

PROJECT: Town of Erin: Urban Centre Wastewater

Municipal Class Environmental Assessment (EA)

DATE: November 24, 2016

LOCATION: Town of Erin Municipal Office

TIME: 7:00 p.m. – 9:00 p.m.

ATTENDEES:

PLC members	Organization
Allan Alls	Mayor
Dave Doan	SeptTechWastewater Group
Jamie Cheyne	Heritage Committee and Economic Development, Erin Agricultural Society
Derek McCaughan	Interim Chief Administrative Officer
Dianna Mckay	General public
Jay Mowat	Environment Committee
Justin Morrow	Copper Hills Development
Linda Rosier	General public
Lloyd Turbitt	Let's Get Hillsburgh Growing Committee
Maurizio Rogato	Solmar
Melodie Rose	Riverwalk trails committee
Nancy Shoemaker	Black, Shoemaker, Robinson and Donaldson Limited (Lawyer for Tavares Group)
Roy Val	General public
Valerie Bozanis	General public
Project Team	
Christine Furlong	Triton Engineering
Joe Mullan	Ainley Group
Gary Scott	Ainley Group
Neil Hutchinson	Hutchinson Environmental Sciences
Dave Hardy	HSAL
Noah Brotman	HSAL



MEETING PURPOSE: To review and discuss findings from the technical studies that

have been completed to date

MEETING AGENDA

1. Welcome Remarks

Remarks by Mayor Alls

2. Chair's Remarks

Welcome PLC members Review Agenda

3. Assimilative Capacity Study

Presentation by Hutchinson Environmental Sciences
Discussion of Findings and Implications for the Project

4. Septic System Survey Results

Presentation by Ainley Group
Discussion of Findings and Implications for the Project

5. Flows and Service Population

Presentation by Ainley Group
Discussion of Findings and Implications for the Project

6. Next Steps

7. Adjournment



Welcome Remarks

The meeting started with a brief welcome from Mayor Allan Alls and an introduction from Dave Hardy (PLC Chair), providing a brief overview of the agenda for the second PLC meeting. It was noted that there was quite a bit of detailed material to go through together, so the meeting would be broken up into three presentations, with Q&A and discussion time following each presentation. As well, it was expressed that, if necessary, an additional PLC meeting could be arranged early in the new year to continue the discussion and to provide input for the Public Information Centre.

Introductions

The Project Team and PLC members were then asked to briefly introduce themselves, as well as any organizations that they were there to represent.

Project Update

Dave Hardy provided an update of the work completed over the summer since the last PLC meeting. The field studies were described, as well as the process to complete draft reports, receive comments from the Ministry of Environmental and Climate Change (MOECC) and from Credit Valley Conservation (CVC), and finalize the reports for public release. Mr. Hardy noted that MOECC and CVC have a large influence over decisions at this stage of the project.

Presentation: Assimilative Capacity Study

Neil Hutchinson (Hutchinson Environmental) presented the Assimilative Capacity Study (ACS). He stated that the purpose of the study is to understand how the river will deal with the treated effluent. He explained how the level of allowable effluent release would be influenced by factors such as the river's flow rate, flow volume, water quality and sensitive aquatic communities. The field studies undertaken during the summer were described in detail, including the involvement of CVC in the process.

The general findings were described, including, there is very good water quality in the river between 10th Line and Winston Churchill with a low concentration of nutrients and algae. Phosphorus, ammonia, and nitrites are critical elements to consider. The field studies completed below Erin Village show that the phosphorus level is low and well below Provincial standards.

The rhodamine dye test to determine river flow rate was explained. Water quality modelling using the CORMIX and QUAL2K models was explained. Allowable effluent concentration was explained.

ACS Q&A and Discussion

Q: The ACS from B.M. Ross was peer reviewed by Ray Blackport. Are we looking to have this study peer reviewed as well?

Ray Blackport is actually part of this project team and has been working with the CVC to help



reach the low flow value.

Q: We have spent a lot of money on studies up to this point. How did we get from B.M. Ross's results to this?

One of the main differences between the findings from B.M. Ross and the new findings is that a higher concentration of effluent phosphorus in the river is now suggested.

Q: Does this phosphorus limit represent the "worst" possible scenario?

The limit indicated is the amount of phosphorus that the treatment facility will not be permitted to exceed.

Q: The 2014 Sewer Servicing Master Plan (SSMP) identified a 7Q20 of 210 and now you're saying 225. Could you explain the difference?

The project team explained that the "7Q20" is the 7-day lowest flow rate over a 20-year period. It was explained that the primary difference between the 7Q20 rates is the inclusion of two more years of flow rate data. B.M. Ross had to use projections and standard ratios, but a flow monitoring gauge placed at 10th Line has given real data and allowed for a more accurate projection.

A PLC member asked that this be made clear in the report and when presented to the community.

Q: How can the B.M. Ross report and this report both claim to use "best available technologies" if there are differences in effluent treatment levels? If the study results are going to allow growth to 15,000 people, that will be the headline of any public meeting.

