



**Asset Management  
Plan – Phase One  
(STAMP – P1)**



**Consolidation  
September 2015**



## **Executive Summary**

In December 2013, Council adopted the Selwyn Township Asset Management Plan – Phase One (STAMP-P1) as the starting point for a new long term asset management planning and budgeting process at Selwyn Township.

Phase One of STAMP-P1 included core infrastructure. For the purposes of the plan, **core infrastructure** included:

1. Roads network (*including stormwater collection*)
2. Water treatment and distribution system
3. Sewage treatment and collection system
4. Stormwater management ponds

In establishing STAMP-P1 every effort was made to tie back to the Township Strategic Plan, and in particular overarching Goal # 3:

### ***Support a sustainable, balanced and investment-ready community***

Using STAMP-P1 as a starting point, staff made progress throughout 2014 in several areas, most notably, improving the fullness and quality of asset data on hand and building upon service level deliverables. In 2015, that work continued with a renewed focus on digitization of paper plans and capturing GPS coordinates for utility structures.

Council endorsed the allocation of the initial receipt of OCIF funds to the Asset Management Planning Project to offset program expenses including engineering and consulting work as required and included in the 2015 budget.

With the dedication of funding from OCIF, the Township can rely on expertise of the engineering firm, engage individuals or firms to complete scoped tasks/projects, and generally fill-in the missing gaps. In addition, with the ability to use this dedicated grant funding, and related funding from the tax budget and water and sewer rates, staff will have the resources at hand for long term improvement.

The Township has made considerable effort in recent years to address infrastructure needs and improve the condition of assets. Over time an updated and continually improving asset management plan will provide the Township with the information it needs to make informed decisions on managing capital assets in a sustainable manner over the long term.



## 1. Introduction

Asset management plans provide sufficient qualitative and quantitative detail to make informed decisions that will maximize the benefits of the Township's infrastructure.

The Selwyn Township Asset Management Plan – Phase One (STAMP-P1) is the starting point for a new long term asset management planning and budgeting process at Selwyn Township.

### Scope

Phase One of the Selwyn Township Asset Management Plan (STAMP) includes core infrastructure.

For the purposes of this plan, **core infrastructure** is:

- i. Roads network (*including stormwater collection*)
- ii. Water treatment and distribution system
- iii. Sewage treatment and collection system
- iv. Stormwater management ponds

### Rationale

- These four key areas represent the largest infrastructure components in the Township asset base
- The potential for funding from upper levels of governments specific to Infrastructure are linked to these core areas
- The Township will use STAMP P1 as a launching point to Phase Two which will:
  - Improve the fullness and quality of asset data on hand
  - Build upon service level deliverables
  - Formalize asset condition rating systems
  - Extend reach to additional asset classes including facilities, fixed equipment, vehicles and other mobile equipment

### Data Compilation

Utilize existing data sources to establish an overall snap shot of readily available information and identify any significant gaps/approaches.

Acknowledge up-front that this process will identify information gaps and reliability concerns. This process is an important part of asset management and will reinforce the need to establish sound information gathering techniques.



## **Service Standards**

In establishing STAMP every effort will be made to tie back to Township strategic plan directly.

*Goal # 3 – Support a sustainable, balanced and investment-ready community*

Use underlying rationale of the Strategic Plan to develop more robust service standards based on stated goals, initiatives and Council supported projects.

## **Long Term Decision Making**

STAMP is a ‘living’ document that requires attention to detail, makes use of an integrated and coordinated planning model for asset renewal, and, at a minimum, will be refreshed with annual updates.

STAMP will feed into the annual capital budget, impact the operations budget and reinforce that the priorities established for infrastructure renewal require predictable financial resources.

In addition to capital investments, it is essential that preventative maintenance programs clearly extend useful life of assets and minimize future costs. Examples of these preventative maintenance programs for core infrastructure include:

- Early resurfacing to maintain road bed condition
- Concrete relining of iron water mains with no/low break frequencies
- Crack sealing sewer mains and grouting sewer manholes
- Proper annual maintenance of stormwater retention ponds

These types of investments reflect proper financial stewardship and minimize risk. This type of priority setting and the complementary financial strategy are formally adopted through a locally based decision making process.

## **Public Outreach and Transparency**

STAMP will be available through the Township’s website under the Financial Services Department.

Given its relationship to priority setting in the annual budget, STAMP will be denoted through a specific tab or by using a specific symbol. This will reinforce that priority setting for annual expenditures are grounded in long term planning.



## **2. State of Local Infrastructure**

### **Roads**

The Selwyn Public Works department is responsible for the maintenance and construction of the Township's road network. The road network includes road base and surfaces, shoulders, ditches, culverts and related signage. In urban sections the road network also includes stormwater management features including curb and gutter, catch basins and drainage outlets.

For the purposes of this report, the stormwater management collection system within the roads network is included in the roads replacement costs and captured through the increased urban construction values. *(stormwater management ponds are included as a separate asset class)*

### **Surface Type**

The Township's complete road infrastructure system covers approximately 310 km within a mix of both urban and rural settings. The road network includes surfaces ranging from gravel to low class bituminous (LCB) to hot mix paved (asphalt). The Township has approximately 6 km of gravel roads, 259 km of surface treated roads (low class bituminous (LCB)) and 45 km of asphalt paved roads (HCB).

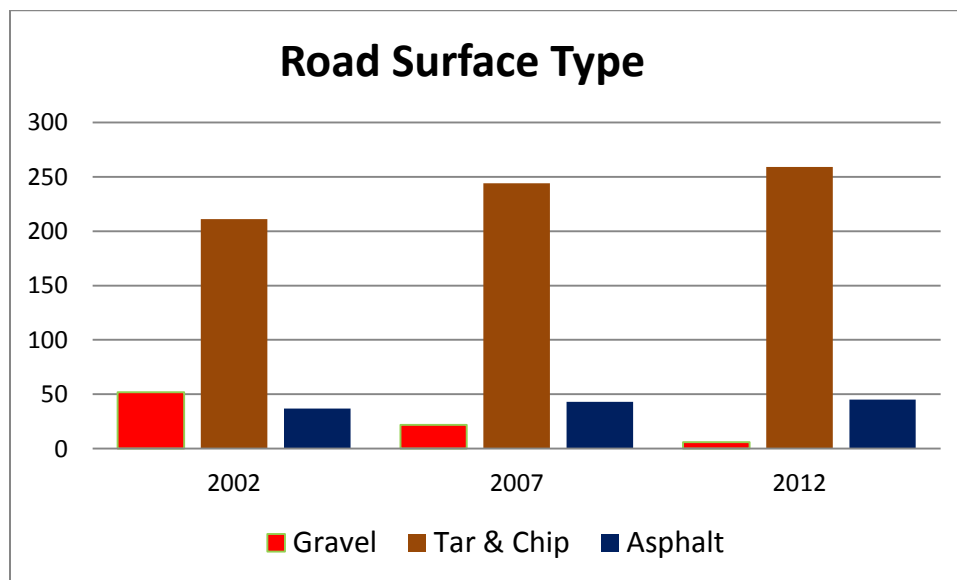


Rural road with open ditch drainage and tar & chip surface





Urban road with curb&gutter, storm water and asphalt surface





<b>Township of Selwyn</b>	
<b>Road System in Kilometres</b>	
<b>as of September 2012</b>	
<b>A.</b>	<b>Surface Type *</b>
Earth	0
Gravel (Loose Top Gravel)	6
Low Class Bituminous (LCB)	259
Hot Mix (HCB)	45
<b>Total A</b>	<b>310 km</b>
<b>B.</b>	<b>Roadside Environment</b>
(i)	<b>Rural</b>
Gravel	6
LCB	186
HCB	6
<b>Total Rural</b>	<b>198 km</b>
(ii)	<b>Semi-Urban</b>
Gravel	0
LCB	72
HCB	29
<b>Total Semi-Urban</b>	<b>101 km</b>
(iii)	<b>Urban</b>
Gravel	0
LCB	1
HCB	10
<b>Total Urban</b>	<b>11 km</b>
<b>Totals B</b>	<b>310 km</b>
*Estimated to the nearest kilometre.	

## Road Network Valuation

### Tangible Capital Asset Values

For audit purposes, historical cost is used and then amortized over the useful life of the asset. Recent changes in public sector accounting standards required the implementation of tangible capital asset accounting which captured the historical costs.



A review of the Township's TCA data related to roads shows TCA asset values of over \$27 million.

<b>Tangible Capital Asset Details</b>	<b>Amounts</b>
Roads - Historical Cost	27,250,928
Roads - Accumulated Amortization	(14,983,924)
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Roads - Net Book Value	12,267,004

Based on financial accounting valuation, data illustrates that historical cost less amortization (useful life) is 45% net book value.

### Replacement Cost

In developing a long term asset management plan, one needs to have regard for replacement cost. Replacement cost, as referenced by the Province's Building Together guide, is forward looking and accounts for expected inflation, changes in technology and other factors.

For the purposes of the Roads Needs Study, industry standards are used by engineering firm and referenced in appendix b of the roads needs study.

This valuation method is further impacted in Selwyn by the fact that many types of rural and semi urban construction are completed using our own staff and equipment. While labour, equipment time, aggregates and construction materials are appropriately charged to the specific jobs, this has historically resulted in lower construction values than that which would have been incurred if we tendered on the open market.

### **Standards and Condition Rating**

The Township road network is monitored through periodic road patrols with conditions documented through standardized record keeping in conjunction with Minimum Maintenance Standards.

In addition, it has been the Township's practice since 2002 to complete a comprehensive Road Needs Study every five years. The purpose of the Road Needs Study is to assess the current condition of the network and update the road inventory to include new additions since the last Road Needs Study. The information derived from the study update provides assistance to the Township for developing and executing a planned road maintenance and improvement program.

