LIQUID WASTE MANAGEMENT PLAN

Technical Memo #2

To:	Wastewater Advisory Committee	**Date:**	October 23, 2017
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Subject:	**Financial Framework**		

1.0 OVERVIEW

Any improvements or expansions to the wastewater treatment system need to be paid for at the time of construction. The ability to pay for public works is a major influence on what can be done, and when. Regardless of the technical, environmental and other merits of any proposed option, if it can't be paid for, it can't be done.

In the Cumberland context, financing of a wastewater project can come from three major sources;

1. Village of Cumberland funds
2. Borrowing by the Village of Cumberland
3. Grants from outside sources, typically Provincial and Federal governments

While development of a sewer financing plan is a Stage 3 LWMP activity, the ability of Cumberland to pay for a project is a major factor in the decision making about preferred options, so it is given some consideration here.

This memorandum examines the status of these funding sources, and how they relate to potential LWMP wastewater projects.

2.0 VILLAGE OF CUMBERLAND WASTEWATER RESERVES

Wastewater reserve funds are accumulated by the Village for the purposes of maintaining, replacing and improving wastewater infrastructure. There are four sources of funds;

1. User fees, from existing connected or serviced wastewater users,
2. Property taxes,
3. Sewer parcel taxes, and
4. Development Cost Charges, or DCC's ,

User fees are normally intended to cover operation and maintenance of the system, and are not intended to be a major contributor to reserves, though surplus amounts in any given year can be put into reserves. Equally, in years when there are extraordinary operating or maintenance costs, these can be covered from wastewater reserves. The wastewater user fee for a single-family house is currently set at $366.60 per year. *For LWMP planning purposes, the net contribution from user fees for capital projects is considered to be zero.*

Sewer "frontage" taxes (parcel taxes levied based on frontage measurements) are intended to cover infrastructure replacement costs. They can be accumulated to offset future costs, and used to pay off borrowing for previous projects. Since there is a defined number of properties, and a defined tax rate, frontage taxes provide a predictable rate of reserve accumulation. They are the primary means for building-up reserves. In the case of wastewater, frontage taxes can only be levied on properties that are serviced by (capable of connecting to) the wastewater system. The property itself does not need to be connected, so a vacant lot will pay the frontage tax even though it is not paying user fees. This is in recognition of the fact that the infrastructure - both collection and treatment - to service the lot is aging and needs replacement regardless of whether the lot is actually connected. Cumberland has a Sewer Frontage Tax of $1.57 per foot of frontage, with a minimum deemed frontage of 50 feet, and maximum of 100 feet, for a range of $78.50 to $157 per lot per year. For financial year 2017, the sewer frontage tax revenue that has been levied is $155,290. Where a major project, such as a new treatment plant, creates large additional costs, parcel taxes can be raised to cover all or part of this. However, while levying a high frontage tax may seem to be an easy way to accumulate reserves, they must be considered in the context of the overall tax burden on the community.

DCC's are usually collected from developers at the time of subdivision approval or at the time a building permit is issued. The purpose of DCC's is to offset the portion of sewer, water drainage, roads and park services infrastructure that are required to accommodate the new development. They consider the projected growth, and expected future costs of infrastructure, to establish a charge for each new dwelling unit or equivalent. They are subject to Provincial government review, established by bylaw and typically updated every five years, with the next update for the Village of Cumberland set to take place in 2018.

Since DCC's are dependent on the rate of growth, their annual revenue is unpredictable. For a growth of 1500 houses – a doubling of the current Cumberland population – this would bring in sewer DCC revenues of $14.5M. However, this growth is projected to occur over a 20 year horizon, so none of this money is available for a current project, though it can be used to pay off borrowing for a current project.

The Cumberland DCC's are set by Bylaw #934, last updated in 2015, and for wastewater, the current DCC is set at $9,664 per house, with equivalent rates for mult family housing and commercial properties.

As of January 2017, Cumberland has the funds shown in Table 1 in wastewater reserves;

Table 1 Status of Cumberland Reserve Funds as at January 2017

Fund	2017 status
Wastewater Reserve Fund	$109,260
Wastewater DCC Fund	$635,506
Total	$744,766

The wastewater reserves are not only intended to be used for treatment works, but also for replacement of works in the collection system, and the on-going storm-sewer separation program. The reserves have been used for matching funds on major projects that have taken place in Cumberland over the past number of years, including the storm and sewer separation work on Dunsmuir Avenue in 2016.

***Key Points about reserves**;*

– *They accumulate slowly over time*

- *They are partially dependent on growth rates*
- *They are needed for the whole wastewater system, not just the treatment plant*
- *Cumberland presently has minimal reserves*

3.0 BORROWING

Many municipalities borrow money to pay for infrastructure projects. There are two main reasons for considering borrowing;

1. Where a project is to be built now, or built larger, to service future growth needs. Water and wastewater treatment plants are the best examples of this.
2. Where the municipality has insufficient funds in reserves to cover the cost of the project.

Borrowing has the advantage of allowing infrastructure to be built sooner and paid off over time, and partially paid for by future growth. The disadvantages are that there are interest costs, and it imposes a burden on future residents; so a heavy debt load may inhibit the ability to do other projects in the future.