Another PLC member responded that the cost to treat effluent is directly relatable to how many people the system serves. When people say best available technology there is still the question of what is economically achievable.

The project team added that best available technology changes with time. The last ten years has seen development of a number of new treatment technologies and a 0.07 effluent limit has become a common industry practice.

It was also noted that the effluent limits are only one part of the decision to grow the community. While the allowable effluent level and level of treatment set the potential limits of the overall population, the decision on how much to grow is a planning and strategic decision that rests in the Official Plan process that will occur outside the scope of this study.

Q: In 1991-1993 there were tests done on the West Credit River and the water quality was really bad, specifically regarding Pseudomonas bacteria. Has there ever been updated tests for this?

The PLC member indicated that CVC had provided her with the studies at the time and she



would be happy to share. The project team responded that they would be happy to look at those studies if provided.

Q: During the 2014 SSMP process it was stated that Ontario communities recommend the assumption of a 10% reduction of flow because of climate change. Why would we not do 15% just to be on the conservative side?

The project team explained that the 7Q20 of 225 is a calculation done by CVC and the 7Q20 flow statistics is set by the MOECC and not by this team. As well, to give some context, the summer of 2016 was an extremely dry one and during that time the lowest flow recorded was 305, meaning that the 7Q20 of 225 calculated by the CVC is being conservative.

Q: Did we want to address the reduction in precipitation that the area has seen over the last few years? There has been an increasing number of heat advisories and 2016 was the hottest year ever.

Interestingly, the precipitation being low this year actually didn't manifest in a lower flow. In fact, there is a 20% increase in flow between 10th Line and Winston Churchill, indicating that local water springs are adding significantly to the river flow.

A PLC member suggested that the proposed expansion of the gravel pit in the area may have an impact on the water table and how that could impact flows may need to be considered.

Presentation: Septic System Survey

Gary Scott (Ainley Group) presented the results of the Septic System Survey. It was explained, when you design a communal sewage system for an area you don't design for what is currently there, but for what could potentially be built in the area as well. There is a need to account for all potential properties in the area.

The approach taken for the Septic System Survey was described. The approach taken was to define logical groupings of homes and businesses into servicing areas that would allow for decisions to be made based on the overall characteristics of the zone. For example, if a zone has numerous small properties that are unable to put in new septic tanks it would likely be recommended for inclusion in the wastewater system. However, an area with larger properties or undeveloped lots could stay on septic systems and perhaps have their zone connected at a later stage.

An example map of one zone was reviewed and the decision criteria used were briefly discussed. PLC members were invited to take time over the next few weeks to review the zone maps in the completed reports and to provide comments.

Q: Why would the age of a septic system be important? Shouldn't they be able to operate forever if properly maintained?

Septic systems can fail for a number of reasons. Even if maintained in very good working order,



the concrete itself and the structural integrity of the tank can degrade over time. Disposal beds can become blocked over time. As well, not all septic systems are properly maintained.

Q: If a holding tank on Main St. breaks, what does the building code say about that? What do they replace it with?

The building code states that new holding tanks would not normally be allowed, however it would be allowed it if there are no other possible solutions.

Q: There was a mention made of nitrate concentrations being elevated at Winston Churchill Blvd. That was when they were dropping whey on the field. Would that have any effect on the nitrates?

This is a good and interesting question but we don't not enough about dairy wastes to respond at this time.

Q: You have prepared this detailed maps from the Town GIS. Are we able to access those?

We are not sure if the maps can be shared due to privacy concerns. We will look into whether the release of that information is possible.

Q: During the SSMP it was brought up that there might be two different ways of treating houses in town (some septic, some communal). This would create two classes of houses. There will be a question from people of "why aren't I a part of this?" and "how much will it cost to hook up this area?".

It is important that people understand that if a decision is made not to connect a zone to the communal system, that a compelling reason to connect the area has not been identified.

Q: There's some wonderful decentralized systems that we should be looking at before I can concur with the area recommendations.

The project team responded that the Terms of Reference for this project was to refine the servicing areas identified in the SSMP and to move on to the treatment approach. Reassessing the base findings of the SSMP was not a part of this project.

A PLC member stated that their understanding is that the mandate is for one facility for both communities and that this decision was no longer on the table.

A PLC member suggested that decentralized systems could deal with the industrial area or certain residential spots.

The project team stressed that we are now past that stage of decision and it is no longer in the scope of work to consider decentralized systems.

Q: You have indicated that you will be looking at alternatives in Phase 3. I assume we will be looking at decentralized systems at that point.



Phase 3 will focus on different treatment technologies that are options for a centralized treatment system. Decentralized systems will not be considered.

A PLC member noted that this was an issue for years in the SSMP and they said someone would look at alternative non-centralized systems. They said that someone would be looking at that in the EA study. But you seem to be under the assumption that this is settled.

The project team clarified that the SSMP concluded that there would be a single municipal treatment plant. The Terms of Reference for this team was to look at a centralized treatment system with collection and treatment alternatives. The CVC has said that the discharge for a centralized facility must be located between Winston Churchill Blvd. and 10th Line.