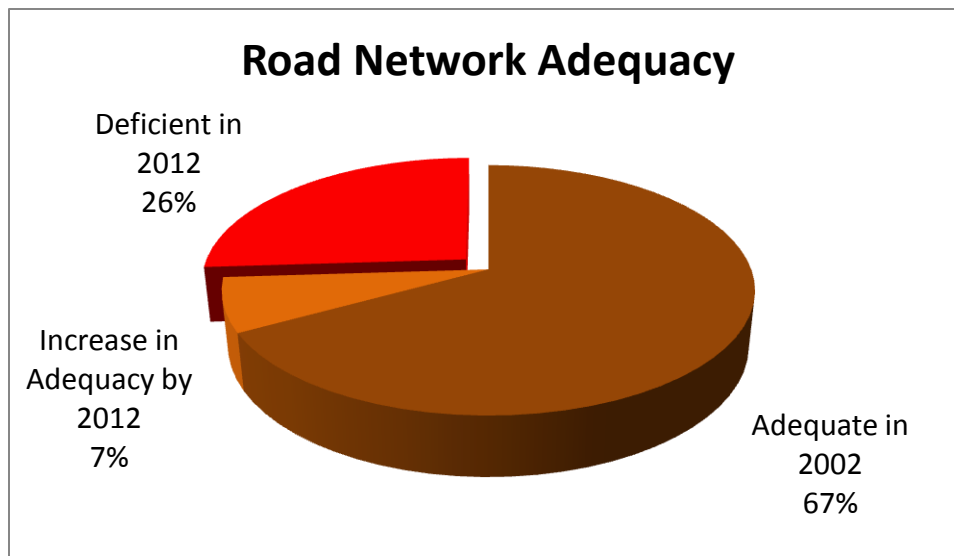


The Township retained the services of D.M. Wills Associates (Wills) to undertake a review of the existing road network and assess its physical condition as well as confirm various road attributes. Data collected as a result of the field review is used to develop a prioritized listing of the road network needs, the results of which are included in the updated Roads Needs Study 2012.

Of the 310 km of roads inventoried, a total of 88 km were found to be critically deficient in one or more areas or expected to be within five (5) years. Of these 88 km of road, 6 km represents roads with AADT of less than 50 vehicles. Regardless of condition ratings, roads with AADT of 50 or less are assigned as "Adequate" as per the Ministry protocol and as such are excluded from the system adequacy calculation. The total overall system adequacy for the 2012 Road Needs Study, which is based upon the total road kilometres less the identified critically deficient roads, is as follows:

The 2012 Roads Study calculates Township road adequacy at 74%, meaning only 26% of our roads are considered deficient based on a number of engineering criteria

$$\text{2012 System Adequacy} = \frac{310 - 82}{310} \times 100\% = 74\%$$





## Water System

### Overview

The Township of Selwyn owns two municipal drinking water systems located in the former Village of Lakefield and in the Woodland Acres water service area.

### Lakefield Water System

The majority of the Lakefield water system was installed in 1955. The water distribution system received significant upgrades to key water mains in the mid 1990's. The water treatment plant was upgraded at several junctures to add standby power and was expanded with new filter beds and related pumping and equipment in 2002.

The Lakefield Water System has been operated and managed under contract with Peterborough Utilities Services Inc. (PUS) since 2001. PUS is a respected water provider in the industry and an accredited Operating Authority under Operational Plan # 149-402.

The Lakefield water system provides municipal drinking water to approximately 1,275 households and a mixture of semi-urban commercial/industrial/institutional customers, which total approximately 3,600 customers.

The Lakefield water distribution system consists of approximately 23,645 meters of water main, 109 hydrants, booster station, a standpipe with an effective volume of 900 m<sup>3</sup> and an elevated storage tank (water tower) with capacity of 2,750 m<sup>3</sup>.

The standpipe and elevated storage tank allow the system to operate as one pressure zone, save and except a small area adjacent to the base of the standpipe which operates in isolation with assistance from the booster station.

The water treatment plant is located at Water Street North and consists of a dual intake from the Otonabee River, a low lift pumping system located within the water treatment plant, and a treatment process using chemical coagulation, ballasted floc sedimentation (Actiflo), dual media filtration and disinfection. The plant has a two-celled baffled 1000 m<sup>3</sup> clearwell and a high lift pumping facility discharging to the distribution system.





New water tower



### Woodland Acres Water Service Area

The Woodland Acres Water System consists of two phases within a semi-urban subdivision. The original phase was installed in the 1960's. A significant upgrade to the phase 1 section was completed in 2001-2002. At the same time the main water feed was upgraded and phase two installations began.

The Woodland Acres Water System has been operated and managed under contract with Peterborough Utilities Services Inc. (PUS) since 2001. PUS is an accredited Operating Authority under Operational Plan # 149-401.

The Woodland Acres water system is a water distribution system connected to the Peterborough Water Commission water system. The Woodland Acres system receives its water supply at a booster station at the corner of Woodland Avenue and Woodland Drive via a 300 mm diameter watermain from the City of Peterborough. The pumping station boosts pressure to the water service area which includes watermains, hydrants and provides municipal drinking water to approximately 265 households.



Woodland Acres Booster Station

### **Water System Valuation**

#### Tangible Capital Asset Values

For audit purposes, historical cost is used and then amortized over the useful life of the asset. Recent changes in public sector accounting standards required the implementation of tangible capital asset accounting which captured the historical costs.



A review of the Township's TCA data related to water shows TCA asset values of over \$9.98 million. *(This does not include the new water tower and related mains identified as work in progress at the end of 2012 – approx. \$5.19 million)*

<b>Tangible Capital Asset Details</b>	<b>Amounts</b>
Lakefield Water Plant - Historical Cost	2,596,655
Lakefield Plant Equipment – Historical Cost	1,918,812
Water Distribution – Total Mains - HC	3,664,716
Water Distribution - Hydrants – Total - HC	322,348
Water Distribution – Stations & Storage - HC	1,485,104 **
Water - Accumulated Amortization	(2,741,179)
	-----
Water - Net Book Value	7,245,857
** Does not include new tower in WIP	

Based on financial accounting valuation, data clearly shows that the system is relatively new. Township has been investing in system betterments. The chart above illustrates that historical cost less amortization (useful life measure) is 73% net book value.

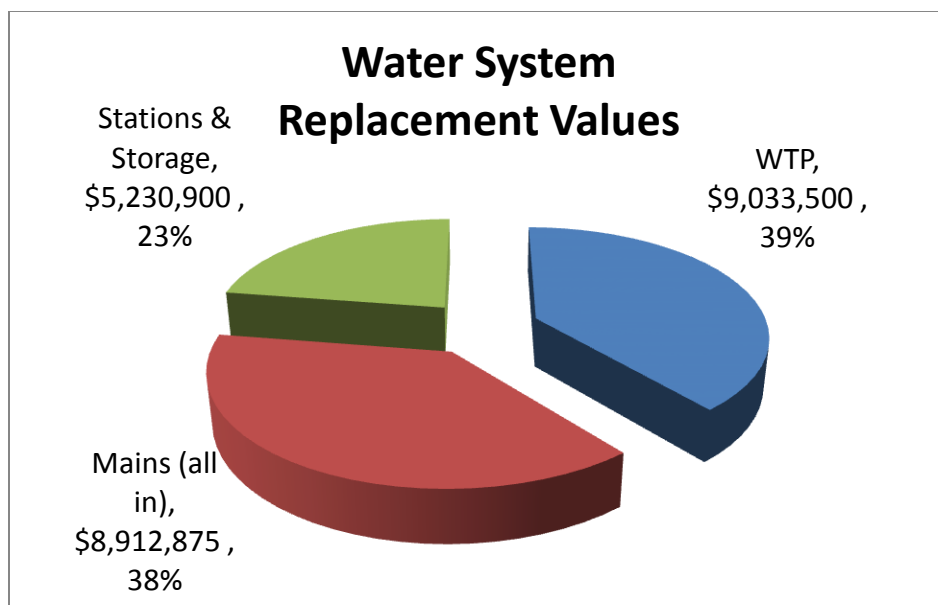
#### Replacement Cost

As noted earlier in this report, in developing a long term asset management plan, one needs to have regard for replacement cost.

For the purposes of this report industry standards used by engineering and insurance professionals are used and included as reference in appendices to this report.

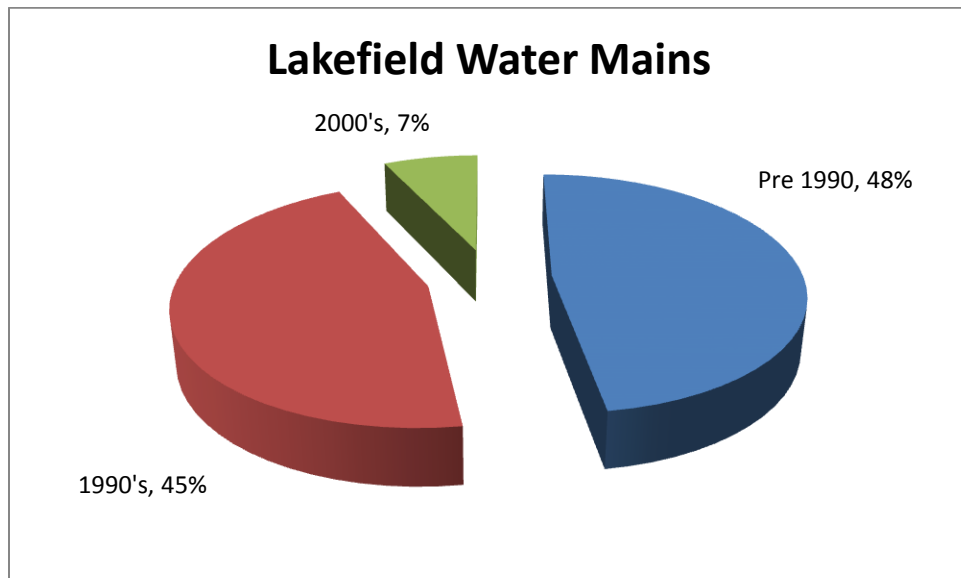
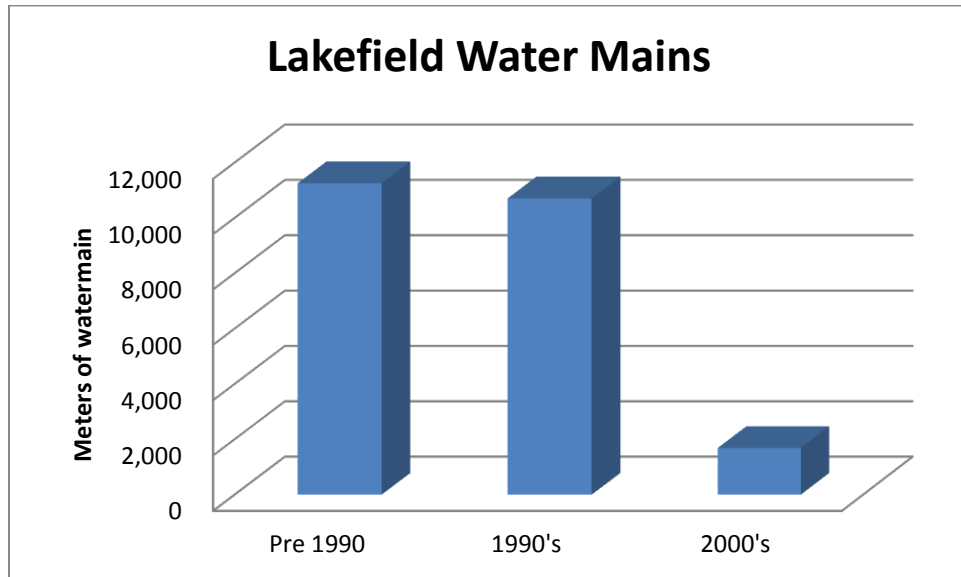
<b>Capital Asset Details</b>	<b>Amounts</b>
Lakefield Water Plant	9,033,500
Water Distribution – Total Mains (Lakefield*)	8,912,875
Water Distribution – Stations & Storage	5,230,900
	-----
Water – Full Replacement Value	23,177,275





