



Appendix F

Screening Criteria and Assessment of the Alternatives To the Undertaking

List of Tables

		Page
Table F.1	Rationale for and Supporting Documentation for the Application of the Screening Criteria to the Alternatives To the Undertaking for the Upper York Sewage Solutions Environmental Assessment	F-1
Table F.2	Assessment of the Alternatives to the Undertaking Upper York Sewage Solutions Environmental Assessment	F-18
Table F.3	Application of York Region's Sustainability Strategy for Water and Wastewater Servicing to the Alternatives to the Undertaking Upper York Sewage Solutions Environmental Assessment	F-42

Table F.1: Rationale for and Supporting Documentation for the Application of the Screening Criteria to the Alternatives To the Undertaking for the Upper York Sewage Solutions Environmental Assessment

Screening Criteria	Definition/Rationale (ANSWERS THE WHY - why is the criterion included in the table)	Supporting Documentation	Application (ANSWERS THE HOW – explains how the criterion is applied)
1. Can the alternative satisfy the problem / opportunity statement?	<p>As per the Terms of Reference, the problem/opportunity statement was determined to be as follows:</p> <p>The purpose of the proposed undertaking is to develop a sustainable sewage servicing solution that can accommodate the growth that is forecasted* to occur in the UYSS service area in accordance with both the provincial growth management policies outlined in the Growth Plan pursuant to the Places to Grow Act, 2005 and applicable environmental statutes including but not limited to the Lake Simcoe Protection Act, 2008, the Oak Ridges Moraine Conservation Act, 2001, the Greenbelt Act, 2005, and the <i>Ontario Water Resources Act</i>. The UYSS service area consists of the growth portions of the Towns of Aurora, Newmarket, and East Gwillimbury, including Holland Landing, Queensville, and Sharon.</p> <p>As a result, the preferred alternative to the undertaking needs to satisfy this problem/opportunity statement otherwise the fundamental reason for carrying out the UYSS EA remains unaddressed.</p>	<ul style="list-style-type: none"> ■ Growth Plan for the Greater Golden Horseshoe (2006), Office of Consolidation, January 2012 (Ministry of Infrastructure): https://www.placestogrow.ca/content/ggh/plan-cons-english-all-web.pdf ■ <i>Places to Grow Act</i> (2005), S.O. 2005, Chapter 13, Last amendment: 2009 (Government of Ontario): http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_05p13_e.htm ■ <i>Lake Simcoe Protection Act</i> (2008), S.O. 2008, Chapter 23, Last amendment 2009: (Government of Ontario): http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_08l23_e.htm ■ <i>Oak Ridges Moraine Conservation Act</i> (2001), S.O. 2001 Chapter 31, Last amendment: 2006 (Government of Ontario): http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_01o31_e.htm 	<p>Yes – The problem/opportunity statement would be satisfied by the alternative based on meeting the following requirements:</p> <ol style="list-style-type: none"> 1. The alternative would be a sustainable sewage servicing solution (<i>would be satisfied if a “yes” response is provided to screening criterion # 9</i>). 2. The alternative would accommodate the growth forecasted to occur in the UYSS service area to 2031 (<i>would be satisfied if a “yes” response is provided to screening criterion # 5</i>). 3. The alternative would comply with the provincial growth management policies and applicable environmental statutes (<i>e.g., Growth Plan - would be satisfied if a “yes” response is provided to above question #2 and screening criterion # 5; Lake Simcoe Protection Act - would be satisfied if a “yes” response is provided to screening criterion # 6; Oak Ridges Moraine Conservation Act and Greenbelt Act – would need their own response provided, but refer to screening criterion #7 (point 16); and Ontario Water Resources Act - would be satisfied if a “yes” response is provided to screening criterion # 12</i>).
	<p>* For the purposes of the UYSS EA, forecasted growth is defined as the additional sewage flows from growth in the UYSS service area to 2031.</p>		<p>No – If the above requirements, as applicable, are not met then the problem/opportunity statement would not be satisfied by the alternative.</p>

Screening Criteria	Definition/Rationale (ANSWERS THE WHY - why is the criterion included in the table)	Supporting Documentation	Application (ANSWERS THE HOW – explains how the criterion is applied)
2. Does the alternative represent proven technology?	The critical technologies being proposed in the preferred alternative to the undertaking must be commercially available and have met the performance requirements for its intended use for a reasonable length of time.	<ul style="list-style-type: none"> ▪ <i>Ontario Water Resources Act (1990) R.S.O 1990, Chapter O.40 Last amendment: 2011(Government of Ontario):</i> http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90o40_e.htm ▪ Technical Memorandum – Review of Selected Water Reclamation Facilities, January 4, 2011 ▪ Memorandum – Water Reclamation Facility Site Visits California and Arizona – November 29 to December 1, 2010, January 6, 2011 	<p>YES – The critical technologies are commercially available and have met the performance requirements for its intended use for a reasonable length of time.</p> <p>No – The critical technologies are not commercially available and have not met the performance requirements for its intended use.</p>
3. Is the alternative constructible?	In order to be constructible, the preferred alternative to the undertaking must use well established construction methodologies and practices and meet applicable code requirements at the size and scale of the infrastructure that is required.	<ul style="list-style-type: none"> ▪ Technical Memorandum – Review of Selected Water Reclamation Facilities, January 4, 2011 ▪ Technical Memorandum – Water Reclamation Facility Site Visits California and Arizona – November 29 to December 1, 2010, January 6, 2011 	<p>YES – The alternative would be constructible.</p> <p>No - The alternative would not be constructible.</p>

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<p>4. Is the alternative consistent with the Provincial Policy Statement?</p>	<p>The Provincial Policy Statement (PPS) is issued under the authority of Section 3 of the <i>Planning Act</i>, and provides direction on matters of provincial interest related to land use planning and development, promoting the provincial “policy-led” planning system. With this in mind, the PPS provides policies on “Infrastructure and Public Service Facilities” including those dealing specifically with “Sewage and Water”.</p> <p>Specifically, Section 1.6.4.1 of the PPS, “Planning for sewage and water services”, includes the following relevant policy¹:</p> <p>b. ensure that these [municipal sewage services and municipal water services] systems are provided in a manner that:</p> <ol style="list-style-type: none"> 1. can be sustained by the water resources upon which such services rely; 2. is financially viable and complies with all regulatory requirements; and 3. protects human health and the natural environment. <p>Since the long-term prosperity and social well-being of Ontarians depend on maintaining strong communities, a clean and healthy environment and a strong economy, it is important that the preferred alternative to the undertaking be consistent with the preceding policy contained within Section 1.6 “Infrastructure and Public Service Facilities” of the PPS.</p>	<ul style="list-style-type: none"> ▪ Provincial Policy Statement (2005), (Ministry of Municipal Affairs and Housing): http://www.mah.gov.on.ca/Assesment/1421.aspx ▪ <i>Planning Act</i> (1990) R.S.O. 1990, Chapter P.13. Last amendment: 2011 (Government of Ontario): http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90p13_e.htm 	<p>Yes – The alternative would be consistent with the policy contained within Section 1.6.4.1 of the PPS based on meeting the following requirements:</p> <ol style="list-style-type: none"> 1. The alternative can be sustained by the water resources upon which such services rely (<i>would be satisfied if a “yes” response is provided to screening criterion # 12</i>). 2. The alternative is financially viable and complies with all regulatory requirements (<i>would be satisfied if a “yes” response is provided to screening criterion # 13</i>). 3. The alternative protects human health and the natural environment (<i>would be satisfied if a “yes” response is provided to screening criterion # 15</i>). <p>No – If all of the above requirements are not met, then the alternative would not be consistent with the policy contained within Section 1.6.4.1 of the PPS.</p>

¹ Reference is to PPS 2005. The equivalent reference in the PPS 2014 (as of April 30, 2014) is Section 1.6.6.1.

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5. Is the alternative consistent with the Growth Plan for the Greater Golden Horseshoe?	<p>The Growth Plan for the Greater Golden Horseshoe (the Plan) has been prepared under the <i>Places to Grow Act, 2005</i>, and provides a framework for implementing the Government of Ontario's vision for building stronger, prosperous communities by better managing growth in the Greater Golden Horseshoe region (GGH) by 2031.</p> <p>The Plan provides the framework for infrastructure investments in the GGH so that existing infrastructure and future investments are optimized to serve growth to 2031 and beyond.</p> <p>Specifically, Section 3.2.5 “Water and Wastewater Systems” of the Plan includes the following relevant policies:</p> <ol style="list-style-type: none"> 3. Municipalities are encouraged to plan and design <i>municipal water and wastewater systems</i> that return water to the Great Lake <i>watershed</i> from which the withdrawal originates. 4. Construction of new, or expansion of existing <i>municipal or private communal water and wastewater systems</i> should only be considered where the following conditions are met: <ol style="list-style-type: none"> a) Strategies for water conservation and other water demand management initiatives are being implemented in the existing service area b) Plans for expansion or for new services are to serve growth in a manner that supports achievement of the intensification target and density 	<ul style="list-style-type: none"> ▪ The Growth Plan for the Greater Golden Horseshoe (2006) (Ministry of Public Infrastructure and Renewal): http://www.moi.gov.on.ca/pdf/en/GrowthPlan_GGH.pdf ▪ <i>Places to Grow Act</i> (2005), S.O. 2005, Chapter 13. Last amendment: 2009 (Government of Ontario): http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_05p13_e.htm 	<p>Yes – The alternative would be consistent with policies 3 and 4 of Section 3.2.5 of the Plan based on meeting the following requirements:</p> <ol style="list-style-type: none"> 3. The alternative can be sustained by the water resources upon which such services rely (<i>would be satisfied if a “yes” response is provided to screening criterion # 12</i>). 4a) (<i>would be satisfied if a “yes” response is provided to screening criterion # 10</i>). 4b) no corresponding screening criteria 4c) (<i>would be satisfied if a “yes” response is provided to screening criterion # 12</i>) <p>No – If the above requirements are not met, then the alternative would not inconsistent with policies 3 and 4 of Section 3.2.5 of the Plan.</p>

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	<p>targets</p> <p>c) Plans have been considered in the context of applicable inter-provincial, national, bi-national, or state-provincial Great Lakes Basin agreements</p> <p>Since the viability of Ontario’s communities and economic competitiveness, quality of life, and the delivery of public services are dependent upon ready and accessible public infrastructure, it is important that the preferred alternative to the undertaking be consistent with the preceding policies contained within Section 3.2.5 of the Plan.</p>		
6. Is the alternative consistent with the Lake Simcoe Protection Plan?	<p>The ultimate goal of the Lake Simcoe Protection Plan (LSPP) is to restore the ecological health of Lake Simcoe. To accomplish this goal, the LSPP identifies a dissolved oxygen target of 7 mg/L. Current modeling estimates the total phosphorus loading to the Lake must be reduced to approximately 44 tonnes per year to achieve this target.</p> <p>Among the policies in the LSPP is the development, by the Province, of a comprehensive Lake Simcoe Phosphorus Reduction Strategy. For each major source of phosphorus, the Lake Simcoe Phosphorus Reduction Strategy (June 2010) identifies specific total phosphorus limits. For sewage treatment plants the Phosphorus Reduction Strategy establishes 2015 baseline total phosphorus loading limits which will be reviewed every five years.</p> <p>The preferred alternative to the undertaking must be consistent with the policies of the LSPP, including the Phosphorus Reduction Strategy.</p>	<ul style="list-style-type: none"> ▪ Lake Simcoe Protection Plan (2009) (Ministry of Environment): http://www.ene.gov.on.ca/stdpr/odconsume/groups/lr/@ene/@resources/documents/resource/td01_076302.pdf ▪ Lake Simcoe Phosphorus Reduction Strategy (June 2010) (Ministry of Environment): http://www.ene.gov.on.ca/stdpr/odconsume/groups/lr/@ene/@resources/documents/resource/td01_079876.pdf 	<p>Yes – The alternative would be consistent with the policies of the LSPP, including the draft Phosphorus Reduction Strategy.</p> <p>No - The alternative would not be consistent with the policies of the LSPP, including the Phosphorus Reduction Strategy.</p>

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7. Is the alternative consistent with York Region's Official Plan?	<p>The York Region Official Plan (ROP) adopted by Council in December 2009 and subsequently approved by the Ministry of Municipal Affairs and Housing in September 2010 under the Planning Act consists of three main sections: Towards a Sustainable Region, Growth Management, and Implementation. The policies of ROP will guide economic, environmental, and community building decisions to manage growth.</p> <p>With this in mind, Section 7.3 includes policies on Regional infrastructure relating to Water and Wastewater Servicing. The Water and Wastewater Servicing objective is to deliver safe, clean drinking water and provide long term water and wastewater services to York Region's communities that are safe, well-managed, and sustainable. To achieve this objective, this section of the ROP includes 34 policies with the following nine being directly relevant to this project:</p> <ol style="list-style-type: none"> 5. To work with partners in the provision of water and wastewater services for the Region. 6. To provide full municipal water and wastewater servicing to accommodate growth in the Urban Area. 7. To consider alternatives to servicing northern York Region in keeping with the requirements of the Environmental Assessment Act, the York Region Water and Wastewater Master Plan and the Upper York Sewage Solutions Individual Environmental Assessment. 12. To supply the Urban Area and Towns and Villages with water from the Great Lakes or 	<ul style="list-style-type: none"> ▪ York Region Official Plan(2009) (York Region) approved by Ministry of Municipal Affairs and Housing (2010): http://www.york.ca/NR/rdonlyres/mlml5rxjuzlatgipib4m4nsbsghyuy54zupihqmtcdripex7grn5d ucxgzo6ytzkjoue3ihexcpfbfvag43fjdxzd/apprv_AnnotatedApprovedYROP.pdf 	<p>Yes – The Alternative would be consistent with the policies directly relevant to this project for achieving the ROP objective for water and sewer services of delivering safe, clean drinking water and providing long term water and wastewater services to York Region's communities that are safe, well-managed, and sustainable.</p> <p>No - The alternative would not be consistent with the policies directly relevant to this project for achieving the ROP objective for water and sewer services of delivering safe, clean drinking water and providing long term water and wastewater services to York Region's communities that are safe, well-managed, and sustainable.</p>

