

APPENDIX A3: TM 3 – Customer Service and Public Awareness



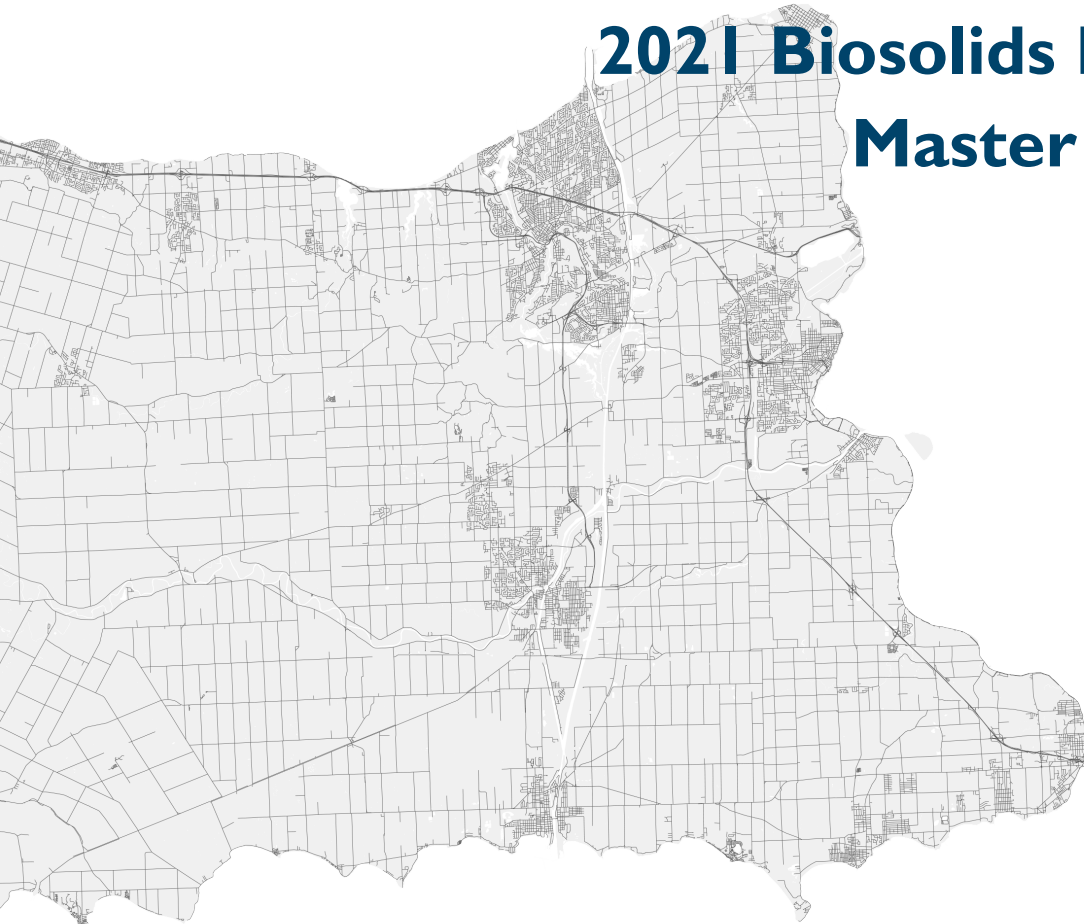
Niagara Region

Technical Memorandum 3

Customer Service and Public Awareness

2021 Biosolids Management Master Plan Update

November 2023



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**621143 – Niagara Biosolids Management Master Plan Update
Technical Memorandum 3 – Customer Service and Public Awareness**

QA/QC - SIGN OFF SHEET

This report has been reviewed and approved by the undersigned.



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I.0 Introduction

I.1 Background and Purpose

Niagara Region has extensive water and wastewater infrastructure, with ten (10) wastewater treatment plants (WWTP) and six (6) water treatment plants (WTP). Most of the solids generated at the WWTPs are anaerobically digested, and the resulting liquid biosolids are currently transported to the centralized Garner Road Biosolids Storage and Dewatering Facility (Garner Road Biosolids Facility) for storage prior to land application or dewatering and further processing. The solid residuals from the six WTPs are either transported to the Garner Road Biosolids Facility or discharged into sanitary sewers to be treated at the receiving WWTP and managed as part of the resulting wastewater solids.

The Region currently has contracts with two third-party contractors as part of their biosolids management program: Walker Environmental and Thomas Nutrient Solutions (TNS).