<b>Township of Selwyn</b>	
<b>Lakefield Water Distribution- mains by meter</b>	
<b>as of December 2012</b>	
30 mm copper	575
32 mm copper	31
50 mm copper	96
100 mm cast iron	123
100 mm pvc	173
150 mm cast iron	7252
150 mm cast iron/cement relined	1716
150 mm ductile iron/unknown	1602
150 mm pvc	2992
200 mm cast iron	1065
200 mm cast iron/cement relined	117
200 mm ductile iron	191
200 mm pvc	2930
300 mm pvc	3489
350 mm cast iron	31
350 mm ductile iron	190
350 mm pvc	460
400 mm ductile iron	203
400 High Density Poly	283
500 High Density Poly	127
Total Meters	23,646





The two charts above show the Lakefield water mains according to years of installation. The 1990's marked a major restoration in the watermains in terms of meters replaced, switch to PVC and upsizing for better flows. A majority of the pre-1990's water mains in place actually relate to the original installation and are of 1955 vintage.



## Standards and Condition Rating

The Township water systems are monitored by PUS as the Service Provider. In accordance with the agreement PUS provides management, operation, administration and maintenance services. As part of this management service PUS makes annual recommendations for capital expenditures as follows:

*Capital Expenditures” means the charges for all capital items in relation to the Facilities, including new or replacement equipment, any overhaul or rebuild of equipment, any non-routine repair; maintenance and excluding routine maintenance.*

*No later than September 30th of each year this Agreement is in force, or a date as the parties may agree in writing, THE SERVICE PROVIDER will provide the Township with an estimate of the Capital Expenditures reasonably required for the operation of the Facilities for the following year. The list of recommended Capital Expenditures shall include the reason for the recommendation and potential implication for not performing the work. The Township’s written approval of any estimate authorizes THE SERVICE PROVIDER to incur the Capital Expenditures included in the estimate in the following year (the “Approved Capital Expenditures”).*

Peterborough Utilities Services representatives have recommended that a number of watermains be considered for relining. These recommendations will be combined with recommendations from our engineering firm to feed into the asset management plan to establish priorities.

This work builds upon the various studies and lifeline reports that have been completed by the Township engineer D.M. Wills Associates (Wills) Data collected as a result of the field review is used to develop a prioritized listing of the watermain needs, the results of which are included in the updated annual budget

In addition, it has been the Township's practice to track watermain breaks and plot on distribution plans. These breaks are then cross-referenced to roads needs and repairs/replacement prioritized.

With relation to plant and storage, PUS tracks and reports on flow data by month. For long term planning purposes, staff will be able to produce trending reports on consumption. Can also analyze in terms of other qualitative data such as whether the summer was a dry season. This type of data and data analysis will aid in some of the works outlined in the recommendations section of the report.



## **Sewer System**

### Overview

The Township of Selwyn owns two municipal sewage systems located in the former Village of Lakefield and in the Woodland Acres sewer service area.

### Lakefield Sewage System

The majority of the Lakefield sewer system was installed in 1972. The sewer collection system has received periodic camera inspection and crack sealing as well as manhole grouting. The main sewage pumping station was upgraded in 1991 to expand wet well size, install three pumps and to add standby power. In 2011 a building addition was completed to bring chemical storage inside with proper containment and to replace the sewer forcemain with dual 300 mm forcemains.

The Lakefield Sewer System has been operated and managed under contract with Peterborough Utilities Services Inc. (PUS) since 2001.

The Lakefield sewer system accepts wastewater from approximately 1,200 households and a mixture of semi-urban commercial/industrial/institutional customers, which total approximately 3,600 customers.

The Lakefield sewage collection system consists of approximately 23 kilometers of sewer main, 281 sewage manholes, 5 pumping stations, a main pumping station with three pumps and dual forcemains to a two celled sewage lagoon.

The main sewage pumping station located on Water Street accepts all wastewater from the collection system, adds a coagulation chemical to aid sedimentation, and then pumps to the sewage lagoon through one of two forcemains.

The sewage lagoon is located on County Road 33 to the south east of Lakefield. The south cell is fully aerated with sedimentation basin; the north cell is used as a polishing pond before effluent goes through UV filtration and is received by the Otonabee River downstream of the Village.





Lagoon – south cell



Underground Pumping Station

<b>Township of Selwyn</b>	
<b>Sewage Collection- mains</b>	
<b>as of December 2012</b>	
150-250 mm AC	12,999
300-375 mm AC	1,907
Clay 150 mm	782
200 mm pvc	5,942
300 mm pvc	1,354
Total	22,984



*The sewer collection system grew marginally in 2014 with a 29 meter extension to service a new lot on Fitzgerald Street.*

#### Woodland Acres Water Service Area

The Woodland Acres water system consists of two phases. The original phase was installed in the 1960's. A significant upgrade to the phase 1 section was completed with camera inspection and crack sealing. At the same time the sewer main for disposal to the City system was replaced and phase two installations began in the early 2000's.

The Woodland Acres Sewer System has been operated and managed under contract with Peterborough Utilities Services Inc. (PUS) since 2001.

All sewage collected within the Woodland Acres sewer service area of approximately 265 homes flows to the south east via a gravity sewer main to the City of Peterborough.

### **Sewer System Valuation**

#### Tangible Capital Asset Values

For audit purposes, historical cost is used and then amortized over the useful life of the asset. Recent changes in public sector accounting standards required the implementation of tangible capital asset accounting which captured the historical costs

A review of the Township's TCA data related to sewer shows TCA asset values of over \$5.4 million.

<b>Tangible Capital Asset Details</b>	<b>Amounts</b>
Lakefield Main Pumping Station- HC	2,684,116
Sewage Collection – Total Mains - HC	4,317,294
Sewage Collection – Manholes – Total - HC	420,697
Sewage Collection – Pumping Stations-HC	126,169
Sewage - Accumulated Amortization	(2,103,283)
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Sewage - Net Book Value	5,444,993

Based on financial accounting valuation, data clearly shows that the system is relatively new. Township has been investing in system betterments.

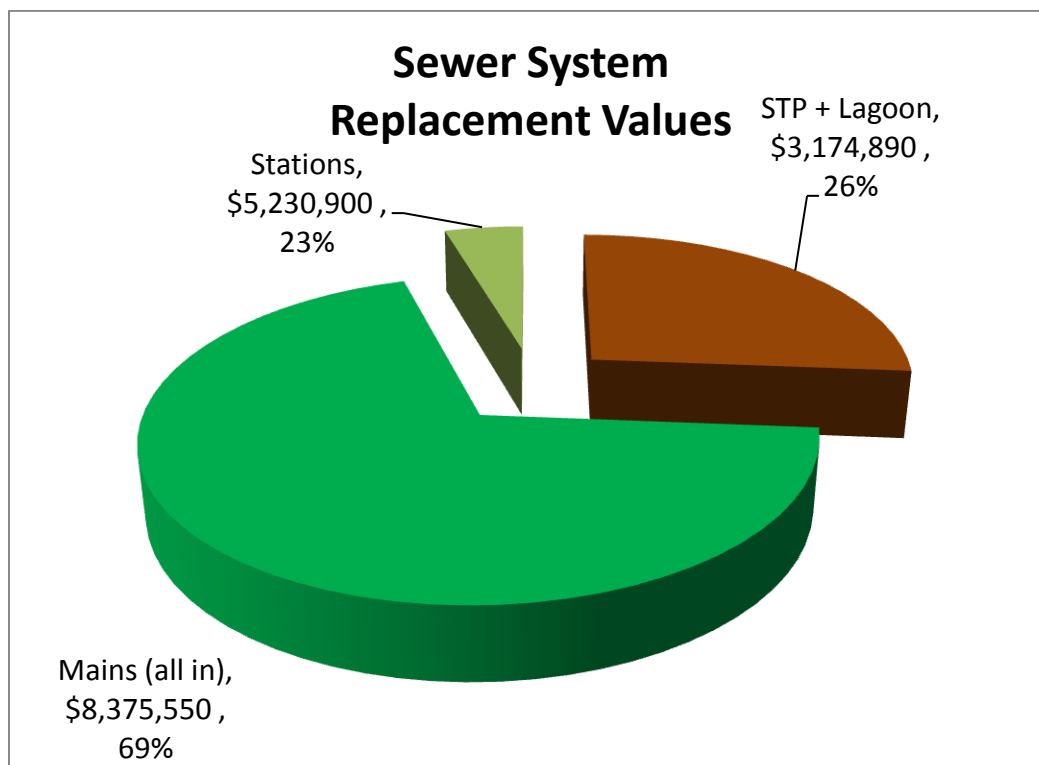


### Replacement Cost

As noted earlier in this report, in developing a long term asset management plan, one needs to have regard for replacement cost.

For the purposes of this report industry standards used by engineering and insurance professionals are used.

