

## Town of Ladysmith

### **REPORT TO COUNCIL**

From: Erin Anderson, Director of Financial Services  
Geoff Goodall, Director of Infrastructure Services  
Date: December 6, 2016  
File No: 1760-20

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**RE: BORROWING FOR THE WATER FILTRATION PLANT**

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#### **RECOMMENDATION(S):**

That Council direct staff to:

1. Prepare a bylaw to authorize the Town of Ladysmith to borrow up to six million dollars (\$6,000,000) over 25 years for the construction of a Water Filtration Plant, and
2. Seek elector approval of the borrowing bylaw through an Alternative Approval Process.

#### **PURPOSE:**

The purpose of this report is to provide Council with information regarding options to finance the balance of construction costs for a new Water Filtration Plant to meet Island Health requirements to maintain the Town's Water Supply Operating Permit, and to seek direction for the preferred financing approach.

#### **EXECUTIVE SUMMARY**

Island Health requires the Town of Ladysmith to construct a Water Filtration Plant to ensure that the Town continues to provide safe, quality drinking water and complies with the terms of its Water System Operating Permit. Benefits of this new plant include offering the best quality water in the most efficient manner possible, and ensuring that Ladysmith offers up-to-date, quality infrastructure to serve current and future generations of residents. This in turn will lay a solid framework for managed community and economic growth in keeping with Ladysmith's Sustainability Vision. The Town will need to borrow funds to build the new water filtration plant, although a significant \$8.8 million grant will greatly offset the total construction cost. Staff are seeking Council's approval to proceed with borrowing \$6 million over 25 years and to obtain the approval of the electors through an Alternative Approval Process.

#### **PREVIOUS COUNCIL DIRECTION**

Resolution	Meeting Date	Resolution Details
CS 2014-136	Apr-14-2014	That Council: 1. Receive the draft 2013 Water Report for information; 2. Direct staff to pursue, in principle, water filtration as the method of secondary water treatment for the Town of Ladysmith, and waive the purchasing policy for a Water Filtration Pilot Study; and,

Resolution	Meeting Date	Resolution Details
		3. Direct staff to amend capital plans to provide for a secondary water filtration system for the Town.
CS 2015-045	Feb-02-2015	That Council direct staff to apply to the Small Communities Fund Program of the New Building Canada Fund for grant funding of up to two-thirds of the cost of the Water Filtration Plant Project, with the Town's one-third share of the costs of the project to be drawn from borrowing as outlined in the approved 2014-2018 Financial Plan.
CS 2015-111	Apr-13-2015	That Council establish "Water Supply and Watershed Protection" as a focus area for 2015, and that staff be directed to identify specific actions to be taken in 2015 in addition to those identified on page 8 of the Draft Financial Plan document, including investigating options for water storage, and constructing a water filtration system.
CS 2015-119	Apr-13-2015	That Council: 1. Direct staff to apply to the Union of British Columbia Municipalities Gas Tax Program—Capital Infrastructure Fund for \$10 million towards the Water Filtration Project. 2. Support the Town administration with overseeing the management of this grant if successful.
CS 2016-155	Apr-18-2016	That Council 1. Direct staff to apply to the Small Communities Fund Program of the New Building Canada Fund for grant funding of a minimum of two-thirds of the cost of the Water Filtration Plant Project; and  2. Confirm the Town's commitment that up to one-third of funding for this project will come from borrowing, with the debt-servicing to be funded through the approved Water Parcel Tax.
CS 2016-375	Nov-21-2016	That Council: 1. Direct staff to proceed with the construction of the Arbutus Water Filtration Plant, consisting of coagulation, flocculation, DAF and membrane filtration, consistent with the recommendations of the <i>"Town of Ladysmith Arbutus Water Treatment Plant Phase 2 Pilot-scale Treatability Study – September 2015."</i> 2. Waive the Town's purchasing policy and direct-award the Design and Construction Services for the Arbutus Water Filtration Plant to Associated Engineering (BC) Ltd. as outlined in the proposal of services dated October 2016. 3. Direct staff to prepare a communication plan for the Water Filtration Plant project and if necessary retain the services of a communication consultant for this process.
CS 2016-376	Nov-21-2016	That Council direct staff to notify Island Health that Council desires to amend the completion date for the Water Filtration Plant project in the Town's water system operating permit to March 31,



Resolution	Meeting Date	Resolution Details
		2019 and that the detailed work plan developed in the engineering proposal from Associated Engineering and Koers and Associates Ltd. be used to support the request.
CS 2016-377	Nov-21-2016	That Council direct staff to notify the Director, Local Government Infrastructure and Engineering, (Ministry of Community, Sport and Cultural Development) that Council wishes to request an extension of one year to the approved grant for the Water Filtration Project.