Walker Environmental currently transports dewatered cake from the Garner Road Facility and Niagara Falls WWTP to its N-Viro Alkaline Stabilization facility in Thorold. Walker provides enhanced treatment of the Region biosolids, and markets and sells the final soil amendment product through licensed distributors.

Thomas Nutrient Solutions manages Niagara's land application program and identifying and partnering with farmers for biosolids application to their agricultural land. They are also responsible for transporting biosolids to Garner Road facility as well as operation and maintenance of this facility. Thomas Nutrient maintains a Non-Agricultural Source Materials (NASM) plan for each agricultural end user and is responsible for acting in accordance with the Nutrient Management Act.

As summarized in TM 7, seven biosolids management strategies were developed and evaluated, and the top three strategies identified were:

1. **Strategy 4:** Anaerobic Digestion + Dewatering + Advanced Alkaline Treatment to produce a fertilizer product for land application
2. **Strategy 2:** Anaerobic Digestion + Dewatering + Cake Land Application
3. **Strategy 1:** Anaerobic Digestion + Liquid Biosolids Land Application

These strategies are further described in TM 5 and TM 8 which provide specific capital projects and operational recommendations, as summarized below:

1. Continue dewatering at Niagara Falls WWTP and contracting with Walker Environmental to transport and process cake until, at a minimum, the existing centrifuge at the Niagara Falls WWTP reach the end of its useful life.

2. Pilot dewatering at Baker Road WWTP, and if successful, add dewatering at this plant. Convey the residuals generated at the Grimsby WTP to Baker Road WWTP to be managed with the Baker Road WWTP solids and dewatered. Coordinate Walker Environmental to transport dewatered cake to their facility in Thorold.
3. Continue sending liquid biosolids from all WWTPs (except Niagara Falls and Baker Road), and thickened WTP residuals from Decew WTP and Niagara Falls WTP to the Garner Road Facility. Continue discharging WTP residuals from Welland WTP, Rosehill WTP and Port Colborne WTP to local wastewater collection systems.
4. Pilot test land application of dewatered biosolids cake in collaboration with Thomas Nutrient Solution and area farmers to assess feasibility and end-user buy-in. Pending success of this pilot, complete additional upgrades at the Garner Road Facility:
 - a. Option 1 (pilot is successful): Add new dewatering capacity and potentially cake storage.
 - b. Option 2 (pilot is not successful): Increase liquid storage capacity. Consider adding dewatering capacity once centrifuges at Niagara Falls WWTP reach the end of their useful life.

TM 3 provides a review of customer service needs and communication methods that will support the proposed biosolids management program in the Region, in alignment with the recommendations previously described in TM 5, TM 7, and TM 8.

1.2 Technical Memorandum Outline

This TM is organized into the following sections:

1. **Introduction:** This section provides the background and propose of the TM and its outline.
2. **Customer Service Benchmarking:** This section reviews customer services approaches in other Ontario Municipalities and industry best practices for biosolids communications, based on Water Environment Federation (WEF) Biosolids Communications Toolkit
3. **Customer Service Plan:** This section first reviews potential public concerns around biosolids, and messaging to address these concerns. It then provides a review of Niagara’s existing approach to customer service and public awareness. Recommendations for improving communications, managing complaints, product marketing, public outreach and consumer education are presented.
4. **Master Plan Consultation Review:** This section summarizes all stakeholder consultation completed as part of the Biosolids Master Plan.
5. **Summary and Next Steps**

2.0 Customer Service Benchmarking

2.1 Ontario Municipality Benchmarking

A summary of biosolids management practices in other Ontario municipalities is provided in TM 1 – Background and Existing Conditions. To expand upon this review, the table below describes approaches to customer service and biosolids communication used in other Ontario municipalities.

Table 2-1 Summary of Other Ontario Municipalities’ Biosolids Customer Service Approach

Municipality	Online Educational Materials	Opportunities for Public Feedback
Region of Halton	<p>The Region of Halton has a dedicated Biosolids Management webpage that provides an overview of biosolids basics and expands on Halton’s biosolids re-use program including:</p> <ul style="list-style-type: none"> • What are Biosolids? • How Biosolids are Created • Halton’s Biosolids Become Fertilizer • Future Program Plans <p>The webpage also links Halton’s 2012 Biosolids Master Plan.</p>	<p>The Region of Halton has a general contact page where they welcome the public to contact the Region, which includes the following contact methods:</p> <ul style="list-style-type: none"> • Email • Toll-Free Phone Number for a customer service representative • Address of the Halton Regional Centre <p>On their biosolids webpage, Halton Region also provides a phone number for the Biosolids Operations coordinator in which the public can contact for additional information or questions.</p> <p>A link to the Region of Halton’s Biosolids Management page is provided below.</p> <p>Region of Halton - Biosolids Management</p>