<b>Capital Asset Details</b>	<b>Amounts</b>
Lakefield Main Pumping Station & Lagoon	3,174,890
Sewage Collection – Mains (all in)	8,375,550
Sewage Collection – Pumping Stations	554,000
	-----
Sewage System – Replacement Value	12,104,440





## Standards and Condition Rating

The Township sewage systems are monitored by PUS as the Service Provider. In accordance with the agreement PUS provides management, operation, administration and maintenance services. As part of this management service PUS makes annual recommendations for capital expenditures as follows:

*Capital Expenditures” means the charges for all capital items in relation to the Facilities, including new or replacement equipment, any overhaul or rebuild of equipment, any non-routine repair; maintenance and excluding routine maintenance.*

*No later than September 30th of each year this Agreement is in force, or a date as the parties may agree in writing, THE SERVICE PROVIDER will provide the Township with an estimate of the Capital Expenditures reasonably required for the operation of the Facilities for the following year. The list of recommended Capital Expenditures shall include the reason for the recommendation and potential implication for not performing the work. The Township’s written approval of any estimate authorizes THE SERVICE PROVIDER to incur the Capital Expenditures included in the estimate in the following year (the “Approved Capital Expenditures”).*

Peterborough Utilities Services representatives have recommended a number of improvements/repairs and these recommendations will be combined with recommendations from our engineering firm to feed into the asset management plan to establish priorities.

This work builds upon the various studies and lifeline reports that have been completed by the Township engineer D.M. Wills Associates (Wills). In addition, it has been the Township's practice to track sewer main replacements and plot on collection plans.

Data collected as a result of the field review is used to develop a prioritized listing of the sewer main needs, the results of which are included in the updated annual budget.



## Storm Water Management Ponds

### Overview

The Township of Selwyn owns and is responsible for three (3) municipal storm water management ponds located in the former Village of Lakefield, the former Township of Ennismore and in the Woodland Acres subdivision.



Typical subdivision stormwater pond

In addition, there is one ‘Stormceptor’ catch basin that is not a pond but is a stormwater quality tool not located on a road allowance and will be tracked in this section.

At the date of report writing there are four (4) other storm water management ponds pending approval. Should approval be granted these will also be Township owned and maintenance will fall under Township responsibility.

All Township ponds are provided for both storm water quality and quantity.

### Tangible Capital Asset Values

Based on current TCA practice for the Township, storm water management ponds are not capitalized. As such no historical cost is available.

### Replacement Cost

There is very little data on the ponds, but the following chart provides a starting point for further research. All were contributed assets from developers, but now fall under the Township’s responsibility.



<b>Township of Selwyn</b>			
<b>Stormwater Management Ponds</b>			
<b>As at December 2012</b>			
<b>Planning File #</b>	<b>Applicant</b>	<b>Ward</b>	<b>Location</b>
15T-01003	Watson	Lakefield	Albert St.-south side
15T-91002	Hickson	Ennismore	Earl Ave. - north
15T-10001	Cor-Plan Inc.	Smith	Woodland Acres – south on hydro corridor



### **3. Service Levels**

The initial 2013 STAMP-P1 plan did not include a lot of detail on service levels, but rather outlined the principles related to establishing Selwyn's specific approach.

- A range of quantifiable service level targets, that incorporate the quantity and quality of capital assets, should be established for all services.
- Service level data should be measured, reported in relation to established targets, and adjusted annually.
- Service level targets, likely more detailed and tailored to each service area, should complement measures currently being developed for the Township Strategic Plan

In 2014, the CAO, Manager of Public Works and Manager of Financial Services held a number of meetings with the engineer to discuss options for service levels.

It is generally accepted that base levels of service will build upon accepted practices. The established levels of service inform maintenance activities by setting out the objectives (or expectations) to be achieved and level of service standards for each class of infrastructure (e.g. roads, water, wastewater)

An overall level of service target will be assigned for each of the core asset groups. The Target will be used as the measure to assess how the Township is doing in meeting the Plan with respect to each of the groups.

The levels of service will set out a written series of procedures that will guide staff's recommendations to Council as they make financial decisions designed to maintain all of the Township's capital assets to the level appropriate for the Township given its relative priorities and minimum legislated requirements.

The service level standards will ensure the delivery of a quality level of services and an appropriate measure of accountability to municipal taxpayers. Generally established service level standards will support the old adage, "what gets measured, gets done."

#### **Roads – Minimum Overall System Adequacy Rating**

**The Township's goal is to maintain, as a minimum, an overall system adequacy rating of a given percentage yet to be confirmed. Road Condition ratings are assigned in accordance with the MTO Inventory Condition Manual, 1991.**

The department continues to place a high priority on roadside maintenance, ditching efforts, sweeping, and resurfacing.



In 2014, the department completed the last of a three year pilot related to improved roadside maintenance activities. In this pilot, three different automated brush head units were rented throughout the summer months. The units involved:

- Year 1 – truck with brush head mounted mid-way back
- Year 2 - Trackless rubber tired unit with rotary brush head
- Year 3 - Trackless rubber tired unit with flail brush head

Clearing roadside grasses and brush farther away from the road surface, yields better sightlines and improved drying of the road surface. As an added health and safety benefit, the automated unit reduces direct contact by the works employees with poison ivy which is a concern with more hands-on roadside maintenance activities.

**Water and Wastewater - Meet All Applicable Regulations**  
**Water and Wastewater investments shall be as required to ensure the long-term sustainability of the systems and ensure compliance with the Safe Drinking Water Act and other applicable legislation.**

The CAO and Manager of Financial Services continue to work with representatives from Peterborough Utilities Services Inc. (PUS), the Township's accredited operator for the Lakefield Water system.

In late 2014 approval was given to incorporate a Lakefield watermain relining project in the overall PUS watermain relining tender slated for 2015. This garnered better pricing as part of a larger tender and moved forward with an item on the PUS annual recommendations for capital maintenance.

PUS and the Township engineer are also working on the integral communications system at the water treatment plant and necessary upgrades to the electronic data monitoring equipment. The project will be initiated this year with some minimal equipment implementation, but the majority of the work will be in the 2016 budget.

Water distribution system records and digital plans have been updated to reflect any water main breaks and additional refinements.

## **Sewer**

The CAO and Manager of Financial Services continue to work with representative from PUS, the Township's accredited operator for the Lakefield Sewer system.

The next step in terms of priority and system renewal is replacement of aging pumping stations.



Two stations have been identified as priorities for rehabilitation or replacement;

- George Street pumping station
- Lakefield College School pumping station

The majority of long term planning efforts completed in 2014 related to the ongoing sewer environmental assessment (EA). The Manager of Building of Planning took the lead and worked with engineering firm, the CAO and Manager of Financial Services.

While the sewer EA is broad and all encompassing, an essential piece in the EA is the importance of the George Street pumping station. This involves a combination of required upgrades to this key pumping station and regard for expansion of the system to link the Lakefield South development area and currently underserviced areas on west Bridge Street and west Smith Street.

**While all infrastructure investments are necessary, the replacement of the George Street pumping station has been identified as the top investment priority for the Township.**

Engineering work to prepare for a sewer main flushing and camera tender will be completed in 2015. The project goal is a tender call over the winter of 2015-2016 for project completion in the spring of 2016. It is expected that any crack sealing tender would follow immediately thereafter in the summer of 2016.

## **Storm Water Management Ponds**

Staff have been successful in compiling additional details from planning records related to the stormwater ponds construction and proposed maintenance activities.

As well, in 2015 the Township engineering firm was engaged to complete a detailed stormwater inspection program and establish maintenance guidelines. As part of this work, a general checklist per site will be completed including items such as water level, inlet and outlet function, existing vegetation, sediment accumulation, and erosion. In addition, each site inspected will receive complete photo documentation.

The firm should have this document prepared in Q4 2015 and ready for review. This document can serve as the basis for future inspection and improvement programs.



## **4. Asset Management Strategies**

Township infrastructure planning and financial management for capital projects has been and continues to be a key component of the annual budgeting process.

The Township always needs to be able to react to infrastructure challenges as they arise. Many times capital projects are the result of **reactive** strategies as unanticipated events occur.

Thus far, capital project planning has been more typically **preventative** in nature, as staff attempt to anticipate infrastructures issues before they become critical and require a reactionary response.

When one considers more effective asset management strategies and looks to replacement values, the long term needs requires a switch in focus to being more **proactive**. Whether this is through funding/financing or replacing/renewing before the useful life of the asset is reached and failure becomes more critical.

The following information outlines some of the strategies currently used and how it may impact on core infrastructure. The Township does need to move towards a more proactive replacement strategy. It is expected that once some of the outstanding pieces outlined in this report are completed, that annual updates will begin to improve the asset management strategy moving forward.

### **Roads**

In terms of planned actions or strategies to take care of the roads infrastructure, the Township Roads department makes use of a number of tools and information sources.

The Township continues to do the regular maintenance in the form of ditching cleanout and clearing in order to extend the useful service life of all existing roads.

Recently, improved roadside maintenance has resulted from using different types of equipment to improve brushing efforts.

Sweeping is another necessary maintenance items following winter control operations and in order to control dust and excess accumulations on road surfaces.

The Township road network is monitored through periodic road patrols, with conditions documented through standardized record keeping in conjunction with Minimum Maintenance Standards. This informs potential capital needs of the roads network and this is particularly evident following the spring when frost within the road base may cause breakup.



