

## Effluent Quality Criteria

- Are determined based on the assimilative capacity of the receiving stream and by MOE policies.
- Are site-specific.
- Effluent quality criteria requirements (expressed as loadings or concentrations) are incorporated in the Environmental Compliance Approval.
- May be set for: phosphorous, nitrogen, suspended solids, Biochemical Oxygen Demand (BOD), etc.,

## Receivers and Assimilative Capacity

- Can be rivers, lakes, dry ditches, and land (surface or subsurface).
- Assimilative Capacity Study is a tool to characterize water flow and quality in the receiver and assist in determining the Effluent Quality Criteria (EQC).



## Assimilative Capacity

- is an assessment of the ability of a watercourse to resist the effects of a disturbance without impairing water quality.
- Assimilative Capacity Study (ACS) is a tool to determine the extent a potential receiving stream can be used as part of the sewage treatment process.
- ACS generally include:
  - Characterization of effluent quality and quantity.
  - Characterization of receiving stream water quality and quantity.
  - Modelling scenarios of effluent discharge and background conditions.

Table 2.4 Estimated Projected Population

The following population scenarios have been arbitrarily selected and are for comparison purposes only.

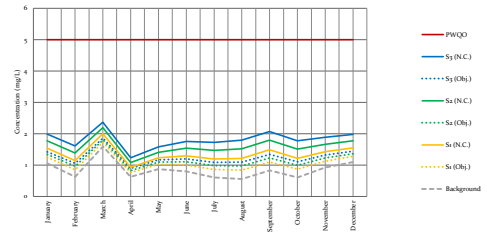
Development Scenario	Pop. Density ppl/sq	Urban Development Area		Equivalent Population	
		Incremental	Total	Incremental	Total
Existing	10 ppl/sq	417	417	4280	4280
Growth Scenario 1	40	56	472	2200	6480
Growth Scenario 2	40	88	505	3520	10000
Growth Scenario 3	40	88	568	3500	13500
Possible Ultimate	40	232	680	9300	22800
Ultimate Urban Area	8800 sq				
Ultimate Population (Equivalent)	22800 People				



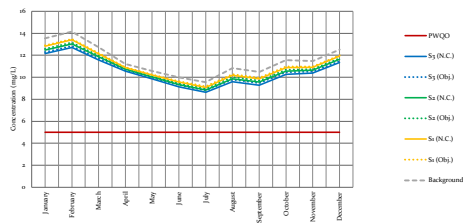
Table 3.0 Treatment Requirements

Parameter	Design Values 1996 MCE Suggestion	
	Treatment Objective	Non Compliance
pH	8.2	7-8.6
Total Suspended Solids (mg/L)	3.0	10
Total Phosphorous (mg/L)	0.1	0.20 (0.15')
Total Ammonia (mg/L)	0.4	2.0
Total Kjeldahl Nitrogen (mg/L)		3.0
Nitrate Nitrogen (mg/L)	7.6	10
C. Coli (cpq/100 mL)	100	200 (100')
Dissolved Oxygen (mg/L)	5 (min)	4 (min)
BOD <sub>5</sub> (mg/L)	3.6	7.5
Temperature	17	8-19

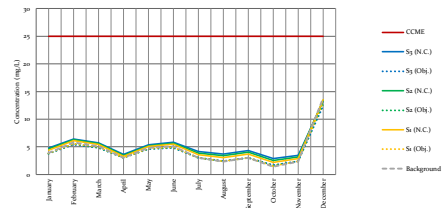
Biochemical Oxygen Demand



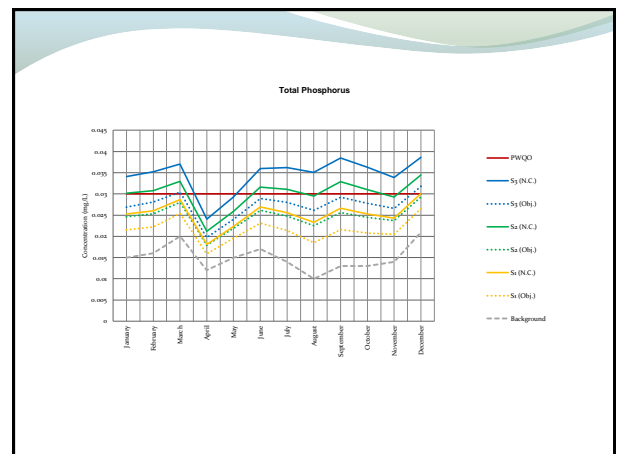
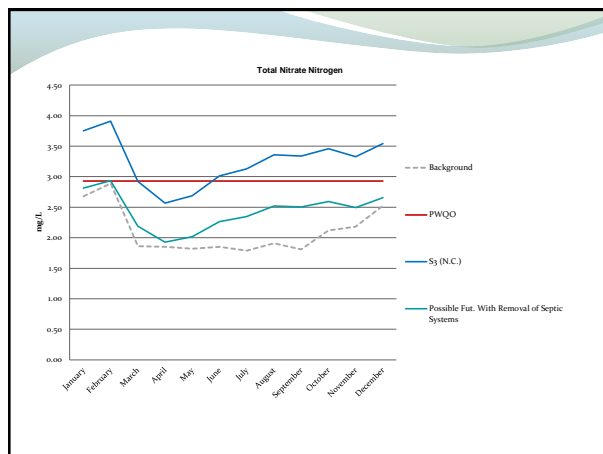
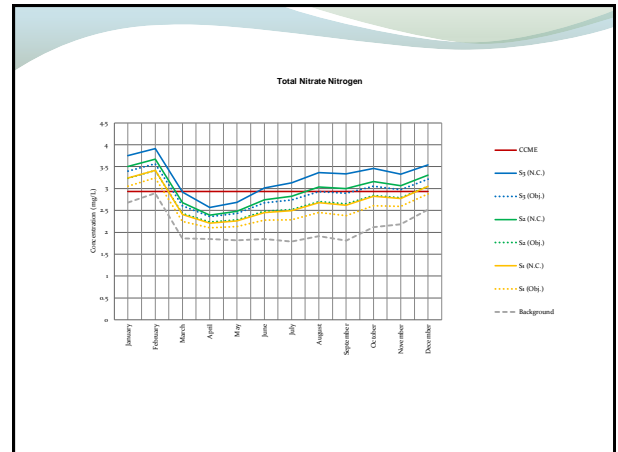
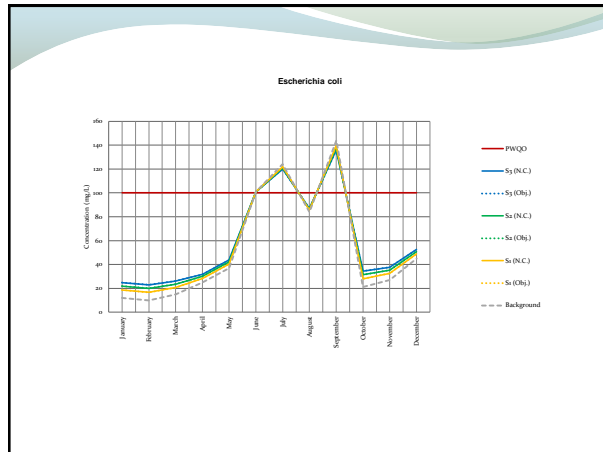
Dissolved Oxygen



Total Suspended Solids









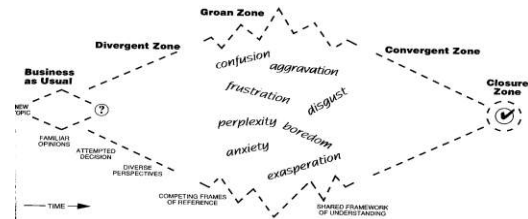
## Dealing with Septage

- Septage is raw, untreated waste from septic systems and holding tanks.
- Generally, septage is 30-60x more concentrated (in terms of biochemical oxygen demand and suspended solids) than wastewater.
- Treatment facility requirements:
  - Unloading facilities
  - Extended aeration facilities
  - Sequencing Batch Reactor
  - Discharge into WWTP



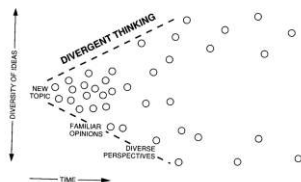
## Welcome to the Groan Zone!

- Group members struggle to integrate new and different opinions, perspectives and trust levels are low, while tension is high
- The Groan Zone is a consequence of diversity
- Groups must acknowledge the Groan Zone and the feelings that come with it (annoyed, impatient, overloaded etc)



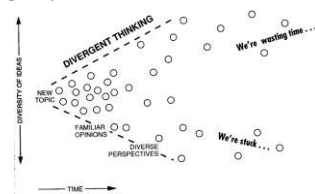
## The Divergent Zone

- Occurs in early discussions
- Tends to cover safe, easy and familiar topics
- Old, standard arguments/disagreements come out
- Begin to explore wider range of possibilities, solutions, opinions but...



- It's hard to shift opinions and build understanding between differing points of view
- Especially true when the group is diverse
- Often people feel:

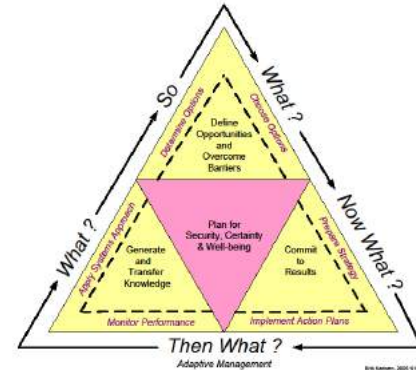
- Overloaded  
"Is this all necessary?"
- Disorientated  
"Where are we going?"
- Annoyed  
"Why are we still discussing this?"
- Impatient  
"Why is this taking so long?"



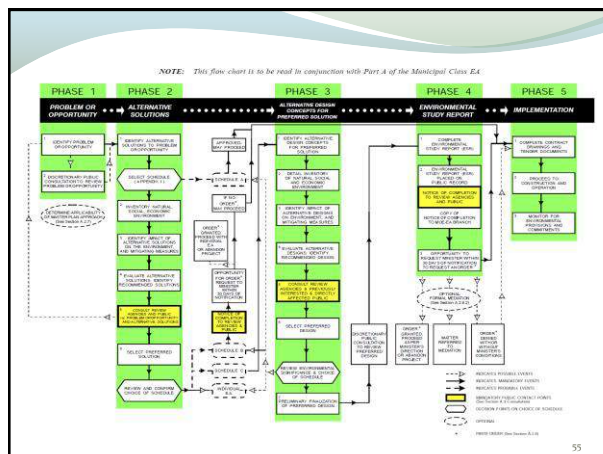


## Eventually we'll get to...

- The Convergent Zone
  - Consolidated thinking and agreement
  - Refining ideas
  - A final decision



54



55

## Community Vision Statement

The Town of Erin will remain a vibrant, safe and sustainable community, located at the headwaters of the Credit and Grand Rivers. The Town will continue to capitalize on its proximity to large urban centres, while maintaining its excellent community spirit. With a strong employment base, and a range and mix of housing, a high percentage of residents will work and continue to live within the Town of Erin. Visitors will enjoy the small-town atmosphere, unique shop and surrounding rural charm. Through responsible development and servicing, the Town's rich natural environment will be protected and preserved.

56



## Problem/Opportunity Statement

- Presently, the Town of Erin lacks a long term, comprehensive strategy for the provision of water and wastewater servicing in the villages of Erin and Hillsburgh. The following limitations are associated with the current status of servicing within the Town's urban areas:

## Problem/Opportunity Statement

### Wastewater

- Wastewater is treated exclusively by private, on-site wastewater treatment systems. Within the Built Boundary of the settlement areas (Hillsburgh and Erin Village), private property investment and redevelopment is restrained by increasingly stringent setbacks required for septic systems, small lot sizes and the presence of private wells. Additionally, there are limited facilities in the area accepting septage from private systems for treatment.
- The settlement areas (Hillsburgh and Erin Village) have been identified as areas of modest growth under the Places to Grow Act and by Wellington County population projections. At present, the servicing infrastructure is inadequate to meet future demand to 2035. Lots sized to include septic systems will not allow for projected future development to occur in a manner consistent with the need for smaller, less-expensive homes in the community as identified in the Vision Statement.

## Problem/Opportunity Statement

### Water

- Partial water servicing in Erin Village and Hillsburgh limits the operational and cost efficiency of the systems and inhibits redevelopment and future development.
- The capacity of the existing system will need to be augmented to address current limitations and the needs of future development.

## Problem/Opportunity Statement

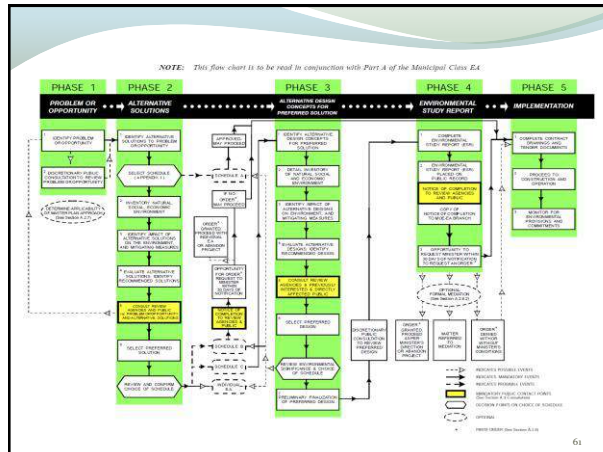
### Stormwater Management

- The West Credit River currently shows impacts from urban stormwater drainage, resulting from limited stormwater management infrastructure. Given existing impacts and potential future impacts relating to development, there is a need to assess existing and future stormwater management infrastructure.

### Transportation

- Current transportation infrastructure may need upgrades to accommodate future growth.







# Defining Erin

Our Ideas  Our Vision  
Our Community

ERIN

## Workshop with Council

**March 20, 2014**

## Purpose of this workshop

- To provide an overview of the planning strategies that will be evaluated in the SSMP.
- To provide Council with an overview of municipal wastewater servicing strategies as determined by the assimilative capacity of the West Credit River.
- To explain what decisions must be made by Council on conceptual servicing strategies to allow the SSMP to move forward.

2

## This isn't a money talk

- Before going into an in-depth financial analysis, we need to narrow down from many possible municipal servicing scenarios to a few municipal servicing scenarios, in-line with the vision of the community.
- The decisions that follow this workshop/next Council meeting will determine what municipal servicing strategies are evaluated in detail by Watson & Associates as part of the SSMP.