Municipality	Online Educational Materials	Opportunities for Public Feedback
Region of Peel	<p>The Region of Peel has a dedicated webpage that provides an overview of the wastewater in Peel and is further broken down by each of their WWTP and treatment processes at each including solids handling processes. Specific to biosolids handling, the webpage provides an overview of the following solids processing steps:</p> <ul style="list-style-type: none"> • Thickening and dewatering processes • Anaerobic digestion • Biogas handling facilities and cogeneration unit (Cogen) • Incineration • Ash Lagoons 	<p>The Region of Peel has a general contact page where the welcome the public to connect with Peel staff, which includes the following contact methods:</p> <ul style="list-style-type: none"> • Call (including toll-free option) • Email • Virtual Assistant Chat • Social Media • Addresses of Access Peel Counters <p>A link to the Region of Peel’s Treatment Processes at the Clarkson and G.E. Booth page is provided below.</p> <p>Region of Peel - Treatment Processes at Clarkson and G.E. Booth</p>
City of Toronto	<p>City of Toronto has a dedicated Biosolids Management webpage that provides a brief description of what biosolids are and further describes how the City categorizes their biosolid management practices. They further provide a brief overview and description of their biosolids end-use program including:</p> <ul style="list-style-type: none"> • Land Application for Agricultural & Other Uses • Pelletization to Create Fertilizer • Alkaline Stabilization • Landfill • Incineration at Highland Creek Treatment Plant <p>The webpage also provides a link to their 2009 Biosolids Master Plan summary.</p>	<p>Currently, the dedicated webpage does not provide a direct City contact for the public to submit questions or concerns specifically related to Biosolids Management, but the website does have a general contact page in which the public can submit complaints, claims & compliments along with the staff directory.</p> <p>A link to the City of Toronto’s Biosolids Management page is provided below.</p> <p>City of Toronto - Biosolids Management</p>

Municipality	Online Educational Materials	Opportunities for Public Feedback
<p>City of Hamilton</p>	<p>The City of Hamilton has a dedicated Biosolids Management webpage that provides an overview of:</p> <ul style="list-style-type: none"> • What are biosolids • How they are treated in the City of Hamilton • New Biosolids Process • Overview of the Biosolids Process Map <p>Further, the webpage also has a short video the provides an overview of the new Biosolids Management Process. The video includes highlights of the old biosolids management process, the new biosolids management process, immediate benefits, details on the final product along with high level details on the construction works including timeline, capital costs and the funding agency.</p> <p>The webpage also provides a link to their 2007 Biosolids Master Plan Report.</p>	<p>The City of Hamilton has a general contact page where they welcome the public to contact the City, which includes:</p> <ul style="list-style-type: none"> • In-Person • By Phone • By Email • By Mail • Emergency After Hours Services <p>A link to the City of Hamilton’s Biosolids Management page is provided below.</p> <p>City of Hamilton - Biosolids Management</p>
<p>Region of Waterloo</p>	<p>The Region of Waterloo has a dedicated Biosolids Strategy webpage that provides short informational videos on the following topics:</p> <ul style="list-style-type: none"> • What are Biosolids and Why Everyone Needs to be Involved in the Decision Process • What Happens After You Flush • Where Does it all go? Biosolids – A Story of Engaging Residents 	<p>The Region of Waterloo have contacts listed for their Water Services department at the bottom of the Biosolids webpage, including phone #, fax, Deaf and Hard of Hearing (TTY), email and emergency 24hr Call Centre.</p> <p>There is also an option to ‘Subscribe to this page’ to be notified of any updates to the Biosolids webpage.</p>

Municipality	Online Educational Materials	Opportunities for Public Feedback
	<p>The webpage also includes additional information including:</p> <ul style="list-style-type: none"> • Summary and Final Reporting for the Biosolids Strategy • Teaching Resources for Water • Biosolids Strategy Project Charter • Past Event Information: <ul style="list-style-type: none"> ○ Public consultation materials and notifications ○ Webinars 	<p>A link to the City of Waterloo’s Biosolids Management page is provided below.</p> <p>City of Waterloo - Biosolids Management</p>

Like the Region of Niagara, the above municipalities have completed Biosolids Management Master Plans, which considered customer and public input in their development.