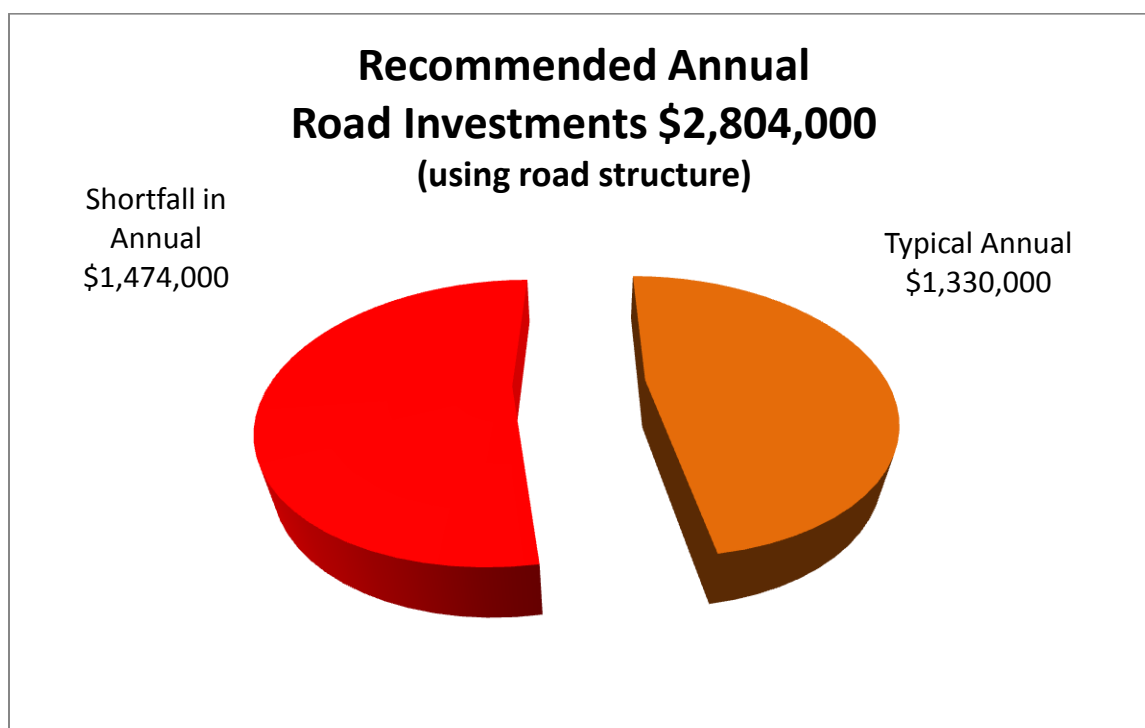
Another informed capital planning tool is the Roads Needs Study. While the study provides an excellent database on road sections and road types, it also provides recommendations on repair or capital replacement. In the last three (3) Roads Needs Studies, prioritization for capital improvements has been based on the structural adequacy and traffic demands on each road.

Using this approach, and as noted in section 2, the roads network is considered to be 76% adequate. This percentage illustrates a good overall condition of the roads, due in large part to the commitment by Selwyn Council and roads staff.

Based on the report the total cost to undertake the recommended capital improvements for the 5 year plan is \$5,878,000. The report also recommends resurfacing 37 km annually + 3 Km of asphalt annually to maintain overall system adequacy.

The typical road expenditures included in the last decade of approved budgets are as follows:

- An annual road construction budget of approximately \$1,000,000
- Coupled with a hard top resurfacing program of \$330,000 covering approximately 23 kilometres of roads



This difference is indeed significant, but is open to further analysis and options.



When determining long term planning for roads, Council does have the option to set capital plans based on different criteria than road base adequacy. For instance, ride-ability and road surface could be determining factors. Also reconstruction or resurfacing policies could be set in relation to average daily traffic flows or thresholds related to traffic volumes.

As a result, the recommendations section suggests a more detailed discussion on how the Roads Needs Study will be formatted prior to bringing this to Council for approval. A reformatted Roads Needs Study will then better inform the debate on the amount of funding that should be reasonably set aside on an annual basis. This in turn will inform the long term approach to roads infrastructure funding.

## **Water**

Both of the Township Water Systems operate under separate full cost recovery models and also adhere to section PS3150, of the Public Sector Accounting Handbook related to accounting for tangible capital assets (TCA).

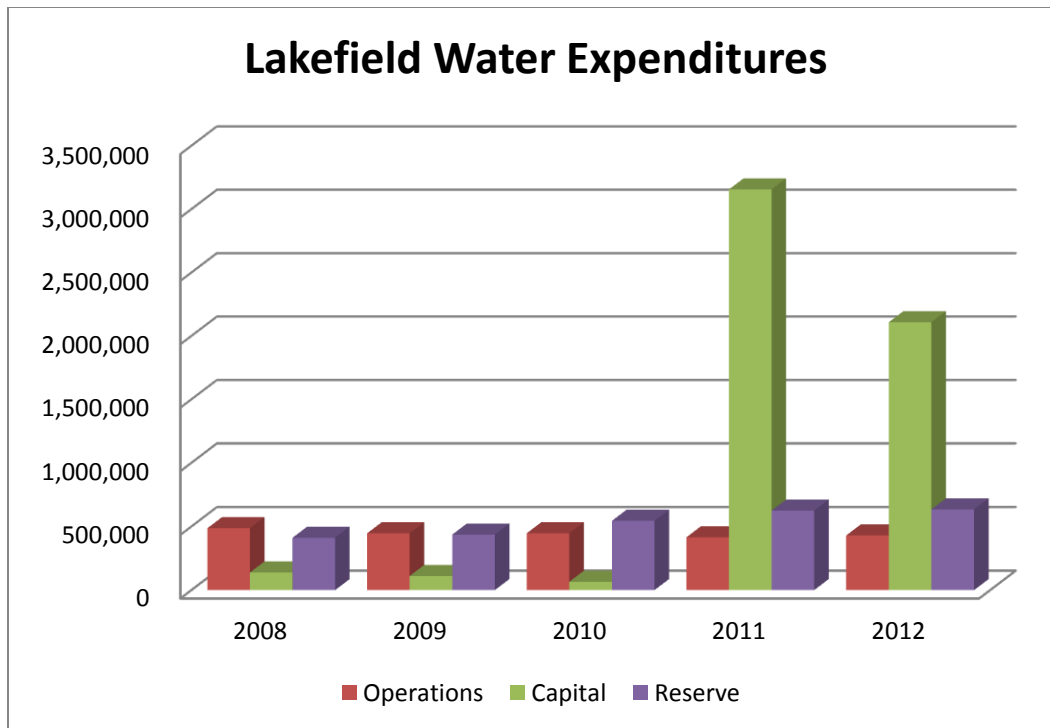
Through the implementation of annual water rate increases and receipt of various operating and capital grants, the water systems have been well maintained and have kept current with industry operating practices.

The Lakefield system is debt free. There are no plans within the life of this plan to require the acquisition of debt.

Based on the existing rate structure, the Lakefield user rate supports three components: ongoing operations, planned typical capital projects and ongoing reserve contributions. In a typical year, funding for capital projects require a 'give-and- take' with the amounts available for reserve contributions.

In order to look to the future, it is important to have some context of past expenditures. This will also allow the Township to see what type of funding increases may be required for full system replacement.





Ongoing pump rebuilds/replacements and typical chemical feed maintenance items are currently covered within the existing rates.

As well, whenever urban roads are slated for rehabilitation, staff have regard for the underground water mains and whether they should be included for relining or replacement. As a manner of practice PUS staff will be updating for break frequency to inform the above noted replacement schedule.

With the water stand pipe and elevated storage tank just recently upgraded and installed, no works are planned in those areas.

The water treatment plant does have some communication and data capture matters that need to be reviewed and attended too. The SCADA system is being reviewed by PUS with recommendations coming forward for short term replacement

Until such time as more informed replacement cost data related to plant equipment is available, this rate structure will serve the Township well within the life of this plan.



### Woodland Acres

The Woodland Acres water system is free of external debt and there are no plans within the life of this plan to require the acquisition of debt. The residents in the area are repaying a capital investment in the system that was funded internally by the Township.

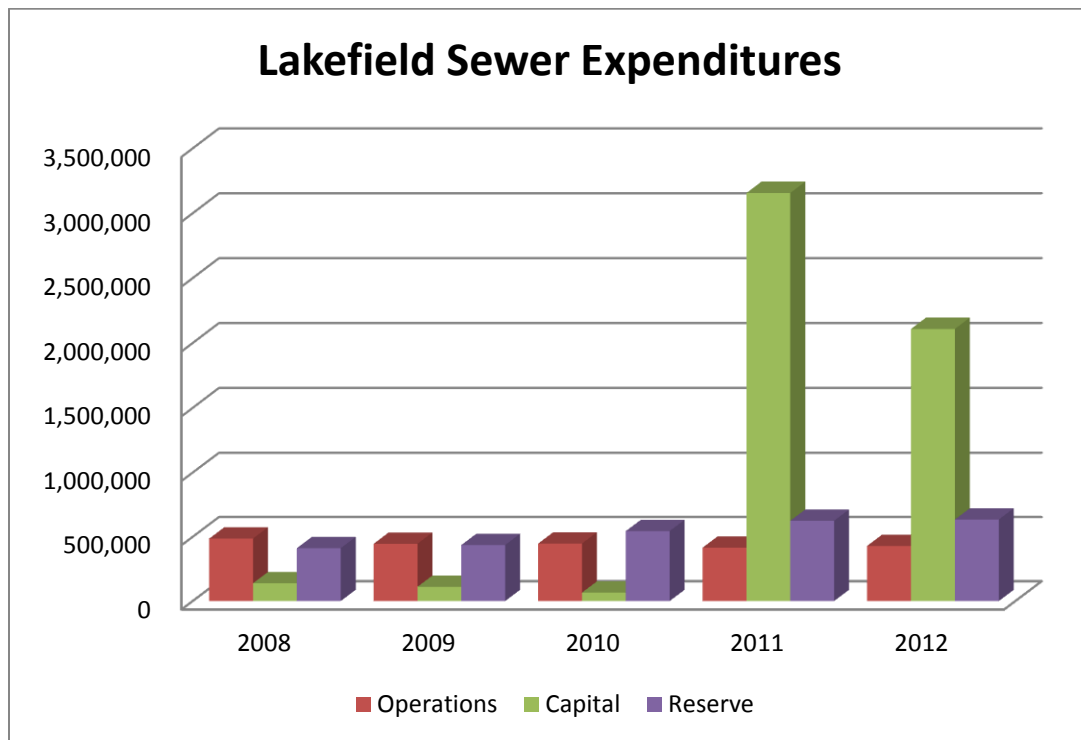
Built into the annual budget is a reserve contribution which considers the eventual replacement of the booster station and any additional water main projects as identified by PUS.

Based on the existing contribution to reserve and until such time as firm replacement cost data related to watermain is available, this rate structure will serve the Township well within the life of this plan.

### **Sewer**

Both of the Township Sewer Systems operate under separate full cost recovery models and also adhere to section PS3150, of the Public Sector Accounting Handbook related to accounting for tangible capital assets (TCA).

Through the implementation of annual sewer rate increases and receipt of various operating and capital grants, the sewer systems have been well maintained and have kept current with industry operating practices.





The main pumping station has been recently upgraded and the lagoon treatment process is functioning well, save and except some effluent exceedance in the shoulder seasons based on ice off of the polishing pond. (cell 2)

The Lakefield sewer system is debt free. There are no plans within the life of this plan to require the acquisition of debt.