3

## What the SSMP will do

- Provide information for Council to decide on a course of action – facts, community values, implications of various strategies.
- Provide a tool to use in applying for senior government funding to implement any final solution

4



## What the SSMP will not do

- It does not provide detailed information regarding technologies that will be reviewed and evaluated as part of a further Class EA process.
- It does not review the appropriateness of any particular site that may be part of a final solution. This review would be part of the next phase of a Class EA process.
- It does not comment on the appropriateness of any particular planning application. That is subject to a Planning Act process.

5

## The Problem

- Presently, the Town of Erin lacks a long term, comprehensive strategy for the provision of wastewater servicing in the villages of Erin and Hillsburgh.
- The future wastewater servicing strategy will determine future needs related to other infrastructure components:
  - The capacity of the existing water system will need to be augmented to address current limitations and the needs of future development.
  - Need to assess existing and future stormwater management infrastructure.
  - Current transportation infrastructure may need upgrades to accommodate future growth.

6

## Assimilative Capacity

- In February 2013, an initial Assimilative Capacity Study (ACS) was drafted. Following consultation with MOE and CVC it was determined that additional stream monitoring should be completed.
- Additional monitoring was completed in fall of 2013 and this data was used in the calculation of the assimilative capacity.
- At the request of MOE and CVC, a 10% reduction in low flow values was incorporated into the calculations to account for climate change and land use changes.

7

## Assimilative Capacity

- Phosphorous is considered a key parameter of concern, and based on the effluent criteria, is a limiting factor.
- Given this limiting factor, there is capacity for approximately 6,000 persons.
- ACS will also suggest an outfall closer to Winston Churchill Blvd., where the assimilative capacity of the West Credit River is at its greatest.

8



## Planning Strategies

- 3 wastewater planning strategies will be evaluated in the SSMP report:

Status Quo	Big Pipe	Municipal Servicing
<ul style="list-style-type: none"> <li>Individual Servicing</li> </ul>	<ul style="list-style-type: none"> <li>Convey for treatment in another municipality</li> </ul>	<ul style="list-style-type: none"> <li>AC for 6,000 people</li> </ul>

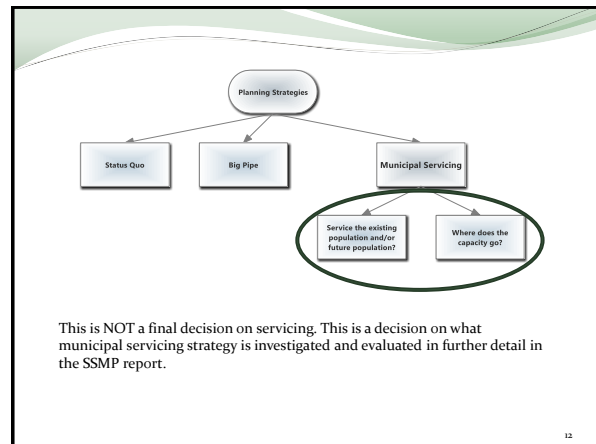
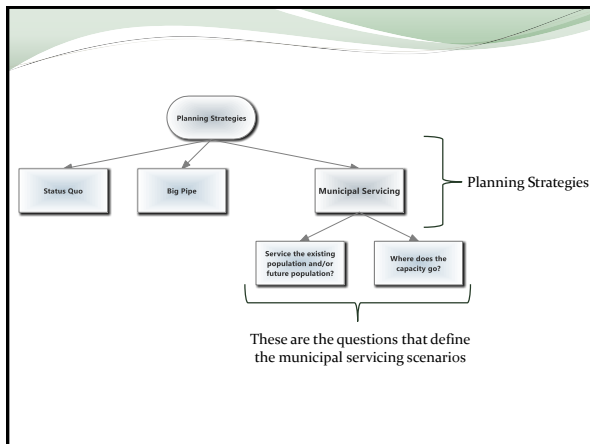
9

Status Quo	Big Pipe	Municipal Servicing
<ul style="list-style-type: none"> <li>Individual Servicing</li> </ul>	<ul style="list-style-type: none"> <li>Convey for treatment in another municipality</li> </ul>	<ul style="list-style-type: none"> <li>AC for 6000</li> <li>Where does capacity go?</li> </ul>

To allow BMROSS to continue evaluating planning strategies, Council needs to make a macro-level decision on what municipal servicing strategies (or future growth scenarios) to investigate and evaluate.



10



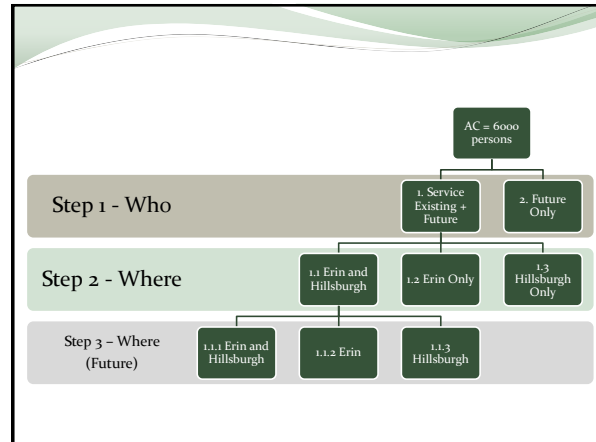
12



## Questions and Decisions

- Do you service:
  - The existing population and some future?
  - Future only?
- Do you service:
  - Erin and Hillsburgh?
  - Erin only?
  - Hillsburgh only?
- To aid in decision making we're going to break down the analysis of different municipal servicing strategies into a number of steps, based on the above questions.
- For each step, the benefits and consequences are evaluated.

13



Step 1 - Who		1. Service Existing + Future	2. Future Only	Comments
Does this option...	1. Service Existing + Future	2. Future Only		
Create a vibrant and sustainable community	✓	✗	<ul style="list-style-type: none"><li>Servicing <b>future only</b> will create an inequality in services available to new residents and the existing residents.</li><li>Servicing <b>future growth only</b> may draw businesses from the cores, impacting their long term sustainability.</li></ul>	
Create employment opportunities	✓	✓		
Allow for a range and mix of housing (e.g. seniors, starter)	✓	✓	<ul style="list-style-type: none"><li>Will allow for smaller lots → more likely to have smaller (senior or starter) homes.</li><li>Will allow for infilling (apartments, condos).</li></ul>	
Maintain the small town atmosphere	✓	✗		
Allow for responsible development patterns	✓	✓	<ul style="list-style-type: none"><li>Will allow for compact development</li><li>Will allow for greater range and mix of housing</li><li>Will allow for redevelopment and infilling</li></ul>	
Allow for responsible servicing	✓	✗		
Protect and preserve the natural environment	✓	✗	<ul style="list-style-type: none"><li>Servicing <b>existing - future</b> addresses the existing issues related to septic systems, holding tanks in the cores, setbacks, and seepage disposal.</li><li>Servicing <b>future only</b> does not address existing issues related to septic systems, holding tanks in the cores, and setbacks on small lots.</li><li>Servicing <b>future only</b> creates inequalities within the community.</li></ul>	
Meet policy requirements	✓	-		
			<ul style="list-style-type: none"><li>Servicing <b>existing - future</b> will eliminate impacts from septic systems to the West Credit River.</li><li>Servicing <b>existing - future</b> reduces the amount of potential groundwater development.</li><li>Servicing <b>future only</b> will not address existing aging septic systems, which have the potential to impact the West Credit River in both villages.</li></ul>	
			<ul style="list-style-type: none"><li>Servicing <b>existing - future</b> is consistent with population and servicing policies.</li><li>Wellington County OP P.2.2.3 (Objectives) bill to deliver an adequate supply of potable water and water usage disposal to meet the needs of existing and future residents and businesses.</li></ul>	

Step 2 - Where		1.1 Erin and Hillsburgh		1.2 Erin Only		1.3 Hillsburgh Only		
		Existing + future						
		1.1 Erin and Hillsburgh	1.2 Erin Only	1.3 Hillsburgh Only	Comments			
Does this option...								
Create a vibrant and sustainable community	✓	✗	✗	✗	• Servicing <b>only one community</b> (Erin or Hillsburgh) will create two-tiered service level between the communities. • Business and community services may leave the <b>unserved community</b> , which will impact the sustainability of the downtown core. • <b>Unserved community</b> likely to have restricted ability to redevelop vacant buildings.			
Create employment opportunities	✓	✓	✓	✓	• The availability of servicing may attract and retain businesses, creating local job opportunities.			
Allow for a range and mix of housing (e.g. seniors, starter)	✓	✓	✓	✓	• Servicing will allow for smaller lots → more likely to have smaller (senior or starter) homes. • Will allow for infilling (apartments, condos). • <b>Community without servicing</b> may have limited development (large lots → need to accommodate septic systems. Large lots will increase the urban extent of the village, and decrease the overall efficiency of other infrastructure (roads, municipal waste).			
Maintain the small town atmosphere	✓	✓	✓	✓	• Lack of a mix of housing types may impact population of <b>unserved community</b> , as seniors (the largest population segment) move to other communities with more appropriate housing for their needs.			
Allow for responsible development patterns	✓	✗	✗	✗	• Servicing <b>both communities</b> will allow for compact development, a greater range and mix of housing, and will allow for redevelopment and infilling. • <b>Community without servicing</b> may have limited development (large lots → need to accommodate septic systems. Large lots will increase the urban extent of the village, and decrease the overall efficiency of other infrastructure (roads, municipal waste).			
Allow for responsible servicing	✓	✗	✗	✗	• Servicing <b>both communities</b> addresses the existing issues related to septic systems, holding tanks in the cores, setbacks, and seepage disposal. • Servicing <b>one community</b> does not address existing issues related to septic systems, holding tanks in the cores, and setbacks on small lots currently present in both communities. • Servicing <b>one community</b> creates inequalities between the two communities.			
Protect and preserve the natural environment	✓	✓	✓	✓	• Servicing <b>both communities</b> will eliminate impacts from septic systems to the West Credit River. • Servicing <b>one community</b> will not address existing aging septic systems in the other community, which have the potential to impact the West Credit River.			
Meet policy requirements	✓	-	-	-	• Servicing <b>both communities</b> will meet the population and servicing policies. • Wellington County – Off – as it is not an adequate supply of potable water and means of sewage disposal will meet the needs of existing and future landowners.			



Step 2 – Service existing in Erin and Hillsburgh

1.1 Erin and Hillsburgh

Step 3 – Where (Future)

1.1.1 Erin and Hillsburgh

1.1.2 Erin

1.1.3 Hillsburgh

- There will be limited capacity for future growth if Erin and Hillsburgh are serviced, based on the AC.
- Where the future growth is allocated (Erin + Hillsburgh, just Erin, or just Hillsburgh) is important:
  - Will influence needs (and our identification of those needs) related to:
    - Water servicing
    - Transportation
    - Stormwater

17

## Next Steps

- Council makes a decision on:
  - Who is serviced (Existing or Future)
  - Where is serviced (Erin + Hillsburgh, Erin only or Hillsburgh only)
  - Where future growth is allocated (Erin + Hillsburgh, Erin only or Hillsburgh only)
- The identified municipal servicing strategies will be put forward to Watson & Associates for a financial analysis.
- BMROSS identifies impacts of planning strategies and impacts related to water, transportation and stormwater.

18

5



# Town of Erin

## Financial Discussion Regarding the Settlement & Servicing Master Plan (SSMP)

Watson & Associates Economists Ltd

July 9, 2014



## Purpose

- The Terms of Reference for the SSMP provided:
  - “Develop a financial plan specific to all servicing options considered that addresses municipalities debt capacity, long term operating costs and sustainability, sources of funding and impacts on existing Sewer and Water Rates and Development Charges Bylaws;”
  - “The Consultant is to confer with the Town’s Economic Consultant, Watson and Associates Ltd., in the review of existing Water and Sewer Rate Study, Development Charges Bylaw and the development of financial Plans specific to servicing options being considered.”

2



## Background

- At this point in the SSMP evaluations, the Town has directed B.M. ROSS to evaluate 3 servicing alternatives (which are variations of implementing a sanitary sewage system for each village and providing for various future growth configurations)
- Sanitary Servicing alternatives would provide for:
  - 1,120 existing properties in Erin
  - 510 existing properties in Hillburgh
  - Growth for 500 residential units

3



## Capital Cost for Wastewater Servicing

- Capital Cost have been developed by B.M. Ross, as follows:

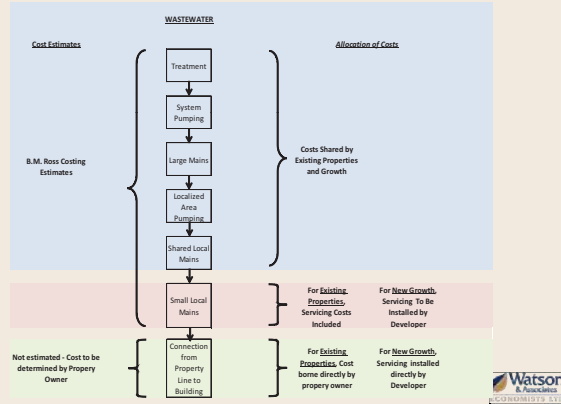
1	Hillsburgh Collection System	6,800,000
2	Hillsburgh Railtrail Trunk - HB to Erin (shared with Hillsburgh and Growth)	2,500,000
3	Erin Collection System	15,400,000
4	Erin Collection System (portion shared with Growth)	2,600,000
5	Erin Trunk Sewer and Main PS (shared with Hillsburgh and Growth)	6,200,000
6	Sewage Plant (shared by Erin, Hillsburgh and Growth)	24,500,000
7	Land (shared by Erin, Hillsburgh and Growth)	500,000
		58,500,000

4





## Basis for Costing



5

## Allocation of Costs

- Cost have been allocated between Existing properties and new growth
- Distribution of costs based on defining properties on a “single unit equivalent” – thus, higher flow users pay a proportionately higher amount per property
- Following table identifies that 14 properties generate the same needs as 172 single family units

