

# Summer Village of Norris Beach

## WASTEWATER SYSTEM UPDATE

The Summer Village of Norris Beach has now received the final Design Basis Memorandum for our Low Pressure Grinder Pump system from MPE engineering.

We are now able to estimate costs for the entire local wastewater system, determine the most effective way to allocate available funding, consider options for payment of the capital costs, and provide this information to you, the property owners.

This update letter will provide information to you in the following sections:

1. The Regional System
2. Local Wastewater System
  - a. Activities to date
  - b. Municipal Utility Model
  - c. Estimated Costs
  - d. Capital Funding
  - e. Operating Costs
  - f. Current Wastewater Costs
3. Construction Schedule
4. Summary

### 1. [The Regional Wastewater System](#)

Phase I is now complete and operational. The line runs from the Village at Pigeon Lake to the pump station at Westeros and on to the Mulhurst Lagoon. The total cost of this line and lagoon upgrade was approximately \$13.8 million dollars. Of this, the Water for Life grant program funded \$12.8 million with the six participating municipalities sharing the balance.

The participating municipalities are the Summer Villages of Crystal Springs, Grandview, Ma-Me-O Beach, Norris Beach, Poplar Bay and the County of Wetaskiwin.

Norris Beach's share of the cost was \$60 K, which was funded through Provincial Grants.

#### [Regional System – What's Next?](#)

Phase II of the Regional System will run from the Village at Pigeon Lake to a location near the Summer Village of Poplar Bay. Funding has been approved under the Water for Life program for the construction of this line and pump station at 90% of the total cost. The same municipalities will share the cost of the remaining 10%. Norris Beach's share will be approx. \$45K to be funded by Provincial Grants.

The Regional Wastewater System will be managed as the South Side Regional Wastewater Commission. The application has been submitted and approvals are expected within the next 24 months. The County of Wetaskiwin is operating and maintaining the system in the interim.

### 2. [Local Wastewater System](#)

#### [a. Activities to Date](#)

A local wastewater system has been contemplated for the Summer Village of Norris Beach since its inception. Over the years, various projects and funding models have been proposed.

A wastewater system will provide benefits in several aspects of our lives at the lake. They include Health and Safety, Environmental Protection, Convenience, and Social Impacts.

Health and Safety- A well-managed and watertight wastewater system will reduce exposure to toxic waste materials that are evident on private property when tanks are pumped and along roadways if there is leakage from the sewage trucks. It will also eliminate all septic fields. Potential exposure of water wells to wastewater contamination will be significantly reduced.

Environmental Protection – This closed system will reduce run off and leakage of wastewater into Pigeon Lake, demonstrating our commitment as property owners and Councils to the health of the lake by taking the steps that we can to reduce nutrient build up.

Convenience – This system will provide the on-going disposal of wastewater at an approved treatment facility for many years to come. You will no longer need to worry about tank levels and company coming; measuring of tank levels to plan for a pump out when you will be at the property; waiting around for the truck to arrive; or, the tank needing to be pumped out on a Sunday or holiday when trucks may not be available.

Social and Economic Impacts – There will be no offensive odours to annoy guests or neighbours when a pump out may be required on a hot, busy summer day. Road maintenance and repair costs will be significantly reduced as wastewater truck hauling is virtually eliminated.

In 2014, Norris Beach participated in a Regional Collaboration Grant with the Summer Villages of Crystal Springs, Grandview, Ma-Me-O Beach, Poplar Bay and the County of Wetaskiwin to complete a preliminary engineering report for all of the local systems that will be connecting to the Regional Wastewater System.

The results of this study were used for grant applications for funding under the Building Canada Grant – Small Communities Fund. We were successful in this application which provides grant funding for two thirds of the cost of the Municipal lines.

Since then, MPE engineering has been working on the design engineering for the local systems. The Design Basis Memorandum for the low pressure grinder pumps system has been received and has been used as the basis for the costs shown in this newsletter.

A tender package has been developed for the County of Wetaskiwin, and the Summer Villages of Norris Beach and Ma-Me-O Beach to be released for bids in October. The current schedule calls for the bids to be tendered by November 7th with the contract awarded on November 22<sup>nd</sup>.

It is expected that some of the work can be completed over the winter with on lot work to commence in the spring.

#### b. Municipal Utility

The Summer Village evaluated several options for the funding of the wastewater system. While the two thirds funding from the Building Canada grant was a huge benefit, there were concerns expressed by some property owners that the remainder of the municipal line costs and on lot costs were high and that there was a need to spread those costs over time to make the system affordable. To accommodate these concerns, Council has decided to operate the Local Wastewater System as a Municipal Utility and as such combine all of the construction costs and connections costs from the pump inside the owner's holding tank to the Municipal Boundary, cost of pump included. (This will include a small allowance for shared lines between the municipal boundary and the Regional System access point.)

The Municipal Utility will be funded by a combination of Government Grants, Reserves and property owner connection fees as identified later under Capital Costs Funding.

#### c. Estimated Capital Costs

The Local Wastewater System Costs are divided into several components. They are: Municipal lines on Municipal property; Municipal lines and equipment on residential property; shared lines outside the Municipality; and On Lot costs such as tanks, tank modifications, electrical service and surface/landscaping costs.

