below in figure 4.

Figure 4: BCGS SSI Geology Mapping

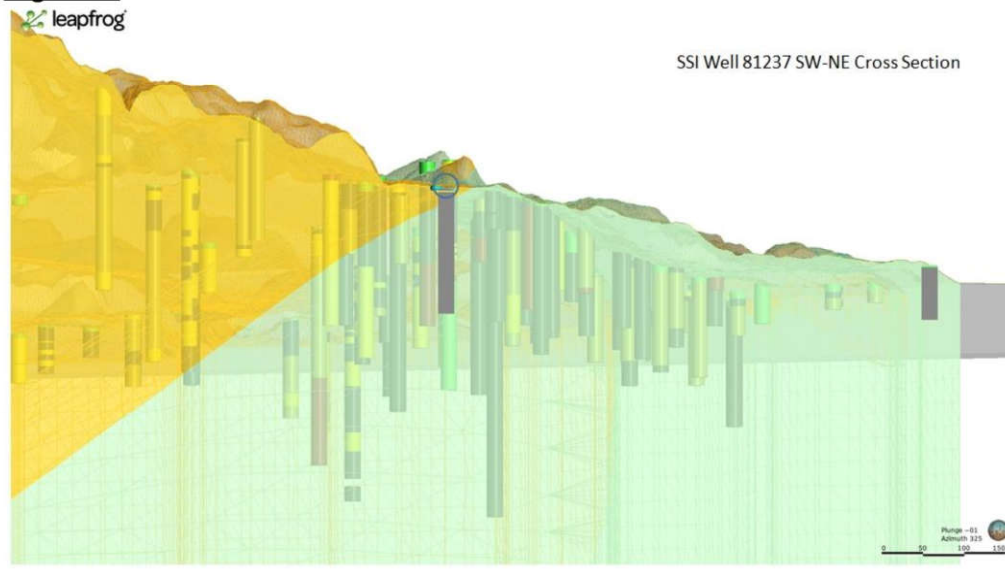


The well #44431 location is shown on fig 4 to left. The well is drilled 95 m into KP thick-bedded sandstone, which is underlain by the thin-bedded mudstone, siltstone and sandstone KG, with a thin interface bed of siltstone between the sandstone and the underlying KG unit. The well log shows this transition layer (called 'brown shale') to be 30 m thick.

The observation well #46504 is located 65 m to the NW of the tested well. From the mapping and the well log it may be on the other (west) side of the mapped fault line. It is drilled directly into the KG transition layer of siltstone, without the overlying sandstone.

Figure 5 below, supplied by IT hydrogeologist William Shulba, PGeo, shows the tested well on a cross section from the Islands Trust's 3-D geologic modeling, showing the inclined sandstone bed overlying the silt/mud/sand stone thin-bedded unit.

Figure 5:

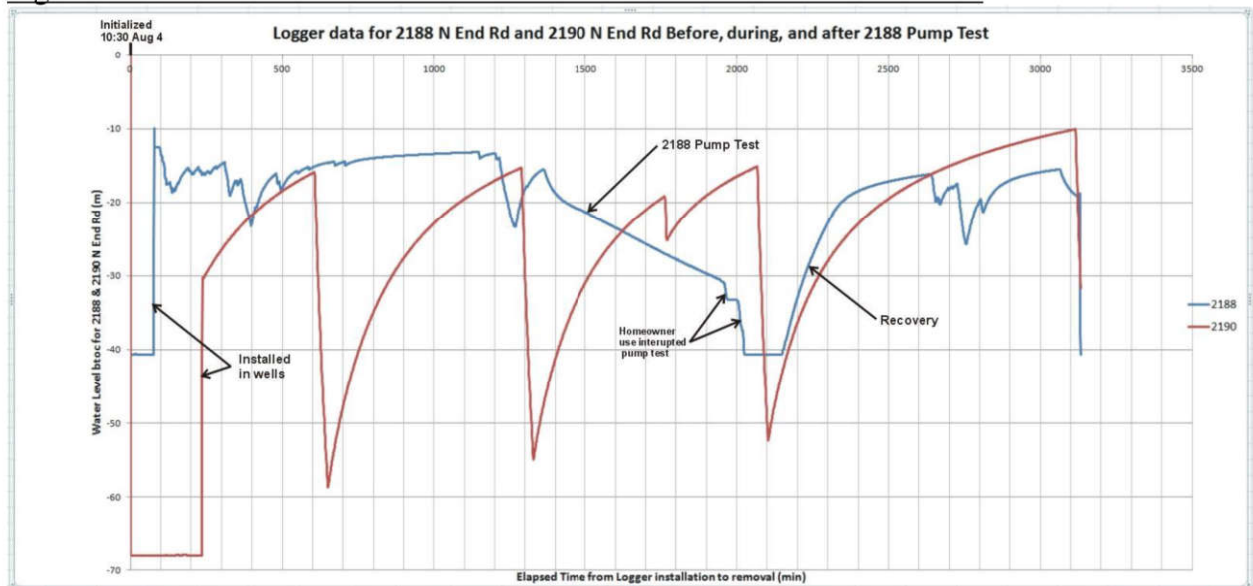


The thin-bedded underlying KG layer will also be inclined, with some of the layers in the unit fractured and water bearing. There would not appear to be a single widespread aquifer which all of the wells in the area share, but a series of fractured water bearing beds dipping generally south to southwest.

#### Observation well monitoring

Pressure sensor derived water levels btoc for the tested well and the observation well are shown below in figure 6. A larger version of this graph is given as appendix 4. The blue waterline is the tested well, the red line the observation well.

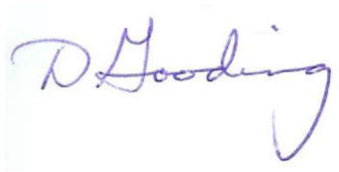
Figure 6: Tested well #44431 and observation well #46504 water levels btoc





During the two days the sensors were in place there were three heavy sustained pumps from the observation well, to fill their cistern. There does not appear to be any visually noticeable effect on the tested well's water level from any of these fairly rapid 35 to 45 m drawdowns in the observation well. None of the drawdowns of the tested well before, during, or after the pumping test appear to have any effect on the smooth recovery curves of the observation well. There was no observable interference between these two wells.

The tested well #44431 has been supplying water to both the residences on the subject property for over 30 years. The proposed rezoning, and allowing continued relatively small domestic use withdrawals from the tested well by the second residence should not have any negative impact on existing neighboring groundwater use.



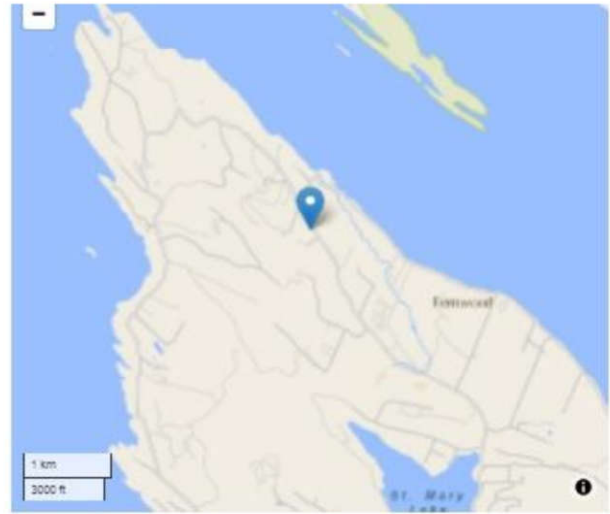
Dave Gooding, P.Eng.