6

## Single Family Equivalent Properties

Customer	Address	Equivalent Residential Units
<b>Erin:</b>		
Stanley Park		82
Town of Erin Centre	14 Boland Drive, Erin	21
2000 Arena		
Upper Grand District School Board-High School	14 Boland Drive, Erin	7
Loblaws Inc.	134 Main St, Erin	7
Central Wire	1 Erinville Drive, Erin	7
Apartment Building	11 Wellington Rd 124, Erin	6
The Royal Canadian Legion-Erin	12 Dundas St, Erin	6
Upper Grand District School Board-Public School	185 Daniel St, Erin	4
Image Car Wash	2 Erin Park Drive, Erin	4
The Wellington County Roman Catholic School	30 Millwood Rd, Erin	3
Apartment Building	15 Wellington Rd 124, Erin	3
Wellington Housing Corp.	14 Centre St, Erin	3
Wellington Housing Corp.	22 Church Blvd, Erin	3
Senior's Apartments		
<b>Hillsburgh:</b>		
Erin Twp Non-Profit Housing	15 Spruce St, Hillsburgh	16
		172

7

## Wastewater Scenarios Considered

- B.M. Ross has developed servicing scenarios for Erin and Hillsburgh communities, as follows:
  - Service existing Erin & Hillsburgh and provide 250 units growth in each community
  - Service existing Erin & Hillsburgh and provide 500 units growth in Erin (only)
  - Service existing Erin & Hillsburgh and provide 500 units growth in Hillsburgh (only)

8



## Scenario Summary for Wastewater

Scenarios (Each Scenario Services Existing Properties)	Property Connections			Residential Equivalents		
	Existing	Growth	Total	Existing	Growth	Total
1 <u>Split Growth</u>						
Erin	1,120	250		1,263	250	
Hillsburgh	510	250	2,130	525	250	2,288
2 <u>Growth in Erin</u>						
Erin	1,120	500		1,263	500	
Hillsburgh	510	-	2,130	525	-	2,288
3 <u>Growth in Hillsburgh</u>						
Erin	1,120	-		1,263	-	
Hillsburgh	510	500	2,130	525	500	2,288

9



## Cost Per Unit – Existing vs. Growth (Wastewater)

### Allocation of Capital Cost

Benefit	Scenario (Each Scenario Services Existing Properties)		
	1 Split Growth	2 Growth in Erin	3 Growth in Hillsburgh
Existing	49,430,922	49,824,675	50,462,306
Growth	9,069,078	8,675,325	8,037,694

### Cost Per Unit Comparison

Benefiting Units	Scenario (Each Scenario Services Existing Properties)		
	1 Split Growth	2 Growth in Erin	3 Growth in Hillsburgh
Existing	27,646	27,866	28,223
Growth	18,138	17,351	16,075

Note: Growth Units do not include localized mains which will be installed by developers at their costs

10



## Scenarios Considered - Water

□ B.M. Ross identified the need for further water projects to service the wastewater servicing scenarios. Some existing properties are not connected to the municipal water system. Based on the prior scenarios:

1. Service 110 existing Erin & 230 Hillsburgh and provide 250 units growth in each community
2. Service existing 110 Erin & 230 Hillsburgh and provide 500 units growth in Erin (only)
3. Service existing 110 Erin & 230 Hillsburgh and provide 500 units growth in Hillsburgh (only)

11



## Cost Per Unit – Existing vs. Growth (Water)

### Allocation of Capital Cost

Benefit	Scenario (Each Scenario Services Some Existing Properties)		
	1 Split Growth	2 Growth in Erin	3 Growth in Hillsburgh
Existing (connected properties)	1,269,360	1,269,360	1,269,360
Existing (unconnected properties)	1,565,200	1,565,200	1,565,200
Growth	3,898,810	2,578,810	2,208,810
Total	6,733,370	5,413,370	5,043,370

### Cost Per Unit Comparison

Benefit	Scenario (Each Scenario Services Some Existing Properties)		
	1 Split Growth	2 Growth in Erin	3 Growth in Hillsburgh
Existing (connected properties)	984	984	984
Existing (unconnected properties)	4,550	4,550	4,550
Growth	7,798	5,158	4,418

12





## Capital Financing Options

- ✓ Municipal Act – Part 12
- Municipal Act - Local Improvement Regulation
- ✓ Development Charges
- ? Developer Over contribution
- ? Grants
- ✓ Debt (Infrastructure Ontario)
- Private-Public Partnership (3P)

## Town Financing Options - Municipal Act

- Non-growth (i.e. Existing) portion of the costs should be recovered by Part 12 of Municipal Act (using similar approach to s. 221 of the former Act)
- Allows municipality to impose a charge against a specific area – is not appealable to the OMB
- Act allows for various methods of recovery (e.g. per lot, assessment, frontage, area or “any method the Council considers fair”) – the Residential Equivalent generally has the greatest acceptance
- Local Improvement is not recommended – recovery on a linear frontage charge basis – also not fully cost recoverable and subject to OMB appeal

## Town Financing Options – Development Charges

- Growth portion of the costs would be recovered by area specific DC
- Some municipalities have secured additional contributions or having developers take on an added portion of the costs
- Town should also consider asking Developers to prepay the DC's to offset debenturing needs (impacts discussed later)

## Town Financing Options - Grants

- Grant funding may be a consideration and would significantly reduce the net cost to benefiting properties
- Unless otherwise stipulated by grant program, usually grant is shared with both growth related and non-growth costs
- Town should consider asking Developers to prepay the DC's to offset debenturing needs (impacts discussed later)



## Town Financing Options - Private/Public Partnerships

- Often 3P agreements provide for operating contracts combined with capital financing
- Municipalities borrow money at significantly lower rates of interest than the private sector (on average 2.5% - 4%) - Infrastructure Ontario (I.O.) loans are even lower than municipal borrowing rates
- Example – Wastewater Cost of \$28,000 per home:
  - 20 yr I.O. loan at 3.50% - \$1,948/year
  - 20 yr 3P loan at 6.50% - \$2,505/year

## Town Financing Options - Private/Public Partnerships

- Usually, only consider projects with a \$50 million value
- As well, look for Design, Build, Operate, Finance and Maintain contracts
- 3P Canada can make available up to 25% grant towards the cost of the project – however, given the added cost of borrowing, this generally offsets the cost of interest if the term of the arrangement does not exceed 20 years
- Generally, 3P agreements have a significantly higher impact on a municipality's debt capacity

## Connection Costs

- Individual businesses and homeowners would be responsible for the costs of extending the connection into the building
- Range of costs will vary depending on the size of the property, distance of the connection to into the house from the roadway, etc.

## Municipal Loans to Residents

- Municipal Act provides that costs may be either collected in a lump sum payment or the municipality shall provide for a loan
- A loan would require the municipality to issue debt and recover the annual payments from residents



## Municipal Loans to Residents - Wastewater

- Homeowners may either elect to borrow from the Town or use other resources (e.g. mortgage)
- Based on the total per lot charge for wastewater of approx. \$28,000, the annual payment would be:
  - 15 yr municipal loan at 3.25% - \$2,361
  - 20 yr municipal loan at 3.50% - \$1,948
  - 25 yr mortgage at 3.1% - \$1,607
- Note – should grants be available, the above payments would reduce by the % of the grant



## Municipal Loans to Residents - Water

- Based on the total per lot charge for water of approx. \$4,500, the annual payment would be:
  - 15 yr municipal loan at 3.25% - \$380
  - 20 yr municipal loan at 3.50% - \$313
  - 25 yr mortgage at 3.1% - \$258
- Note – should grants be available, the above payments would reduce by the % of the grant



## Debt Capacity for Erin

- MMAH regulations allow municipalities to issue debt to the limit of where annual debt payments equal 25% of total own revenues
- Erin's debt capacity would allow between \$15 million (10 year debt) - \$25 million (20 year debt)
- Based on the "No Grant Scenario", borrowing for existing properties could require approx. \$50 million for wastewater and \$3 million for water (note – it is assumed that the \$9 million (wastewater) and \$3 million (water) needed for growth are paid upfront by developers)
- To undertake the full project, grant funding will be needed – the following identifies the benefit of different levels of grant funding



## Debt Capacity for Erin

Assumed Level of Grant Funding	Debt Funding Needed After Grant			Debt Limit (Based on 20 Yr debt)	Amount Over Limit
	Wastewater	Water	Total		
0%	50,000,000	2,800,000	52,800,000	25,000,000	27,800,000
10%	45,000,000	2,520,000	47,520,000	25,000,000	22,520,000
20%	40,000,000	2,240,000	42,240,000	25,000,000	17,240,000
30%	35,000,000	1,960,000	36,960,000	25,000,000	11,960,000
40%	30,000,000	1,680,000	31,680,000	25,000,000	6,680,000
50%	25,000,000	1,400,000	26,400,000	25,000,000	1,400,000
60%	20,000,000	1,120,000	21,120,000	25,000,000	(3,880,000)
66%	17,000,000	952,000	17,952,000	25,000,000	(7,048,000)

- Above debt amounts assume no full upfront payment by property owners
- Town would also need to preserve some debt capacity for other capital needs (e.g. cost road improvements related to above)





## Debt Capacity

- It would appear that the Town has the ability to finance the Existing Benefit for water and wastewater only if grants in the 60%-66% range are obtained
- However, this observation is premised on the Town negotiating with developers to cashflow the growth related charges
- If lesser levels of grants can be obtained, the servicing may be able to go ahead but on a staged basis (however need to consider if Treatment facility may be staged also)

## Operating Costs

- The full system operating cost have been estimated at an annual amount of \$900,000 (in 2014 \$)
- Based on full buildout of the system, this would represent an average per home cost of \$400 per year

## Observations

- Based on the foregoing:
  - Town needs to pursue grants to reduce the overall impact onto property owners
  - Grants are also needed to be able to remain within the Town's debt capacity limits
  - Municipal Act (Part 12) charges for existing properties would be the primary basis for recovery
  - For growth related costs, developing landowners would need to prepay their charges to offset the cost of borrowing
  - Staging of the works may be considered if the treatment plant could be done in stages



**TOWN OF ERIN  
SERVICING & SETTLEMENT MASTER PLAN  
COMMUNITY FORM & FUNCTION WORKSHOP  
MAY 4, 2009**

**Attendance List**

Name

Address

1000 FERRIS @ SYMPATICO.CA  
1000 FERRIS 8 KENNETH AVE

BARB TOCHER COUNCILLOR.

JOAN MURRAY ERIN ADVOCATE

MAUREEN & RAY HAYES ERIN

BOB GARDNER ERIN - sending 470 yaho.ca

CHRIS ZUPAN

KATHYNE COOPER ERIN.  
9121 - 17th St. Rd. Kathrynco  
Hillsburgh sympati  
co

Deanna Mackay Erin (liaison group)

MARY SHIELDS

Erin

Erin

ERIN

D. Pat

ERIN

PATRICK SUESSMUTH - helps@erinhoops.ca  
helps@erinhoops.ca?



**TOWN OF ERIN**  
**SERVICING & SETTLEMENT MASTER PLAN**  
**COMMUNITY FORM & FUNCTION WORKSHOP**  
**MAY 4, 2009**

**Attendance List**

---

Name	Address
STEVE MACEachern	30 ERIN HEIGHTS DR. STUDIO@QUACKCOM.CA
Steve Revell	41 Scotch St.
Jon Maurer	8 Montanuew Cres. Jon@SilvercreekFord.com
Philip Bender	RR2 Erin NOB/TO philav8r@hotmail.com
Phil Gravelle	RR5 Georgetown LTG458 philgravelle@yahoo.ca
RON GODDARD	21 MAY ST. ERIN.
SALLY STULL	PLANNER TOWN OF ERIN
TOM ROBERTS	16 CREDIT RIVER RD.



TOWN OF ERIN  
SERVICING & SETTLEMENT MASTER PLAN  
COMMUNITY FORM & FUNCTION WORKSHOP  
MAY 4, 2009

oldstream.mn?

oldstream  
-M2

Attendance List

Name

Address

Lisa Hass

Town of Erin

Pauline & Doug FOLLET

13 ERIN HEIGHTS

pafflor@  
sympatico.ca

along ~~Oldstream~~

TERRA

EDWARD LONG. 9762 WELLINGTON RD #42 COTTA.

KEPINO

John Brennan

hejo@ca.inter.net

4986 10th Line

JOHN SUTHERLAND

5881 3rd line

J Sutherland  
@ Sympatico

CA

ANDY HAMILTON

5383- 8th LINE

J Sutherland

Eric Little

9535 Dundas St W.

DALE MURRAY

Town

LES SINKA

22 CREDIT RIVER RD.  
LSINKA@AOL.COM

LSINKA@  
AOL.COM



**B. M. ROSS AND ASSOCIATES LIMITED**  
Consulting Engineers  
62 North Street, Goderich, ON N7A 2T4  
p. (519) 524-2641 • f. (519) 524-4403  
[www.bmross.net](http://www.bmross.net)

**TOWN OF ERIN  
SETTLEMENT AND SERVICING MASTER PLAN**

**NOTES FROM  
COMMUNITY FORM AND FUNCTION WORKSHOP**

**Details:** May 4, 2009  
Erin Centre 2000 Arena (Shamrock Room)  
Project Presentation 7:00 ó 8:00 p.m.  
Brainstorming Exercise 8:15 ó 9:30 p.m.

**In Attendance:** Rod Finnie, Mayor Town of Erin  
John Brennan, Councilor  
Barb Tocher, Councilor  
Lisa Hass, Town Manager  
Sally Stull, Planner  
Dale Murray, Project Manager - Triton  
  
Bob Gardner Liaison Committee  
Deanna McKay  
John Sutherland  
Chris Zuppan  
  
Matt Pearson BMROSS  
Rick Steele  
Andrew McGarvey  
  
Jay McGuffin Monteith Brown  
Jamie Gibson

Members of the public: 25±



**7:00 p.m. – Project Presentation**

- **Project Introduction**
  - Mayor Finnie welcomed attendees and introduced the study
  - Matt Pearson introduced the study team
  - Matt explained the Master Plan process using flow charts and mind maps
  - Matt explained the role of public communication in this process
- **‘Tonight’**
  - Matt provided an introduction to the project and how it is important for the study team to understand the form and function of the community. This will be used to define existing and future needs. This workshop is designed to elicit input from a general community/personal perspective.
  - Matt went over the process and rules for the workshop.
- **Planning 101**
  - Sally Stull, Town Planner talked briefly about planning issues and constraints to growth
- **Pictures**
  - Pictures are worth 1000 words; Matt used examples to describe how people could use pictures as part of the community form and function process.
  - A couple of people offered examples of pictures in their heads of what Erin means to them
  - Matt asked the attendees to email pictures to him of what Erin represents and means to them

**8:15 p.m. – Brainstorming Exercise**

- **Question and Answer Period**
  - Everyone was divided into three groups of roughly ten people, with each group being asked to respond to six questions by a team member
  - The questions and group answers are listed in Appendix A
- **Debrief**
  - Matt pointed the similarities and contradictions of the different group's responses to the questions
  - Matt also answered further questions regarding the process and the study
  - Attendees were asked to leave email addresses so that notes from the meeting can be forwarded, as well as future information.