2.2 Water Environment Federation Biosolids Communication Toolkit

The Water Environment Federation (WEF) is a non-profit technical and educational organization that provides water quality education, training and business opportunities.

In Feb 2021, WEF developed a toolkit of industry standards for communicating about biosolids in a way that can be easily understood by the public with little or no prior knowledge of biosolids, while remaining factual and science-based. The WEF toolkit stresses the importance of developing a communication and outreach plan to ensure proponents are taking a proactive approach rather than a reactive approach. This allows for the proponent to write the narrative rather than responding to media coverage or backlash. This toolkit is a helpful resource for developing a communications approach for Region of Niagara, and identifies a four (4) step process summarized below:

(1) Research – This step involves gathering a baseline of information on how stakeholders currently view biosolids and how to measure progress in building overall awareness. Research is aimed to identify the following key questions:

- Who do you need to reach?
- What do you want them to know, do or believe?
- How will you reach them?
- What environment will you be working in (what external factors could impact success)?
- What messages should you convey to change awareness, attitude or behavior?

The WEF Biosolids toolkit provides a variety of research methods to obtain answers to the questions above including identifying key stakeholder groups, conducting surveys, focus groups and interviews.

(2) Planning – This step involves identifying the overall communication plan goals, who you need in order to reach the plans’ objective, the channels you will use to reach them and the key messages.

The WEF highlights that setting measurable objectives will give you a target and should have three key components including time, measurement, and change. WEF provides a list of different strategies to build awareness, which will depend on your targeted audience:

- Dedicated website
- Fact sheets or brochures that can be handed out at event or meetings
- Social media image posts
- Video of end users safely using biosolids for different audiences and used in meetings
- Presentation that can be customized for different audiences and used in meetings
- Infographics and imagery that clearly explain data
- Articles you write or that partners or end users write that tell the story of the benefits of biosolids and can be submitted to the local newspapers or pitched to local media

WEF provide various tips and techniques for working with different partners, pitching to media and using social medial effectively and advertising in a scalable way.

Lastly, WEF stresses the importance of communicating with internal stakeholders before reaching out externally to ensure all groups are working as a united team as you talk openly about biosolids, and for everyone to feel equipped and empowered to talk about biosolids in a positive and meaningful way.

(3) Implementation – Within this step, the toolkit identifies the need for a plan that identifies tasks, the people needed, and deadlines to help achieve communication goals. They suggest developing a stakeholder engagement plan during the master planning process which may include the following:

- Identify stakeholders that represent the interest of the community
- Decide on the level of engagement you want
- Engage with stakeholders using a schedule that aligns with project milestones

(4) Evaluation – Lastly, reflecting and taking the time to tabulate the results during and at the end of a communications effort is a valuable step as it provides the opportunity to collect valuable feedback that can validate effort or improve following iterations. The toolkit suggested the following tips for evaluation:

- Look back at your goals and objectives and compare to determine degree of success

- Ask colleagues inside the organization to share their impressions of effort, expanding on what went well and what didn't
- Develop a short poll online for the public to give their feedback
- Dig into the traditional and social media metrics for example (i.e., how many people were reached through traditional media compared to the engagement level of social media posts)

Overall, the toolkit highlights the importance of being the trusted source for biosolids information. Engaging in a proactive and comprehensive communication strategy will:

- Decrease the odds of being targeted by an advocacy group
- Increase your ease in responding effectively if you are targeted
- Increase your community's understanding and support for the services you provide
- Increase your community perception of you as a leader and trusted source for information.

3.0 Customer Service Plan for Niagara Region

Our approach to developing the customer service plan is modelled on the WEF Biosolids Communications Toolkit described in the previous section. The approach includes the following steps, with details provided in the following subsections:

1. **Customer Needs Review (Research)** – review the Region's existing customer service and public awareness plan, review best management practices in other municipalities, confirm potential stakeholders, stakeholder concerns and develop messaging to address these concerns. This is presented in Section 3.1.
2. **Develop Customer Service and Public Awareness Plan (Planning)** – determine how to deliver the biosolids communication materials to stakeholders. Based on the research completed in Step 1, a Communication Approach and Customer Service Plan and Public Awareness Approach has been developed and is presented in Section 3.2. The plan includes recommendations for implementation and evaluation.