### INTRODUCTION/BACKGROUND:

In 2013, Island Health amended the Town's Permit to Operate a Water Supply to require a water filtration system by January 31, 2018. This was to make sure the Town met the standards of the BC Surface Water Treatment regulation. Island Health

For surface water sources, the BC Ministry of Health has developed the "Drinking Water Treatment Objectives (microbiological) for Surface Water Supplies in British Columbia." This is commonly referred to as a 4-3-2-1 system setting acceptable standards for certain parasites, viruses, types of treatment and turbidity in the water. Information may be found online at [http://www.health.gov.bc.ca/protect/dw\\_treatment-objectives.html](http://www.health.gov.bc.ca/protect/dw_treatment-objectives.html).

In 2015, the Town conducted a Pilot Scale Treatability Study to determine the most suitable treatment option for our particular water source, which resulted in the selection of a Coagulation, Flocculation, DAFF and Membrane Filtration System. The estimated cost of the plant (2016 figures) is \$13,266,910, as outlined in the Pilot Scale Treatability Study Report.

On October 3, 2016, Council learned that its grant application for the Ladysmith Drinking Water Filtration Project had been approved, and the Town was awarded \$8,809,228 through the Clean Water and Wastewater Grant Program.

Based on the grant received and the estimated cost to complete the project there is an unfunded amount of \$4,457,682. As indicated in the 2016 – 2020 Financial Plan, the Town will have to borrow these funds. Given the complexity in obtaining long term borrowing approval, the early stage of the project cost estimate, the debt holdback from the Municipal Finance Authority (MFA) and the uncertainty in the Canadian dollar, staff suggest that Council proceed on the basis that a maximum of \$6,000,000 will be borrowed for this project.

#### **Borrowing**

Borrowing can be short term (not exceeding 5 years) or long term (from 6 years up to 30 years).

Interest rates for borrowing in excess of 10 years are not guaranteed. The rate for long-term borrowing is guaranteed for the first 10 years. The interest rate for the subsequent years is set in five or 10-year increments as determined by Municipal Finance Authority.

Long-term borrowing must be authorized by bylaw. Although the Town is required to build this plant and therefore borrow the funds to do so, the provincial legislation clearly lays out that other than a very few exceptions, long term borrowing also requires the approval of the electors. The legislation is also very specific about how a local government is to secure this elector approval: either through an Alternative Approval Process, and/or through a Referendum.

### Alternative Approval Process (AAP)

This method is most commonly used by local governments in British Columbia for approval of borrowing bylaws. It is less expensive and simpler to administer than a referendum. Staff estimate the cost of an AAP to be \$5,000 to \$10,000. In an AAP, people who do not support the matter at hand must sign and submit an 'elector response form' indicating their opposition. The AAP form submission period is at least 30 days in length, and starts after the Town receives approval of the bylaw from the Inspector of Municipalities and following a subsequent two-week notice period. If 10 per cent or more of the eligible voters submit an elector response form, the AAP is deemed to have failed. In such a situation, the matter must be taken to Referendum within 80 days, and succeed, in order for it to pass.

### Referendum

A referendum is in effect an election and must be conducted in a very similar manner, as laid out in the Local Government Act. Staff estimate a referendum to cost between \$15,000 and \$20,000 based on the costs of holding a general municipal election. As in a general election, the majority of votes (either for or against the question) determine the outcome of the referendum. A referendum is generally an 80 day process.