The pumping station on Murray Street was decommissioned in favour of an extension of a gravity feed sewer. Two other stations have been identified as priorities for rehabilitation or replacement;

- George Street pumping station
- Lakefield College School pumping station



George Street Pumping Station Access

With respect to the George Street pumping station it involves a combination of required upgrades to a key pumping station and regard for expansion of the system to link the Lakefield South development area and currently underserved areas on west Bridge Street and west Smith Street.



The pumping station:

1. Is nearing the end of its useful life at approximately 40 years old
2. Is the sole sewage transfer point for the west sector with no redundancy
3. Has no standby backup power
4. Is located directly adjacent to the Otonabee River on the Trent Severn Waterway and upstream of the City of Peterborough.

In order for any upgrades or improvements to occur with this pumping station, a Class Environmental Assessment is required. Public notice of EA commencement was provided in May 2013.

A Public Information Centre was convened in February 2015 to outline a number of system improvement solutions. The EA process is likely to be completed in the first quarter of 2016.

After identifying a preferred solution through the EA process, additional detailed engineering design will be required to fulfill the requirements of the federal environmental assessment process. These costs will be more readily available when the preferred solution is identified and confirmed through the public notice period.

With respect to the Lakefield College School (LCS) pumping station, discussions have only just begun on next steps. Likely a replacement would consider changes to power supply configuration and possibly standby back-up power. These changes will be affected by discussions with LCS and whether the Township should indeed own the station or not. As well, there may be some possible cost sharing based on the scope of the project and future needs of LCS.

### Woodland Acres

The Woodland Acres sewer system is free of external debt and there are no plans within the life of this plan to require the acquisition of debt. The residents in the area are repaying a capital investment in the system that was funded internally by the Township.

Routine sewer main flushing has been approved and PUS continues to monitor the system, with no recommended improvements.

Based on the existing contribution to reserve and until such time as firm replacement cost data related to sewer mains is available, the rate structure currently in place will serve the Township well within the life of this plan.

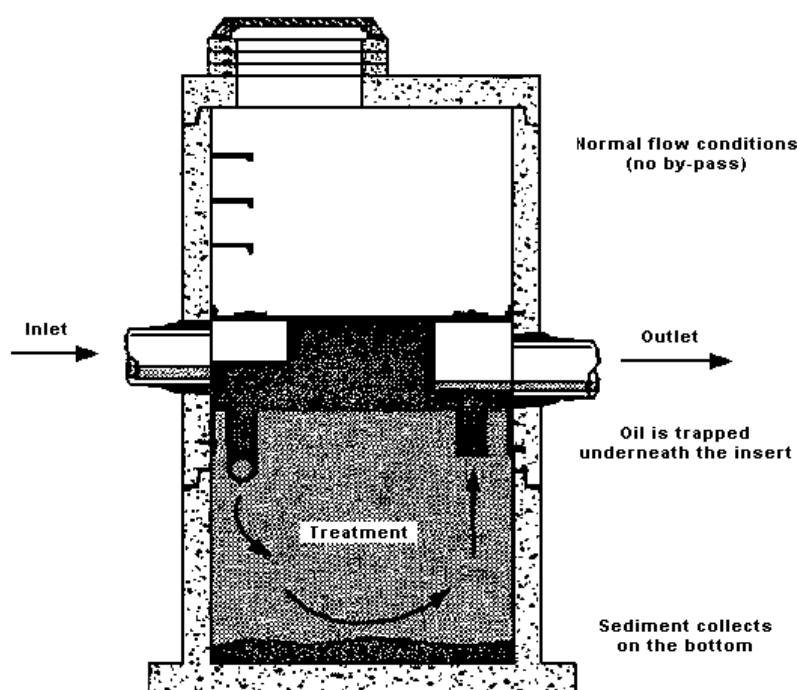


## Storm Water

There is currently no annual maintenance program or funding dedicated specifically to storm water management ponds that are owned by the Township.

The Township does maintain several licences with the federal waterway for storm sewer outfalls in Lakefield.

As well, annual maintenance of a Stormceptor is completed on the catch basin in the Isabel Morris Park parking lot. The stormceptor captures run off from the parking lot and contains any contaminants from reaching the adjacent waterway.



Cross Section Schematic of a Stormceptor



## **5. Financing Strategy**

### **Introduction**

As the Township moves towards more sustainable management of assets, it is clear that the asset management plan needs to become more fully integrated with annual budgeting and long-term financial planning. This approach means that the various short-term, five-year and ten-year plans need to become more unified and cohesive. The relationship between maintenance and infrastructure renewal needs to be more clearly articulated. Ultimately the efforts need to be fully tracked and analysed to demonstrate the impact of maintenance on extending the useful life of assets.

### **Financing Sources and Tools**

The following provides an overview of the typical funding sources and financing tools available to the Township when considering the funding of infrastructure.

#### **Federal and Provincial Grants**

Over the years, the Township has had varying degrees of success in securing grant funding from the federal and provincial governments to assist with capital projects. The Township continues to actively seek out funding programs and merit based funding applications that could provide financial assistance for non-development-related capital works.

#### **Provincial Ontario Municipal Partnership Fund (OMPF) – Unconditional Grant**

The Ontario Municipal Partnership Fund (OMPF) is the Province's main transfer payment to municipalities. The base unconditional OMPF grant provided to the Township has been reduced by \$239,200 to \$1,122,300 in 2015. The Township's practice has been to use OMPF to offset one time/set time or capital expenses.

#### **Property Taxes**

Property taxes represent approximately 49% of revenues in the 2015 tax supported budget. The use of property taxes to fund municipal services is the most secure source of funding for the Township.

Council has supported a stable, slow and steady approach to tax levy increases over the last two decades with typical annual increases in the 1.5% - 3% range.

As part of a new annual budget cycle being implemented for the 2016 fiscal year, capital budgets are receiving a much earlier review and more detailed analysis. A new template is being incorporated that puts more emphasis on documenting the rationale, related factors and alternatives considered. This will provide more focus on the need for asset management and renewal. Consideration of a



dedicated capital levy, perhaps with a mapped out series of annual increases, will also receive due consideration.

The Township will continue to use property tax revenue increases to fund the increased capital and operating expenditures.

### **Operating Receipts and User Fees**

User fees are another significant funding source for the Township at 15% of total revenue. The majority of these revenues fund operational expenditures. However, to the extent that is possible, excess fees will be set aside and allocated as reserve contributions to fund repair and replacement of capital infrastructure.

### **Water and Sewer Rates**

In the 1990's the former Village of Lakefield implemented a seven year plan that increased water and sewer rates and put in place an annual capital investment component. A key part of the plan was the documentation of annual enhancements to the systems and the start of a capital program. This program was very successful and resulted in significant investments in water and sewer infrastructure.

In response to legislation arising from the Walkerton water tragedy, Township Council determined that the operation and management of the water and sewer systems should be contracted out. Peterborough Utilities Services was the successful proponent and has been the accredited operator since 2001.

As part of the updated water and sewer utility set up, a funding program was developed that divided user rates into three streams:

1. Operations
2. Capital renewal and investment
3. Reserve contributions

Capital investments and reserve contributions work in tandem to complete system investments based on the scope of projects undertaken.

In 2013, the Township completed the implementation of significant increases to utility rates in a move towards full cost recovery. The current plan sees a series of consistent 1% increases to stay abreast of increasing contract and hydro utility increases.

Having regard for asset management, full cost recovery methodologies and an updated six year financial plan due in 2016, the water and sewer utility will need to consider a new overall rate plan to ensure sustainability into the future.

### **Development Charges**

Development charges may be imposed to pay for increased capital costs required because of increased needs for services arising from development.



Historically, the Township has used development charges to the extent possible to fund “development-related” capital costs.

Development charge rates were recently updated in 2013. It is noted that capital costs of new infrastructure that benefit existing Township residents cannot be funded from development charges. Furthermore, 10% of all development-related capital costs for certain services must be funded from non-development charge sources (typically property taxes).

### **Debt Financing**

Debt as a funding source has not been traditionally used in the Township. Rather, Council has used consistent reserve funding management and tough decision making in prioritizing projects when approving capital projects. However, debt financing is recognized as a viable tool available to fund infrastructure projects.

Planned debt is a responsible way to spread the costs of a project over the life of an asset to ensure the ratepayers who benefit from the asset share in the cost. In this manner, the burden of capital is distributed between the current taxpayer and future rate payers.

### **Infrastructure Ontario – Financing**

Infrastructure Ontario (IO) is a Crown Corporation that reports to the Ministry of Infrastructure. IO provides loans to eligible broader public sector entities across the Province, including municipalities. The program has a streamlined application process and provides for very attractive rates, flexible terms and no additional fees.

Staff worked successfully with the representatives of IO to finalize the issuance of debt for the replacement of the Lakefield Smith Community Centre floor completed in 2014. The need to replace the floor was identified to be critical on very short notice after the brine leak occurred in 2013. The replacement of the Lakefield Smith Community Centre floor was deemed to be a good candidate for utilizing IO funding and allowed the repayment to be spread over a four year period.

The amount of debt a municipality can carry is set by provincial regulations to ensure municipalities continue to operate in a fiscally sound environment. The Township’s total allowable Annual Repayment Limit is currently \$3.52 million.