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	<p>from Lake Simcoe, subject to the restrictions of the Greenbelt Plan, Lake Simcoe Protection Plan, or other Provincial plans and statutes. A limited amount of groundwater resources will be used and managed in a way that sustains healthy flow into creeks, streams and rivers.</p> <p>13. To support the Great Lakes water balance by continuing to invest in Lake Ontario based infrastructure, and ensuring that water removed from Lake Ontario is returned at an equivalent or better quality.</p> <p>16. That within the Oak Ridges Moraine, Greenbelt, and Lake Simcoe watershed, all improvements or new water and wastewater infrastructure systems shall conform with the Oak Ridges Moraine Conservation Plan, the Greenbelt Plan or the Lake Simcoe Protection Plan.</p> <p>18. To provide reliable water and wastewater services to residents and businesses to ensure continuing community well-being and the economic vitality of the Region.</p> <p>20. To ensure that the Region continues to provide state-of-the-art wastewater treatment while investigating innovative new technologies.</p> <p>25. To ensure that wastewater effluent is managed to minimize impacts on the quality of the receiving water.</p> <p>In order to deliver safe, clean drinking water and provide long term water and wastewater services to York Region's communities that are safe, well-managed, and</p>		

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<p>8. Is the alternative consistent with York Region's 2009 Water and Wastewater Master Plan Update?</p>	<p>sustainable, it is important that the preferred alternative to the undertaking be consistent with the preceding policies provided in Section 7.3 of the ROP.</p> <p>York Region's approved Water and Wastewater Master Plan Update, November 2009, defined the broad framework for delivering its long-term water and wastewater servicing and followed the first two phases of the Municipal Class EA process. This process integrated the planning of municipal infrastructure requirements for existing and future land use with the principles of environmental assessment. As part of this process, alternatives were considered within the context of agency and public consultation for addressing future water and wastewater flows.</p> <p>The Lake Ontario based servicing alternative was identified in the 2009 Water and Wastewater Master Plan Update as the preferred alternative to meet York Region's long-term water and wastewater servicing needs to 2031 while recognizing that a number of alternatives for wastewater servicing in Holland Landing, Queensville, and Sharon were to be examined in greater detail through the UYSS EA.</p> <p>As a result, the preferred alternative to the undertaking should be consistent with the Water and Wastewater Master Plan Update.</p>	<ul style="list-style-type: none"> ▪ Water and Wastewater Master Plan Update: Servicing for a Safe and Healthy Tomorrow. York Region, November 2009. (Genivar and XCG, 2009): http://www.york.ca/Departments/Planning+and+Development/Infrastructure+Planning/Home.htm 	<p>YES – The alternative would be consistent with York Region's Water and Wastewater Master Plan Update.</p> <p>No – The alternative would not be consistent with York Region's Water and Wastewater Master Plan Update.</p>
<p>9. Is the alternative consistent with York Region's Sustainability Strategy for</p>	<p>Using the <i>York Region Sustainability Strategy – Towards a Sustainable Region</i>, November 2007 document as an overall guide, York Region developed a sustainability strategy for water and wastewater servicing in consultation with a variety of stakeholders and the public.</p>	<ul style="list-style-type: none"> ▪ York Region's Water and Wastewater Sustainability Strategy – Towards a Sustainable Region (2007) (York Region): http://www.york.ca/NR/rdonlyres/ddvav3nrw2657f4dljc4m3kboxa 	<p>YES – The alternative would align with the ten underlying principles of York Region's <i>Water and Wastewater Sustainability Strategy</i>.</p> <p>No – The alternative would not align with the ten underlying principles of York Region's <i>Water and Wastewater Sustainability Strategy</i>.</p>

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Water and Wastewater Servicing?	<p>York Region’s <i>Water and Wastewater Sustainability Strategy</i>, February 2008 is comprised of the following ten underlying principles for ensuring the Region’s water and wastewater works and services meet “the need of the present without compromising the ability of future generations to meet their own needs”:</p> <ul style="list-style-type: none"> ▪ Sustainability Principle No. 1: Safe and Clean Drinking Water: York Region is committed to providing safe and clean drinking water to all of its residents. <ul style="list-style-type: none"> - The drinking water supply will be designed and operated to ensure drinking water meets or exceeds Ontario Drinking Water Standards and which is safe for human health and is aesthetically acceptable. - The drinking water supply will be protected through source and intake zone protection strategies. ▪ Sustainability Principle No. 2: Healthy Watersheds: York Region recognizes the “connectedness” of the natural world and therefore actively promotes healthy land, air, and water in all its watersheds and the important role that all its residents play as stewards of its watersheds. <ul style="list-style-type: none"> - York Region will manage the intra-basin transfer of water recognizing international obligations and meeting provincial requirements. - Drinking water quantities supplied from surface and groundwater sources will be within safe yield limits for the water body or aquifer. - Wastewater effluents will be disinfected to protect public health. - Wastewater effluents will be treated to produce 	<p>4v35gzqdtw62f3zce5cvwur4wbcymuvnoobehvgdkpzgsjrzeohstbduin2jlsmd/Final+Sustainability+document.pdf</p> <ul style="list-style-type: none"> ▪ York Region Water and Wastewater Sustainability Strategy (2008) (Genivar and XCG): http://www.york.ca/NR/rdonlyres/php2ezkixmn5pbt6alafw4hle/danvyzpbjbbzrxdal75wwzm3zc6awqajegisdvavket6mhmw2litxfodisouhth/W+and+WW+SS.pdf 	

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	<p>effluents non-toxic to aquatic life.</p> <ul style="list-style-type: none"> - Wastewater effluents will be treated to reduce, where possible, the release of emerging pollutants such as endocrine disrupting compounds. - Wastewater effluents will be treated to reduce effluent nutrient (nitrogen, phosphorus), oxygen demand and solids loadings consistent with management goals for individual watersheds. - Wastewater facilities will be designed and operated to ensure that no bypass of untreated sewage occurs unless human life or facilities are threatened. <ul style="list-style-type: none"> ▪ Sustainability Principle No. 3: Respect for Natural and Cultural Heritage: York Region through integrated growth and servicing planning and through advanced construction and operations practices will restore and enhance the natural environment. York Region respects and protects its First Nations heritage. York Region respects and protects its cultural heritage. <ul style="list-style-type: none"> - Water and wastewater services will be planned through the appropriate Ontario Environmental Assessment process ensuring full regard for the natural and cultural heritage of York Region. - Water and wastewater services will be constructed and operated in a manner that restores and enhances the environment and provides net benefits to York Region’s natural heritage. - The planning and implementation of water and wastewater services will identify and protect areas of cultural significance. 		

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	<ul style="list-style-type: none"> - The planning and implementation of water and wastewater services will identify and protect areas of First Nations traditional use. ▪ Sustainability Principle No. 4: Wise Use of Water: York Region is committed to the wise use of water ensuring adequate water resources for today's residents and for future generations. <ul style="list-style-type: none"> - Drinking water demand will be managed through conservation and public education to ensure wise use of available water supply and the efficient use of available water and wastewater infrastructure. - Drinking water system leakage will be managed in partnership with municipalities through asset management programs to ensure the wise use of available water supply and the efficient use of available water and wastewater infrastructure. - Wastewater extraneous flows will be managed in partnership with municipalities to ensure efficient use of wastewater collection and treatment infrastructure and to ensure wise use of water and other natural resources. - Wastewater effluent and wastewater by-product recycle and reuse will be employed where the applications are environmentally and economically sound. ▪ Sustainability Principle No. 5: Community Well Being: York Region will provide reliable water and wastewater services to its residents to ensure the continuing well-being and economic vitality of the Region. <ul style="list-style-type: none"> - The Region's wastewater collection system will be designed and operated to limit the risk of 		

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	<p>surface and basement flooding.</p> <ul style="list-style-type: none"> ▪ Sustainability Principle No. 6: Full and Equitable Funding and Value for Money: York Region is committed to full and equitable funding of water and wastewater services and value-for-money in delivering water and wastewater services. <ul style="list-style-type: none"> - The full cost of water and wastewater servicing will be assessed and equitably allocated. - Sustainable water and wastewater servicing programs will be fully funded considering the full lifecycle of the project. - Value-for-money will be achieved through careful planning, sound project management, streamlined project delivery, benchmarking and commercially astute business practices. ▪ Sustainability Principle No. 7: Timely and Integrated Service Delivery: York Region supports economically efficient growth through the timely delivery of water and wastewater services and will deliver water and wastewater infrastructure in a manner that is coordinated with other services such as roads and transit. <ul style="list-style-type: none"> - Water and wastewater services will be provided in a timely manner ensuring that authorized growth is not unduly impeded and that existing and future residents are treated in an equitable manner. ▪ Sustainability Principle No. 8: Climate Change and Energy Efficiency: York Region will mitigate the impacts of climate change through demand and capacity planning and the design and efficient operation of water and wastewater services. <ul style="list-style-type: none"> - Water and wastewater facilities will be designed 		

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	<p>and operated to optimize (greatest return per unit energy expended) energy use and where possible recover useable energy.</p> <ul style="list-style-type: none"> - Greenhouse gas emissions will be minimized to the extent possible in the operation of water and wastewater facilities. <ul style="list-style-type: none"> ▪ Sustainability Principle No. 9: Communications, Consultation and Engagement: York Region is committed to planning and implementing water and wastewater services in an open, transparent and accountable manner based on broad consultation, citizen engagement, strong communications; and to building public consensus toward the need to practice sustainability. ▪ Sustainability Principle No. 10: Monitoring, Performance Measurement and Adaptive Management: York Region will monitor and report on the implementation and operation of the water and wastewater sustainability strategies through a range of objective performance measures. York Region will learn from sustainability successes and failures, will adapt management methods and practice continual improvement toward sustainability leadership. <ul style="list-style-type: none"> - Water and wastewater performance measures will be gauged and reported using time periods that allow accurate conclusions to be drawn. - Knowledge gained from public communications, engagement and consultation will help inform sustainability learning, re-evaluation and adaptive management processes. <p>In full support of York Region's sustainability goals, the preferred alternative to the undertaking should align, as</p>		

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	<p>applicable, with these ten underlying water and wastewater sustainability principles to ensure York Region meets “the need of the present without compromising the ability of future generations to meet their own needs</p>		
<p>10. Is the alternative consistent with York Region’s Water Efficiency and Conservation Programs?</p>	<p>York Region’s Water Efficiency and Conservation Programs are dedicated to protecting Lake Simcoe, Lake Ontario and ground water sources by providing the tools to use less water while maintaining the same standard of living. Reducing the demand on municipal water and wastewater treatment facilities through water efficiency and conservation efforts directly reduces energy use and protects streams, rivers and lakes.</p> <p>For example, The Water for Tomorrow program is one such program. It began in 1998 and to date, it has achieved a reduction in water use of over 21 million litres per day (MLD). York Region remains committed to this program and continues to pursue aggressive water reduction targets recommended in the 10-year strategy defined in the 2007 Water Efficiency Master Plan Update.</p> <p>As a result, the preferred alternative to the undertaking must support or enhance York Region’s water efficiency and conservation programs.</p>	<ul style="list-style-type: none"> ▪ York Region’s Water Efficiency and Conservation Programs: Water for Tomorrow (York Region): http://www.waterfortomorrow.ca/en/index.asp ▪ Regional Municipality of York Water Efficiency Master Plan Update (2007) (Resource Management Strategies Inc.): http://www.waterfortomorrow.ca/en/aboutus/resources/YorkRegionWEMPFinalReportwithAppendicesApril272007.pdf 	<p>Yes – The alternative would support or enhance York Region’s water efficiency and conservation programs.</p> <p>No - The alternative would not support or enhance York Region’s water efficiency and conservation programs.</p>
<p>11. Is the alternative consistent with the Source Water Protection – South Georgian Bay</p>	<p>The <i>Clean Water Act, 2006</i> requires Source Protection Committees to prepare Source Protection Plans for submission to the Minister of the Environment for approval. Drinking water source protection is the first step in a multi-barrier approach to protect the quality of drinking water. The South Georgian Bay Lake Simcoe Source Protection Committee and York Region have prepared and updated an Assessment Report for the</p>	<ul style="list-style-type: none"> ▪ <i>Clean Water Act</i> (2006) S.O.2006 Chapter 22. Last amendment: 2009 (Government of Ontario): http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_06c22_e.htm 	<p>Yes – The alternative would avoid negatively affecting the WHPAs, IPZs, and other vulnerable areas identified in the UYSS EA study area.</p> <p>No – The alternative would negatively affect the WHPAs, IPZs, and other vulnerable areas identified in the UYSS EA study area.</p>