The two processes are described as follows:

Referendum vs. AAP: Key Attributes		
Attribute	Referendum	AAP
<b>Administration</b>	<ul style="list-style-type: none"> <li>• Chief Election Officer (CEO)</li> <li>• Administered as a vote under election-like rules</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Officer (CAO/CO)</li> <li>• Administered as a petition-like process</li> </ul>
<b>Elector Eligibility</b>	<ul style="list-style-type: none"> <li>• Resident electors and non-resident property owners living within the area for which the vote is being held</li> </ul>	<ul style="list-style-type: none"> <li>• Resident electors and non-resident property owners living within the area for which the AAP is being held</li> </ul>
<b>Geographic Area</b>	<ul style="list-style-type: none"> <li>• Conducted on a municipal or regional district-wide basis</li> <li>• Within an area smaller than the municipal or regional district boundary (e.g. a portion of an electoral area)</li> <li>• Within one (or between more than one) regional district electoral area</li> <li>• Between multiple jurisdictions</li> </ul>	<ul style="list-style-type: none"> <li>• Conducted on a municipal or regional district-wide basis</li> <li>• Within an area smaller than the municipal or regional district boundary (e.g. a portion of an electoral area)</li> <li>• Within one (or between more than one) regional district electoral area</li> <li>• Between multiple jurisdictions</li> </ul>



<b>Notice</b>	<ul style="list-style-type: none"> <li>• Notice must be published in a locally circulated newspaper once a week for two</li> </ul>	<ul style="list-style-type: none"> <li>• Notice must be published in a locally circulated newspaper once a week for two</li> </ul>
<b>Timing</b>	<ul style="list-style-type: none"> <li>• Generally an 80 day process</li> <li>• Vote must be conducted within 80 days following the deadline established in an AAP in which 10% or more the electors signed a response form; or, 80 days after <b>Inspector of Municipalities</b> approval of the bylaw.</li> </ul>	<ul style="list-style-type: none"> <li>• Can be as short as 32 days</li> <li>• AAP must allow for a minimum 30- day period in which response forms can be submitted*</li> </ul>
<b>Threshold</b>	<ul style="list-style-type: none"> <li>• Majority rules (50% + 1)</li> </ul>	<ul style="list-style-type: none"> <li>• 10% threshold</li> </ul>
<b>Voting Opportunities</b>	<ul style="list-style-type: none"> <li>• Special and advance voting</li> <li>• General voting day</li> <li>• Mail in ballot (if allowed by bylaw)</li> </ul>	<ul style="list-style-type: none"> <li>• Electors have at least 30 days to sign and submit an elector response form</li> </ul>

\*Interpretation Act, s. 25

Alternative Approval Process: A Guide for Local Governments, June 2015 (BC Ministry of Community, Sport and Cultural Development, Local Government Division)

Should Council choose to hold a Referendum without first holding an AAP, the voting date must be within 80 days after approval of the borrowing bylaw is received from the Inspector of Municipalities.

### Staff's Recommendation

It is required by Island Health that the Town build a water filtration plant; Council will need to borrow funds for the construction. Borrowing can be either short- term (under five years) or long-term (six to 30 years.) If Council chooses to seek long-term financing, it is also required to seek elector approval to borrow funds for the construction. Staff's advice, given these circumstances, is to proceed with *long-term borrowing*, and to use the *Alternative Approval Process* for the following reasons:

1. Borrowing over a longer term means that the *annual* cost to citizens of the debt repayment is lower.
2. Amortizing the repayment of the debt over a longer period of time better reflects the longevity of the new infrastructure and more fairly distributes the cost to all users over time.
3. An Alternative Approval Process is the least expensive and quickest way to seek voter approval, especially in this situation where the Town is required to build the water filtration plant.

### ALTERNATIVES

In order to construct a water filtration plant as required by Island Health, the Town must borrow the funds. Essentially Council has three options to proceed with borrowing for this project:

- Short term borrowing – no electoral approval required, although subject to approval by Municipal Finance Authority.
- Long term borrowing utilizing a referendum for elector approval.

- Long term borrowing bylaw utilizing the Alternative Approval Process for elector approval.

### Short Term Borrowing

Similar to the purchase of the Buller Street properties, Council could choose to fund this purchase with short term borrowing. This method does not require electoral approval.