## **Appendix A**

### **Responses to Questions**

#### **Group 1**

##### **What is the community's greatest asset?**

- Credit River
- The people; knowing residents
- Good tasting drinking water
- Small town atmosphere
- Topography
- Rural flavour
- Wildlife
- High taxation (assessment)
- Commuting to multiple large centers
- Centre 2000
- Great high school
- Shopping
- Proposed SSMP
- Trails
- Urban trails; need to be better developed
- Rural-linkage trails
- Historic buildings
- French immersion
- History of town
- Name of town
- Heritage sites -natural and historic
- Good design style - housing
- Access to sports
- Large volunteer base
- Erin fall fair - prelude to Royal
- Rodeo
- Agriculture base
- Conservation authority
- Erin radio
- Tree base
- Clean air
- Fishing opportunities - wild trout
- Amphibian population
- Children friendly
- Talented students - artistic
- Dedicated mentors to children
- Intellectual capital
- Good community spirit



## Town of Erin ó Notes from May 4, 2009 Workshop

- Ed Stewart's equipment
- Dairy and bakery
- Green community

### **One reason you like to live here?**

- Access to amenities
- Small town atmosphere
- Away from hustle and bustle of city - noise, pollution
- Low density housing
- Friendly
- Birds
- Space and privacy
- Quiet
- Country smell
- Oasis
- Can live here
- Hear the rooster

### **What do you like least about Erin?**

- No public sewer system
- Main Street traffic
- Growth that has happened in the last 30 years
- Lack of public parkland
- No public transportation
- Inaccessible water resources
- Erin-Hillsburgh rivalry
- No opportunities for young adults
- Expensive for young adults and seniors
- Lack of affordable housing
- Lack of job opportunities
- Lack of industrial/commercial tax base
- Too many gravel pits below water table
- Too much water taking
- Lack of senior housing
- No curling club
- No public swimming pool
- Lack doctors → no building for health team
- Intolerance of diversity
- Limited adult recreation activities
- No night life



**Is there a place here for your children when they grow up?**

- No
- Maybe, depending on desire
- Have to leave for education and don't come back
- No place to live → affordable housing
- No community service opportunities

**What would make you leave Erin?**

- Win lottery
- Death
- No place to work
- Business opportunities elsewhere
- Taxation
- Need long-term care
- Housing like Brampton
- Realize equity in property
- If USA takes over Canada
- GTA West through property
- Have to go to the city for things to do
- Move closer to children
- Boredom
- Development - industrial/residential

**What would make Erin a better place to live in?**

- Public sewer system
- Emphasize recreational industry
- Control downtown traffic
- Countryside more accessible
- Better roads
- Affordable and senior housing
- More parkland and safe bike paths
- Parking
- Family health team building
- Housing design with small town feel
- McDonalds
- Swimming pool
- Public washroom on Main Street
- Urban walking trails finished and enhanced
- More integration of residential/commercial/light industrial
- Lower user fees for community groups



## Town of Erin ó Notes from May 4, 2009 Workshop

- Eliminate development
- Buy-up available property and demolish residences
- Lower taxes/more industrial to allow for lower taxes
- Support for local businesses→chamber of commerce
- Public transit links outside Erin
- Enhance heritage parkland
- Dams and fish barriers
- Clean-up behind Main Street stores
- Boardwalk on river
- An advocating advocate
- New subdivision development having at least two trees per lot
- Developer responsibility
- Truck bypass

### **Group 2**

#### **What is the community's greatest asset?**

- Great downtown - unique, pleasant old style, nice feeling
- Excellent recreation opportunities - golf course, rail trail, Centre 2000
- Location convenient to countryside
- Clean air
- Clean water
- Central location
- Access to GO Train
- Equestrian
- Safe
- Good services
- Walkable
- Culture
- Quality of life

#### **One reason you like to live here?**

- It's comfortable
- Clean living, accessibility
- Location - best of both worlds
- Quality of life
- Small town feeling
- Sense of community
- Surrounded by nature
- Heritage
- Unique village



**What do you like least about Erin?**

- Taxes are expensive
- Low industrial/commercial base→don't want it to mushroom, but would prefer light manufacturing
- Most of Erin down-wind from industrial land
- Main Street is main truck route
- Lack of pedestrian crossings
- Area behind high school used for dirt bikes
- High-density housing
- Gravel pits

**Is there a place here for your children when they grow up?**

- No
- Costs of homes are out of reach
- Taxes are out of reach

**What would make you leave Erin?**

- Increasing taxes
- Burden of sewage treatment plant costs
- Disruption of construction
- Loss of water due to aggregate
- Lack of EMS
- Not having a plan for the future

**What would make Erin a better place to live in?**

- Skateboard Park
- Improve trail network
- More health care opportunities in town -Medical Centre
- Lower taxes
- By-pass for trucks
- Pedestrian friendly downtown
- Green up the downtown
- Downtown parking



**Group 3****What is the community's greatest asset?**

- Students/young people/schools - should be engaged
- Natural open spaces/Credit River - outdoor activities
- Safe - low crime rate
- Small town character/charm - tight knit community
- Community looks after each other and gives support
- Small community is key
- Proximity to bigger communities
- Historic downtown
- Recreation facilities are good
- Lots of space/low density
- Engaged churches
- Low taxes
- Hands-on government

**One reason you like to live here?**

- Quiet
- It is close to the GTA but is still a small town
- No light pollution
- Stores and shops
- Clean air and water/environment
- Less traffic
- School system is small, and has the same kids from start to finish
- It's exciting in a small town way
- Natural resources, rivers, trails
- Diverse/complete community
- Like the snow
- Advocate - small town newspaper
- People stop to see the nature

**Is there a place here for your children when they grow up?**

- No job opportunities
- Expensive to start out
- Nothing to do/no activities
- Lack of transportation
- The natural environment is valued and will bring kids back
- Familiarity/family



## Town of Erin ó Notes from May 4, 2009 Workshop

### **What would make you leave Erin?**

- Disrespectful neighbours
- Incompatible uses
- Development that does not respect the town's assets
- Poor quality of air and water at unsafe levels
- Commercial polluters
- Unclean industrial
- High density
- Significant changes to what we have
- Disruption of construction and cost
- Wind turbines - economically don't work
- If the community became too busy

### **What would make Erin a better place to live in?**

- Truck bypass
- Improve trail/bike system - something connecting landfill
- Recoup money from Winston Churchill
- Improvements in services
- Clean up Stanley Park
- Improve Langdon School
- Improve shopping area
- Boardwalk along the Credit River
- Doctors and a medical centre
- Better housing mix
- Clean industry
- More local employment
- More kids programs/activities
- High speed Internet



# Defining Erin

Our Ideas  Our Vision  
Our Community



## TOWN OF ERIN SERVICING AND SETTLEMENT MASTER PLAN NOTICE OF PUBLIC MEETING

A public meeting has been scheduled to **present the findings of the Servicing and Settlement Master Plan Background Report and introduce Phase 2 of the SSMP process.**

***When:* Tuesday, May 8, 2012 at 7 PM**

***Where:* Shamrock Room  
Erin Community Centre/Centre 2000  
14 Boland Drive, Erin ON**

Copies of the Background Report can be viewed at the Town of Erin Municipal Office, Hillsburgh Library, Erin Library, as well as on the SSMP website: [www.erin.ca/definingerin](http://www.erin.ca/definingerin)

For more information about the Background Report or the SSMP, please contact:

Matt Pearson, Senior Planner  
B.M. Ross and Associates Limited  
1-888-524-2641  
[mpearson@bmross.net](mailto:mpearson@bmross.net)



# Defining Erin

Our Ideas  Our Vision  
Our Community

## Town of Erin Servicing and Settlement Master Plan (SSMP)

### Public Meeting 2

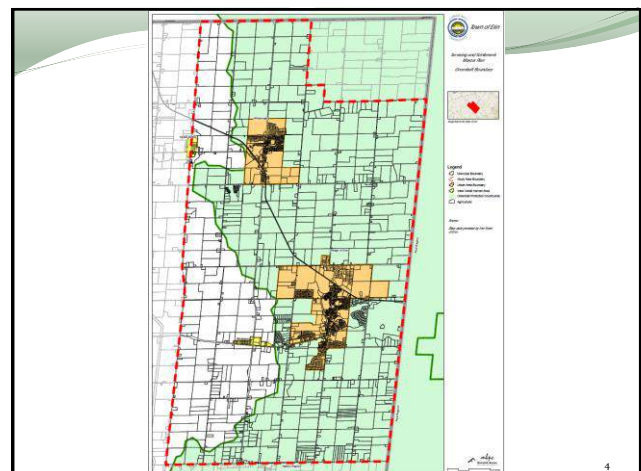
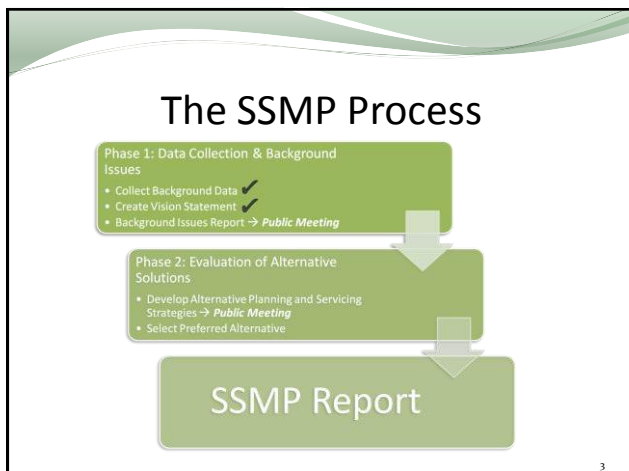
May 8, 2012



## The Servicing and Settlement Master Plan

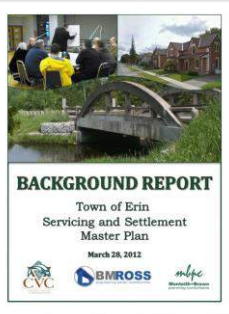
- A plan to encompass the community's visions and ideas, while approaching planning and servicing issues in a comprehensive, rational and environmentally-minded way.
- The SSMP will identify strategies for community planning and municipal servicing over the next 25 years, specific to the needs and wants of the residents of the Town.

2





## Phase 1 – Background Report



•Data relating to the following categories was collected:

- Community Design, Form and Function
- Community Planning
- Environment
- Existing Infrastructure

•Summarized into the Background Report.

•Copies available at Municipal Office, Hillsburgh and Erin libraries and on the SSMP website.

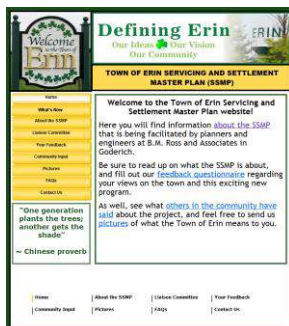
## Liaison Committee

- Provides input and direction on the SSMP process.

Meeting	Date	Topic
1	April 8, 2009	Introduction to the SSMP
2	June 9, 2009	Brainstorming – Community Role and Function
3	October 19, 2009	Septic Systems 101
4	November 18, 2009	Community Planning 101
5	December 16, 2009	Introduction to Vision Statements
6	July 25, 2010	Drafting a Vision Statement
7	August 25, 2010	Finalizing the Vision Statement
8	November 3, 2010	CVC Draft Existing Condition Report

6

## Defining Erin Website



[www.erin.ca/definingerin](http://www.erin.ca/definingerin)

- Information on the SSMP, and Liaison Committee and meetings.
- SWOT feedback questionnaire.
- Reports are posted.

7

## Community Design, Form and Function

### Goals

- Develop a clear understanding of the existing design, form and function of the Town.
- Determine future role and function of the community (i.e., bedroom community, agricultural service centre, tourism centre).
- Develop a vision statement to provide direction for the future of the Town.



# Community Form and Function Workshops

- Workshops with:
  - Council and Staff
  - The Public
  - Erin Village BIA
  - Brampton Real Estate Board
- Completed Strength, Weakness, Opportunity and Threat exercises.



9

- 

# Community Form and Function Workshops

Themes and key characteristics from the SWOT exercises:

Natural Environment	"Small Town"	Housing	Industry
<ul style="list-style-type: none"><li>• Credit River</li><li>• Recreation</li><li>• Scenic</li><li>• Tourism</li><li>• Pollution</li><li>• Aggregates</li></ul>	<ul style="list-style-type: none"><li>• Atmosphere</li><li>• Charm</li><li>• Heritage</li><li>• Safety</li><li>• Friendly</li><li>• Rural</li></ul>	<ul style="list-style-type: none"><li>• Senior</li><li>• Heritage</li><li>• Starter</li><li>• High Cost</li><li>• High Taxes</li><li>• Aggressive Development</li></ul>	<ul style="list-style-type: none"><li>• Small Tax Base</li><li>• Sewers</li><li>• Tourism and Recreation</li><li>• Transportation</li><li>• Aggregates</li><li>• Development</li></ul>

10

Natural Environment	"Small Town"	Housing	Industry
<ul style="list-style-type: none"> <li>• Credit River</li> <li>• Recreation</li> <li>• Scenic</li> <li>• Tourism</li> <li>• Pollution</li> <li>• Aggregates</li> </ul>	<ul style="list-style-type: none"> <li>• Atmosphere</li> <li>• Charm</li> <li>• Heritage</li> <li>• Safety</li> <li>• Friendly</li> <li>• Rural</li> </ul>	<ul style="list-style-type: none"> <li>• Senior</li> <li>• Heritage</li> <li>• Starter</li> <li>• High Cost</li> <li>• High Taxes</li> <li>• Aggressive Development</li> </ul>	<ul style="list-style-type: none"> <li>• Small Tax Base</li> <li>• Sewers</li> <li>• Tourism and Recreation</li> <li>• Transportation</li> <li>• Aggregates</li> <li>• Development</li> </ul>

10

[illegible]

- 

12



## Community Vision Statement

The Town of Erin will remain a vibrant, safe and sustainable community, located at the headwaters of the Credit and Grand Rivers. The Town will continue to capitalize on its proximity to large urban centres, while maintaining its excellent community spirit. With a strong employment base, and a range and mix of housing, a high percentage of residents will work and continue to live within the Town of Erin. Visitors will enjoy the small-town atmosphere, unique shops and surrounding rural charm. Through responsible development and servicing, the Town's rich natural environment will be protected and preserved.