## Appendix 1: Well Log for well #44431, 2188 N End Rd

### Legal Description:

Lot	3
Plan	34166
District Lot	
Block	
Section	7
Township	
Range	1N
Land District	16
Property Identification Description (PID)	

### Description of Well Location:



### Geographic Coordinates - North American Datum of 1983 (NAD 83)

Latitude: 48.921378 Longitude: -123.561882  
UTM Easting: 458838 UTM Northing: 5418868  
Zone: 10 Coordinate Acquisition Code: (20 m accuracy) Digitized from 1:5,000 mapping

### Well Activity

Activity	Work Start Date	Work End Date	Drilling Company	Date Entered
Legacy record	1980-02-16	1980-02-16	Ken's Drilling	August 13th 2003 at 4:50 AM

### Well Work Dates

Start Date of Construction	End Date of Construction	Start Date of Alteration	End Date of Alteration	Start Date of Decommission	End Date of Decommission
1980-02-16	1980-02-16				

### Well Completion Data

Total Depth Drilled:  
Finished Well Depth: 350 ft bgl  
Final Casing Stick Up:  
Depth to Bedrock: 5 feet bgl  
Ground elevation:  
Estimated Well Yield: 1 USgpm  
Well Cap:  
Well Disinfected Status: Not Disinfected  
Drilling Method: Other  
Method of determining elevation: Unknown  
Static Water Level (BTOC):  
Artesian Flow:  
Artesian Pressure (head):  
Artesian Pressure (PSI):  
Orientation of Well: VERTICAL


### Lithology

From (ft bgl)	To (ft bgl)	Raw Data	Description	Moisture	Colour	Hardness	Observations	Water Bearing Flow Estimate (USGPM)
0	5	OVERBURDEN						
5	100	HARD SANDSTONE - SEAMS OF SHALE						
100	131	BROWN SHALE WITH SOME MOISTURE.						
0	205	.75 GPM						
205	250	BLACK SHALE WITH SEAMS OF SANDSTONE						
250	350	SOFT BLACK SHALE						
0	350	T.D.						

## Appendix 2: Observation Well Log for Observation Well #46504 at 2190 N End Rd

Section	/
Township	
Range	1N
Land District	16
Property Identification Description (PID)	

Description of Well Location:



Geographic Coordinates - North American Datum of 1983 (NAD 83)  
Latitude: 48.921401 Longitude: -123.562783  
UTM Easting: 458772 UTM Northing: 5418871  
Zone: 10 Coordinate Acquisition Code: (20 m accuracy) Digitized from 1:5,000 mapping

### Well Activity

Activity	Work Start Date	Work End Date	Drilling Company	Date Entered
Legacy record	1980-10-31	1980-10-31	Tri-K Drilling	August 13th 2003 at 4:50 AM

### Well Work Dates

Start Date of Construction	End Date of Construction	Start Date of Alteration	End Date of Alteration	Start Date of Decommission	End Date of Decommission
1980-10-31	1980-10-31				

### Well Completion Data

Total Depth Drilled:	Estimated Well Yield: 0.5 USgpm	Static Water Level (BTOC):
Finished Well Depth: 325 ft bgl	Well Cap:	Artesian Flow:
Final Casing Stick Up:	Well Disinfected Status: Not Disinfected	Artesian Pressure (head):
Depth to Bedrock: 5 feet bgl	Drilling Method: Other	Artesian Pressure (PSI):
Ground elevation:	Method of determining elevation: Unknown	Orientation of Well: VERTICAL

### Lithology

From (ft bgl)	To (ft bgl)	Raw Data	Description	Moisture	Colour	Hardness	Observations	Water Bearing Flow Estimate (USGPM)
0	1.5	BLACK LOAM						
1.5	5	SANDY LOAM WITH GRAVEL						
5	10	BROWN SHALE						
10	15	BROWN & BLACK SHALE MIX.						
15	15	BLACK SHALE						
0	20	CASING						
0	90	FRACTURE, BLACK SHALE MOISTURE BEARING						
0	230	FRACTURE, MOISTURE BEARING						
0	245	FRACTURE,						
0	325	T.D.						