Screening Criteria	Definition/Rationale (ANSWERS THE WHY - why is the criterion included in the table)	Supporting Documentation	Application (ANSWERS THE HOW – explains how the criterion is applied)
Lake Simcoe Source Protection Region?	<p>South Georgian Bay Lake Simcoe Source Protection Region for approval by the Ministry of the Environment. The Assessment Report, among other things, identifies wellhead protection areas (WHPAs) and intake protection zones (IPZs) and other vulnerable areas within the UYSS EA study area.</p> <p>As a result, the preferred alternative to the undertaking should avoid negatively affecting the WHPAs, IPZs, and other vulnerable areas (significant recharge areas, highly vulnerable aquifers) identified in the UYSS EA study area.</p>	<ul style="list-style-type: none"> ▪ Updated Draft Assessment Reports for the South Georgian Bay Lake Simcoe Source Protection Region (2011) (South Georgian Bay-Lake Simcoe Source Protection Committee): http://www.ourwatershed.ca/documents/proposed_assessment_report/updated_assessment_report.php 	
12. Is the alternative consistent with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the <i>Ontario Water Resources Act</i> ?	<p>The transfer of water from one Great Lakes watershed to another is considered an intra-basin transfer of water. Intra-basin transfers of water that meet or exceed a threshold amount set out in the <i>Ontario Water Resources Act</i>, and are considered “new” or “increased” under the <i>Ontario Water Resources Act</i>, will be regulated through the regime set out in the <i>Ontario Water Resources Act</i>, which is not yet in effect. Revisions to the <i>Ontario Water Resources Act</i> to implement this regime will not take effect until additional regulations are issued that clarify and establish applicable requirements.</p> <p>The <i>Ontario Water Resources Act</i> lists the following exception criteria which certain types of intra-basin transfers of water will be required to satisfy wholly or in part before they will be permitted by the Ministry:</p> <ol style="list-style-type: none"> 1. The water transferred is returned, naturally or after use, to the source watershed less an allowance for consumptive use. 2. The need for water cannot be reasonably avoided through efficient use and conservation 	<ul style="list-style-type: none"> ▪ <i>Ontario Water Resources Act</i> (1990) R.S.O 1990, Chapter O.40 Last amendment: 2011(Government of Ontario): http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90o40_e.htm 	<p>Yes - The alternative would be consistent with the intra-basin transfer provisions of the <i>Ontario Water Resources Act</i>.</p> <p>No - The alternative would not be consistent with the intra-basin transfer provisions of the <i>Ontario Water Resources Act</i>.</p>

Screening Criteria	Definition/Rationale (ANSWERS THE WHY - why is the criterion included in the table)	Supporting Documentation	Application (ANSWERS THE HOW – explains how the criterion is applied)
	<p>of existing water supplies.</p> <ol style="list-style-type: none"> 3. The transfer amount is limited to what is reasonable for the intended purpose. 4. There is no significant adverse impact anticipated (individual or cumulative). 5. Feasible, environmentally sound, and cost-effective water conservation measures must be applied to minimize taking/withdrawal and consumptive use losses. 6. There is compliance with all existing laws and agreements. 7. The transfer must meet any additional conditions that are imposed. 		
	<p>The preferred alternative to the undertaking should be consistent with the intra-basin transfer provisions of the <i>Ontario Water Resources Act</i>.</p>		
13. Is the alternative financially viable?	<p>In York Region, major capital infrastructure projects are initially financed by York Region. Over time, the majority of the capital cost is recovered through Development Charges. The cost to operate the constructed infrastructure is recovered through water and sewer charges to users.</p> <p>As a result, the capital and operating costs for the preferred alternative to the undertaking needs to be within the ability of York Region to provide financing for and cost recovery of the proposed infrastructure.</p>	<ul style="list-style-type: none"> ▪ York Region to confirm ▪ A 10 year capital plan, 2000-2009: York Region's infrastructure program (2000) (Regional Municipality of York). 	<p>Yes – It would be within York Region's ability to provide financing for and cost recovery of the proposed infrastructure associated with the alternative.</p> <p>No – It would not be within York Region's ability to provide financing for and cost recovery of the proposed infrastructure associated with the alternative.</p>
14. Is the alternative within the ability of York	<p>As the upper tier municipality, York Region is responsible for providing the sewage servicing for accommodating the growth that is forecasted to occur in the UYSS service area.</p>	<ul style="list-style-type: none"> ▪ <i>Municipal Act</i> (2001). S.O. 2001 Chapter 25. Last amendment: 2011. (Government of Ontario): http://www.e-laws.gov.on.ca/html/statutes/en 	<p>Yes – The alternative could be implemented by York Region on their own or through an arrangement with another party.</p> <p>No – The alternative could not be implemented by York</p>

Screening Criteria	Definition/Rationale (ANSWERS THE WHY - why is the criterion included in the table)	Supporting Documentation	Application (ANSWERS THE HOW – explains how the criterion is applied)
Region to implement?	As a result, it is critical that York Region be able to implement the preferred alternative to the undertaking either on its own or through an arrangement with another party.	glish/elaws_statutes_01m25_e.htm	Region on their own or through an arrangement with another party.
15. Is the alternative able to meet the purpose of the <i>Environmenta l Assessment Act (EA Act)</i> ?	<p>The purpose of the <i>EA Act</i> is the betterment of the people of Ontario by providing for the protection, conservation and wise management of the environment in Ontario.</p> <p>With this in mind, it is important that the preferred alternative to the undertaking be able to meet the purpose of the <i>EA Act</i> to facilitate the Minister of the Environment's decision making process.</p>	<ul style="list-style-type: none"> ▪ <i>Environmental Assessment Act</i> (1990), R.S.O. 1900, Chapter E.18. Last amendment: 2010 (Government of Ontario)Ministry of Environment www.e-laws.gov.on.ca/Download?dID=42071 	<p>Yes – The alternative would be consistent with the purpose of the <i>EA Act</i>.</p> <p>No – The alternative would not be consistent with the purpose of the <i>EA Act</i>.</p>

Table F.2: Assessment of the Alternatives to the Undertaking Upper York Sewage Solutions Environmental Assessment

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
	No	Yes	No	Yes
Screening Criterion No. 1: Can the alternative satisfy the problem/opportunity statement?	<p>Alternative No. 1 would not satisfy the problem/opportunity statement for the following reasons:</p> <ol style="list-style-type: none"> Would not be a sustainable sewage servicing solution because the alternative would align with only 7 of the 10 underlying principles of York Region's Sustainability Strategy for Water and Wastewater Servicing (see Screening Criterion No. 9 for further information). Would not accommodate the growth forecasted to occur in the UYSS service area to 2031 because no new sewage collection and/or treatment capacity would be built with Alternative No. 1. Would comply with certain applicable provincial growth management policies and environmental statuses as 	<p>Alternative No. 2 would satisfy the problem/opportunity statement for the following reasons:</p> <ol style="list-style-type: none"> Would be a sustainable servicing solution because the alternative would align with all 10 underlying principles of York Region's Sustainability Strategy for Water and Wastewater Servicing (see Screening Criterion No. 9 for further information). Would accommodate all of the growth forecasted to occur in the UYSS service area to 2031 because a new sewage system would be built for conveying all of the additional sewage flows to the Duffin Creek Wastewater Pollution Control Plant (WPCP), which is appropriately sized for accommodating these additional flows for treatment prior to discharge to Lake Ontario. Would comply with provincial growth management policies and applicable environmental statuses as follows: 	<p>Alternative No. 3 would not satisfy the problem/opportunity statement for the following reasons:</p> <ol style="list-style-type: none"> Would not be a sustainable servicing solution because the alternative would align with only 8 of the 10 underlying principles of York Region's Sustainability Strategy for Water and Wastewater Servicing (see Screening Criterion No. 9 for further information). Would not accommodate all of the growth forecasted to occur in the UYSS service area to 2031 because the new sewage conveyance system and the new or expanded existing treatment facility would not receive Provincial approval (i.e., Environmental Compliance Approval) due to the increase in the phosphorous nutrient load to Lake Simcoe (i.e., the 124 kg TP PRS load limit and resulting 0.008 mg/L phosphorus effluent limit with a 40 MLD capacity plant cannot be consistently achieved). Would not comply with all of the provincial growth management policies and applicable environmental 	<p>Alternative No. 4 would satisfy the problem/opportunity statement for the following reasons:</p> <ol style="list-style-type: none"> Would be a sustainable servicing solution because the alternative would align with all 10 underlying principles of York Region's Sustainability Strategy for Water and Wastewater Servicing (see Screening Criterion No. 9 for further information). Would accommodate all of the growth forecasted to occur in the UYSS service area to 2031 because (1) a new sewage conveyance system and a new or expanded existing treatment facility would be built to accommodate the additional sewage flows from East Gwillimbury prior to discharge to either an inland watercourse draining to Lake Simcoe or directly to Lake Simcoe and, (2) the existing Duffin Creek WPCP would accommodate the additional sewage flows from the Towns of Newmarket and Aurora via the existing YDSS prior to discharge to Lake Ontario. Would comply with provincial growth management policies and applicable environmental statuses as follows:

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
	<p>follows:</p> <p>a) <u>Growth Plan</u> - Since no new sewage collection and/or treatment capacity would be built for Alternative No. 1, policies 3 and 4 of section 3.2.5 of the Growth Plan for the Greater Golden Horseshoe would not be applicable to Alternative No. 1 (see response #2 above and response to Screening Criterion No. 5).</p> <p>b) <u>Lake Simcoe Protection Act</u> – Alternative No. 1 would be consistent with the policies of the Lake Simcoe Protection Plan, including the Phosphorus Reduction Strategy (see Screening Criterion No. 6 for further information).</p> <p>c) <u>Oak Ridges Moraine Act</u> – The <u>Oak Ridges Moraine Act</u> would not be applicable to Alternative No. 1 because no additional sewage collection and/or treatment capacity would be built in the Oak Ridges Moraine Conservation Plan (ORMCP) area.</p> <p>d) <u>Greenbelt Act</u> - The <u>Greenbelt Act</u> would not be applicable to Alternative No. 1 because no additional sewage collection and/or treatment capacity would be built with this alternative,</p>	<p>a) <u>Growth Plan</u> – Alternative No. 2 would be consistent with policies 3 and 4 of section 3.2.5 of the Growth Plan for the Greater Golden Horseshoe (see Screening Criterion No. 5 for further information).</p> <p>b) <u>Lake Simcoe Protection Act</u> – <i>Alternative No. 2 would be consistent with the policies of the Lake Simcoe Protection Plan, (as established by the Lake Simcoe Protection Act) including the Phosphorus Reduction Strategy (see Screening Criterion No. 6 for further information).</i></p> <p>c) <u>Oak Ridges Moraine Act</u> - <i>All proposed infrastructure (i.e., pump stations, forcemains, and/or gravity sewers/tunnelling) for constructing a new conveyance system through the Oak Ridges Moraine Conservation Plan (ORMCP) area to an appropriate connection point into the existing YDSS would conform to the tests contained in section 41 of the ORMCP.</i></p> <p>d) <u>Greenbelt Act</u> – <i>Since Alternative No. 2 would be subject to the Environmental Assessment Act, it is permitted</i></p>	<p>statues as follows:</p> <p>a) <u>Growth Plan</u> - Alternative No. 3 would not be consistent with all of policies 3 and 4 of section 3.2.5 of the Growth Plan for the Greater Golden Horseshoe (see Screening Criterion No. 5 for further information)</p> <p>b) <u>Lake Simcoe Protection Act</u> – Alternative No. 3 would not be consistent with the policies of the Lake Simcoe Protection Plan (as established by the <u>Lake Simcoe Protection Act</u>), including the Phosphorus Reduction Strategy (see Screening Criterion No. 6 for further information).</p> <p>c) <u>Oak Ridges Moraine Act</u> - Since no new sewage infrastructure would need to be constructed through the Oak Ridges Moraine Conservation Plan (ORMCP) area for implementing this alternative, the <u>Oak Ridges Moraine Act</u> would not be applicable to Alternative No. 3.</p> <p>d) <u>Greenbelt Act</u> - Since Alternative No. 3 would be subject to the <u>Environmental Assessment Act</u>, it is permitted by the <u>Greenbelt Act</u> subject to complying with the policies outlined in the Greenbelt Plan, 2005.</p>	<p>a) <u>Growth Plan</u> - Alternative No. 4 would be consistent with policies 3 and 4 of section 3.2.5 of the Growth Plan for the Greater Golden Horseshoe (see Screening Criterion No. 5 for further information).</p> <p>b) <u>Lake Simcoe Protection Act</u> – Alternative No. 4 would be consistent with the policies of the Lake Simcoe Protection Plan (as established by the <u>Lake Simcoe Protection Act</u>), including the Phosphorus Reduction Strategy (see Screening Criterion No. 6 for further information).</p> <p>c) <u>Oak Ridges Moraine Act</u> - Since no new sewage infrastructure would need to be constructed through the Oak Ridges Moraine Conservation Plan (ORMCP) area for implementing this alternative, the <u>Oak Ridges Moraine Act</u> would not be applicable to Alternative No. 4.</p> <p>d) <u>Greenbelt Act</u> - Since Alternative No. 4 would be subject to the <u>Environmental Assessment Act</u>, it is permitted by the <u>Greenbelt Act</u> subject to complying with the policies outlined in the Greenbelt Plan, 2005.</p> <p>e) <u>OWRA</u> – The new sewage</p>

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
	e) <i>OWRA</i> - The OWRA would not be applicable to Alternative No. 1 because no transfer of water is required as there would be no growth assigned to the UYSS service area.	<p><i>by the Greenbelt Act subject to complying with the policies outlined in the Greenbelt Plan, 2005.</i></p> <p>e) <i>OWRA</i> - <i>The new sewage conveyance system would be consistent with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the Ontario Water Resources Act (OWRA).</i></p>	e) <i>OWRA</i> - The new sewage conveyance system and new or expanded existing treatment facility would be consistent with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the <i>Ontario Water Resources Act (OWRA)</i> .	conveyance system and new or expanded existing treatment facility would be consistent with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the <i>Ontario Water Resources Act (OWRA)</i> .
Summary of Key Findings				
<ul style="list-style-type: none"> ▪ Alternatives 2 and 4 would satisfy the problem/opportunity statement as they are sustainable solutions, can accommodate approved growth in the UYSS service area to 2031, and comply with environmental statutes including the <i>Oak Ridges Moraine Conservation Act</i>. ▪ Under Alternative 4 no new wastewater infrastructure would be required within the Oak Ridges Moraine. 				