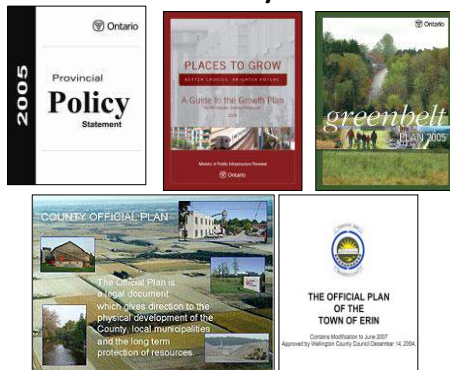
13

## Community Planning

- Background information collected relating to community planning, including:
  - Policy Directives
  - Existing Land Uses
  - Community Character
  - Cultural Heritage Resources
  - Analysis and Forecasting of Population and Housing
  - Viability of Commercial Cores
  - Future Development

14

## Policy



15

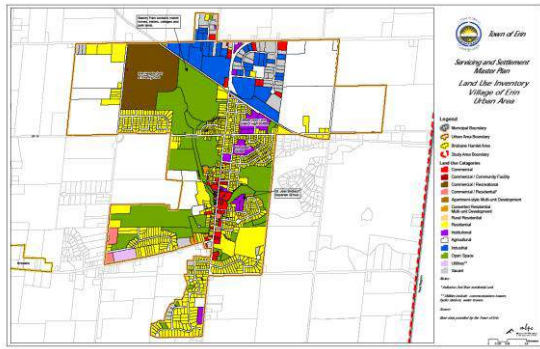
## Existing Land Uses – Erin Village

- Residential
  - 1,273 residential dwelling units (2007).
  - Most are single-detached dwellings.
  - 2 3-storey apartment buildings and no townhouses.
- Commercial
  - Most commercial use concentrated along Main Street.
  - Includes: banks, grocery store, specialty shops, restaurants, offices and more.
  - Many commercial buildings have second-floor residential unit.
- Industrial
  - Found primarily north of Cataract Trail.
  - Includes: manufacturing, distribution and storage facilities.

16



## Existing Land Uses – Erin Village



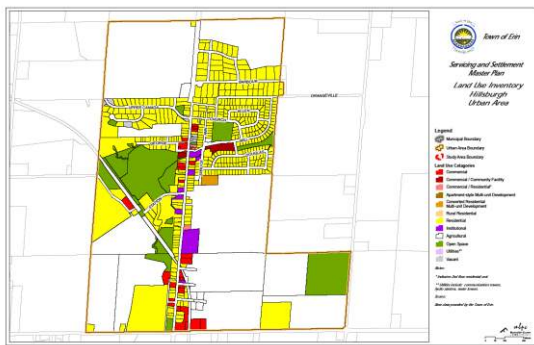
17

## Existing Land Uses – Hillsburgh

- Residential
  - 513 residential dwelling units (2007).
  - 95% are single-detached dwellings .
  - 1 2-storey apartment buildings and no townhouses.
- Commercial
  - Most commercial use concentrated along Main Street.
  - Includes: furniture store, bakery, grocery store, hair salon, bank, offices and more.
  - Some vacant commercial spaces on Main Street.
- Industrial
  - No industrial land uses within the urban boundary.

18

## Existing Land Uses – Hillsburgh



19

## Cultural Heritage Resources

- Includes: residential, commercial and institutional buildings.
- Heritage designation based on date of construction (prior to 1930).
- 143 heritage buildings in Erin Village .
- 119 heritage buildings in Hillsburgh.
- Source of civic pride and benefit the local economy through tourism.



20



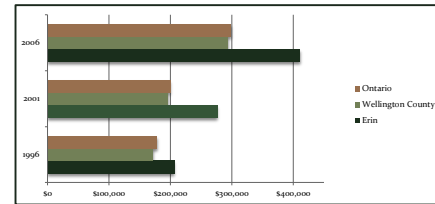
## Commercial Cores



21

## Housing Assessment

- Majority of residences are single-detached homes.
- Average value of a home in the Town of Erin has increased from \$276,060 (2001) to \$409,976 (2006).



22

## Population and Employment

	1991	% Change (1991-1996)	% Change (1996-2001)	% Change (2001-2006)	% Change (2006-2011)
Town of Erin	11,145	6.0%	3.7%	0.9%	-3.4%
Wellington	159,609	7.4%	9.2%	7.0%	4.8%
Ontario	10,084,885	6.6%	6.1%	6.5%	5.7%

- Town of Erin population: 10,770 (2011).
- Majority of Town's population between ages of 40-49, 10-19, 50-59 (older professionals and their children).
- Negative population growth in ages 0-14, 20-29.
- 15.4% of labour force works within the Town, 5.5% work within Wellington County, 55% work in a different County.

23

## Population Growth

Town of Erin	2006	2011	2016	2021	2026	2031
Total Population	11,380	11,930	12,490	13,510	14,530	15,530
Households	3,810	3,960	4,160	4,510	4,850	5,180
Total Employment	5,550	3,590	3,780	4,600	5,020	5,460

	2006	2011	2016	2021	2026	2031
<b>ERIN VILLAGE</b>						
Total Population	3,020	3,000	3,100	3,540	3,980	4,400
Households	1,030	1,050	1,090	1,240	1,390	1,530
<b>HILLSBURGH</b>						
Total Population	1,240	1,280	1,380	1,610	1,850	2,080
Households	410	430	460	540	610	690

24



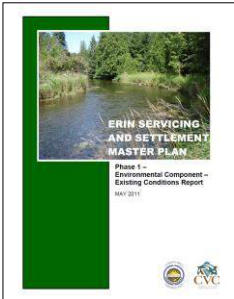
# Future Development

# Future Development – Erin Village

# Future Development – Hillsburgh

# Environment

- Undertaken by CVC.
- Studied:
  - Hydrogeology
  - Hydrology and Hydraulics
  - Natural Heritage
  - Fluvial Geomorphology
  - Macroinvertebrates and Fisheries
  - Water Quality
  - Septic System Assessment



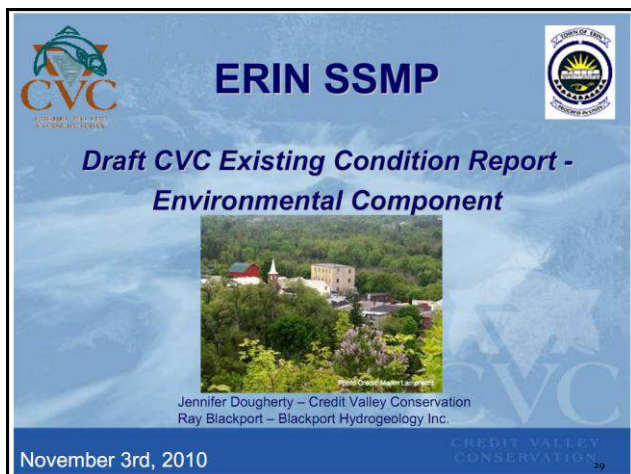
ERIN SERVICING  
AND SETTLEMENT  
MASTER PLAN

Phase 1 -  
Environmental Component -  
Existing Conditions Report  
MAY 2017

City of Vancouver CVC

28





## Summary of CVC Findings


- Relatively healthy ecosystem present in the Study Area
  - Relatively good surface water quality.
  - Brook trout spawning throughout Study Area.
- Existing municipal wells show no apparent impacts from septic system and urban sources, appear to be well protected.
- Localized impacts related to surface/stormwater runoff and cumulative impacts of online ponds.

## Summary of CVC Findings

- Former municipal wells show areas of groundwater impacts from surface source of contamination (possible septic systems) in eastern and southeastern areas of Erin Village.
- West Credit River and tributaries show relatively higher impacts from urban activity through and downstream of Erin Village.
  - Multiple potential sources including septic systems.

## Infrastructure - Drinking Water

- 2 Municipal drinking water systems
- Erin Village
  - 2 Wells (E7, E8)
  - 849 service connections
  - 1,700 m<sup>3</sup> elevated tank
  - 24.9 km of watermain
- Hillsburgh
  - 2 Wells (H2, H3)
  - 224 service connections
  - 6.7 km of watermain
- Estimated 2,300 private wells in the Town.

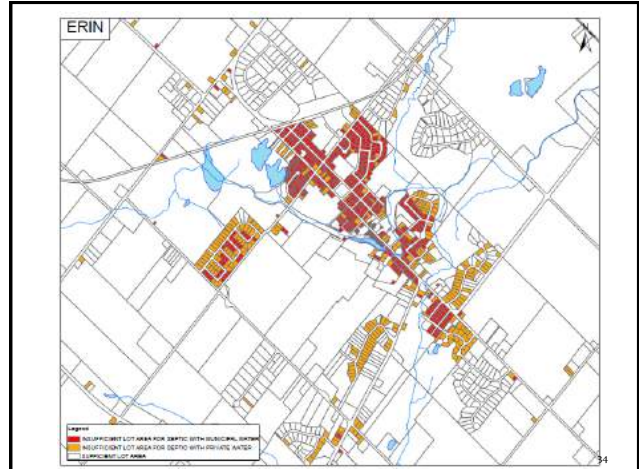




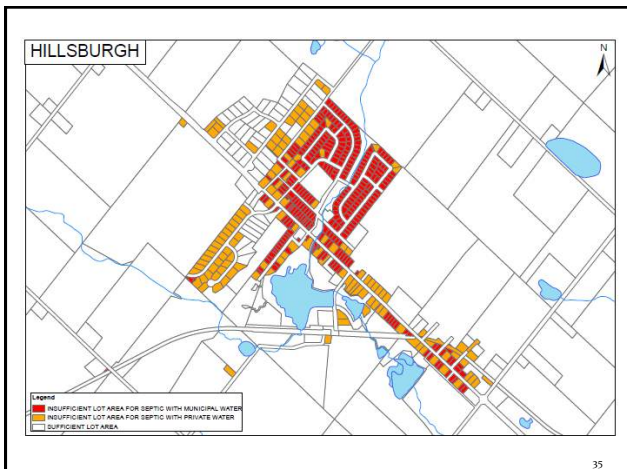
## Wastewater

- Town is serviced exclusively by private Class 4 and 5 septic systems.
- Shared septic system for Centre 2000 and Erin High School.
- Since 1999:
  - 484 permits issued for new systems
  - 209 permits issued for replacement or alterations to existing systems.
- Many lots in the villages are too small for a septic system under current setback regulations.

33



34



35

## Problem/Opportunity Statement

- The purpose of the Problem/Opportunity Statement is to define the starting point of the Master Plan Class EA and assist in defining the scope of the project.
- Problem/Opportunity Statement should address the magnitude and extent of a problem.
- Constitutes Phase 1 of the Class EA Process.



## Problem/Opportunity Statement

The Town of Erin Official Plan outlines a community-based process for completing a Servicing and Settlement Master Plan (SSMP) to address servicing, planning and environmental issues within the Town. The SSMP study area includes Erin Village and Hillsburgh, as well as the lands between and surrounding the villages. Under the Master Plan approach, infrastructure requirements are assessed in conjunction with existing and future land uses using environmental planning principles over extended time-periods and geographic areas. Servicing scenarios are evaluated using environmental, technical and financial sustainability lenses to define a preferred strategy. From community input and feedback, a Vision Statement outlining the community's ideas for the future of the Town, has been developed. The Vision Statement will serve as a guide throughout the SSMP process, assuring the development of the SSMP is consistent with the community's goals for the future.

The first phase of the Master Plan process is the definition of a Problem/Opportunity statement. This statement serves to provide guidance and direction during the development of alternative community planning and servicing strategies during the second phase of the SSMP process.

## Problem/Opportunity Statement

Presently, the Town of Erin lacks a long term, comprehensive strategy for the provision of water and wastewater servicing in the villages of Erin and Hillsburgh. The following limitations are associated with the current status of servicing within the Town's urban areas:

### Wastewater

- Wastewater is treated exclusively by private, on-site wastewater treatment systems. Within the Built Boundary of the settlement areas (Hillsburgh and Erin Village), private property investment and redevelopment is restrained by increasingly stringent setbacks required for septic systems, small lot sizes and the presence of private wells. Additionally, there are limited facilities in the area accepting septage from private systems for treatment.
- The settlement areas (Hillsburgh and Erin Village) have been identified as areas of modest growth under the Places to Grow Act and by Wellington County population projections. At present, the servicing infrastructure is inadequate to meet future demand to 2035. Lots sized to include septic systems will not allow for projected future development to occur in a manner consistent with the need for smaller, less-expensive homes in the community as identified in the Vision Statement.

### Water

- Partial water servicing in Erin Village and Hillsburgh limits the operational and cost efficiency of the systems and inhibits redevelopment and future development.
- The capacity of the existing system will need to be augmented to address current limitations and the needs of future development.

### Stormwater Management/Transportation

- The West Credit River currently shows impacts from urban stormwater drainage, resulting from limited stormwater management infrastructure. Given existing impacts and potential future impacts relating to development, there is a need to assess existing and future stormwater management and transportation infrastructure planning strategies.