A PLC member asked to see the Terms of Reference and it was indicted that this could be put up on the project website.

The PLC member thought this meant alternative decentralized systems would be considered, rather than alternative technologies in a centralized system. At this point a conversation ensued between several PLC members and the project team to determine how this difference of understanding could have occurred. Ultimately it was identified that there was a misunderstanding of what was meant by "alternatives".

Q: In the core area, were you able to figure out the density and average plot sizes? Yes.

Q: Regarding the building code and outdated septic tanks, how would you know that a tank is out of code?

A PLC member responded that any septic tank installed before 2012 would be out of code.

The project team explained that if a landowner went to get a permit to replace the tank it would have to be brought up to the latest Building Code standard.

Q: What will happen if someone has spent money on a tertiary system or their septic system is working well?

When an EA is completed a municipality typically passes a bylaw that says everyone will have to connect. There can be phasing done but they eventually will have to a connect to a communal system.

Q: What is the current timeline for when all rural properties will need to have a mandatory septic inspection?

The regulation requiring that has been passed by the Town and they are now in the process of implementation and inspection for compliance are expected to occur over the next few years.



Presentation: Flows and Population Projections

Joe Mullan (Ainley Group) presented on flows and population projections. It is explained that part of the purpose of this study is to identify what effluent flow is possible given the river condition and treatment technology. The Official Plan process will be where the actual growth decisions are made. That process is separate and will be run by the Town and the County.

It was also explained that part of this teams mandate is to reevaluate, not redo Phase 2 before moving on to Phase 3 and 4, which is one of the key differences from the B.M. Ross report.

The current population and wastewater flows were presented. The potential populations that would be possible with various treatment levels were presented. The new growth areas of both Erin and Hillsburgh were described. Observations and preliminary recommendations were reviewed.

Q: If we build a facility for 10,000 people, could we still restrict growth and keep the population at 6,000? How would that impact the cost per person?

The result would be a much higher expense per person. There is some staging possible but there would be no reason to overbuild if you are not intending to grow.

Comment: Mayor Als commented that this is just technology. It has nothing to do with population levels the Town decides to achieve. The Town will be initiating a process to discuss population growth in 2017. The wastewater EA will not make the decision about how much we grow. Also, at this point we should really be starting to move beyond discussing the SSMP. Those decisions have been made and we need to move forward.

Comment: It would be helpful for the public meeting to come up with a simplified statement about the differences between the B.M. Ross study and this study in order to help differentiate.

Q: In order to achieve full buildout, we have to go with the best technology. Does anyone have any idea of the cost per year to service that?

That is a topic that we will be getting to in the new year.

A PLC member suggested that if we got to the public meeting and say that 15,000 people can now be accommodated then the first question will be how much will that cost. It will be viewed as suspicious if we don't have a number.

The project team responded that we are currently in the middle of the process and there is quite a bit more study to be done before we get to costing.

Q: Is the PIC in January premature if we don't have all the info?

One of the key focuses for the team on this project is to communicate with the public and to provide information in a timely and easy to understand way. We are going to be doing the PIC at this time so that we can familiarize people with what is happening early in the process. This will give people time to think about things, learn more about the process, and take the time to



discuss and understand. If we just save everything up for a single meeting at the end it will be very challenging for people to engage and provide meaningful input. We are planning a second PIC at which costs and technologies will be discussed.

Q: Has this taken into account septage? Now septage must be sent to Collingwood so this could be a source of revenue.

Yes, septage has been taken into account and the treatment plant should be able to treat septage over and above the limit shown here.

Q: After treating septage would there still be biosolids to deal with? Has technology gotten to a point where there are beneficial uses for the biosolids?

There will be a biosolids management aspect to this and there are currently beneficial uses for biosolids. That is an aspect that will be considered later in the process, however the scale of the plant might mean that not enough biosolids are produced to provide a notable benefit.

Final Comments

PLC members were asked to provide final comments about their thoughts on the overall process

- It would be helpful to really make the point that planning is not done by pipe. You should show at the PIC how planning decisions are made.
- Much of this material will need to be made more easily digestible for the public.
- I applaud this team for this process. It is going much better than last time.
- I am still really concerned about what you'll do in terms of alternate technologies. If what you're saying is that the only option is a single treatment plant, then I am disappointed. There are plenty of other technologies that should be considered. I was at those B.M. Ross meetings and it was very clear that alternative technologies would be considered.
- Looking forward to see where we're going next because that is the guts of this process.
- Not being an engineer, I agree that it is disappointing that decentralized approaches are not going to be considered.
- I would like to see a little more study on the quality of the River.
- We should look at alternatives that cost less and are decentralized.
- People will be most interested in costs and what it means for development.
- I believe we could get Council to revise the Terms of Reference and look at two treatment plants.
- Why would the public want to look at alternative systems? Wouldn't the centralized system be the most economic way of doing this?



- This is going well and there has been lots of good discussion.
- There has been lots of great work done by the project team. This is a public process and people should engage with it and present other options to the team if they feel certain ideas have not had enough consideration.
- If I do some research and find some technologies I will send to the project team for their consideration.