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
Screening Criterion No. 2: Does the alternative represent proven technology?	Not applicable	Yes	No	Yes
	<ul style="list-style-type: none"> Screening Criterion No. 2 does not apply because no additional sewage collection and/or treatment capacity would be built. 	<ul style="list-style-type: none"> Alternative No. 2 would represent proven technology because sewage conveyance including pump stations, forcemains, and/or gravity sewers/tunnelling are commercially available and have met performance requirements for their intended use over an extended period of time both globally and locally. For example, York Region has used this type of sewage conveyance system as part of the York Durham Sewer System (YDSS). 	<ul style="list-style-type: none"> Alternative No. 3 would not represent proven technology because the proposed sewage treatment components (i.e., tertiary and quaternary – Reverse Osmosis) have not met performance requirements for their intended use with respect to consistently achieving a low Total Phosphorus TP concentration limit of 0.008 mg/L over an extended period. In order for this alternative to be implemented, Water Quality Trading would be required to increase the 124 kg/yr annual TP loading limit to allow for an effluent TP concentration of 0.01 to 0.02 mg/L. 	<ul style="list-style-type: none"> Alternative No. 4 would represent proven technology because the proposed sewage treatment components and use of reclaimed water are commercially available and have globally met performance requirements for their intended use over an extended period of time. For this alternative, part of the reclaimed water would be beneficially used for irrigation or other applications. The remainder of the reclaimed water would be discharged to surface water within a TP load limit approved by MOE. Sewage treatment technologies that have been used for reclaimed water applications include conventional secondary treatment, followed by tertiary treatment such as membrane filtration, and disinfection such as ultraviolet disinfection. Additional advanced treatment technologies that have the capability to achieve low TP concentrations include reverse osmosis.
Summary of Key Findings				
<ul style="list-style-type: none"> Alternatives 2 and 4 would represent proven technology as the technologies are both commercially available and have met performance requirements for their intended use over an extended period of time. Additionally, Alternative 4 would involve the use of proven technology to reclaim wastewater for irrigation and other purposes. 				

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
Screening Criterion No. 3: Is the alternative constructible?	Not applicable	Yes	Yes	Yes
	<ul style="list-style-type: none"> Screening Criterion No. 3 does not apply because no new sewage collection and/or treatment capacity would be built. 	<ul style="list-style-type: none"> Alternative No. 2 would be constructible because sewage conveyance including pump stations, forcemains, and/or gravity sewers/tunnelling use well established construction methodologies and practices and meet applicable code requirements at the size and scale of the infrastructure that is required. For example, York Region has constructed this type of sewage conveyance system as part of the YDSS. 	<ul style="list-style-type: none"> Alternative No. 3 would be constructible because the proposed sewage treatment components use well established construction methodologies and practices and meet applicable code requirements at the size and scale of the infrastructure that is required. Conventional secondary sewage treatment followed by tertiary treatment facilities have been constructed both globally and locally in Ontario. As well, advanced quaternary (i.e., reverse osmosis) treatment facilities to achieve higher water quality have been built globally and examples include the following: <ul style="list-style-type: none"> Groundwater Replenishment System, Orange County, California, USA Scottsdale Water Campus, Scottsdale, Arizona, USA NEWater, Public Utilities Board Singapore Bundamba Advanced Water Reclamation Facility, Southeast Queensland, Australia Kwinana Water Reclamation Facility Kwinana, Australia 	<ul style="list-style-type: none"> Alternative No. 4 would be constructible because the proposed sewage treatment components and distribution of reclaimed water uses well established construction methodologies and practices and meet applicable code requirements at the size and scale of the infrastructure that is required. Conventional secondary sewage treatment followed by tertiary treatment facilities have been constructed both globally and locally in Ontario. As well, advanced quaternary (i.e., Reverse Osmosis) treatment facilities to achieve higher water quality have been built globally as listed with Alternative 3. In addition, examples of water reclamation facilities where reclaimed water is used for irrigation include the following: <ul style="list-style-type: none"> Scottsdale Water Campus, Scottsdale, Arizona, USA, The Edward C. Little Water Recycling Facility, EL Segundo, California, USA Bundamba Advanced Water Reclamation Facility, Southeast Queensland, Australia Chandler Water Reclamation Facility, Chandler, Arizona
Summary of Key Findings				
<ul style="list-style-type: none"> Alternatives 2, 3, and 4 would use well established construction methods and practices and meet applicable code requirements, making each constructible. 				

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
	No	Yes	Yes	Yes
Screening Criterion No. 4: Is the alternative consistent with the Provincial Policy Statement (PPS)?	<ul style="list-style-type: none"> ▪ Alternative No. 1 would not be consistent with the policy contained within Section 1.6.4.1² of the PPS for the following reasons: <ol style="list-style-type: none"> 1. Alternative No. 1 would be financially viable because there are no new costs associated with sewage collection and/or treatment capacity. However, since the approved growth in the UYSS service area would not be accommodated by Alternative No. 1, "doing nothing" would not be in compliance with the Growth Plan for the Greater Golden Horseshoe (Places to Grow Act, 2005), which established a 2031 population forecast of 1.5 million for all of York Region (basis for growth in the UYSS service area of approximately 150,000 of population and employment). 2. Human health and the natural environment would continue to be protected because the UYSS service area would not be developed. However, the approved growth in the UYSS Service Area would have to be limited and/or re-directed to either another location within York Region and/or to another municipality within 	<ul style="list-style-type: none"> ▪ Alternative No. 2 would be consistent with the policy contained within Section 1.6.4.1 of PPS for the following reasons: <ol style="list-style-type: none"> 1. Alternative No. 2 would be sustained by the water resources which such services rely on because it will be developed, designed, constructed, and operated to meet the seven exception criteria in accordance with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the Ontario Water Resources Act (OWRA). In addition, the water resources would be further sustained through adequate sewage treatment at the Duffin Creek Water Pollution Control Plant prior to discharge to Lake Ontario. 2. Alternative No. 2 would be financially viable and comply with all regulatory requirements for the following reasons: <ul style="list-style-type: none"> ▪ Alternative No. 2 is within York Region's ability to provide financing for and cost recovery of the proposed infrastructure. 	<ul style="list-style-type: none"> ▪ Alternative No. 3 would be consistent with the policy contained within Section 1.6.4.1 of PPS for the following reasons: <ol style="list-style-type: none"> 1. Alternative No. 3 would be sustained by the water resources which such services rely on because it will be developed, designed, constructed and operated to meet the seven exception criteria in accordance with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the OWRA. In addition, the water resources would be further sustained through adequate sewage treatment at both the Duffin Creek Water Pollution Control Plant prior to discharge to Lake Ontario and at the new or expanded existing treatment facility prior to discharge to Lake Simcoe. 2. Alternative No. 3 would be financially viable and would comply with all regulatory requirements for the following reasons: <ul style="list-style-type: none"> ▪ Alternative No. 3 is within York Region's ability to provide financing for and cost recovery of the proposed infrastructure. 	<ul style="list-style-type: none"> ▪ Alternative No. 4 would be consistent with the policy contained within Section 1.6.4.1 of PPS for the following reasons: <ol style="list-style-type: none"> 1. Alternative No. 4 would be sustained by the water resources which such services rely on because it will be developed, designed, constructed and operated to meet the seven exception criteria in accordance with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the OWRA. In addition, the water resources would be further sustained through adequate sewage treatment at both the Duffin Creek Water Pollution Control Plant prior to discharge to Lake Ontario and at the new or expanded existing treatment facility prior to discharge to Lake Simcoe. 2. The alternative would be financially viable and would comply with all regulatory requirements for the following reasons: <ul style="list-style-type: none"> ▪ Alternative No. 4 is within York Region's ability to provide financing for and cost recovery of the

² Reference is to PPS 2005. The equivalent reference in the PPS 2014 (as of April 30, 2014) is Section 1.6.6.1.

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
	<p>the Greater Golden Horseshoe area, which could be less suitable environmentally to accommodate the approved growth.</p>	<ul style="list-style-type: none"> ▪ Alternative No. 2 is subject to the requirements of the <i>Environmental Assessment Act</i>, which requires the identification of required approvals/permits that will need to be obtained prior to construction/operation of the new sewage conveyance system. 	<ul style="list-style-type: none"> ▪ Alternative No. 3 is subject to the environmental assessment process, which requires the identification of required approvals/permits that will need to be obtained prior to construction/operation of the new sewage conveyance system and a new or expanded existing treatment facility. 	<p>proposed infrastructure.</p> <ul style="list-style-type: none"> ▪ Alternative No. 4 is subject to the environmental assessment process, which requires the identification of required approvals/permits that will need to be obtained prior to construction/operation of the new sewage conveyance system and a new or expanded existing treatment facility.
		<p>3. Alternative No. 2 would protect human health and the natural environment as follows:</p> <ul style="list-style-type: none"> ▪ The additional sewage flows from the approved growth in the UYSS service area would be conveyed to the Duffin Creek Wastewater Pollution Control Plant (WPCP) for advanced and environmentally responsible treatment prior to discharge to Lake Ontario. The new sewage conveyance system, like the Duffin Creek WPCP, would be built in accordance with required approvals/permits. ▪ The natural environment associated with building the new sewage conveyance system would be protected 	<p>3. Alternative No. 3 would protect human health and the natural environment as follows:</p> <ul style="list-style-type: none"> ▪ The additional sewage flows from the approved growth in the UYSS service area would be conveyed to a new or expanded existing treatment facility for advanced and environmentally responsible treatment prior to discharge to either an inland watercourse draining to Lake Simcoe or directly to Lake Simcoe. The new sewage conveyance system and new or expanded existing treatment facility would be built in accordance with required approvals/permits. ▪ The natural environment associated with building the new 	<p>3. The alternative would protect human health and the natural environment as follows:</p> <ul style="list-style-type: none"> ▪ The additional sewage flows from the approved growth in the UYSS service area would be conveyed to a new or expanded existing treatment facility for advanced and environmentally responsible treatment prior to discharge to either an inland watercourse draining to Lake Simcoe or directly to Lake Simcoe. The new sewage conveyance system and new or expanded existing treatment facility would be built in accordance with required approvals/permits.

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
		<p>through the (1) application of avoidance, mitigation, compensation and, as appropriate, enhancement measures (as developed as part of the UYSS EA) during construction/operation of this alternative, (2) adherence to any Conditions of Approval issued by the Minister of the Environment and/or associated with subsequent design/environmental permits/approvals (obtained as part of detail design) during construction/operation of this alternative, and (3) implementation of any construction, post-construction, and/or operational monitoring programs.</p>	<p>sewage conveyance system and a new or expanded existing treatment facility would be protected through the (1) application of avoidance, mitigation, compensation and, as appropriate, enhancement measures (as developed as part of the UYSS EA) during construction/operation of this alternative, (2) adherence to any Conditions of Approval issued by the Minister of the Environment and/or associated with subsequent design/environmental permits/approvals (obtained as part of detail design) during construction/operation of this alternative, and (3) implementation of any construction, post-construction and/or operational monitoring programs.</p>	<ul style="list-style-type: none"> ▪ The natural environment associated with building the new sewage conveyance system and a new or expanded existing treatment facility would be protected through the (1) application of avoidance, mitigation, compensation and, as appropriate, enhancement measures (as developed as part of the UYSS EA) during construction/operation of this alternative, (2) adherence to any Conditions of Approval issued by the Minister of the Environment and/or associated with subsequent design/environmental permits/approvals (obtained as part of detail design) during construction/operation of this alternative, and (3) implementation of any construction, post-construction and/or operational monitoring programs. In addition, the natural environment would be enhanced because a portion of the treated wastewater would be reclaimed for irrigation purposes thereby

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
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conserving water resources and beneficially applying reclaimed nutrients (N, P).

Summary of Key Findings

- Alternatives 2, 3, and 4 would be consistent with Section 1.6: "Infrastructure and Public Service Facilities," specifically Section 1.6.4.1: "Planning for Sewage and Water Services" of the PPS.