## Moving Forward

- Initiate Phase 2 of the SSMP – Development of Alternative Solutions.
  - Develop alternative solutions
  - Develop evaluation protocol for alternatives
  - Consult with agencies and the public
  - Continued involvement of the Liaison Committee
- Selection of Preferred Solution
- SSMP Report
- Notice of Completion



**TOWN OF ERIN**  
**SERVICING AND SETTLEMENT MASTER PLAN (SSMP)**

**PUBLIC MEETING 2**  
**May 8, 2012**

**ATTENDANCE LIST**  
**(PLEASE PRINT)**

Name	Address
Rob Smith	276 main ST
Laura + Stu Royal	9703 Dundas STE
Gail + Bruce Bourne	266 Main St.
MIKE RUSSELL	264 MAIN ST Box 128
TED FORREST	5950 NINTH LINE
PAT + JIM HOLMES	5525 8 <sup>th</sup> LINE
Ruth Pennington	23 Waterford Dr. P.O. Box 335
JOHN DENISON	8 <sup>th</sup> LINE
STANISLAV	—
Dickson	12 Creek Line Rd
Susan Stp	5390 Wellington Rd 52.
Mike Taylor	5392 10 LINE
Tom Carroll	4935 Wellington Rd 125
Heather Gentles	9347 Sideroad 9



TOWN OF ERIN  
SERVICING AND SETTLEMENT MASTER PLAN (SSMP)

PUBLIC MEETING 2  
May 8, 2012

**ATTENDANCE LIST**  
(PLEASE PRINT)

Name	Address
Blair Patterson	5488 Warden Churchill Blvd.
Marlene Bayko	9 Station St. Hillsburgh
Vic Bayko	" " " "
T.K. Scott	7 Charles St ERIN
Lois Brown	5745 10th Line Erin
Stephen Enk	5265 TRAFALGAR RD
Steve/Terry Clark	5 Barbour Dr. Hillsburgh
Bert Wheeler	RR 2 ERIN
Subey Dvorsky	3 Union St & Trafalgar
Andrea Cuthbert	3 Credit River Rd., Erin
Ken & Margaret Chapman	15 KENNETH AVE ERIN
LIZ KWASICK	12 Station Rd Hillsburgh
JAMIE CHEYNE	
MARK LATAM	RR #1 HILLSBURGH
NORM NIX	25 MAY ST ERIN BOX 307
DIANNE NIX	" " "
Ray Blackport	56 Alexandra Ave. Waterloo.
Joe Pereira	23 Scotch St. Erin.



TOWN OF ERIN  
SERVICING AND SETTLEMENT MASTER PLAN (SSMP)

PUBLIC MEETING 2

May 8, 2012

**ATTENDANCE LIST**  
(PLEASE PRINT)

Name	Address
ROLAND HILL	156 MONTGOMERY BLVD.
BOB WILSON	RR 2 HILLSBURGH
JOE FLEWELL	ERIN
MC Mc ANTHON	ERIN
STEVE PRINCE - COX	19 SCOTCH ST. ERIN
MARY VENNEMAN	36 MILLWOOD
SCOTT MATHIE	5570 8 <sup>th</sup> LINE
PAULINE FOLLETT	ERIN HEIGHTS ERIN
DEANNA MACKAY	5409-10 <sup>th</sup> LINE, ERIN
MILIND JOG	98 SOUTHLAKE BLVD, BRAMPTON
ROW GODWARD	21 MAY ST ERIN
MYRA PENNINGTON	23 WATERFORD DRIVE, ERIN
JEAN DENISON	RD 7 ERIN
TINA SODER	7 PINE RIDGE RD.
MUNE	8 ARMDRONG ST
DON CHAMBERS	5969 NINTH LINE RR1
DAVE - JOAN REBLAN	12 LIONS PARK AVE, ERIN
ANDY HAMILTON	5383-8 <sup>th</sup> LINE ERIN



TOWN OF ERIN  
SERVICING AND SETTLEMENT MASTER PLAN (SSMP)

PUBLIC MEETING 2

May 8, 2012

**ATTENDANCE LIST**  
(PLEASE PRINT)

Name	Address
<u>Deb Cullen</u>	<u>37 ERINDALE DR</u>
<u>BARB TOCHER</u>	<u>TOWN OF ERIN COUNCILLOR</u>
<u>John R. McGowan</u>	<u>36 Dundas St. E.</u>
<u>Tom Roberts</u>	<u>16 CREDIT RIVER RD.</u>
<u>Shirley Edgerton</u>	<u>30 Waverford Dr.</u>
<u>Elaine B. Bohn</u>	<u>15th Sdrd -</u>
<u>GM BELL</u>	<u>Erindale Dr.</u>
<u>Mark Lee</u>	<u>Scotch St.</u>
<u>(Evan Argiloff)</u>	<u>1 Yonge St. Toronto</u>
<u>GERRY STEWART</u>	<u>24 MAY ST.</u>
<u>ASTRID CLOS</u>	<u>astrid.clos@ajcplanning.ca</u>
<u>FORD RALPH H</u>	<u>5252 TENTH LINE</u>
<u>LIZ ARMSTRONG</u>	<u>5216 NINTH LINE</u>
<u>Heidi Matthews</u>	<u>41 Erinlea Cres.</u>
<u>Steve Revell</u>	<u>41 Scotch St.</u>
<u>BRUCE BOURNE</u>	<u>266 HALL ST.</u>
<u>JOSEPH MOORE</u>	<u>8 ARMSTRONG ST.</u>
<u>ROD FINNIE</u>	<u>54th EIGHTH LINE</u>



TOWN OF ERIN  
SERVICING AND SETTLEMENT MASTER PLAN (SSMP)

PUBLIC MEETING 2

May 8, 2012

**ATTENDANCE LIST**  
(PLEASE PRINT)

Name	Address
John Brennan	4986 10 <sup>th</sup> Line
Suzanne + Gary Whaley	7 Laurel Lane
Karen McCreary	5376 9 <sup>th</sup> Line
Joe White	# 17 Cedar Rd 8611
DANA MUNDELL	MAIN ST. ERIN
Jamie MacDargall	29 William Park C. Erin
Betsy + Shisley Luedemann	RR #2 ERIN
Melissa Ains	9 SCOTCH STREET
M. Huges	52.94 Tenth Line RR2. Erin. Ont.
Alan Alb	Box 283 ERIN ON.
Erin Montgomery	Box 627 ERIN.
Patrick Suesmith	RR2 Hillbrough
Sarah Bartlett	5961 NINTH LINE
Martin Rush	9366 Wellington Rd 22
Dave DORMAN	5354 Nine Line ERIN
DORIS DORMAN	5354 NINTH LINE ERIN
Chris Wedeles	5015 9th line Erin.
Kevin Latam	5917 6th line ERIN



TOWN OF ERIN  
SERVICING AND SETTLEMENT MASTER PLAN (SSMP)

PUBLIC MEETING 2

May 8, 2012

**ATTENDANCE LIST**  
(PLEASE PRINT)

Name	Address
Cecil Chambers	5425 8th line
Hannah Sine	97 Waterford Dr.
Neil & Carl Baldwin	5886 9th line R.R. 1 Erin
Joe and Linda Leenders	
SHIRLEY FERGUSON + DAVID NATHAN	92 MAW ST.
EDWARD LONG	9762 Wellington Rd #42 Terra Vista
Leonard Stoen	5390 Wellington Rd 52 Erin
Leon Maren	8 Mapleman Cres
Joy Spencer	8 Wesley Cres
Bill Bell	
Mr. Wevers	4935 Wellington 125.
MAURIZIO ROGATO	122 ROMANA DR. (CONCORD, ON)
Pierre Paradis	48 Harding St Georgetown, MA
	LFGBB2
Lisa Brusse	28 Ellen, Hillsburgh
Joanne Struwer	217 Main St, Erin
Andre Leitert	9669 Dundas St



TOWN OF ERIN  
SERVICING AND SETTLEMENT MASTER PLAN (SSMP)

PUBLIC MEETING 2  
May 8, 2012

ATTENDANCE LIST  
(PLEASE PRINT)

Name

Address

DAVE DOAN

5 DOUGLAS CRES HILLSBURGH







TOWN OF ERIN  
SERVICING AND SETTLEMENT MASTER PLAN (SSMP)

PUBLIC MEETING 2  
May 8, 2012

COMMENTS

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Presentation too long - give overview  
and then let questions dictate the  
discussion.

An overview of the primary ~~stream~~ options  
for useful would be helpful/desired,  
plus the usual tradeoffs.

This process has taken a long time  
- 4 years + is a long time. Concern that  
septic systems will start to fail - Council  
is missing the window of opportunity. ~~I~~  
People will be pissed if they have to replace  
septic systems only to have to pay for a  
community sewage system a few years  
later.

PLEASE HAND IN, MAIL, EMAIL, OR FAX TO:

B. M. ROSS AND ASSOCIATES LIMITED  
Consulting Engineers  
62 North Street  
Goderich, Ontario  
N7A 2T4

Phone: (519) 524-2641 Fax: (519) 524-4403

E-mail: mpearson@bmross.net

Attention: Matt Pearson, Senior Planner

GET ON WITH IT!

Comments and Information collected by B.M. Ross & Associates Limited on behalf of the Town of Erin will assist in decision making pertaining to the SSMP. Comments and opinions will be kept on file but will not be included in study documentation made available for public review. Under the Freedom of Information and Protection of Privacy Act (1990) personal information provided to the Town of Erin will remain confidential unless prior consent is obtained.



TOWN OF ERIN  
SERVICING AND SETTLEMENT MASTER PLAN (SSMP)

PUBLIC MEETING 2  
May 8, 2012

COMMENTS

Name: S. Edgerton

Address: 30 Waterford Dr.

\* Very difficult to follow info because of inconsistent sound i.e. moving away from mic. Hard to hear several times! Talked too long, sometimes staying too long on minor info. Audience started talking amongst selves. Made it even harder to hear. Poster Presentation around room, if read ahead of time was very informative. Should have shortened verbal presentation.

PLEASE HAND IN, MAIL, EMAIL, OR FAX TO:

B. M. ROSS AND ASSOCIATES LIMITED  
Consulting Engineers  
62 North Street  
Goderich, Ontario  
N7A 2T4

Phone: (519) 524-2641 Fax: (519) 524-4403  
E-mail: mpearson@bmross.net  
Attention: Matt Pearson, Senior Planner

Comments and Information collected by B.M. Ross & Associates Limited on behalf of the Town of Erin will assist in decision making pertaining to the SSMP. Comments and opinions will be kept on file but will not be included in study documentation made available for public review. Under the Freedom of Information and Protection of Privacy Act (1990) personal information provided to the Town of Erin will remain confidential unless prior consent is obtained.



Finally got interesting near the end.  
Likely because we could <sup>finally</sup> hear speaker.  
Clarification, by audience members  
more interesting. Started to fill in  
the missing pieces of the town's  
background that many did not know.  
Question/Answer part more interesting.



# Defining Erin

Our Ideas  Our Vision  
Our Community

ERIN

## Town of Erin Servicing and Settlement Master Plan

Public Meeting No. 3  
21-Feb- 2013

1

## Presentation Themes

- What is the goal of the SSMP
- What has been done to date
- What is new
- Where is the process going

2

What is the goal of the SSMP ...

... and what it wasn't designed to do.

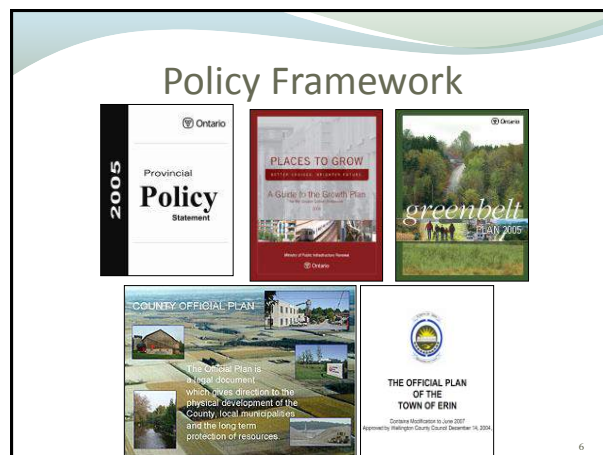
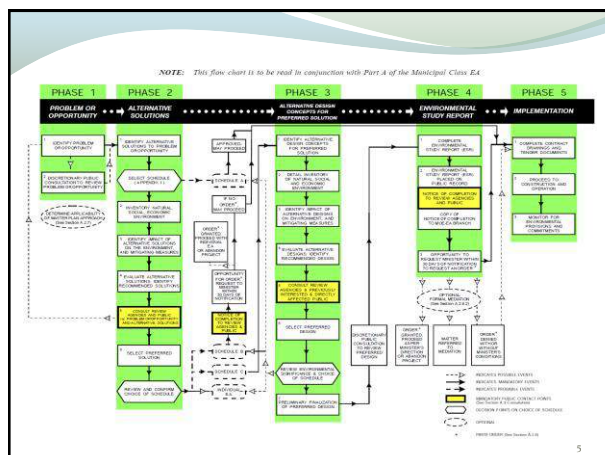
3

## The Servicing and Settlement Master Plan

- A plan to encompass the community's visions and ideas, while approaching planning and servicing issues in a comprehensive, rational and environmentally-minded way.
- The SSMP will identify strategies for community planning and municipal servicing over the next 25 years, specific to the needs and wants of the residents of the Town.

4

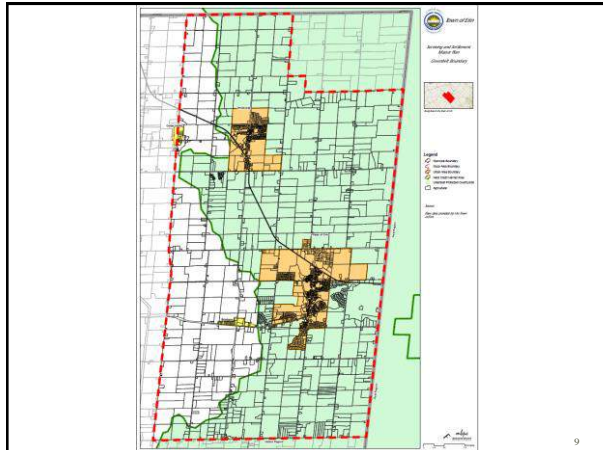




- The Province has established a Growth Plan for the Greater Golden Horseshoe (aka Places to Grow) which includes Wellington County
  - Where and how to grow – making better use of land and infrastructure by **directing growth to existing urban areas**.
  - There is a large supply of land already designated for future development.
  - The Plan emphasizes intensification, making better use of infrastructure and reducing sprawl.
  - The Plan provides **density targets** for development.

- Establishes a broad band of **permanently protected land**
- The Greenbelt Plan builds on the existing policy framework established in the Provincial Policy Statement and is to be implemented through municipal official plans and maps.
- Will be **reviewed every 10 years**.