3.1 Customer Needs Review

Similar to the 'Research' step described in the previous section, the first stage of developing a customer service plan is to identify common public concerns related to biosolids and what information they need to know to alleviate these concerns.

Biosolids is a term commonly misunderstood by the public, which can lead to confusion and concern when information is not properly conveyed. Typical public concerns about biosolids relate to:

- Nuisance odours
- Noise and traffic impacts from the hauling of biosolids
- "Dangerous" levels of bacteria, heavy metals and per- and polyfluoroalkyl substances (PFAS) within agricultural land application material that could enter food supply
- Financial impacts (i.e., cost of turning biosolids into a safe soil amendment)

These drivers of concerns are often due to the misunderstanding of biosolids which can stem from:

- Misinformation
- Tough terminology to understand
- Lack of science literacy
- Sensational news articles
- Fear

By implementing a proper communication platform for biosolids, the public will be able receive trusted information from a reliable source. Stakeholders in the Region include the general public, the farming community, local area municipalities, Indigenous groups and government agencies. Different stakeholders will have differing concerns. The general public may be most concerned about odours, truck traffic, contaminants and cost, whereas farmers are likely most concerned with contaminants or nutrient levels that could impact quality of their crops. Indigenous groups may be concerned with impacts of land applying biosolids to the natural environment and waterbodies.

Key messaging that can be communicated to the public and other stakeholders for a better understanding of the benefits of biosolids includes the following:

- Biosolids are a natural and renewable resource
- Biosolids are rich in key nutrients making them a high quality, easily accessible fertilizer for the farming community and for private and public landscaping needs.
- Biosolids fertilizer is much more cost effective than a conventional chemical fertilizer
- The re-use of biosolids help municipalities reduce the amount of waste that is sent to landfills; this in turns allows the operating landfills to have a longer lifespan and reduce greenhouse gas (GHG) emissions
- The use of biosolids as a fertilizer instead of chemical fertilizers reduces the amount of greenhouse gas emissions that can occur in the production of chemical fertilizers
- Strict regulations on the quality of biosolids that are land applied ensure that the natural environment is protected, and food crop quality is maintained.

3.2 Customer Service and Public Awareness Plan

After identifying potential stakeholder concerns and required information to address these concerns, a plan is required to communicate this information effectively to stakeholders. Similar to the ‘Planning’ stage described in the WEF biosolids communication planning tool, this section reviews current and proposed communication methods related to biosolids.

3.2.1 Existing Approach to Public Communications

The Region’s current approach to communication and consultation with stakeholders aims to provide updated information on the Region’s biosolids management program to the public in an accessible format.

Like many other municipalities, the Region has a dedicated biosolids management webpage that provides a brief overview of the following information:

- Location and key details of biosolids storage lagoons
- Current biosolids processes at the Region
- Benefits of biosolids
- Regulations for the land application of biosolids

A general ‘Contact Us’ page is available for the public to submit comments or complaints.

The Region currently addresses any complaints from the public either directly or through Third Party Contractor, Thomas Nutrient Solutions, who managing hauling of liquid biosolids.

Additional communication goals related to the Master Plan study are to:

- Keep Niagara Region and area municipality councillors and senior management up to date and aware of study progress and findings.
- Undertake and maintain the appropriate level of communication with the public and stakeholders.
- Effectively engage with Indigenous Communities.
- Maintain Niagara’s brand and public reputation.
- Meet or exceed MEA Standards for public and stakeholder consultations.

The Region’s consultation and engagement program during the Master Plan Study has aimed to offer the following:

- Educating the community about biosolids infrastructure and beneficial use.
- Building public and stakeholder understanding and buy-in to support the EA process and the preferred solutions.
- Raising awareness of Region services.
- Building the foundation for future steps in the project including implementation of subsequent studies and designs.

A webpage dedicated to the Biosolids Master Plan was created near the beginning of the study and has been updated throughout. It currently includes a study overview, Problem and Opportunity Statement, contact information, public notices and materials from PIC 1 and PIC 2. This webpage is in line with the primary goal of the Region’s current communication program, to keep the public information on the biosolids program and any proposed changes.