Screening Criterion No. 5:	Not Applicable	Yes	No	Yes
Is the alternative consistent with the Growth Plan for the Greater Golden Horseshoe?	<ul style="list-style-type: none"> ▪ Policies 3 and 4 of section 3.2.5 of the Growth Plan for the Greater Golden Horseshoe would not be applicable to Alternative No. 1 (Do Nothing) because no new sewage collection and/or treatment capacity. 	<ul style="list-style-type: none"> ▪ Alternative No. 2 would be consistent with policies 3 and 4 of section 3.2.5 of the Growth Plan for the Greater Golden Horseshoe for the following reasons: <ul style="list-style-type: none"> - Policy 3: Under this alternative the transferred water from Lake Ontario less the allowable consumptive use would be returned to Lake Ontario as effluent via the YDSS/Duffin Creek WPCP (see response to Screening Criterion No. 12). - Policy 4, condition 4a: York Region's existing Water Efficiency and Conservation Programs would continue to be implemented and be applied to the approved growth for the UYSS service area (see response to Screening Criterion No. 10). - Policy 4, condition 4b: The new sewage conveyance system 	<ul style="list-style-type: none"> ▪ Although Alternative No. 3 would be consistent with the majority of policies 3 and 4 of section 3.2.5 of the Growth Plan for the Greater Golden Horseshoe, it would not be consistent with policy 4, condition 4b as follows: <ul style="list-style-type: none"> - Policy 3: Under this alternative the transferred water from Lake Ontario less the allowable consumptive use would be returned to Lake Ontario as effluent via the YDSS/Duffin Creek WPCP (see response to Screening Criterion No. 12). - Policy 4, condition 4a: York Region's existing Water Efficiency and Conservation Programs would continue to be implemented and be applied to the approved growth for the UYSS service area (see response to Screening Criterion No. 10). - Policy 4, condition 4b: The new sewage conveyance system and 	<ul style="list-style-type: none"> ▪ Alternative No. 4 would be consistent with policies 3 and 4 of section 3.2.5 of the Growth Plan for the Greater Golden Horseshoe for the following reasons: <ul style="list-style-type: none"> - Policy 3: Under this alternative the transferred water from Lake Ontario less the allowable consumptive use would be returned to Lake Ontario as effluent via the YDSS/Duffin Creek WPCP (see response to Screening Criterion No. 12). - Policy 4, condition 4a: York Region's existing Water Efficiency and Conservation Programs would continue to be implemented and be applied to the approved growth for the UYSS service area (see response to Screening Criterion No. 10). - Policy 4, condition 4b: The new sewage conveyance system and

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
		<p>would serve the approved growth for the UYSS service area in compliance with the <i>Places to Grow Act, 2005</i>, which established a 2031 total population forecast of 1.5 million for all of York Region based on intensification and density targets.</p>	<p>new or expanded existing treatment facility would not serve the approved growth for the UYSS service area in compliance with the <i>Places to Grow Act, 2005</i>, which established a 2031 total population forecast of 1.5 million for all of York Region based on intensification and density targets.</p>	<p>new or expanded existing treatment facility would serve the approved growth for the UYSS service area in compliance with the <i>Places to Grow Act, 2005</i>, which established a 2031 total population forecast of 1.5 million for all of York Region based on intensification and density targets.</p>
		<ul style="list-style-type: none"> - Policy 4, condition 4c: The new sewage conveyance system would be consistent with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the <i>Ontario Water Resources Act</i> (OWRA) (see response to Screening Criterion No. 12). 	<ul style="list-style-type: none"> - Policy 4, Condition 4c: The new sewage conveyance system and new or expanded existing treatment facility would be consistent with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the <i>Ontario Water Resources Act</i> (OWRA) (see response to Screening Criterion No. 12). 	<ul style="list-style-type: none"> - Policy 4, condition 4c: The new sewage conveyance system and new or expanded existing treatment facility would be consistent with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the <i>Ontario Water Resources Act</i> (OWRA) (see response to Screening Criterion No. 12).
<p>Summary of Key Findings</p> <ul style="list-style-type: none"> ▪ Alternatives 2 and 4 would be consistent with Section 3.2.5 "Water and Wastewater Systems," specifically Policy 3 (returning water to the Great Lake watershed from which the withdrawal originates) and Policy 4 (constructing or expanding water and wastewater systems). ▪ Alternative 3 would adhere to most of policies 3 and 4, with the exception of not accommodating the approved growth in the UYSS service area. 				

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
Screening Criterion No. 6: Is the alternative consistent with the Lake Simcoe Protection Plan (LSPP)?	Yes <ul style="list-style-type: none"> Alternative No. 1 would be consistent with the policies of the LSPP, including the Phosphorus Reduction Strategy because the phosphorus nutrient load to Lake Simcoe would not change (i.e., since the approved growth in the UYSS service area would not occur, there would be no additional sewage generated requiring treatment and discharge to Lake Simcoe). 	Yes <ul style="list-style-type: none"> Alternative No. 2 would be consistent with the LSPP including the Phosphorus Reduction Strategy because the phosphorus nutrient load to Lake Simcoe would not change (i.e., the sewage from the approved growth within the UYSS service area would be conveyed to the Duffin Creek WPCP for treatment via the YDSS). 	No <ul style="list-style-type: none"> Alternative No. 3 would not be consistent with the LSPP including the Phosphorus Reduction Strategy because the proposed sewage treatment components (i.e., tertiary and quaternary – Reverse Osmosis) have not met performance requirements for their intended use with respect to consistently achieving a low Total Phosphorus TP concentration limit of 0.008 mg/L (i.e., 124 kg/yr annual TP loading) over an extended period. In order for this alternative to be implemented, Water Quality Trading would be required to increase the 124 kg/yr annual TP loading limit to allow for an effluent TP concentration in the range of 0.01 to 0.02 mg/L. 	Yes <ul style="list-style-type: none"> Alternative No. 4 would be consistent with the LSPP including the Phosphorus Reduction Strategy because it meets the annual phosphorus nutrient load (i.e., 124 kg/yr annual TP loading) plus phosphorus nutrient load offsets within the Lake Simcoe watershed to allow for an effluent TP concentration in the range of 0.01 to 0.02 mg/L which would also improve water quality. Furthermore, Alternative No. 4 would improve the water quantity flowing into Lake Simcoe because the approximate 40 MLD of groundwater well supply that currently discharges to Lake Ontario via the YDSS would remain within the Lake Simcoe watershed. In addition, reclaimed water use for irrigation would aid in conserving water resources within the Lake Simcoe watershed.

Summary of Key Findings

- Alternatives 1, 2, and 4 would be consistent with the LSPP policies, including the Phosphorus Reduction Strategy to reduce phosphorus levels in Lake Simcoe.
- Alternatives 1 and 2 would not convey wastewater to Lake Simcoe.
- Alternative 3 would not consistently achieve the Phosphorus loading targets.
- Alternative 4 would be within the phosphorus effluent limits of the Phosphorous Reduction Strategy. Furthermore, Alternative No. 4 would improve the water quality and quantity flowing into Lake Simcoe.

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
	No	Yes	No	Yes
Screening Criterion No. 7: Is the alternative consistent with York Region's Official Plan (ROP)?	<ul style="list-style-type: none"> ▪ Overall, Alternative No. 1 would not be consistent with the policies directly relevant to this project for achieving the ROP water and sewer strategies objective of delivering safe, clean drinking water and providing long term water and wastewater services to York Region's communities that are safe, well-managed, and sustainable as follows: <ul style="list-style-type: none"> - Policy 5 of Section 7.3 of ROP would not be applicable because since no new sewage collection and/or treatment capacity would be built with Alternative No.1; there would be no need for working with partners. - Would be non-compliant with Policy 6 of Section 7.3 of ROP would not be complied with because full wastewater services would not be provided with Alternative No. 1 to accommodate the approved growth for the UYSS service area to 2031. 	<ul style="list-style-type: none"> ▪ Overall, Alternative No. 2 would be consistent with the policies directly relevant to this project for achieving the ROP water and sewer strategies objective of delivering safe, clean drinking water and providing long term water and wastewater services to York Region's communities that are safe, well-managed, and sustainable as follows: <ul style="list-style-type: none"> - Would be compliant with Policy 5 of Section 7.3 of ROP because although the new sewage conveyance system would be built entirely within York Region, the existing agreement with the Regional Municipality of Durham would continue allowing the conveyed sewage to be treated at the Duffin Creek Water Pollution Control Plant (WPCP). - Would be compliant with Policy 6 of Section 7.3 of ROP because full wastewater services would be provided with Alternative No. 2 to accommodate the approved growth for the UYSS service area to 2031. 	<ul style="list-style-type: none"> ▪ Overall, Alternative No. 3 would not be consistent with the policies directly relevant to this project for achieving the ROP water and sewer strategies objective of delivering safe, clean drinking water and providing long term water and wastewater services to York Region's communities that are safe, well-managed, and sustainable as follows: <ul style="list-style-type: none"> - Policy 5 of Section 7.3 of ROP would not be applicable because the new sewage conveyance system and new or expanded existing treatment facility could be implemented by York Region without the need for working with partners. - Would be non-compliant with Policy 6 of Section 7.3 of ROP because not all of the growth forecasted to occur in the UYSS service area to 2031 could be accommodated by Alternative No. 3 because the new sewage conveyance system and the new or expanded existing treatment facility would not be able to receive Provincial approval (i.e., Environmental Compliance 	<ul style="list-style-type: none"> ▪ Overall, Alternative No. 4 would be consistent with the policies directly relevant to this project for achieving the ROP water and sewer strategies objective of delivering safe, clean drinking water and providing long term water and wastewater services to York Region's communities that are safe, well-managed, and sustainable as follows: <ul style="list-style-type: none"> - Would be compliant with Policy 5 of Section 7.3 of ROP because although the new sewage conveyance system and new or expanded existing treatment facility would be built entirely within York Region, York Region would negotiate agreements for reuse water with public/private sector partners. - Would be compliant with Policy 6 of Section 7.3 of ROP because full wastewater services would be provided with Alternative No. 4 to accommodate the approved growth for the UYSS service area to 2031.

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
			Approval). This is due to the increase in the phosphorous nutrient load to Lake Simcoe (i.e., the 0.008 mg/L phosphorus effluent limit cannot be consistently achieved).	
	<ul style="list-style-type: none"> - Would be compliant with Policy 7 of Section 7.3 of ROP because the consideration of the "Do Nothing" alternative is in keeping with the requirements of the <i>Environmental Assessment Act (EAA)</i>. 	<ul style="list-style-type: none"> - Would be compliant with Policy 7 of Section 7.3 of ROP because the consideration of the "Discharge to Lake Ontario" alternative is in keeping with the requirements of the <i>Environmental Assessment Act (EAA)</i>, the York Region Water and Wastewater Master Plan, and the approved UYSS EA Terms of Reference (ToR). 	<ul style="list-style-type: none"> - Would be compliant with Policy 7 of Section 7.3 of ROP because the consideration of the "Discharge to Lake Simcoe" alternative is in keeping with the requirements of the <i>Environmental Assessment Act (EAA)</i>, the York Region Water and Wastewater Master Plan, and the approved UYSS EA Terms of Reference (ToR). 	<ul style="list-style-type: none"> - Would be compliant with Policy 7 of Section 7.3 of ROP because the consideration of the "Innovative Wastewater Treatment Technologies" alternative is in keeping with the requirements of the <i>Environmental Assessment Act (EAA)</i> and the approved UYSS EA Terms of Reference (ToR).
	<ul style="list-style-type: none"> - Policy 12 of Section 7.3 of ROP would not be applicable with Alternative No. 1 because there would be no need to supply water to the UYSS service area because the approved growth would not occur. 	<ul style="list-style-type: none"> - Would be compliant with Policy 12 of Section 7.3 of ROP because the approved growth for the UYSS service area would be supplied with water from the Great Lakes (i.e., Lake Ontario and Lake Huron (Lake Simcoe)), subject to the restrictions of the Greenbelt Plan, Lake Simcoe Protection Plan, or other Provincial plans and statutes. 	<ul style="list-style-type: none"> - Would be compliant with Policy 12 of Section 7.3 of ROP because the approved growth for the UYSS service area would be supplied with water from the Great Lakes (i.e., Lake Ontario and Lake Huron (Lake Simcoe)), subject to the restrictions of the Greenbelt Plan, Lake Simcoe Protection Plan, or other Provincial plans and statutes. 	<ul style="list-style-type: none"> - Would be compliant with Policy 12 of Section 7.3 of ROP because the approved growth for the UYSS service area would be supplied with water from the Great Lakes (i.e., Lake Ontario and Lake Huron (Lake Simcoe)) subject to the restrictions of the Greenbelt Plan, Lake Simcoe Protection Plan, or other Provincial plans and statutes.
	<ul style="list-style-type: none"> - Policy 13 of Section 7.3 of ROP would not be applicable with Alternative No. 1 because there would be no change in the existing Great Lakes water balance by "doing nothing". 	<ul style="list-style-type: none"> - Would be compliant with Policy 13 of Section 7.3 of because Alternative No. 2 supports the Great Lakes water balance by continuing to invest in Lake Ontario based infrastructure, and ensuring that water removed 	<ul style="list-style-type: none"> - Would be compliant with Policy 13 of Section 7.3 of ROP because Alternative No. 3 supports the Great Lakes water balance by continuing to invest in Lake Ontario based infrastructure (i.e., existing YDSS 	<ul style="list-style-type: none"> - Would be compliant with Policy 13 of Section 7.3 of ROP would be complied with because Alternative No. 4 supports the Great Lakes water balance by continuing to invest in Lake Ontario based infrastructure (i.e.,