## Provincial Policy Statement

- Issued under the Planning Act, all planning authorities shall be consistent with the PPS when making decisions affecting planning matters.
- It is intended that Municipal Official Plans serve as the main vehicle for implementation of these policies.
- Based on 3 fundamental principles: **building strong communities, the wise use and management of resources, and protecting health and safety.**

## Provincial Policy Statement

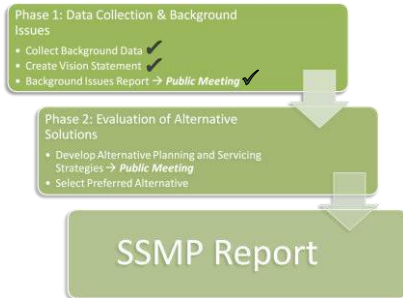
- Key policy direction:
  - Focus **development to Settlement Areas**
  - Provide **efficient, orderly and cost effective** development
  - Sufficient land is to be made available through intensification and redevelopment to accommodate an **appropriate range and mix of employment and housing needs** to meet projected needs for time horizons up to 20 years
  - Promote economic development and competitiveness.

## Provincial Policy Statement

- Key policy directions:
  - **Ensure necessary infrastructure is in place to support current and projected needs**
  - Direct **new housing to locations with appropriate infrastructure** and public service facilities.
  - Promote **densities of new housing to efficiently use land, resources, infrastructure** and public service facilities.
  - Planning for **infrastructure** and public service facilities shall be **integrated with planning for growth**
  - Municipal water and sanitary services are the **preferred form of servicing**



## The SSMP Process



13

## What the SSMP will do

- Provide information for Council to decide on a course of action – facts, community values, implications of various strategies.
- Provide a tool to use in applying for senior government funding to implement any final solution

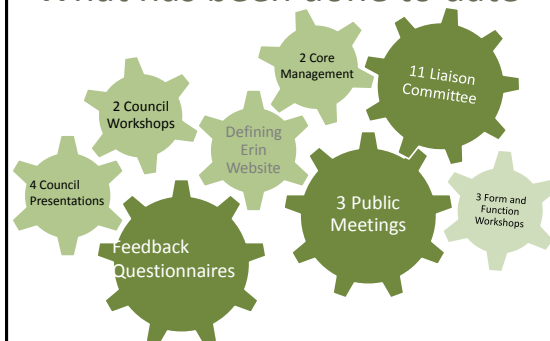
14

## What the SSMP will not do

- It does not provide detailed information regarding technologies that will be reviewed and evaluated as part of a further Class EA process.
- It does not review the appropriateness of any particular site that may be part of a final solution. This review would be part of the next phase of a Class EA process.
- It does not comment on the appropriateness of any particular planning application. That is subject to a Planning Act process.

15

## What has been done to date



16







## Community Vision Statement


The Town of Erin will remain a vibrant, safe and sustainable community, located at the headwaters of the Credit and Grand Rivers. The Town will continue to capitalize on its proximity to large urban centres, while maintaining its excellent community spirit. With a strong employment base, and a range and mix of housing, a higher percentage of the residents will work and continue to live within the Town of Erin. Visitors will enjoy the small-town atmosphere, unique shops and surrounding rural charm. Through responsible development and servicing, the Town's rich natural environment will be protected and preserved.

21



## ERIN SSMP

**Draft CVC Existing Condition Report -  
Environmental Component**



Jennifer Dougherty – Credit Valley Conservation  
Ray Blackport – Blackport Hydrogeology Inc.

November 3rd, 2010

CREDIT VALLEY  
CONSERVATION

## Summary of CVC Findings

- Relatively healthy ecosystem present in the Study Area
  - Relatively good surface water quality.
  - Brook trout spawning throughout Study Area.
- Existing municipal wells show no apparent impacts from septic system and urban sources, appear to be well protected.
- Localized impacts related to surface/stormwater runoff and cumulative impacts of online ponds.

23

## Summary of CVC Findings

- Former municipal wells show areas of groundwater impacts from surface source of contamination (possible septic systems) in eastern and southeastern areas of Erin Village.
- West Credit River and tributaries show relatively higher impacts from urban activity through and downstream of Erin Village.
  - Multiple potential sources including septic systems.

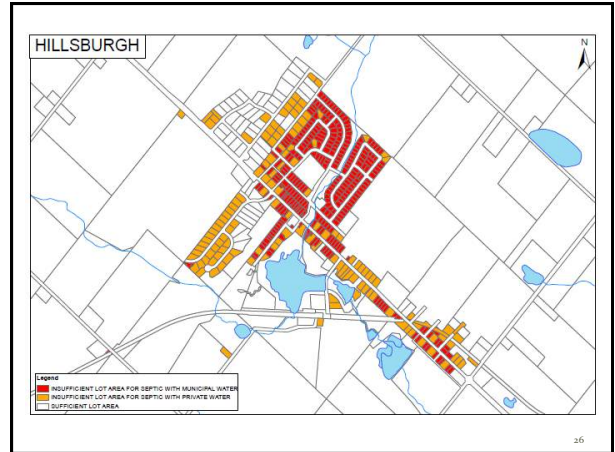
24



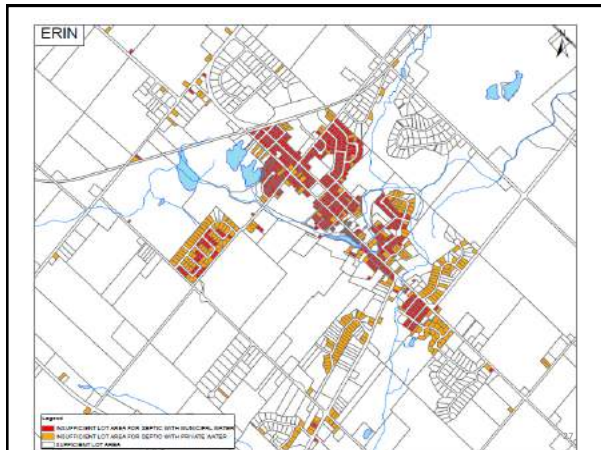
## Town of Erin Septic Studies

- **Wellington-Dufferin-Guelph Health Unit – Village of Erin – May 1995:**
  - 94 lots inaccessible for equipment needed to remove & replace a deficient system (homes too close together or presence of trees)
  - Numerous lots not large enough for replacement systems based on the current Ontario Building Code
  - Soils mostly sand & gravel difficult to find failed systems with water ponding
  - Numerous systems in downtown core and south end of Main street close proximity of Credit River
- **MOE Town of Erin Septic Investigation 2005:**
  - Due to soil type – untreated sewage effluent from failed septic systems would be able to reach Credit River quickly
  - Indicated that septic systems are a contributor of nutrients to the west branch of the Credit River
  - Recommend an investigation be conducted on the integrity of the septic systems in the older section of the Town of Erin

25



26



28



## Septic Tanks Requiring Pumping



29

## Pumping Septic Tanks

- Pumped every 3-5 years (depends on size and load)
- When scum & sludge equal  $>1/3$  of total tank volume
- Removes built up sludge & prevents solids from exiting tank into leaching bed
- Be present for pumping as pumper will point out maintenance problems



30

## Existing Conditions

- Location
  - Conveniently located
  - 30 km to Guelph
  - 70 km to Toronto
  - A world of employment, cultural, recreational, and institutional opportunities within a 45 minute drive.



31

## Filling the Gap

Density, Form & Compatibility of New Growth

- Observed Gaps
  - Housing for seniors
  - Entry level housing, new families
  - Affordable housing, to wide income range
  - Expanded commercial function – more jobs, greater selection, secure outflow of expenditure to surrounding communities
  - Expanded industrial base, more jobs, more assessment

32



## Policy Framework

- Wellington County Official Plan
  - Population and employment forecasts for next 25 years were done by CN Watson
    - 82% of population growth in Wellington will occur in the 15 Urban Centres – Erin and Hillsburgh are among these.
    - Erin and Hillsburgh are projected to grow approximately 2,200 persons and 780 dwelling units by 2031.
    - This represents 6.84% of the County's growth.
    - Average of 89 people per year and 31 dwelling units per year.
    - Beyond this the SSMP will examine projections out to 2035.
    - This is not rapid growth.

33

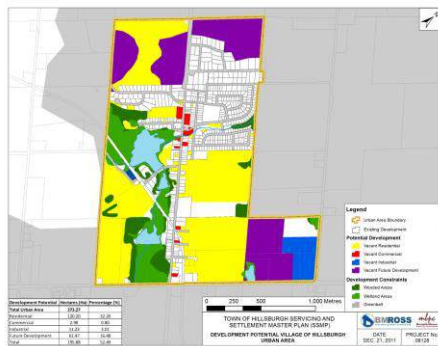
## Population Growth

	2006	2011	2016	2021	2026	2031
Total Population	11,380	11,930	12,490	13,510	14,530	15,530
Households	3,810	3,960	4,160	4,510	4,850	5,180
Total Employment	5,550	3,590	3,780	4,600	5,020	5,460

	2006	2011	2016	2021	2026	2031
<b>ERIN VILLAGE</b>						
Total Population	3,020	3,000	3,100	3,540	3,980	4,400
Households	1,030	1,050	1,090	1,240	1,390	1,530
<b>HILLSBURGH</b>						
Total Population	1,240	1,280	1,380	1,610	1,850	2,080
Households	410	430	460	540	610	690

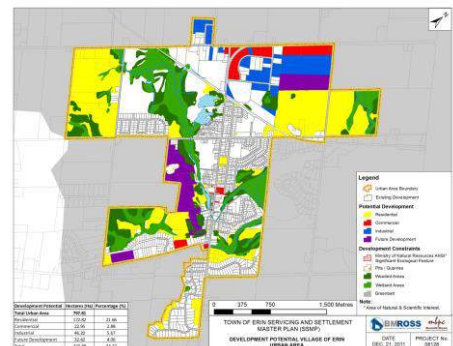
34

## Future Development – Hillsburgh



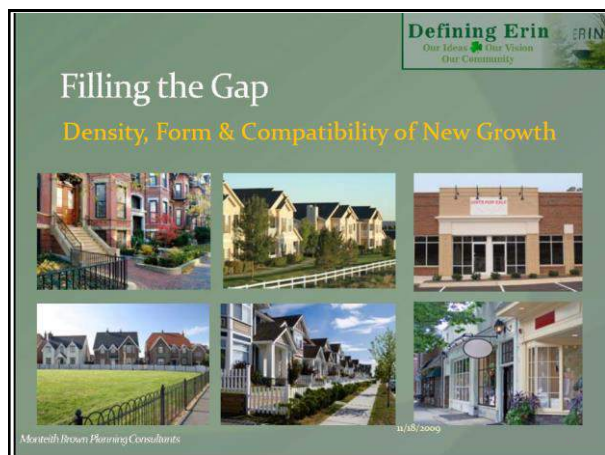
35

## Future Development – Erin Village



36





## Problem/Opportunity Statement

- Presently, the Town of Erin lacks a long term, comprehensive strategy for the provision of water and wastewater servicing in the villages of Erin and Hillsburgh. The following limitations are associated with the current status of servicing within the Town's urban areas:

## Problem/Opportunity Statement

### Wastewater

- Wastewater is treated exclusively by private, on-site wastewater treatment systems. Within the Built Boundary of the settlement areas (Hillsburgh and Erin Village), private property investment and redevelopment is restrained by increasingly stringent setbacks required for septic systems, small lot sizes and the presence of private wells. Additionally, there are limited facilities in the area accepting septage from private systems for treatment.
- The settlement areas (Hillsburgh and Erin Village) have been identified as areas of modest growth under the Places to Grow Act and by Wellington County population projections. At present, the servicing infrastructure is inadequate to meet future demand to 2035. Lots sized to include septic systems will not allow for projected future development to occur in a manner consistent with the need for smaller, less-expensive homes in the community as identified in the Vision Statement.

## Problem/Opportunity Statement

### Water

- Partial water servicing in Erin Village and Hillsburgh limits the operational and cost efficiency of the systems and inhibits redevelopment and future development.
- The capacity of the existing system will need to be augmented to address current limitations and the needs of future development.



## Problem/Opportunity Statement

### Stormwater Management

- The West Credit River currently shows impacts from urban stormwater drainage, resulting from limited stormwater management infrastructure. Given existing impacts and potential future impacts relating to development, there is a need to assess existing and future stormwater management infrastructure.

### Transportation

- Current transportation infrastructure may need upgrades to accommodate future growth.

41

## What is New



42

Collection system + treatment system = sanitary sewage system



43

## Effluent Quality Criteria

- Are determined based on the assimilative capacity of the receiving stream and by MOE policies.
- Are site-specific.
- Effluent quality criteria requirements (expressed as loadings or concentrations) are incorporated in the Environmental Compliance Approval.
- May be set for: phosphorous, nitrogen, suspended solids, Biochemical Oxygen Demand (BOD), etc.,

44



Table 3.0 Treatment Requirements

Parameter	Design Values 1996 MOE Suggestion	
	Treatment Objective	Non Compliance
pH	8.2	7-8.6
Total Suspended Solids (mg/L)	3.0	10
Total Phosphorous (mg/L)	0.1	0.20 (0.15*)
Total Ammonia (mg/L)	0.4	2.0
Total Kjeldahl Nitrogen (mg/L)		3.0
Nitrate Nitrogen (mg/L)	7.6	10
E. Coli (mpg/100 mL)	100	200 (1100*)
Dissolved Oxygen (mg/L)	5 (min)	4 (min)
BOD <sub>5</sub> (mg/L)	3.6	7.5
Temperature	17	8-19

45

## Assimilative Capacity

- is an assessment of the ability of a watercourse to resist the effects of a disturbance without impairing water quality.
- Assimilative Capacity Study (ACS) is a tool to determine the extent a potential receiving stream can be used as part of the sewage treatment process.
- ACS generally include:
  - Characterization of effluent quality and quantity.
  - Characterization of receiving stream water quality and quantity.
  - Modelling scenarios of effluent discharge and background conditions.

46

## Receivers and Assimilative Capacity

- Can be rivers, lakes, dry ditches, and land (surface or subsurface).
- Assimilative Capacity Study is a tool to characterize water flow and quality in the receiver and assist in determining the Effluent Quality Criteria (EQC).