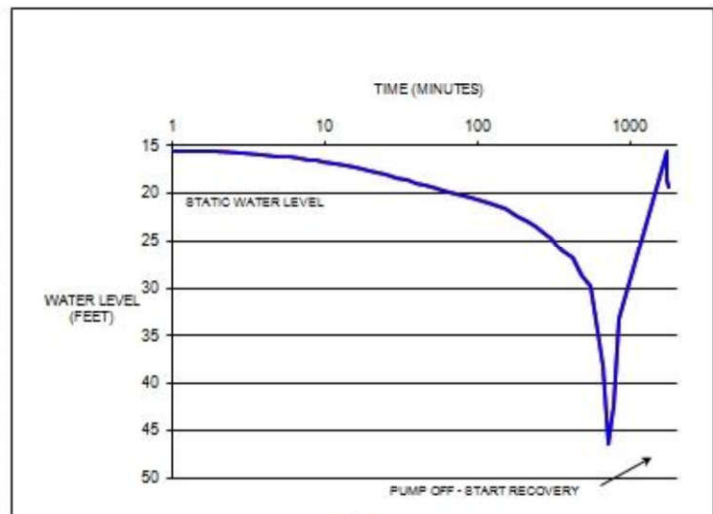
### Appendix 3: Manual Pumping Test Data

ADDRESS: 2188 North End Rd  
LOT No.:  
DATE: 05-Aug-21  
START TIME: 2021-08-05 9:07

ELEVATION:

WELL DEPTH: m  
WELL FLOW: 3LPM  
GL - MP: m  
STATIC LEVEL: 15.55 m  
PUMP RATE: 3LPM

DATE	ELAPSE D TIME (MINUTE)	READING FROM GROUND	DROP
5-Aug-2021	1	15.58	0.03
5-Aug-2021	2	15.64	0.06
5-Aug-2021	3	15.73	0.09
5-Aug-2021	4	15.89	0.16
5-Aug-2021	5	16.06	0.17
5-Aug-2021	6	16.17	0.11
5-Aug-2021	7	16.30	0.13
5-Aug-2021	8	16.43	0.13
5-Aug-2021	9	16.53	0.10
5-Aug-2021	10	16.68	0.15
5-Aug-2021	12	16.90	0.22
5-Aug-2021	14	17.06	0.16
5-Aug-2021	16	17.25	0.19
5-Aug-2021	18	17.45	0.20
5-Aug-2021	20	17.59	0.14
5-Aug-2021	25	18.00	0.41
5-Aug-2021	30	18.32	0.32
5-Aug-2021	35	18.64	0.32
5-Aug-2021	40	18.86	0.22
5-Aug-2021	45	19.10	0.24
5-Aug-2021	50	19.28	0.18
5-Aug-2021	55	19.47	0.19
5-Aug-2021	60	19.67	0.20
5-Aug-2021	90	20.47	0.80
5-Aug-2021	120	21.04	0.57
5-Aug-2021	150	21.60	0.56
5-Aug-2021	180	22.27	0.67
5-Aug-2021	210	22.90	0.63
5-Aug-2021	240	23.52	0.62
5-Aug-2021	270	24.21	0.69
5-Aug-2021	300	24.81	0.60
5-Aug-2021	330	25.52	0.71
5-Aug-2021	360	26.12	0.60
5-Aug-2021	420	26.73	0.61
5-Aug-2021	480	28.65	1.92
5-Aug-2021	540	29.82	1.17
5-Aug-2021	600	33.30	3.48
5-Aug-2021	660	38.17	4.87
5-Aug-2021	720	46.37	8.20
5-Aug-2021	780	42.38	-3.99
5-Aug-2021	840	33.07	-9.31
6-Aug-2021	1707	15.56	-17.51
6-Aug-2021	1727	17.61	2.05
6-Aug-2021	1747	18.66	1.05
6-Aug-2021	1767	19.34	0.68



#### REMARKS:

Homeowner drew heavily on the well after 9 hours of the test, interrupting valid data collection. (Invalid data in red)

A second pumping for 1 hour was performed 28 hours after the start of the first test pump as an additional check on interference between wells at 2188 and 2190 N End Rd.

START RECOVERY



#### Appendix 4: Water levels in tested well #44431 and observation well #46504