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
	<ul style="list-style-type: none"> - Policy 16 of Section 7.3 of ROP would not be applicable with Alternative No. 1 because there would be no new sewage collection and/or treatment capacity built by "doing nothing" and hence no need to conform with the Oak Ridges Moraine Conservation Plan, the Greenbelt Plan or the Lake Simcoe Protection Plan. - Would be non-compliant with Policy 18 of Section 7.3 of ROP because reliable water and wastewater services would not be provided to residents and businesses to ensure continuing community well-being and the economic vitality of the Region. - Would be non-compliant with Policy 20 of Section 7.3 of ROP because innovative new technologies for wastewater treatment would not be investigated by "doing nothing". 	<p>from Lake Ontario is returned at an equivalent or better quality.</p> <ul style="list-style-type: none"> - Would be compliant with Policy 16 of Section 7.3 of ROP because the new sewage conveyance system built within the Oak Ridges Moraine, Greenbelt, and Lake Simcoe watershed would conform with the Oak Ridges Moraine Conservation Plan, the Greenbelt Plan, and the Lake Simcoe Protection Plan. - Would be compliant with Policy 18 of Section 7.3 of ROP because reliable water and wastewater services would be provided to residents and businesses to ensure continuing community well-being and the economic vitality of the Region. - Would be compliant with Policy 20 of Section 7.3 of ROP because innovative wastewater treatment technologies would be investigated during the Alternative Methods of Carrying Out the Undertaking EA stage as part of Alternative No. 2 in accordance with the approved UYSS EA ToR. 	<p>modifications), and ensuring that water removed from Lake Ontario is returned at an equivalent or better quality.</p> <ul style="list-style-type: none"> - Would be compliant with Policy 16 of Section 7.3 of ROP because the new sewage conveyance system and new or expanded existing treatment facility built within the Greenbelt, and Lake Simcoe watershed would conform with the Greenbelt Plan and the Lake Simcoe Protection Plan. - Would be non-compliant with Policy 18 of Section 7.3 of ROP because reliable water and wastewater services would not be provided to all residents and businesses within the UYSS service area to ensure continuing community well-being and the economic vitality of the Region. - Would be compliant with Policy 20 of Section 7.3 of ROP because Alternative No. 3 includes state of the art wastewater treatment (i.e., tertiary and quaternary – Reverse Osmosis). 	<p>existing YDSS modifications), and ensuring that water removed from Lake Ontario is returned at an equivalent or better quality.</p> <ul style="list-style-type: none"> - Would be compliant with Policy 16 of Section 7.3 of ROP because the new sewage conveyance system and new or expanded existing treatment facility built within the Greenbelt and Lake Simcoe watershed would conform with the Greenbelt Plan and the Lake Simcoe Protection Plan. - Would be compliant with Policy 18 of Section 7.3 of ROP because reliable water and wastewater services would be provided to residents and businesses to ensure continuing community well-being and the economic vitality of the Region. - Would be compliant with Policy 20 of Section 7.3 of ROP because Alternative No. 4 includes state of the art wastewater treatment (i.e., tertiary and quaternary – Reverse Osmosis) and use of reclaimed water and innovative approaches for phosphorus off-setting within the Lake Simcoe watershed.

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
	<ul style="list-style-type: none"> - Would be non-compliant with Policy 25 of Section 7.3 of ROP because existing wastewater effluent would continue to be managed to minimize impacts on the quality of the receiving water. 	<ul style="list-style-type: none"> - Would be compliant with Policy 25 of Section 7.3 of ROP because wastewater effluent would be managed to minimize impacts on the quality of the receiving water. 	<ul style="list-style-type: none"> - Would be non-compliant with Policy 25 of Section 7.3 of ROP because wastewater effluent would not be managed to minimize impacts on the quality of the receiving water (an increase in the phosphorous nutrient load to Lake Simcoe (i.e., the 0.008 mg/L phosphorous effluent limit cannot be consistently achieved). 	<ul style="list-style-type: none"> - Would be compliant with Policy 25 of Section 7.3 of ROP because wastewater effluent would be managed to minimize impacts on the quality of the receiving water.
<p>Summary of Key Findings</p> <ul style="list-style-type: none"> ▪ Alternatives 2 and 4 would be consistent with the nine relevant policies relating to "Water and Wastewater Servicing" in Section 7.3 of York Region's Official Plan. 				
Screening Criterion No. 8:	No	Yes	Yes	Yes
Is the alternative consistent with York Region's 2009 Water and Wastewater Master Plan Update?	<ul style="list-style-type: none"> ▪ Alternative No. 1 would not be consistent with York Region's 2009 Water and Wastewater Master Plan Update because the Water and Wastewater Master Plan Update recommended a Lake Ontario based solution for servicing the approved growth in the UYSS service area. 	<ul style="list-style-type: none"> ▪ Alternative No. 2 would be consistent with York Region's 2009 Water and Wastewater Master Plan Update because the Water and Wastewater Master Plan Update recommended a Lake Ontario based solution for servicing the approved growth in the UYSS service area. 	<ul style="list-style-type: none"> ▪ Alternative No. 3 would be consistent with York Region's 2009 Water and Wastewater Master Plan Update because although the Water and Wastewater Master Plan Update recommended a Lake Ontario based solution for servicing the approved growth in the UYSS service area, this recommendation was subject to the outcome of a more detailed examination of alternatives as part of an individual environmental assessment (i.e., UYSS EA). 	<ul style="list-style-type: none"> ▪ Alternative No. 4 would be consistent with York Region's 2009 Water and Wastewater Master Plan Update because although the Water and Wastewater Master Plan Update recommended a Lake Ontario based solution for servicing the approved growth in the UYSS service area, this recommendation was subject to the outcome of a more detailed examination of alternatives as part of the an individual environmental assessment (i.e., UYSS EA).
<p>Summary of Key Findings</p> <ul style="list-style-type: none"> ▪ Alternatives 2, 3, and 4 would be consistent with the York Region's 2009 Water and Wastewater Master Plan Update. 				

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
Screening Criterion No. 9:	No	Yes	No	Yes
Is the alternative consistent with York Region's Sustainability Strategy for Water and Wastewater Servicing ³ ?	<ul style="list-style-type: none"> Alternative No. 1 would only align with 7 of the 10 underlying principles of York Region's Sustainability Strategy for Water and Wastewater Servicing. 	<ul style="list-style-type: none"> Alternative No. 2 would align with all of the 10 underlying principles of York Region's Sustainability Strategy for Water and Wastewater Servicing. 	<ul style="list-style-type: none"> Alternative No. 3 would only align with 8 of the 10 underlying principles of York Region's Sustainability Strategy for Water and Wastewater Servicing. 	<ul style="list-style-type: none"> Alternative No. 4 would align with all 10 underlying principles of York Region's Sustainability Strategy for Water and Wastewater Servicing.
	<p>Summary of Key Findings</p> <ul style="list-style-type: none"> Alternatives 2 and 4 would be consistent with all of the underlying principles of York Region's 2008 Water and Wastewater Sustainability Strategy. Alternative No. 4 would improve the quality and quantity of water flowing into Lake Simcoe in support of Sustainability Principle No. 2: Healthy Watersheds. 			
Screening Criterion No. 10:	Yes	Yes	Yes	Yes
Is the alternative consistent with York Region's Water Efficiency and Conservation Programs?	<ul style="list-style-type: none"> Alternative No. 1 would be consistent with York Region's Water Efficiency and Conservation Programs because they would continue to be supported (i.e., the existing programs would continue and no additional growth would take place within the UYSS service area thus reducing water demand). 	<ul style="list-style-type: none"> Alternative No. 2 would be consistent with York Region's Water Efficiency and Conservation Programs because they would continue to be supported (i.e., the existing programs would continue and the new infrastructure would meet water efficiency program requirements). 	<ul style="list-style-type: none"> Alternative No. 3 would be consistent with York Region's Water Efficiency and Conservation Programs because they would continue to be supported (i.e., the existing programs would continue and the new infrastructure would meet water efficiency program requirements). 	<ul style="list-style-type: none"> Alternative No. 4 would be consistent with York Region's Water Efficiency and Conservation Programs because they would continue to be supported and enhanced (i.e., the existing programs would continue, the new infrastructure would meet water efficiency program requirements, and the use of reclaimed water would reduce water demand for fresh/potable water resources (e.g., irrigation)).
	<p>Summary of Key Findings</p> <ul style="list-style-type: none"> All four alternatives would support York Region's water efficiency and conservation programs. Alternative 4 would enhance these programs by using reclaimed water, and therefore reducing the demand for fresh/potable water resources. 			

3. The application of Screening Criterion No. 9 is further detailed in Table F-3 "Application of York Region's Sustainability Strategy for Water and Wastewater Servicing to the Alternatives To The Undertaking: UYSS EA" of Appendix "F".

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
Screening Criterion No. 11:	Yes	Yes	Yes	Yes
Is the alternative consistent with the Source Water Protection – South Georgian Bay Lake Simcoe Source Protection Region?	<ul style="list-style-type: none"> Alternative No. 1 would avoid negatively affecting the wellhead protection areas (WHPAs), intake protection zones (IPZs), and other vulnerable areas in the UYSS EA study area because no new infrastructure would be built. 	<ul style="list-style-type: none"> Alternative No. 2 would avoid negatively affecting the WHPAs, IPZs, and other vulnerable areas in the UYSS EA study area by developing designing/constructing/operating all new infrastructure in accordance with the policies set out in the Source Water Protection – South Georgian Bay Lake Simcoe Source Protection Region. 	<ul style="list-style-type: none"> Alternative No. 3 would avoid negatively affecting the WHPAs, IPZs, and other vulnerable areas in the UYSS EA study area by developing/designing/constructing/operating all new infrastructure in accordance with the policies set out in the Source Water Protection – South Georgian Bay Lake Simcoe Source Protection Region. 	<ul style="list-style-type: none"> Alternative No. 4 would avoid negatively affecting the WHPAs, IPZs, and other vulnerable areas in the UYSS EA study area by developing/designing/constructing/operating all new infrastructure in accordance with the policies set out in the Source Water Protection – South Georgian Bay Lake Simcoe Source Protection Region.
	Summary of Key Findings			
	<ul style="list-style-type: none"> All four alternatives would avoid negatively affecting wellhead protection areas, intake protection zones, and other vulnerable areas (significant recharge areas, highly vulnerable aquifers) identified in the UYSS EA study area. 			

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
Screening Criterion No. 12: Is the alternative consistent with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the Ontario Water Resources Act (OWRA)?	Not Applicable	Yes	Yes	Yes
	<ul style="list-style-type: none"> Since a transfer of water would not be required because no growth would be assigned to the UYSS service area with Alternative No. 1, Screening Criterion No. 12 would not apply. 	<ul style="list-style-type: none"> Alternative No. 2 would be consistent with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the OWRA because although it requires a transfer of water from Lake Ontario for potable water supply to meet the approved growth in the UYSS service area, it would be developed, designed, constructed and operated to meet the seven exception criteria as follows⁴ : <ol style="list-style-type: none"> Exception Criterion No. 1) The water transferred is returned, naturally or after use, to the source watershed less an allowance for consumptive use. <p>With this alternative, for growth to 2031 within the UYSS service area the transferred water less the allowable consumptive use would be returned to Lake Ontario as sewage via the YDSS/Duffin Creek WPCP.</p> 	<ul style="list-style-type: none"> Alternative No. 3 would be consistent with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the OWRA because although it requires a transfer of water from Lake Ontario for potable water supply to meet the approved growth in the UYSS service area, it would be developed, design, constructed and operated to meet the seven exception criteria as follows⁵: <ol style="list-style-type: none"> <i>Exception Criterion No. 1) The water transferred is returned, naturally or after use, to the source watershed less an allowance for consumptive use.</i> <p>With this alternative for growth to 2031 in the Towns of Aurora and Newmarket, the transferred water less the allowable consumptive use would be returned to Lake Ontario as sewage via the YDSS/Duffin Creek WPCP.</p> <p>For the communities of Holland Landing, Queensville and Sharon in East Gwillimbury, growth to</p> 	<ul style="list-style-type: none"> Alternative No. 4 would be consistent with the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (2005) as incorporated into the OWRA because although it requires a transfer of water from Lake Ontario for potable water supply to meet the approved growth in the UYSS service area, it would be developed, design, constructed and operated to meet the seven exception criteria as follows⁶: <ol style="list-style-type: none"> Exception Criterion No. 1) The water transferred is returned, naturally or after use, to the source watershed less an allowance for consumptive use. <p>With this alternative for growth to 2031 in the Towns of Aurora and Newmarket, the transferred water less the allowable consumptive use would be returned to Lake Ontario as sewage via the YDSS/Duffin Creek WPCP.</p> <p>For the communities of Holland Landing, Queensville and Sharon in East Gwillimbury, growth to 2031 would be serviced by ground water from municipal wells within the Lake Simcoe watershed. As sewage would be treated at a</p>

⁴ Additional provincial regulations that will clarify and establish the applicable requirement for each exception criteria has yet to be finalized by the Province.