3.2.2 Proposed Customer Service and Public Awareness Plan

By comparing the Region’s current biosolids communication approach to other local municipalities’ approaches and the guideline set in the WEF biosolids toolkit, it is apparent that the Region is already implementing many best practices for communication including:

- Maintenance of a Biosolids Webpage outlining key features of the program and facilities
- Providing a means for the public to submit comments or complaints

However, there are some opportunities to improve biosolids communications in the Region, which could include:

Managing Feedback and Complaints:

- Providing a direct contact on the Region’s biosolids webpage for the public to submit comments, complaints or ask questions in relation to the biosolids management. This will make it easier for the public to provide feedback, which will allow the Region to better understand any issues or common concerns that the public has. Currently there is a general ‘contact us’ page on the Region’s website, but it is not directly associated with the biosolid webpage.
- Develop a clear process for managing complaints, including:
 - Designation of party responsible for response, depending on the type of complaint (i.e., complaints related to truck traffic directed to Thomas Nutrient Solutions)
 - Clearly defined response time (ideally with 24 – 48hrs)
 - Clearly defined method of response (i.e., phone call followed up with summary email)
 - Developing tracking spreadsheet to log all complaints and classify type of complaint, so trends can be identified and addressed (i.e., increasing # of odour complaints over time)
- Take action to respond to complaints as required (i.e., adjust operations, trucking routes, application processes)

Website Organization and Materials:

- The webpage should provide a direct link to the Biosolids Management Master Plan (BMMP) study page, and eventually the associated Master Plan report, once it is complete. This report is to be a publicly available document which will already contain key background information and help the public better understand the existing conditions, future needs and recommendations.
- Providing infographics and imagery that clearly explain data; this could include an aerial image of the Garner Road Biosolids Facility, photos of typical equipment (i.e., centrifuge, storage tank) or a simplified process flow diagram illustrating different pathways for biosolids management (liquid land application, cake land application, alkaline stabilization)

Public Outreach and Education

- Consider developing short informational videos on biosolids management processes within the Region and or videos showcasing the direct benefits of biosolids within the community (i.e., interviews with farmers who utilize the Regions biosolids fertilizer program). These could be shared through social media or at community events (i.e., festivals, farmers markets), along with other information on the biosolids end product and its beneficial uses
- Keep portraying the benefits of biosolids through the webpage, or social media

Product Marketing

- The recommended strategies in the Master Plan are to continue outsourcing product marketing to third party contractors. As these parties (Walker Environmental and Thomas Nutrient Solutions) have ongoing strong relationships with product end users (both farmers and landscaping companies that buy fertilizer products), it is most practical to allow this practice to continue.

Implementation and Evaluation

It will be important to keep the Biosolids webpage up-to-date as related projects progress to keep the public informed. Furthermore, beyond the scope of the Master Plan, key stakeholders should continue to be informed of progress of implementation of the recommendations in the Master Plan.

The Biosolids Management Master Plan should be updated on a regular basis (at least every 10 years) to account for potential changes in population, technologies, regulations, customer needs and environmental conditions. In addition, existing contracts should be reviewed and updated as required.

The Region should also monitor on-going research on impacts of PFAS and potential treatment technologies and provide information to the public on how public safety will be protected (i.e., through monitoring or treatment as required).

4.0 Master Plan Consultation Overview

This section provides a summary of all consultation activities undertaken as part of the Biosolids Management Master Plan. These activities are part of the implementation of biosolids communication in the Region. Key stakeholders were identified and notified, consulted and/or engaged at specific points in the process in accordance with the Municipal Class EA requirements.

All stakeholders were kept informed throughout the study through notices and public information centres (PICs) at key milestones in the Class EA.

4.1 Stakeholder List

A stakeholder contact list for the study was developed during Phase 1 based on the project team's knowledge of the general study area (i.e. Region of Niagara) and has been continuously updated throughout the study to include nay and all relevant agencies, stakeholders and interested parities including; indigenous communities, government agencies, utilities, public members and other special interest groups.

4.2 Agency and Municipal Stakeholder Consultation

A virtual meeting was held on April 21, 2023 with representatives from local area municipalities and approval agencies including:

- Town of Lincoln
- Town of Fort Erie
- Town of Niagara-on-the-Lake
- Ministry of the Environment, Conservation and Parks
- Infrastructure Ontario
- Ministry of Agriculture, Food and Rural Affairs
- Niagara Parks Commission
- Niagara Escarpment Commission
- Niagara Peninsula Conservation Authority

During this meeting there were comments asking to clarify how biosolids storage was considered in the evaluation, and how the screening criteria were quantified. It was noted during the meeting that biosolids storage was included as part of the technical evaluation criteria 'ease of operation' and 'ease of implementation'. Details of how the screening criteria were defined and quantified will be provided in the Master Plan report. Further details on this meeting are documented in Appendix C.