47

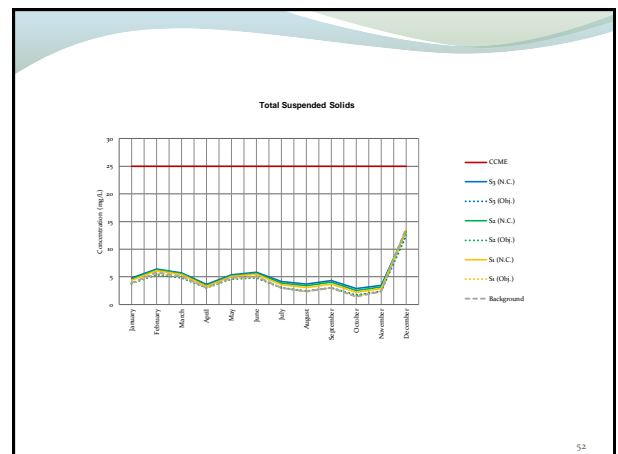
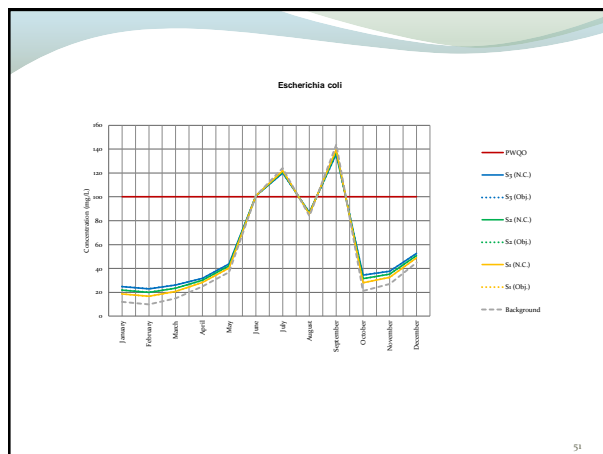
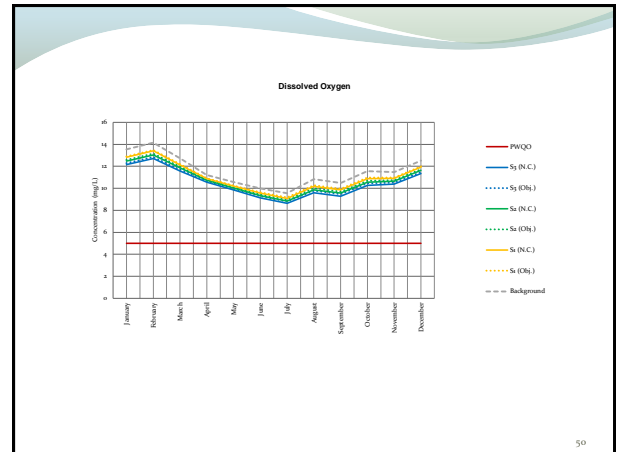
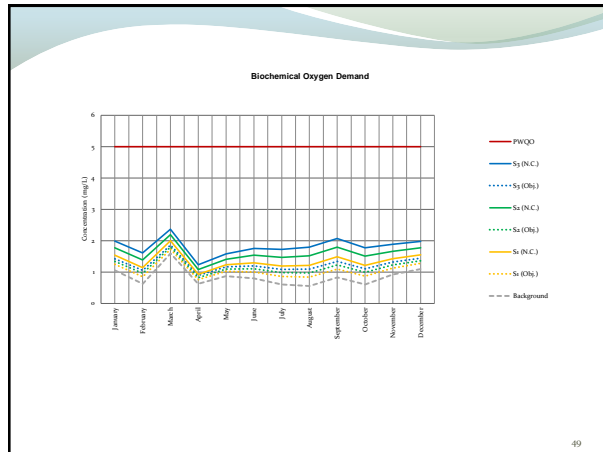
Table 2.4 Estimated Projected Population

The following population scenarios have been arbitrarily selected and are for comparison purposes only.

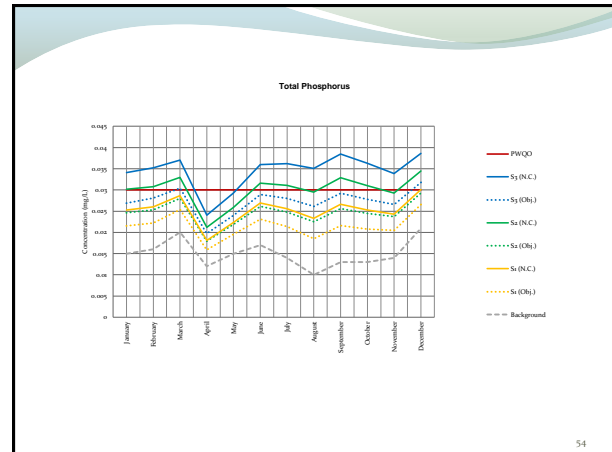
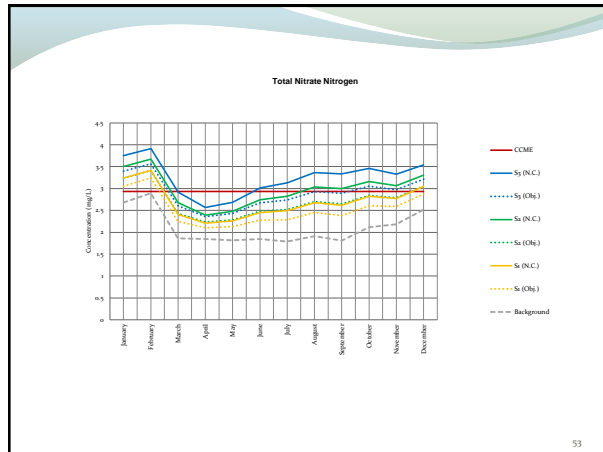
Development Scenario	Pop. Density	Urban Development Area		Equivalent Population	
		Incremental	Total	Incremental	Total
	pp21k	15k	15k	People	People
Existing	10 ac	417	417	4280	<b>4280</b>
Growth Scenario 1	40	55	472	2200	<b>6480</b>
Growth Scenario 2	40	88	560	3520	<b>10000</b>
Growth Scenario 3	40	88	568	3500	<b>13500</b>
Possible Ultimate	40	232	880	9300	<b>22800</b>
Ultimate Urban Area	880ha				
Ultimate Population (Equivalent)	22800 People				

48









## Dealing with Septage

- Septage is raw, untreated waste from septic systems and holding tanks.
- Generally, septage is 30-60x more concentrated (in terms of biochemical oxygen demand and suspended solids) than wastewater.
- Treatment facility requirements:
  - Unloading facilities
  - Extended aeration facilities
  - Sequencing Batch Reactor
  - Discharge into WWTP



55

## Conceptual Design Cost Estimate

	Erin	Hillsburgh	Total
Sewage collection	\$27,000,000	\$9,800,000	\$36,800,000
Sewage treatment:	design pop'n =6,500		\$28,600,000
Total cost:			\$65,400,000

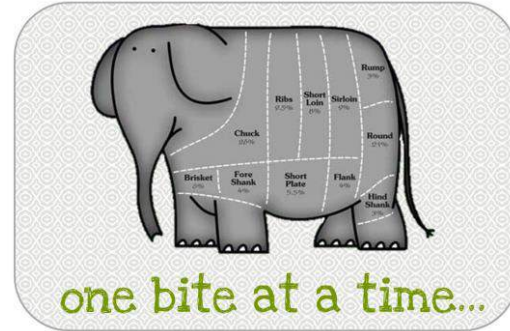
56



## Conceptual Design Cost Allocation

	Erin/Hillsburgh Existing Lots	Future Lots
Sewage collection	\$19,500	\$5,700
Sewage treatment:	\$12,500	\$12,500
Total cost:	\$32,000	\$18,200

57



58

## Planning & Servicing Strategies

- How do they relate to the Vision Statement
- How do they relate to the Problem Opportunity Statement
- Review compliance with overarching rules/policy
- Review environmental impacts and mitigations

59

## Community Vision Statement

The Town of Erin will remain a vibrant, safe and sustainable community, located at the headwaters of the Credit and Grand Rivers. The Town will continue to capitalize on its proximity to large urban centres, while maintaining its excellent community spirit. With a strong employment base, and a range and mix of housing, a high percentage of residents will work and continue to live within the Town of Erin. Visitors will enjoy the small-town atmosphere, unique shop and surrounding rural charm. Through responsible development and servicing, the Town's rich natural environment will be protected and preserved.

60



## Problem/Opportunity Statement

- Presently, the Town of Erin lacks a long term, comprehensive strategy for the provision of water and wastewater servicing in the villages of Erin and Hillsburgh. The following limitations are associated with the current status of servicing within the Town's urban areas:

61

## Problem/Opportunity Statement

### Wastewater

- Wastewater is treated exclusively by private, on-site wastewater treatment systems. Within the Built Boundary of the settlement areas (Hillsburgh and Erin Village), private property investment and redevelopment is restrained by increasingly stringent setbacks required for septic systems, small lot sizes and the presence of private wells. Additionally, there are limited facilities in the area accepting septage from private systems for treatment.
- The settlement areas (Hillsburgh and Erin Village) have been identified as areas of modest growth under the Places to Grow Act and by Wellington County population projections. At present, the servicing infrastructure is inadequate to meet future demand to 2035. Lots sized to include septic systems will not allow for projected future development to occur in a manner consistent with the need for smaller, less-expensive homes in the community as identified in the Vision Statement.

62

## Problem/Opportunity Statement

### Water

- Partial water servicing in Erin Village and Hillsburgh limits the operational and cost efficiency of the systems and inhibits redevelopment and future development.
- The capacity of the existing system will need to be augmented to address current limitations and the needs of future development.

63

## Problem/Opportunity Statement

### Stormwater Management

- The West Credit River currently shows impacts from urban stormwater drainage, resulting from limited stormwater management infrastructure. Given existing impacts and potential future impacts relating to development, there is a need to assess existing and future stormwater management infrastructure.

### Transportation

- Current transportation infrastructure may need upgrades to accommodate future growth.

64



## Fish or cut bait .....

### 1. Stay with the status quo

- Will stay small, not much growth
- Identified issues with septic systems need to be addressed.
- Does not address any of the issues regarding housing, employment, quality of life.
- Costs are individually handled, no government funding for septic repairs/replacement on private property
- May lead to two tier serviced community.

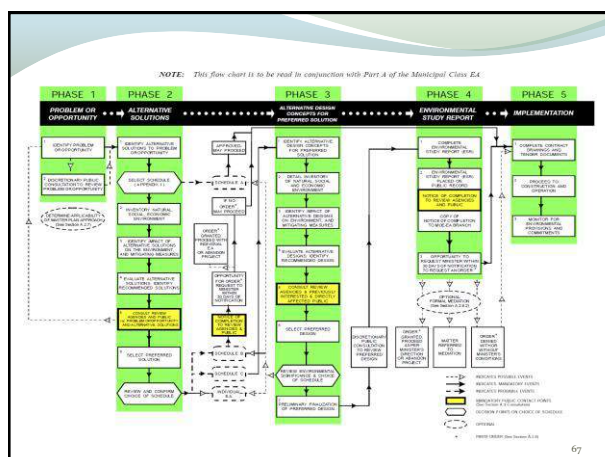
65

## Poop and get off the pot ....

### 2. Move on to the next phase of the Class EA process

- Opportunity to address existing issues in Problem Statement
- Ties into the Vision Statement
- Further defines technology, costs, phasing possibilities
- Further defines growth limits
- Opportunity to attract senior government funding
- Opportunity to take advantage of current demands for growth by leveraging costs
- Allows municipality to be the main driver in its future
- A significant financial investment to continue
- Still an opportunity to not move forward at end of EA process.

66



## Continuing with EA process

### 1. Explore collection and treatment technologies in detail

- Treatment could be achieved in a stand alone facility or via a "Big Pipe" option.
- Stand alone facility limited by assimilation capacity and level of treatment required. This would limit growth potential.
- "Big Pipe" requires agreement with another municipality to process your flow. Cost difference between this and own facility may not be significant. Need to buy capacity and build facilities to transmit sewage flow.
- Advantage of this option is that you may be able to buy enough capacity to satisfy ultimate needs of Town.
- Disadvantage of this option is that you are at mercy of the other municipality with respect to treatment costs, asset management reserve costs.

68



## Continuing with EA process

- 2. A "Do nothing" option is always in play
  - If the environmental impacts are insurmountable or the costs deemed not feasible to implement a preferred alternative a municipality can always revert to a "Do nothing" option.
  - This option would be similar to the "Status Quo" presented earlier.
  - Would lose investment of SSMP and EA process.

69

## Next steps in SSMP process

- The ACS is reviewed by MOE and CVC and final population numbers are agreed to.
- A draft Final Report is prepared and reviewed with Liaison Committee and Core Management Team.
- Council will review draft, provide comments. Report will be finalized and put into the Public Record for review and comments by the public.
- Following this review period and any revisions, Council then approves the Master Plan.
- Municipality implements course of action.

70



75

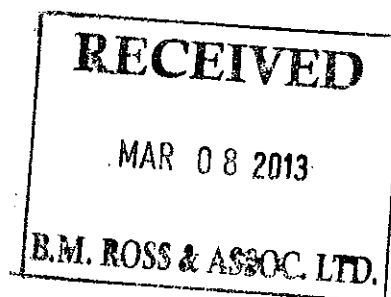


Town of Erin  
Servicing and Settlement Master Plan

PUBLIC INFORMATION MEETING

February 21, 2013

COMMENTS



Name: Betty Livermore

Address: 5362 9th Line Erin RR2 - 1-519-833-2674

*My view is for Solimar to go ahead and build his sewer plant and subdivision and perhaps make a deal to connect to Erin main st, as it is a problem.*

*Leave our residents alone, they have a good size septic system that works well. The funding and who's going to pay for it is cloudy.*

*Taxes are sky high now and the town has a huge deficit*

PLEASE HAND IN, MAIL, OR FAX TO:

B. M. ROSS AND ASSOCIATES LIMITED

Consulting Engineers

62 North Street

Goderich, Ontario

N7A 2T4

Phone: (519) 524-2641 Fax: (519) 524-4403

Email: [lcourtney@bmross.net](mailto:lcourtney@bmross.net)

Attention: Lisa Courtney, Environmental Planner

Comments and Information collected by B.M. Ross & Associates Limited on behalf of the Municipality of Kincardine will assist in decision making pertaining to the Environmental Assessment study. Comments and opinions will be kept on file but will not be included in study documentation made available for public review. Under the Freedom of Information and Protection Act (1987) personal information provided to the Municipality of Kincardine will remain confidential unless prior consent is obtained.