⁵ Additional provincial regulations that will clarify and establish the applicable requirement for each exception criteria has yet to be finalized by the Province.

⁶ Additional provincial regulations that will clarify and establish the applicable requirement for each exception criteria has yet to be finalized by the Province.

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
			2031 would be serviced by ground water from municipal wells within the Lake Simcoe watershed. As sewage would be treated at a facility within the Lake Simcoe watershed, there is no transfer achieving a water balance within the Lake Simcoe watershed.	facility within the Lake Simcoe watershed, there is no transfer achieving a water balance within the Lake Simcoe watershed.
		2. Exception Criterion No. 2) The need for water cannot be reasonably avoided through efficient use and conservation of existing water supplies.	2. Exception Criterion No. 2) The need for water cannot be reasonably avoided through efficient use and conservation of existing water supplies	2. Exception Criterion No. 2) The need for water cannot be reasonably avoided through efficient use and conservation of existing water supplies.
		Although York Region has saved approximately 20.4 MLD of water since the inception of its Water Efficiency and Conservation Program (includes the awards winning "Water for Tomorrow" program) 11 years ago, the need for water would remain for the UYSS service area.	Although York Region has saved approximately 20.4 MLD of water since the inception of its Water Efficiency and Conservation Program (includes the awards winning "Water for Tomorrow" program) 11 years ago, the need for water would remain for the UYSS service area.	Although York Region has saved approximately 20.4 MLD of water since the inception of its Water Efficiency and Conservation Program (includes the awards winning "Water for Tomorrow" program) 11 years ago, the need for water would remain for the UYSS service area.
		3. <i>Exception Criterion No. 3) The transfer amount is limited to what is reasonable for the intended purpose.</i>	3. <i>Exception Criterion No. 3) The transfer amount is limited to what is reasonable for the intended purpose.</i>	3. <i>Exception Criterion No. 3) The transfer amount is limited to what is reasonable for the intended purpose.</i>
		The transfer amount would be used to supply only the approved growth for the UYSS service area and is based on historical potable water use records being well within provincial guidelines.	The transfer amount would be used to supply only the approved growth for the UYSS service area and is based on historical potable water use records being well within provincial guidelines.	The transfer amount would be used to supply only the approved growth for the UYSS service area and is based on historical potable water use records being well within provincial guidelines.
		4. <i>Exception Criterion No. 4) There is no significant adverse impact anticipated (individual or cumulative)</i>	4. <i>Exception Criterion No. 4) There is no significant adverse impact anticipated (individual or cumulative)</i>	4. <i>Exception Criterion No. 4) There is no significant adverse impact anticipated (individual or cumulative)</i>

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
		<p>No significant adverse impact would be anticipated (individual or cumulative) based on the facts that there is no indication that Lake Ontario is undergoing stress and the current number of municipal and residential takings suggest sufficient capacity to support the proposed taking.</p>	<p>No significant adverse impact would be anticipated (individual or cumulative) based on the facts that there is no indication that Lake Ontario is undergoing stress and the current number of municipal and residential takings suggest sufficient capacity to support the proposed taking.</p>	<p>No significant adverse impact would be anticipated (individual or cumulative) based on the fact that there is no indication that Lake Ontario is undergoing stress and the current number of municipal and residential takings suggest sufficient capacity to support the proposed taking.</p>
		<p>5. Exception Criterion No. 5) Feasible, environmentally sound, and cost-effective water conservation measures must be applied to minimize taking/withdrawal and consumptive use losses.</p>	<p>5. Exception Criterion No. 5) Feasible, environmentally sound, and cost-effective water conservation measures must be applied to minimize taking/withdrawal and consumptive use losses.</p>	<p>5. Exception Criterion No. 5) Feasible, environmentally sound, and cost-effective water conservation measures must be applied to minimize taking/withdrawal and consumptive use losses.</p>
		<p>Water taking/withdrawal and consumptive use losses would be minimized via York Region's existing Water Efficiency and Conservation Programs, which are feasible, environmentally sound, and cost effective.</p>	<p>Water taking/withdrawal and consumptive use losses would be minimized via York Region's existing Water Efficiency and Conservation Programs, which are feasible, environmentally sound, and cost effective.</p>	<p>Water taking/withdrawal and consumptive use losses would be minimized via York Region's existing Water Efficiency and Conservation Programs, which are feasible, environmentally sound, and cost effective.</p>
		<p>6. <i>Exception Criterion No. 6) There is compliance with all existing laws and agreements,</i></p>	<p>6. <i>Exception Criterion No. 6) There is compliance with all existing laws and agreements,</i></p>	<p>6. <i>Exception Criterion No. 6) There is compliance with all existing laws and agreements.</i></p>
		<p>All applicable laws and agreements would be met as part of developing/designing/constructing/operating this alternative.</p>	<p>All applicable laws and agreements would be met as part of developing/designing/constructing/operating this alternative.</p>	<p>All applicable laws and agreements would be met as part of developing/designing/constructing/operating this alternative.</p>
		<p>7. Exception Criterion No. 7) The transfer must meet any additional conditions that are imposed.</p>	<p>7. Exception Criterion No. 7) The transfer must meet any additional conditions that are imposed.</p>	<p>7. Exception Criterion No. 7) The transfer must meet any additional conditions that are imposed.</p>
		<p>The transfer would meet any additional conditions that are imposed</p>	<p>The transfer would meet any additional conditions that are imposed.</p>	<p>The transfer would meet any additional conditions that are imposed.</p>

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
Summary of Key Findings				
<ul style="list-style-type: none"> Alternatives 2, 3, and 4 would be consistent with the intra-basin transfer provisions of the <i>Ontario Water Resources Act (OWRA)</i> because they would be developed, designed, constructed, and operated to meet the seven exception criteria. Unlike Alternative 2, Alternatives 3 and 4 would maintain a water balance within the Lake Simcoe watershed. 				
Screening Criterion No. 13:	Yes	Yes	Yes	Yes
Is the alternative financially viable?	<ul style="list-style-type: none"> Alternative No. 1 ("Do Nothing") would be financially viable because there would be no increased financial obligations beyond existing conditions including no capital, land acquisition, or operation and maintenance costs". 	<ul style="list-style-type: none"> Alternative No. 2 would be financially viable because it is within York Region's ability to provide financing for and cost recovery of the proposed infrastructure based on the following: <ul style="list-style-type: none"> Estimated Conceptual Capital Costs: \$463M (primarily pumped sewage flow) to \$707M (all gravity sewage flow) which includes land acquisition costs. Estimated Conceptual Operations & Maintenance Costs: \$6M (all gravity pumped sewage flow) to \$7M (primarily pumped sewage flow) annually. Total Estimated Conceptual 50 Year Net Present Value Costs: \$579M (primarily pumped sewage flow) to \$815M (all gravity sewage flow). 	<ul style="list-style-type: none"> Alternative No. 3 would be financially viable because it is within York Region's ability to provide financing for and cost recovery of the proposed infrastructure based on the following: <ul style="list-style-type: none"> Estimated Conceptual Capital Costs: \$404M (discharge to Holland River) to \$484M (discharge to Cook's Bay) which includes land acquisition costs. Estimated Conceptual Operations & Maintenance Costs: \$13M for both discharging to either Holland River or Cook's Bay annually. Total Estimated Conceptual 50 Year Net Present Value Costs: \$643M (discharge to Holland River) to \$723M (discharge to Cook's Bay). 	<ul style="list-style-type: none"> Alternative No. 4 would be financially viable because it is within York Region's ability to provide financing for and cost recovery of the proposed infrastructure based on the following: <ul style="list-style-type: none"> Estimated Conceptual Capital Costs: \$452M (discharge to Holland River) to \$532M (discharge to Cook's Bay) which includes land acquisition costs. Estimated Conceptual Operations & Maintenance Costs: \$13M for both discharging to either Holland River or Cook's Bay annually. Total Estimated Conceptual 50 Year Net Present Value Costs: \$695M (discharge to Holland River) to \$775M (discharge to Cook's Bay).
Summary of Key Findings				
<ul style="list-style-type: none"> All four alternatives would be financially viable. Alternative 4 would provide flexibility to accommodate potential future changes in regulations and technologies because construction can be phased over time. 				

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
Screening Criterion No. 14: Is the alternative within the ability of York Region to implement?	Yes	Yes	No	Yes
	<ul style="list-style-type: none"> Alternative No. 1 could be implemented by Region as they could continue under the current scenario and do nothing (Alternative No. 1) as the outcome of an EA. 	<ul style="list-style-type: none"> Alternative No. 2 could be implemented by York Region for the following reasons : <ul style="list-style-type: none"> Because the new sewage conveyance system would be built entirely within the Region's municipal jurisdiction. Because the new sewage conveyance system could receive Provincial approval (i.e., Environmental Compliance Approval). 	<ul style="list-style-type: none"> Alternative No. 3 could not be implemented by York Region because the new sewage conveyance system and the new or expanded existing treatment facility would not receive Provincial approval because it could not consistently achieve a low Total Phosphorus TP concentration limit of 0.008 mg/L (i.e., 124 kg/yr annual TP loading) over an extended period. 	<ul style="list-style-type: none"> Alternative No. 4 could be implemented by York Region for the following reasons: <ul style="list-style-type: none"> Because the new sewage conveyance system and the new or expanded existing treatment facility would be built entirely within the Region's municipal jurisdiction. Because the new sewage conveyance system and the new or expanded existing treatment facility could receive Provincial approval (i.e., Environmental Compliance Approval) Implementation of the water reuse component could be accomplished through public/private sector operating agreements.

Summary of Key Findings

- All alternatives except Alternative 3 could be implemented by York Region alone or through an arrangement with another party.
- Alternative 3 would not receive provincial approval, because the Lake Simcoe phosphorus effluent limits cannot be achieved, and cannot therefore be implemented by York Region.

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
	No	Yes	No	Yes
Screening Criterion No. 15: Is the alternative able to meet the purpose of the Environmental Assessment Act (EA Act)?	<ul style="list-style-type: none"> ▪ Alternative No. 1 would not be able to meet the overall purpose of the EA Act (i.e., protection, conservation, and wise management of the environment for the betterment of the people of Ontario) for the following reason: ▪ No additional sewage collection and/or treatment capacity would be generated with this alternative to accommodate the approved growth in the UYSS service area based on the Growth Plan for the Greater Golden Horseshoe (as established by the <i>Places to Grow Act, 2005</i>). Consequently, the approved growth in the UYSS service area would have to be limited and/or re-directed either to another location within York Region and/or to another municipality within the Greater Golden Horseshoe area, which could be less suitable environmentally to accommodate the approved growth. 	<ul style="list-style-type: none"> ▪ Alternative No. 2 would be able to meet the overall purpose of the EA Act (i.e., protection, conservation, and wise management of the environment for the betterment of the people of Ontario) for the following reasons: ▪ A new sewage conveyance system would be built to accommodate the additional sewage flows from the approved growth in the UYSS service area in accordance with required approvals/permits. ▪ The environment associated with building the new sewage conveyance system would be protected, conserved, and wisely managed through the: <ol style="list-style-type: none"> 1. application of avoidance, mitigation, compensation and, as appropriate, enhancement measures (as developed as part of the UYSS EA) during construction/operation of this alternative 2. adherence to any Conditions of Approval issued by the Minister of the Environment associated with EA Act approval and/or associated with subsequent design/environmental permits/approvals (obtained as part of detail design) issued by the Ministry of the Environment 	<ul style="list-style-type: none"> ▪ Alternative No. 3 would not be able to meet the overall purpose of the EA Act (i.e., protection, conservation, and wise management of the environment for the betterment of the people of Ontario) because although the environment associated with building the new sewage conveyance system and a new or expanded existing treatment facility would be protected, conserved, and wisely managed based on the reasons outlined below, the new sewage conveyance system and a new or expanded existing treatment facility would not be able to accommodate the additional sewage flows from the approved growth in the UYSS service area. As a result, the prescribed growth in the UYSS service area would have to be limited and/or re-directed either to another location within York Region and/or to another municipality within the Greater Golden Horseshoe area, which could be less suitable environmentally to accommodate the prescribed growth 1. application of avoidance, mitigation, compensation and, as appropriate, enhancement measures (as developed as part of the UYSS EA) during construction/operation of this alternative 2. adherence to any Conditions of Approval issued by the Minister of 	<ul style="list-style-type: none"> ▪ Alternative No. 4 would be able to meet the overall purpose of the EA Act (i.e., protection, conservation, and wise management of the environment for the betterment of the people of Ontario) for the following reasons: ▪ A new sewage conveyance system and a new or expanded existing treatment facility would be built to accommodate the additional sewage flows from the approved growth in the UYSS service area in accordance with required approvals/permits. ▪ The environment associated with building the new sewage conveyance system and a new or expanded existing treatment facility would be protected, conserved, and wisely managed through the: <ol style="list-style-type: none"> 1. application of avoidance, mitigation, compensation and, as appropriate, enhancement measures (as developed as part of the UYSS EA) during construction/operation of this alternative 2. adherence to any Conditions of Approval issued by the Minister of the Environment associated with EA Act approval and/or associated with subsequent design/environmental permits/approvals (obtained as

Screening Criteria	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technologies
		<p>during construction/operation of this alternative</p> <p>3. implementation of any construction, post-construction, and/or operational monitoring programs</p>	<p>the Environment associated with <i>EA Act</i> approval and/or associated with subsequent design/environmental permits/approvals (obtained as part of detail design) issued by the Ministry of the Environment during construction/operation of this alternative</p> <p>3. implementation of any construction, post-construction and/or operational monitoring programs</p>	<p>part of detail design) issued by the Ministry of the Environment during construction/operation of this alternative</p> <p>3. implementation of any construction, post-construction and/or operational monitoring programs</p> <p>▪ The environment associated with the Lake Simcoe watershed would be improved because of increased base flow and improved phosphorus concentrations to surface watercourses.</p>
<p>Summary of Key Findings</p> <ul style="list-style-type: none"> ▪ Alternatives 2 and 4 would be consistent with the overall purpose of the <i>EA Act</i> because the environment would be protected, conserved, and wisely managed for the betterment of the people of Ontario. 				