On July 11, 2023, the preliminary results of the Biosolids Management Master Plan were presented to the Niagara Region Public Works Committee to allow for questions and comments before submitting the Master Plan Report for approval. Comments and questions from this meeting and provided responses are included in Table 4-2 later in the report. Full meeting minutes and a recording of the presentation are available on the Region's website.

4.3 Project Website

A dedicated Biosolids Management Master Plan Study webpage was established in Phase 1, which included publishing key project materials including project notices, Public Information Materials (PIC), contact info, and other relevant information. It will also include a copy of the Master Plan once this report has been finalized.

4.4 Public Notices

4.4.1 Notice of Study Commencement and Public Information Centre No. 1

A Notice of Study Commencement and Public Information Centre No. 1 was issued via mail and email to the stakeholders identified on May 24, 2022. The notice was also posted on the project website and published in the following local newspapers:

- Niagara Falls Review, St. Catharines Standard, Welland Tribune – Saturday, May 28, 2022
- Niagara This Week, All Zones advertised Thurs., June 2, 2022
- Fort Erie Observer – Thurs., June 9, 2022
- News Now (Grimsby, Lincoln, West Lincoln) – Thurs., June 2, 2022
- Niagara-on-the-Lake Local: Wed., June 1, 2022
- The Lake Report: Thurs., June 2, 2022
- Voice of Pelham: Wed., June 1, 2022
- Thorold News: beginning May 30, 2022
- Regional Website until June 8, 2022

4.4.2 Notice of Public Information Centre No. 2

A Notice of Public Information Centre No. 2 was issued via mail and email to the stakeholders identified on May 4, 2023. The notice was also posted on the project website and published in the following local newspapers.

- St. Catharines Standard, Sat., May 13/23
- Niagara Falls Review, Sat., May 13/23
- Welland Tribune, Sat., May 13/23
- Niagara This Week – Zones 1, 2, 3, 4, 5, 6 & 7, Thurs., May 11/23
- Fort Erie Observer, Thurs., May 11, 2023
- News Now (Grimsby), Thurs., May 11, 2023
- NOTL Local, Wed., May 10, 2023
- The Lake Report, Thurs., May 11, 2023
- Voice of Pelham, Wed., May 10, 2023
- Thorold News, Wed., May 10, 2023
- Regional Website, Wed., April 26, 2023

4.5 Public Information Centres

Public Information Centres (PIC) were held to elicit input at key milestones of the Class EA Process. Table 4-1 provides an overview of the purpose, format, and dates for these PICs. All comments received during the PIC events were responded to and posted on the Region’s project website following the PICs.

A copy of the PIC materials and corresponding PIC summary reports can be found in **Appendix A**.

Table 4-1 Summary of the 2021 BMMP Public Consultation Events

Date of PIC	Purpose and Objectives	Format	Date Responses Posted
Wednesday June 8, 2022, to Wednesday June 22, 2022	<ul style="list-style-type: none"> • Introduce the study (including background) • Describe the Class EA process • Identity the problem and opportunity statement • Present biosolids servicing alternatives being considered • Evaluation approach that will be used to select the short list of recommended strategies to be developed. • Receive public input and answer any questions. 	Virtual PIC display panels and video presentation, interactive ESRI Story Map Presentation	July 6, 2022
Wednesday May 17, 2023, to Wednesday May 31, 2023	<ul style="list-style-type: none"> • Provide a progress update on the BMMP and work completed to date; and • Present the Region’s recommended biosolids management approach and provide insight to future needs • Obtain feedback on the list of alternatives biosolids management strategies, detailed evaluation of these strategies and preliminary recommendations. 	Virtual PIC display panels and video presentation	June 14, 2023

4.6 Indigenous Engagement

The Crown has a legal obligation to consult with Indigenous rights-holders, where decisions or actions contemplated may adversely impact asserted or established treaty rights.

In their response letter to the Notice of Commencement (June 3, 2022), the MECP provided direction as to the appropriate Indigenous communities to engage and the protocols for engaging these communities. The MECP identified the following communities:

- Mississaugas of the Credit First Nation
- Six Nations of the Grand River (Elected Council and Haudenosaunee Confederacy Chiefs Council with a copy to Haudenosaunee Development Institute)

GM BluePlan contacted each community at the beginning of the study in June 2023 via email and mail to notify them of the study and give them an opportunity to provide feedback. The Region engaged with each community again in May 2023 by sending a letter (via email and mail) to let the communities know about the ongoing study and provide an update on the selected preliminary preferred strategies. Copies of the letter that was sent to each of the indigenous communities are provided in **Appendix B**.