As a matter of practice, the Township will continue to consider debt financing on capital related works should other revenue sources not be readily available or if the asset replacement comes up unexpectedly. Based on the current highly competitive rates being offered by

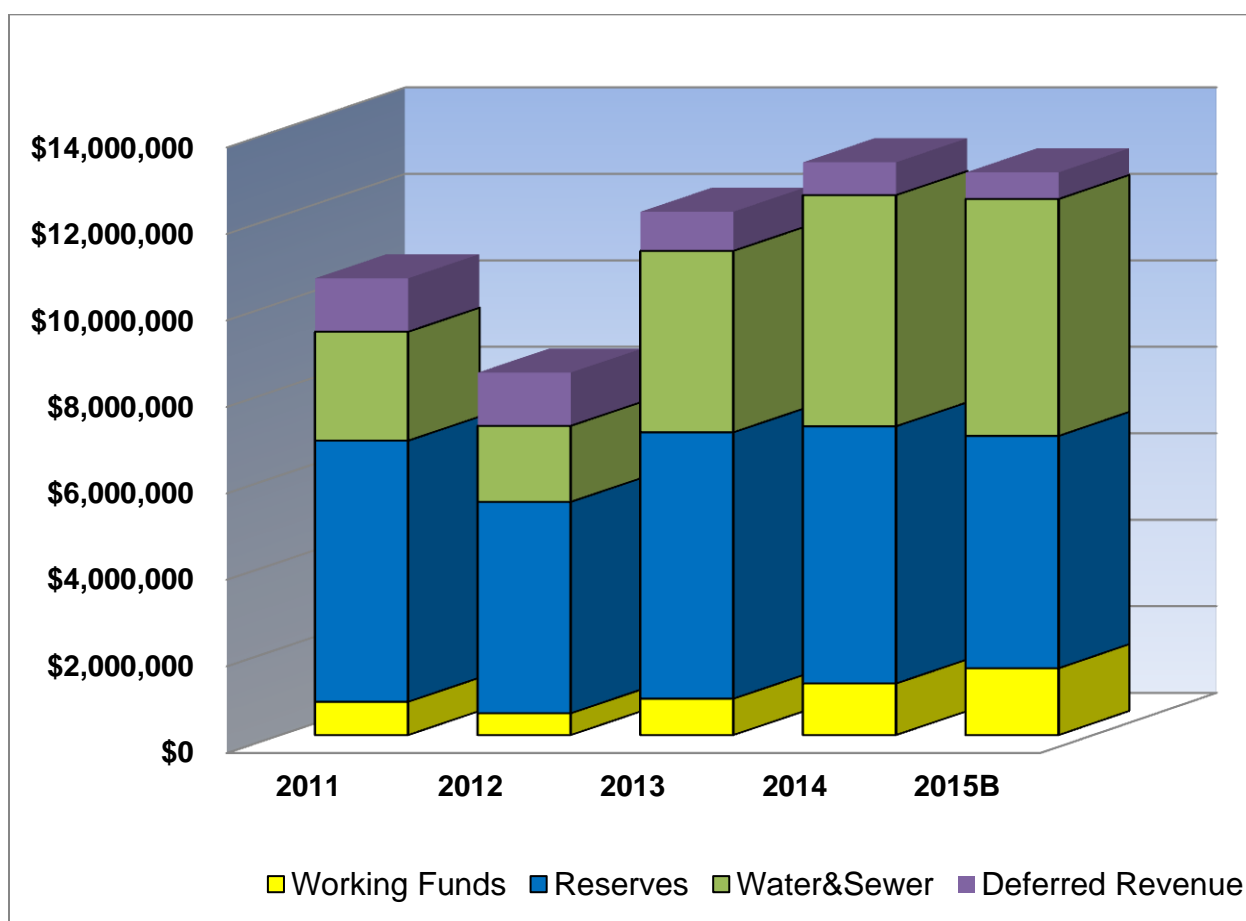


Infrastructure Ontario, that agency will be the first course of action if debt financing is to be considered.

### Reserves and Reserve Funds

Reserves are to be used to cope with high capital investment periods by saving during low capital investment periods. This practice stabilizes annual expenditures to ensure the municipality can complete the required annual capital works.

The Township's reserves ebb and flow based on the capital projects at hand as illustrated in the following chart.



The Township currently has a balance of \$7.52 million of tax supported reserves and \$5.48 million of utility rate supported reserves. This represents a combination of operations, contingency and capital reserves and deferred revenues.



## **Current infrastructure deficit and future funding gaps**

To implement sustainable asset management practices the Township needs to have a better understanding of the current “infrastructure deficit” as well as the funding gaps that would arise should the required annual contributions not materialize.

## **Financial management practices**

The Township has traditionally followed a modified “pay-as-you-go” approach to financing infrastructure. Capital expenditures are prioritized and approved with reference to the availability of funds. Periodically, projects will span several years and as such may make use of Unfinanced Capital Outlay and thereby use uncommitted internal funding throughout the construction time frame

The Township has historically set aside sufficient funds in reserves and reserve funds to maintain most of its capital assets in a state of good repair. This has meant that sufficient funds have typically been available to deal with immediate and critical asset repair and rehabilitation needs.

It is unrealistic in the current fiscal context to expect the Township to address its infrastructure deficit in the short-term. Accordingly, a long-term funding strategy that identifies options for addressing current and future asset expenditure requirements, including the infrastructure deficit needs to be more fully developed.

As part of this plan, the annual budgetary requirements for both the water and wastewater system also need to be forecasted. It is important that the Township continue to move toward full cost recovery.

As the data from the existing infrastructure becomes more complete and service level considerations are confirmed, the Township can then set realistic targets and develop funding and financing strategies.

This area is the next step in the process of development and improvement for the Selwyn Township Asset Management Plan.



## **6. Recommendations, Next Steps and Progress**

The annual budget process has typically included capital projects and planning for these projects over the short to mid- term. The Selwyn Township Asset Management Plan – Phase One represents the next step in capital project planning. Over time this plan will be used to provide the Township with the information it needs to make informed decisions on managing capital assets in a sustainable manner over the long term.

Overall, the Township is in a good position to move forward with sustainable asset management planning. The Township has made considerable effort in recent years to address infrastructure needs and improve the condition of assets.

Many elements of core infrastructure assets are relatively new and investments in infrastructure, for both tax and rate supported assets, have put the Township in a good position.

The following recommendations are put forward in response to information gaps, best practices that should be in place, the need to maximize each asset based on its own set criteria, and in the spirit of continuous improvement.

### **1. Maintain Accurate Infrastructure Information**

#### **Ensure Asset Inventories are Updated Regularly**

- In order to make sound asset management decisions, the information in the asset database needs to be detailed, supportable and accurate.
- The Township should regularly update the asset database as part of ongoing operations.
- Regular updates should have regard for not only the cost of asset purchases but also have regard for the rationale for the asset upgrades, consider asset condition ratings, and include information about remaining useful life.

#### **Filling Information Gaps**

- A scope of work should be developed and estimates should be obtained from the Township engineer and/or PUS to more accurately document the water main types and sizes in the Woodland Acres subdivision to ensure a more accurate inventory.
- A scope of work should be developed and estimates should be obtained from the Township engineer and/or PUS to more accurately document the sewer main types and sizes in the Woodland Acres subdivision to ensure a more accurate inventory.



- A scope of work should be developed within Township staff to update and discuss the existing stormwater management ponds database to create a more robust inventory.

### **Capture Intangible Corporate Knowledge Now**

The need to capture intangible corporate knowledge is important and proper documentation is required now. Over the next decade many key employees and senior managers for the Township and PUS will be eligible for retirement and their working knowledge of asset details needs to be captured. This is a key part of good succession management and time needs to be dedicated to this task.

### **Make Use of GIS Capabilities**

Resources should be recommended to maximize the use of reliable GIS data and work with the County of Peterborough to upload GIS layers. As a minimum these layers should include:

- Updated water distribution systems
- Updated sewage collection systems
- Updated Township road systems
- Storm water pond locations

## **2. Optimize the Useful life of Existing Assets**

In seeking to extend the useful life of current assets, the Township should consider the following activities:

### **Roads**

- Conduct a series of meetings with the Township engineer to further refine the Roads Needs Study.
- Consider the pros and cons of using road base versus road surface as a method for prioritization

### **Water**

- Review water conservation measures currently in place in other jurisdictions and compile report with recommended actions in Selwyn
- Implement water conservation measures as approved
- Continue watermain relining programs and use of trenchless technologies where appropriate
- Further refine the PUS capital recommendation process with respect to prioritization and improve documentation on condition ratings

### **Sewer**

- Complete periodic condition assessment reviews of sewer mains through flushing and camera inspection.
- Crack seal and grout as required to repair infiltration issues on existing mains



- Further refine the PUS capital recommendation process with respect to prioritization and improve documentation on condition ratings

#### **Storm water**

- Develop documentation for proper maintenance practices for each type of pond identified.

#### **All Assets Classes**

- Repair and replacement of capital works should be prioritized more formally and include asset condition ratings as a key prioritization factor
- The process for urban area infrastructure improvements should continue to have regard for all components of road sections including road, water, sewer and storm sewer
- The Township should, where possible, coordinate the construction of new infrastructure with infrastructure repairs and replacement to achieve cost efficiencies.

### **3. Establish and Track Service Levels**

- A range of quantifiable service level targets that incorporate the quantity and quality of capital assets should be established for all services.
- Service level data should be measured, reported in relation to established targets, and adjusted annually.
- Service level targets, likely more detailed and tailored to each service area, should complement measures currently being developed for the Township Strategic Plan

### **4. STAMP Reporting**

#### **Asset Management Plan – Annual Updates**

The resolution and end result of recommendations included above should be included in an annual update to this report.

#### **Comprehensive Asset Management Plan Update Frequency**

STAMP should be comprehensively reviewed and updated every five (5) years.