Category of Cost	Estimated Cost \$K	Building Canada Eligibility	Other Grant Eligibility	Reserve Fund Eligibility	Property Owner Responsibility
Municipal lines Off Lot	\$1,307	yes	yes	yes	no
Municipal Lines and Equip On Lot	\$ 859	partial	yes	yes	partial
Tanks, tank modifications, electrical, deeply buried tank additional costs and landscaping	Variable and extra	no	no	no	yes
<b>Total</b>	<b>\$2,166</b>				

d. **Capital Funding**

Funding is available through the Building Canada Grant, MSI funding, Reserves, and property owner connection fees.

Building Canada	\$ 808 K	
MSI Grants	\$ 428 K	
Reserves	\$ 304 K	
Connection Fees	\$ 626 K	
<b>Total Cost</b>	<b>\$2,166 K</b>	
Connection Fee per lot	\$ 6.2 K	
Per year, per lot over 25 years	\$350 dollars	
Note – there may be additional costs for tanks, tank modifications, electrical, and landscaping. This will vary from lot to lot.	\$1,000 - \$10,000	

The connection fee of \$6,200 per lot as listed above, may be paid up front or amortized over a period of 25 years at a cost of approximately \$350 per year which would be included on the owners' annual tax notice.

e. **Operating Costs**

Regional Wastewater System

The operating costs for the Regional System are estimated at \$66 per year per lot. This will increase slightly when Phase II of the Regional Line becomes operational.

Local Wastewater System

Local Wastewater system costs can be divided into two main categories. They are general operating and maintenance costs and capital replacement costs.

Operating costs for the local system include general maintenance costs such as line flushing, vents /valves maintenance, and regular pump inspections and maintenance. The Summer Village will repair and replace the pump for problems that are due to normal use, however, in the event that the Owner is negligent and prohibited materials damage the pump, the owner will be responsible for the cost of repairs.

On lot operating costs for ratepayers are limited to power for the pump.

Capital replacement costs relate to the provision of a fund to replace pumps on a 15 year life cycle and a fund to replace the main lines in approx. 60 years. The model assumes that 25% of the replacement cost of the lines will be funded through reserves and the balance of the replacement cost will be paid through grants or borrowing.

The estimated operating costs per year per lot are:

	<b>Developed Lots</b>	<b>Vacant Lots</b>
Regional System Costs	66	66
Local System Line flushing and routine maintenance including pump repairs	25	
Pump inspections (every second year)	60	
Capital Replacement – lines	47	47
Capital Replacement – pumps (15 year life)	167	
<b>Total Municipal Utility per Year</b>	<b>\$ 365</b>	<b>\$ 113</b>
Ratepayer Cost - power	20	
<b>Total System Operating Cost</b>	<b>\$ 385</b>	<b>\$ 113</b>

#### f. [Current Wastewater Costs](#)

Current wastewater costs include the wastewater fee shown on the tax notice, the amount currently in the budget to build the wastewater reserve, and costs for pump outs (for this purpose, it is estimated at 2 pump outs per year per developed lot).

Note that the increase in costs to vacant lots is associated with accounting for the Regional System operating costs as an infrastructure cost applicable to all lots. In the past, the wastewater fee has applied only to developed lots.

	<b>Developed Lots</b>	<b>Vacant Lots</b>
Wastewater fee on taxes	122	
Wastewater reserves per 2016 budget	57	57
Pump Outs (assume 2 per year)	210	
<b>Current Cost per Lot</b>	<b>\$ 389</b>	<b>\$ 57</b>

<b>Incremental Cost per lot of New Wastewater System</b>	<b>(\$ 4)</b>	<b>\$ 56</b>
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### 3. [Schedule](#)

Tendering of the project	Late October 2016
Awarding of project	November 2016
Construction Begins – Municipal lines On Lot equipment	Winter 2016 -17 Spring 2017
Completion of Construction	Late July 2017

#### 4. Summary

The information provided in this document is based on a Municipal Utility Model in which the Summer Village will own and operate the system and its components from the pump to the Regional System connection point. Cost estimates are based on information provided by MPE engineering.

##### Capital Costs

If the total local wastewater system costs are in line with the engineering estimates, the net capital cost per lot after the application of available grants and reserves will be about \$6,200. This amount would be borrowed by the Summer Village. This amount can be paid immediately by the owner or amortized over 25 years at approx. \$350 per lot per year.

The process will be managed as a connection fee under a Utility Bylaw. It will apply only to lots that are connected to the system. Vacant lots that are developed and connect at a later date will also have a connection fee when they are serviced, however, the amount of the fee may change over time.

Given the current economic climate, there is a possibility that construction costs will be lower than the engineering estimates established nearly two years ago. If this is the case, the connection fee will decline.

##### Operating Costs

The annual operating costs are currently estimated at close to \$400 for a developed lot and \$113 for a vacant lot. However, residents are now paying approx. \$400 for a developed lot (assuming 2 pump outs per year) and \$57 for a vacant lot. Note that pump repair or replacement due to negligence on the part of the Owner will be the Owner's responsibility.

Therefore, ratepayers with developed lots will likely break even on the operating costs as compared to the 2016 budget. Vacant lot owners will have an annual increase of about \$56 related to the allocation of Regional Wastewater System to all lots as an infrastructure cost.

While the costs are a concern to some people in the Summer Village, other benefits will be achieved through this project in areas of Health and Safety, Environmental Protection, Convenience, and Social Impacts. This infrastructure improvement is expected to add value to properties in the area in the future.