Short term borrowing (under 5 years) allows the municipality to obtain borrowing without requesting the funds through the regional district. Short-term borrowing cannot be renewed after the 5 years. In other words, the full amount borrowed must be repaid within five years. This borrowing would be in accordance with *Community Charter* s.175 – Liabilities under Agreement and is subject to approval from MFA.

Using the projected interest rate of 2.5%, an annual payment of \$1,350,000 would be required.

This would be an increase to the water parcel tax of approximately \$356.00. This will result in a total annual water parcel tax in the first year of \$552 based on proposed 2017 water parcel tax rates.

### Long Term Borrowing (Requires Approval Through Referendum and/or AAP)

Council can set the length of long term borrowing up to a maximum of 30 years. Below is a summary of various borrowing periods and the resulting increases to parcel taxes:

	Interest Rate	Estimated Annual Payment	Increase in Water Parcel Tax*	Resulting Parcel Tax for 2017
10 years	2.74%	691,383	\$ 182	\$ 383
20 years	3.47%	431,494	\$ 114	\$ 315
25 years	3.51%	375,167	\$ 99	\$ 300
30 years	3.51%	341,516	\$ 90	\$ 290

*\*Interest rate to be determined at borrowing.*

The number of parcels in the Town of Ladysmith is 3,643 plus 153 equivalent parcels from other service areas.

The proposed timeline for holding an AAP or Referendum is as follows:

DATE		AAP	REFERENDUM
December	5 -- 12	Prepare Borrowing Bylaw	Prepare Borrowing Bylaw
	12	Determine AAP or Referendum	Determine AAP or Referendum



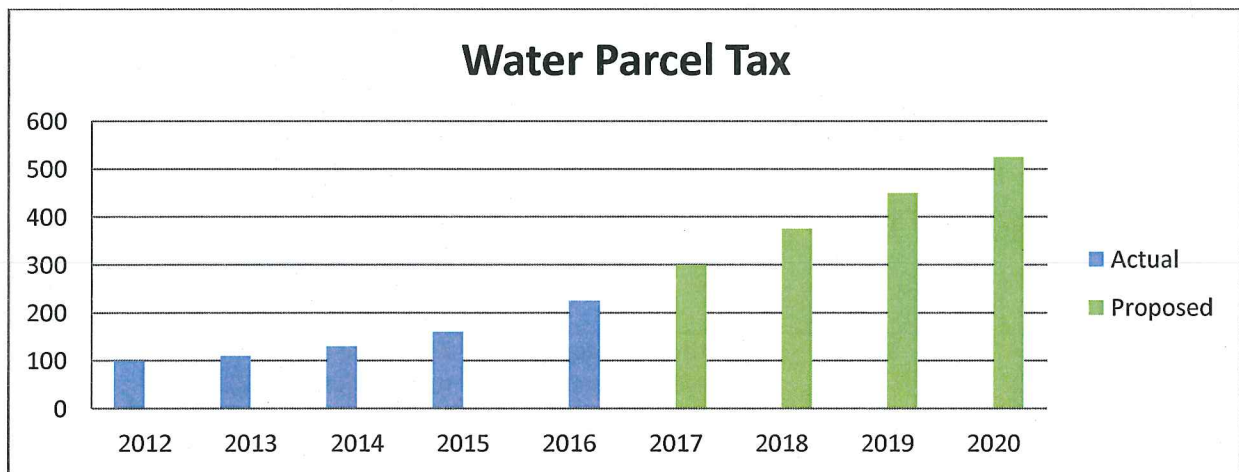
	19	Introduce Borrowing Bylaw for first three readings	Introduce Borrowing Bylaw for first three readings
	20	Bylaw to Inspector of Municipalities for approval	Bylaw to Inspector of Municipalities for approval
January	16		Appoint Chief Election Officer and Deputy
	31	Approval of Inspector received (estimated)	Approval of Inspector received (estimated)
February	8	First Notice in Chronicle	
	15	Second Notice in Chronicle	
	16	First day of AAP process	
March	24	Last day to submit elector forms	Issue Notice of Assent Voting
April	22		Referendum Voting Day
May	27	Hold Referendum Vote if AAP does not succeed	

#### FINANCIAL IMPLICATIONS:

During the 2016 – 2020 Financial Plan discussions, Council was advised that the water parcel tax will need to increase significantly to complete all of the projects (Filtration Plant, Holland to Stocking Supply Main, Stocking Lake Supply Main, and Holland Dam Storage). At that time, it was discussed that the water parcel tax should increase from \$225 in 2016 to \$525 in 2020.