#### ***Progress Tracking Chart***

*See the attached spreadsheet to track STAMP – P1 progress to date.*



Recommendations	Updates and Activity Progress - 2014 - Second Quarter	Updates and Activity Progress - 2014 - Fourth Quarter	Updates and Activity Progress - 2015 - Mid Year
<b>1. Maintain Accurate Infrastructure Information</b>			
<b>Ensure Asset Inventories are Updated Regularly</b>			
<ul style="list-style-type: none"><li>In order to make sound asset management decisions, the information in the asset database needs to be detailed, supportable and accurate.</li></ul>	making use of detailed Excel sheets, .pdf scans and asset registers to improve data quality.	work is ongoing.	improving quality of data on hand. Making refinements as new information becomes available.
<ul style="list-style-type: none"><li>The Township should regularly update the asset database as part of ongoing operations.</li></ul>	scan of all accounts payable invoices when received for capital purchases beginning in Q1 2014. .pdf copies saved on public folder in Finance dept. for retrieval.	using scanned copies in TCA yearend work. Capturing additional details to aid in asset mgmt. planning as appropriate.	work noted in 2014 Q4 is ongoing.
<ul style="list-style-type: none"><li>Regular updates should have regard for not only the cost of asset purchases but also have regard for the rationale for the asset upgrades, consider asset condition ratings, and include information about remaining useful life.</li></ul>			will be aided through the use of new standard Capital Project Template being implemented as part of the 2016 budget process. Includes more information on rationale and impact of investment which should allow for a better dialogue before project receives Council approval.
<b>Filling Information Gaps</b>			
<ul style="list-style-type: none"><li>A scope of work should be developed and estimates should be obtained from the Township engineer and/or PUS to more accurately document the water main types and sizes in the Woodland Acres subdivision to ensure a more accurate inventory.</li></ul>	initial inventory received and under review. Analyzing any impacts on PSAB TCA related data.	PSAB TCA data comparison underway. No TCA changes will be made until ground-proofing has been completed - likely 2015.	Concept plan completed by engineer and .pdf to Township. Waiting for Block B "as-builts" to be added. Proposal requested and received for more detailed tie-down drawings - to be completed by end of 2015 Q3.
<ul style="list-style-type: none"><li>A scope of work should be developed and estimates should be obtained from the Township engineer and/or PUS to more accurately document the sewer main types and sizes in the Woodland Acres subdivision to ensure a more accurate inventory.</li></ul>	initial inventory received and under review. Analyzing any impacts on PSAB TCA related data.	PSAB TCA data comparison underway. No TCA changes will be made until ground-proofing has been completed - likely 2015.	Concept plan completed by engineer and .pdf to Township. Waiting for Block B "as-builts" to be added. Proposal requested and received for more detailed tie-down drawings - to be completed by end of 2015 Q3.
<ul style="list-style-type: none"><li>A scope of work should be developed within Township staff to update and discuss the existing stormwater management ponds database to create a more robust inventory.</li></ul>	initial collection of readily available files received.		Engineer engaged to complete inspections and develop future improvements program to be completed by end of 2015 Q3.
<b>Capture Intangible Corporate Knowledge Now</b>			
The need to capture intangible corporate knowledge is important and proper documentation is required now. Over the next decade many key employees and senior managers for the Township and PUS will be eligible for retirement and their working knowledge of asset details needs to be captured. This is a key part of good succession management and time needs to be dedicated to this task.		discussed at management team level. Hoping that some interesting ideas may arise from involvement in non-profit sector forums and/or through discussions at the human resource professionals level.	Exit interview planned with retiring PUS staff member on water and sewer infrastructure in Lakefield service area.
<b>Make Use of GIS Capabilities</b>			
Resources should be recommended to maximize the use of reliable GIS data and work with the County of Peterborough to upload GIS layers. As a minimum these layers should include:	County GIS currently has data layers for water and sewer. Process for annual updates to be determined with County GIS staff.	discussions with County GIS staff needs to be completed.	operations agreement in place with County GIS team to update GIS layers as new information is confirmed by Township.
<ul style="list-style-type: none"><li>Updated water distribution systems</li></ul>	engineer data updated to May 2014. Need to transmit to County for GIS updating.	Paper plans received from engineer. Verifying data for electronic transfer to County.	completed to date.
<ul style="list-style-type: none"><li>Updated sewage collection systems</li></ul>	engineer data updated to May 2014. Need to transmit to County for GIS updating.	Paper plans received from engineer. Verifying data for electronic transfer to County.	completed to date.
<ul style="list-style-type: none"><li>Updated Township road systems</li></ul>		road network data received. Will need to discuss how existing road network is laid out with respect to neighbourhood, collector and arterial roads network on County system.	completed to date.
<ul style="list-style-type: none"><li>Storm water pond locations</li></ul>		Paper based parcel map to be updated and provided to County GIS department.	GIS mapping used to confirm locations and provide to engineer. (see Filling Information Gaps comment above)
<b>2. Optimize the Useful life of Existing Assets</b>			
In seeking to extend the useful life of current assets, the Township should consider the following activities:			
<b>Roads</b>			
<ul style="list-style-type: none"><li>Conduct a series of meetings with the Township engineer to further refine the Roads Needs Study.</li></ul>	meeting convened to discuss current status of Roads Needs Study and next steps. Proposal has been received from engineer and accepted. Timelines being developed.	Work with engineer is ongoing. Sample service levels guidance document has been received and reviewed.	work is ongoing.
<ul style="list-style-type: none"><li>Consider the pros and cons of using road base versus road surface as a method for prioritization</li></ul>	will be part of refined study recommendations.	work is ongoing.	this approach is still under consideration and will impact the priority setting included in the Roads Needs Study.
<b>Water</b>			
<ul style="list-style-type: none"><li>Review water conservation measures currently in place in other jurisdictions and compile report with recommended actions in Selwyn</li></ul>	some research to be completed in Q3 using in-house staff as resources available.	to be considered as part of 2015 water utility budget	not implemented as part of the 2015 budget. On the list of "best practice" initiatives to consider on an annual basis and definitely prior to any plans for expansion.
<ul style="list-style-type: none"><li>Implement water conservation measures as approved</li></ul>		waiting for conservation plan with recommendations before implementation is developed.	waiting for conservation plan with recommendations before implementation is developed.
<ul style="list-style-type: none"><li>Continue watermain relining programs and use of trenchless technologies where appropriate</li></ul>	engineering budget for one relining project in 2015 approved. Need to develop comprehensive multi-year plan for system.	top watermain relining project identified by PUS and included in 2015 tender. Engineer will be engaged for multi-year plan and made available to PUS annually.	Hague Blvd. relining project completed. Plans underway to complete multi-year plan that will include another section of watermain relining in 2016.
<ul style="list-style-type: none"><li>Further refine the PUS capital recommendation process with respect to prioritization and improve documentation on condition ratings</li></ul>		better response and follow up system has been put in place with PUS. Still working with PUS on ratings/priority rankings.	have implemented many PUS priority items. Will be using the fall 2015 PUS recommendations to develop the 2016 capital budget.



Recommendations	Updates and Activity Progress - 2014 - Second Quarter	Updates and Activity Progress - 2014 - Fourth Quarter	Updates and Activity Progress - 2015 - Mid Year
<b>Sewer</b>			
<ul style="list-style-type: none"><li>Complete periodic condition assessment reviews of sewer mains through flushing and camera inspection.</li></ul>	in-house research to be completed in Q3 to determine game plan for assessment review by quadrant in Lakefield and by subdivision section in Woodland Acres.	in house research outstanding. Need to dedicate some effort to this in 2015 Q1	Proposal requested and received to prepare tender package for flushing, camera inspection and condition rating of all sewers by 2015 Q4 with actual work completed in spring 2016.
<ul style="list-style-type: none"><li>Crack seal and grout as required to repair infiltration issues on existing mains</li></ul>		determined on an annual basis after initial plan is completed.	Proposal requested and received to prepare tender package for crack sealing, rehab. and sewer manhole repairs based on inspection report by 2015 Q4. Works to be completed in 2016, funding dependent..
<ul style="list-style-type: none"><li>Further refine the PUS capital recommendation process with respect to prioritization and improve documentation on condition ratings</li></ul>		better response and follow up system has been put in place with PUS. Still working with PUS on ratings/priority rankings.	have implemented many PUS priority items. Will be using the fall 2015 recommendations to develop the 2016 capital budget.
<b>Storm water</b>			
<ul style="list-style-type: none"><li>Develop documentation for proper maintenance practices for each type of pond identified.</li></ul>	initial work with planning staff to prepare information on hand. Consider gaps and discuss with engineering firm. Develop process to hand-off maintenance manuals to Public Works.	To review stormwater ponds maintenance guideline with engineer. Possibly create a Selwyn maintenance plan for ponds to be monitored by Public Works department.	maintenance to be included in engineer's report on each stormwater pond as outlined in report noted above
<b>All Assets Classes</b>			
<ul style="list-style-type: none"><li>Repair and replacement of capital works should be prioritized more formally and include asset condition ratings as a key prioritization factor</li></ul>		prioritization is still quite informal, although based on plans of record and common sense approach.	No significant changes so far in 2015.
<ul style="list-style-type: none"><li>The process for urban area infrastructure improvements should continue to have regard for all components of road sections including road, water, sewer and storm sewer</li></ul>		understood by staff involved in process. Will be noted in formal guidelines/level of service documents.	No significant changes so far in 2015.
<ul style="list-style-type: none"><li>The Township should, where possible, coordinate the construction of new infrastructure with infrastructure repairs and replacement to achieve cost efficiencies.</li></ul>			understood by staff involved in process. Will be noted in formal guidelines/level of service documents.
<b>3. Establish and Track Service Levels</b>			
<ul style="list-style-type: none"><li>A range of quantifiable service level targets that incorporate the quantity and quality of capital assets should be established for all services.</li></ul>			No targets established yet.
<ul style="list-style-type: none"><li>Service level data should be measured, reported in relation to established targets, and adjusted annually.</li></ul>	will be initiated as part of Roads recommendation above.	Work with engineer is ongoing. Sample service levels guidance document has been received and reviewed.	2014 Q4 work still to be updated.
<ul style="list-style-type: none"><li>Service level targets, likely more detailed and tailored to each service area, should complement measures currently being developed for the Township Strategic Plan</li></ul>		strategic plan measures now in place. Will see how level of service can complement existing strategic plan measures and ongoing performance reporting.	2014 Q4 work still to be updated.
<b>4. STAMP Reporting</b>			
<b>Asset Management Plan – Short Term Updates</b>			
<ul style="list-style-type: none"><li>As additional information becomes available, refinements to this plan should be completed as part of the 2014 budget process.</li></ul>	no capital grants received under first round of infrastructure investment. Continuing with AMP work in order to be ready for next round.	Council has approved contribution agreement under Ontario Community Investment Fund. Endorsed use of funds to support asset management planning project specifically.	new information and refinements flow into capital planning and will be used in the 2016 Capital Budget
<ul style="list-style-type: none"><li>In the second quarter of 2014, an update should be provided to Council on STAMP-P1 in advance of the formatted plan being posted to the Township website.</li></ul>	this report fulfills the recommendation. Formatted plan expected by end of Q3.	Plan posted on website in Q4 following receipt and approval by Council	Consolidated plan to be presented to Council September 2015. Approved plan will be posted to the Township website.
<b>Asset Management Plan – Annual Updates</b>			
The resolution and end result of recommendations included above should be included in an annual update to this report.	annual update report expected as part of the year end Strategic Plan review meeting	First annual update report completed. This document is included as a schedule.	2015 mid year review completed. Consolidation with new sections on Financial Strategies and Asset Mgmt. Strategies for September 2015.
<b>Comprehensive Asset Management Plan Update Frequency</b>			
STAMP should be comprehensively reviewed and updated every five (5) years.	planning work to begin in 2018		Consolidation of plan in 2015 will provide a more fulsome plan moving forward. STAMP - P1 is a "living document" and evolving as new information becomes available.