Municipal borrowing is typically over terms of 10, 20 or 30 years, and at relatively low interest rates compared to commercial borrowing. Any long-term borrowing – for terms of greater than five years – must have elector approval. This is normally done by either a referendum or an Alternate Approval Process, as was done in January 2017 for the potable water project. A third means of elector approval is the LWMP process itself. The LWMP process includes extensive public consultation, and where a completed, and Ministry of Environment approved Stage 3 LWMP has borrowing as part of the long term financing plan, elector approval is deemed to have occurred.

Municipalities have a limited borrowing capacity, which is determined by the tax revenues of the municipality and its current financial position. As at January 2017, Cumberland's borrowing capacity is about $8.5 million. However, $1.4M of this is committed to the 2017 potable water treatment project, leaving a net borrowing capacity of about $7.1M.

Cumberland Council may desire to keep some of this borrowing capacity for projects other than wastewater thus reducing the capacity for wastewater borrowing – the Wastewater Advisory Committee cannot make this decision.

Key points about borrowing;

- *It allows projects that create long term benefits*
- *It imposes a long term financial burden*
- *Cumberland's borrowing capacity is limited to maximum of $7.1M*

4.0 GRANTS AND OUTSIDE FUNDING SOURCES

The use of outside funding sources is common for municipal infrastructure projects, and most municipalities try to obtain grants wherever and whenever possible.

The major sources are the joint provincial and federal infrastructure funds such as;

- Building Canada Fund
- Gas Tax fund

– Clean Water and Wastewater Fund (CWWF)

These fund sources award grants for specific projects based on a competitive application process. The funds are intended to helping improve standards of infrastructure, especially to help meet new regulatory standards. They are not intended to be just for growth related expansion, which should be funded by DCC's.

These funds typically do intakes every two years. Cumberland applied to the CWWF in November 2016 for both potable and wastewater projects, and secured funding of $5m for the potable water project, and was rejected for the $21M wastewater project. There is never any guarantee that any projects will get funded.

An additional, smaller, source of grant funding is through the Federation of Canadian Municipalities Green Municipal Fund "GMF" which provides loans and small grants for infrastructure projects that demonstrate environmental leadership. Cumberland has received a $175,000 grant from GMF for the 2016 and 2017 LWMP work as a Feasibility Study, and can apply to GMF for a loan and grant for a Capital Project.

*Table 2 Major infrastructure grant funds**

Fund	Funding %	Maximum Amount	Next Expected Intake
Building Canada Fund	66%	None	Unknown
Gas Tax Fund	Up to 100%	$6M	2019
Clean Water and Wastewater Fund	83%	None	2018
Green Municipal Fund	15% of loan amount	$750k	Continuous

*As of 2017. Future funding amounts to be confirmed.

There are also numerous small funding grants available that have very specific criteria, such as environmental enhancement, economic development and community group involvement. These are not a meaningful source of funding for a wastewater treatment project, but may be suitable for some specific aspects of it, such as a habitat reclamation or creation of community recreation or education component.

Another potential source of outside grants is "amenity" contributions from developers, where large projects being planned. These contributions are by negotiation between the developer and the municipality. Because of their nature it is difficult to predict when they will happen or how much they might be.

Key Points about grants

– *Outside grants from varying sources can be pursued*
– *It is not possible to predict how much money can be obtained*
– *It is not possible to predict when they might be obtained.*

5.0 FINANCING STRATEGY

The financing position that Cumberland is in, for a wastewater project, can be summarised as follows;

1. There are negligible reserves available, and they will increase too slowly to fund a near term project.
2. The maximum possible borrowing capacity is $7.1M
3. While all available grant opportunities will be pursued, it could take years before any funding is obtained

Thus, if a project is going to be less (or significantly less) than $7M, then Cumberland can decide to borrow and proceed without waiting for outside funding.

If a project is going to be more than $7M, Cumberland will need to wait for securing of outside grants before it can be completed, thus making timing unpredictable.

The regulatory framework sets the necessity for action to be taken as soon as practical, to meet current Permit and incoming federal regulations, and also triggered by the need to meet current regulatory standards as a result of population growth and increased wastewater flows since the latest Discharge Permit was issued in 1997. Thus the timing *must* be predictable.

This financing framework, specifically the borrowing capacity, sets a limit on how much can be done immediately, thus necessitating a phased approach, where a first phase would;

1. Improve treatment quality to meet the current Permit and new Federal requirements;
2. Cost less than $7M, thus allowing Cumberland to decide to proceed; and
3. Be operational by 2020.

The second phase would;

1. Deliver any further improvements in treatment quality that are needed, or desired (e.g. for reclaimed water);
2. Create any additional capacity for future growth not delivered in the first phase, and
3. Proceed when outside grants are obtained and/or reserve funds have built up sufficiently,

Preferably, the project type is such that both phases could be done at the same time, if grants are obtained before or shortly after a decision to proceed with the first phase.

An “ideal” solution is one where a planned project meets all current and future needs and costs less than $7M, and thus does not need to be phased. It should be noted that over the past 19 years of the LWMP, an “ideal” solution of low cost and high quality and capacity has never been identified.