No responses were received directly from the letters, so the project team followed up with each community to elicit additional feedback on the study. If there are any comments, questions or concerns, the project team will engage further with each individual community.

4.7 Comments and Responses

The table below summarizes stakeholder comments that were received through the Biosolids Management Master Plan Study and how these were addressed.

Table 4-2 – Summary of Stakeholder Comments and Responses

#	Comment	Response
1	Stakeholder noted concerns regarding Per- and Polyfluoroalkyl Substances (PFAS) within the biosolids that are land applied on Niagara farmland. The resident also inquired if the Region is testing or would consider testing for PFAS in biosolids before land application and if this will be addressed within the BMMP.	The Region explained that biosolids are applied as non-agricultural source materials (NASM) following strict regulations under the Nutrient Management Act or as a commercial fertilizer under the Federal Fertilizer Act of the Canadian Food Agency and highlighted that there has been no evidence of adverse impacts to the environment or health of people / animals. The Region highlighted that the government has been proactive in researching PFAS and setting policies to protect human health and the environment and noted that they have been phasing out PFAS compounds in various consumer products. The Region also noted that the Canadian Food Inspection Agency (CFIA) has started to implement an interim standard for domestic and imported biosolids contaminated with PFAS sold in Canada as commercial fertilizers. The CFIA is working to develop a plan for standards and a detailed guide for importers, producers and commercial users of biosolids.

#	Comment	Response
		<p>The Region described that they are committed to providing water and wastewater treatment that meets or better provincial requirements and noted that the preferred BMMP is diverse and flexible to meet potential future environmental and legislative changes (i.e., biosolids quality and land application requirements).</p>
2	<p>Stakeholder noted concerns regarding the perceived increase in biosolids truck traffic (estimating around 120 transports/day) through Cooks Mills and requested consideration of alternative routes. The resident also inquired who determines the routes that the biosolids hauling trucks take.</p>	<p>The Region described that they are looking to minimize impacts of the biosolids hauling on local communities while also providing a direct route to farmers' fields to minimize environmental impacts. The Region noted that biosolids hauling trucks are to stay on Provincial Highways and Regional roads and they are required to apply best management practices while transporting and applying biosolids to the land.</p> <p>The Region described that as part of the BMMP study, it has been recommended that the Region increases dewatering of biosolids which will result in a reduced total volume of biosolids needing to be hauled, therefore decreasing truck traffic.</p>
3	<p>Stakeholder questioned if a wide range of biosolids technologies have been reviewed as a part of this study.</p>	<p>The Region noted that a long list of biosolids treatment technologies were considered and screened based on critical factors. As well as considering the currently used technologies (dewatering, anaerobic digestion, alkaline stabilization), an additional four new technologies to the Region were evaluated in detail (thermal oxidation, thermal drying, composting, and thermal hydrolysis). The Region's review of technologies was extensive and comprehensive.</p>
4	<p>Stakeholder was interested in the return on investment related to Biosolids Management Master Plan Recommendations.</p>	<p>A capital, life cycle and operating cost was determined for each strategy considered under the detailed evaluation. All strategies require an investment, and on-going O&M costs. Cost was one factor considered in the detailed evaluation, and strategies with a lower cost ranked higher in this criterion.</p>
5	<p>Stakeholder wanted to know if sufficient land is available within Niagara Region to land apply biosolids.</p>	<p>TM 9 involved an evaluation of end use markets. The available land bank with Niagara Region is more than adequate to receive biosolids produced within the Region with in the 2051 time horizon.</p>

5.0 Summary and Next Steps

Overall, the Region’s approach to customer service and communication is working well, although some improvement could be made to improve the ease of accessing information on the website and provide a clear path to submit feedback directly related to the Biosolids Management Program.

The next step for the Master Plan study is to develop and submit the draft BMMP Report for Region review and council approval. Once all draft comments have been incorporated, the Final BMMP will be posted for the 30-day public review period.

Following completion of the Master Plan, the Region should continue to update their Biosolids webpage, and consider making the recommended webpage modifications described in Section 3.2.2. They should continue engaging with key stakeholders as projects recommended in the Master Plan progress through any additional Class EA studies, design and construction.

Appendix A - Public Consultation and Engagement Records

Please refer to Appendix B of the 2021 Biosolids Management Master Plan Report for all Consultation and Engagement Records