The 2017 Parcel Tax is expected to be \$300, which is an increase of \$75 over the 2016 parcel tax. This \$300 is sufficient to cover a portion of the debt payments on the Water Filtration Plant borrowing as well as enabling the Town to reserve funds for repairs and other major projects planned for the water supply system such as increasing storage capacity and the interconnect between Holland and Stocking Lakes.

Once constructed, there will be additional costs to operate the new Water Filtration Plant. Based on staffing at other Water Filtration Plants, it is expected that two additional water utility personnel will be required. These costs may be spread out over the next few years with the first hire to take place in late 2017 followed by the additional person the next year. Costs in materials, supplies and hydro will also increase. Overall, there will be approximately a \$460,000 per year increase to operate the Plant. In parcel tax terms, this is an additional \$120.00 per year. This could be funded through additional parcel taxes or through increases in the water utility fee or a combination of parcel taxes and water utility fees.



#### LEGAL IMPLICATIONS:

Borrowing can only be used for a specific project; it cannot be used for other projects (section 190 of the *Community Charter*). In the event that not all of the proposed borrowing of \$6,000,000 is required for the project, only the needed amount will actually be borrowed.

Similar to the Waste Water Treatment Plant, temporary borrowing is used to fund the construction. Long term borrowing is then issued in the spring or fall. It is at this point where any grant funding would be applied and the net amount would be borrowed.

Staff will ensure that the proposed borrowing bylaw is reviewed by legal counsel and that all legislative requirements for securing elector approval are followed.

#### CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

It will be important to provide clear and fact-based information to citizens to assist in their decision-making and to help them understand the necessity and benefits of a water filtration system.

#### INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

Borrowing involves a number of departments in the Town. The Financial Services Department will lead the project with the assistance of Legislative Services to administer the Alternative Approval Process and approval of the required corporate documents. Infrastructure Services will address the technical issues related to construction of the Water Filtration Plant.

#### ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

This aligns with Sustainability Pillar #5: Innovative Infrastructure.

#### ALIGNMENT WITH STRATEGIC PRIORITIES:

This aligns with Council's 2016 Strategic Priority of Watershed Protection and Water Management.

#### SUMMARY:

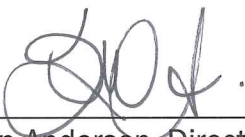
Island Health requires the Town of Ladysmith to construct a Water Filtration Plant to ensure that the Town continues to provide safe, quality drinking water and complies with the terms of its Water System Operating Permit. The Town has been working with AE Koers



Engineering to determine the most suitable type of filtration system and the construction costs, estimated to be \$13,266,910.

Benefits of this new plant include offering the best quality water in the most efficient manner possible, and ensuring that Ladysmith offers up-to-date, quality infrastructure to serve current and future generations of residents and other areas that the Town services. This in turn will lay a solid framework for managed community and economic growth in keeping with Ladysmith's Sustainability Vision.

The Town will need to borrow funds to build the new water filtration plant, although a significant \$8.8 million grant will greatly offset the total construction cost. There are various long term debt payback options and rates as well as alternatives to obtain elector approval if required. Staff are seeking Council's approval to proceed with borrowing \$6 million over 25 years and to obtain the approval of the electors for this long-term borrowing through an Alternative Approval Process.

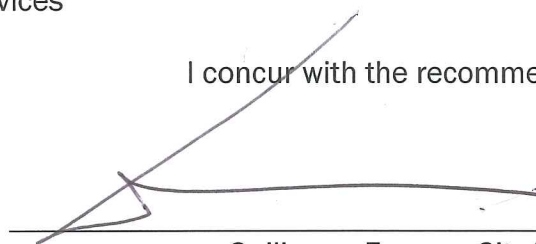


Erin Anderson, Director of Financial Services



Geoff Goodall, Director of Infrastructure Services

I concur with the recommendation.



Guillermo Ferrero, City Manager

ATTACHMENT:  
Decision Tree Flow Chart