Table F.3: Application of York Region's Sustainability Strategy for Water and Wastewater Servicing to the Alternatives to the Undertaking Upper York Sewage Solutions Environmental Assessment

Sustainability Principles	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technology
Sustainability Principle No. 1:	Aligns with Sustainability Principle No. 1	Aligns with Sustainability Principle No. 1	Aligns with Sustainability Principle No. 1	Aligns with Sustainability Principle No. 1
Safe and Clean Drinking Water	<ul style="list-style-type: none"> Although no additional drinking water supply would be provided to the UYSS service area to accommodate the approved growth, York Region would continue to provide safe and clean drinking water to its current residents thereby aligning Alternative No. 1 with Sustainability Principle No. 1. 	<ul style="list-style-type: none"> Alternative No. 2 would align with Sustainability Principle No. 1 for the following reason: <ul style="list-style-type: none"> The current drinking water supply to the UYSS service area would be protected by Alternative No. 2 because additional sewage from approved growth would be treated at the Duffin Creek Water Pollution Control Plant (WPCP) prior to discharge into Lake Ontario. 	<ul style="list-style-type: none"> Alternative No. 3 would align with Sustainability Principle No. 1 for the following reason: <ul style="list-style-type: none"> The current drinking water supply to the UYSS service area would be protected by Alternative No. 3 because additional sewage from approved growth would be treated at the (1) Duffin Creek WPCP prior to discharge into Lake Ontario (portion from Aurora and Newmarket) and (2) new or expanded existing treatment facility prior to discharge into the Lake Simcoe Watershed (portion from East Gwillimbury). 	<ul style="list-style-type: none"> Alternative No. 4 would align with Sustainability Principle No. 1 for the following reason: <ul style="list-style-type: none"> The current drinking water supply to the UYSS service area would be protected by Alternative No. 4 because additional sewage from approved growth would be treated at the (1) Duffin Creek WPCP prior to discharge into Lake Ontario (portion from Aurora and Newmarket) and (2) new or expanded existing treatment facility prior to discharge into the Lake Simcoe Watershed via a surface water body and through water reuse (portion from East Gwillimbury).
Sustainability Principle No. 2:	Aligns with Sustainability Principle No. 2	Aligns with Sustainability Principle No. 2	Does not align with Sustainability Principle No. 2	Aligns with Sustainability Principle No. 2
Healthy Watersheds	<ul style="list-style-type: none"> Although no new infrastructure would be constructed with "do nothing", Alternative No. 1 would align with Sustainability Principle No. 2 because the existing YDSS would continue to provide safe treatment of sewage before discharge to Lake Ontario and effectively manage the intra-basin 	<ul style="list-style-type: none"> Alternative No. 2 would align with Sustainability Principle No. 2 for the following reasons: <ul style="list-style-type: none"> Effective management of the intra-basin transfer of water recognizing international and provincial obligation requirements Protects the safe yields of the 	<ul style="list-style-type: none"> Alternative No. 3 would not align with Sustainability Principle No. 2 because the Phosphorus Reduction Strategy (PRS) annual Total Phosphorus (TP) loading limit (124 kg/TP per year (i.e., 0.008 mg/l TP effluent concentration) can not be consistently achieved thereby resulting in further watershed water 	<ul style="list-style-type: none"> Alternative No. 4 would align with Sustainability Principle No. 2 for the following reasons: <ul style="list-style-type: none"> Effective management of the intra-basin transfer of water recognizing international and provincial obligation requirements Protects the safe yields of the drinking water quantities from

Sustainability Principles	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technology
	<p>transfer of water recognizing international and provincial obligation requirements</p>	<p>drinking water quantities from surface and groundwater regimes</p> <ul style="list-style-type: none"> - Secondary treatment produces an effluent that is non toxic to aquatic life - Provides improvement of the quality of water in the lower section of the East Holland River and Lake Simcoe watershed through decommissioning of the Holland Landing Lagoons and the resulting removal of nutrient loading (N, TP) to the East Holland River 	<p>quality degradation</p> <ul style="list-style-type: none"> ▪ Without Water Quality Trading (WQT) this alternative cannot meet the PRS TP load limit for surface water discharge 	<p>surface and groundwater regimes; eliminates the current 30 to 40 MLD water imbalance</p> <ul style="list-style-type: none"> - High purity Reverse Osmosis (RO) effluent discharged to the Lake Simcoe watershed; effluent is non- toxic to aquatic life; maintains effluent nutrient levels (N, TP) within the Phosphorous Reduction Strategy approved limits <ol style="list-style-type: none"> 1. Improvement to the quality of water in the Lake Simcoe watershed through discharge of high purity (RO) effluent from the WRC. 2. Augmentation of baseflow in the Lake Simcoe watershed during the summer low flow periods through discharge of high purity (RO) effluent from the WRC. 3. Improvement in the quality of water in the Lake Simcoe watershed through phosphorus off-setting 4. Use of reclaimed water for irrigation provides the opportunity to improve base flow to the Lake Simcoe watershed by reducing water taking from current sources for irrigation. 5. Use of reclaimed water for irrigation results in the natural reuse of nutrients (N, TP) and a reduction in the import and application of commercial fertilizer

Sustainability Principles	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technology
				6. Provides highest opportunity for watershed water conservation through recycle/re-use
Sustainability Principle No. 3:	Aligns with Sustainability Principle No. 3	Aligns with Sustainability Principle No. 3	Aligns with Sustainability Principle No. 3	Aligns with Sustainability Principle No. 3
Respect for Natural and Cultural Heritage	<ul style="list-style-type: none"> ▪ Alternative No. 1 would align with Sustainability Principle No. 3 for the following reason: <ul style="list-style-type: none"> - Although the "do nothing" alternative would not restore or enhance the natural environment, Alternative No. 1 would not adversely affect natural and cultural heritage thus respecting and protecting First Nations 	<ul style="list-style-type: none"> ▪ Alternative No. 2 would align with Sustainability Principle No. 3 for the following reasons: <ul style="list-style-type: none"> - The natural environment peripheral to or impacted by building the new sewage conveyance system would be restored and/or enhanced through the (1) application of mitigation and compensation, and, as appropriate, enhancement measures (as developed as part of the UYSS EA) during construction/operation of this alternative, (2) adherence to any Conditions of Approval issued by the Minister of the Environment and/or associated with subsequent design / environmental permits / approvals (obtained as part of detail design) during construction/operation of this alternative, and (3) implementation of any construction, post-construction, and/or operational monitoring programs. - First Nations and cultural heritage 	<ul style="list-style-type: none"> ▪ Alternative No. 3 would align with Sustainability Principle No. 3 for the following reasons: <ul style="list-style-type: none"> - The natural environment peripheral to or impacted by building the new sewage conveyance system and new or expanded existing treatment facility would be restored and/or enhanced through the (1) application of mitigation and compensation, and, as appropriate, enhancement measures (as developed as part of the UYSS EA) during construction/operation of this alternative, (2) adherence to any Conditions of Approval issued by the Minister of the Environment and/or associated with subsequent design/environmental permits/approvals (obtained as part of detail design) during construction/operation of this alternative, and (3) implementation of any construction, post-construction, and/or operational monitoring programs. - First Nations and cultural heritage 	<ul style="list-style-type: none"> ▪ Alternative No. 4 would align with Sustainability Principle No. 3 for the following reasons: <ul style="list-style-type: none"> - The natural environment peripheral to or impacted by building the new sewage conveyance system and new or expanded existing treatment facility would be restored and/or enhanced through the (1) application of mitigation and compensation, and, as appropriate, enhancement measures (as developed as part of the UYSS EA) during construction/operation of this alternative, (2) adherence to any Conditions of Approval issued by the Minister of the Environment and/or associated with subsequent design/environmental permits/approvals (obtained as part of detail design) during construction/operation of this alternative, and (3) implementation of any construction, post-construction, and/or operational monitoring programs. - First Nations and cultural heritage

Sustainability Principles	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technology
		would be respected and protected through implementation of the Protocol for First Nations Consultation (as per Appendix K of the Minister of the Environment Approved Terms of Reference for the UYSS EA).	would be respected and protected through implementation of the Protocol for First Nations Consultation (as per Appendix K of the Minister of the Environment Approved Terms of Reference for the UYSS EA).	would be respected and protected through implementation of the Protocol for First Nations Consultation (as per Appendix K of the Minister of the Environment Approved Terms of Reference for the UYSS EA).
Sustainability Principle No. 4:	Does not align with Sustainability Principle No. 4	Aligns with Sustainability Principle No. 4	Aligns with Sustainability Principle No. 4	Aligns with Sustainability Principle No. 4
Wise Use of Water	<ul style="list-style-type: none"> ▪ Alternative No. 1 would not align with Sustainability Principle No. 4 because York Region could not be committed to the wise use of water ensuring adequate water resources for today's residents and future generations. 	<ul style="list-style-type: none"> ▪ Alternative No. 2 would align with Sustainability Principle No. 4 for the following reasons: <ul style="list-style-type: none"> - The Region's Water Efficiency and Conservation Program would continue to manage drinking water through conservation, public education to ensure wise use of water. - This alternative supports York Region's water efficiency and conservation programs by ensuring all new infrastructure built would meet York Region's water efficiency and conservation program requirements. - Effective management of drinking water systems leakage in partnership with local municipalities through asset management programs to ensure wise use of water supply and efficient use of available water and wastewater infrastructure. - This alternative supports the 	<ul style="list-style-type: none"> ▪ Alternative No. 3 would align with Sustainability Principle No. 4 for the following reasons: <ul style="list-style-type: none"> - The Region's Water Efficiency and Conservation Program would continue to manage drinking water through conservation, public education to ensure wise use of water. - This alternative supports York Region's water efficiency and conservation programs by ensuring all new infrastructure built would meet York Region's water efficiency and conservation program requirements. - Effective management of drinking water system leakage in partnership with local municipalities through asset management programs to ensure wise use of water supply and efficient use of available water and wastewater infrastructure. - This alternative supports the 	<ul style="list-style-type: none"> ▪ Alternative No. 4 would align with Sustainability Principle No. 4 for the following reasons: <ul style="list-style-type: none"> - The Region's Water Efficiency and Conservation Program would continue to manage drinking water through conservation, public education to ensure wise use of water. - This alternative supports York Region's water efficiency and conservation programs by ensuring all new infrastructure built would meet York Region's water efficiency and conservation program requirements. - Effective management of drinking water system leakage in partnership with local municipalities through asset management programs to ensure wise use of water supply and efficient use of available water and wastewater infrastructure. - This alternative supports the

Sustainability Principles	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technology
		<p>Region and local municipalities as all capital delivery infrastructure built under this alternative would meet asset management program requirements and be managed under the Region's infrastructure management program.</p> <ul style="list-style-type: none"> - Effective management of extraneous wastewater flows in partnership with local municipalities to ensure efficient use of wastewater collection and treatment infrastructure and to ensure wise use of water and other natural resources. - This alternative supports the ongoing Inflow & Infiltration (I&I) Reduction Program initiated by York Region and the local municipalities by continuing the program and requiring all new infrastructure to meet the I&I Reduction Program objectives. 	<p>Region and local municipalities as all capital delivery infrastructure built under this alternative would meet asset management program requirements and be managed under the Region's infrastructure management program.</p> <ul style="list-style-type: none"> - Effective management of extraneous wastewater flows in partnership with local municipalities to ensure efficient use of wastewater collection and treatment infrastructure and to ensure wise use of water and other natural resources. - This alternative supports the ongoing Inflow & Infiltration (I&I) Reduction Program initiated by York Region and the local municipalities by continuing the program and requiring all new infrastructure to meet the I&I Reduction Program objectives. 	<p>Region and local municipalities as all capital delivery infrastructure built under this alternative would meet asset management program requirements and be managed under the Region's infrastructure management program.</p> <ul style="list-style-type: none"> - Effective management of extraneous wastewater flows in partnership with local municipalities to ensure efficient use of wastewater collection and treatment infrastructure and to ensure wise use of water and other natural resources. - This alternative supports the ongoing Inflow & Infiltration (I&I) Reduction Program initiated by York Region and the local municipalities by continuing the program and requiring all new infrastructure to meet the I&I Reduction Program objectives. - The use of reclaimed water reduces demand on fresh water resources by providing an alternate supply of irrigation water that also contains nutrients.

Sustainability Principles	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technology
Sustainability Principle No. 5:	Does not align with Sustainability Principle No. 5	Aligns with Sustainability Principle No. 5	Aligns with Sustainability Principle No. 5	Aligns with Sustainability Principle No. 5
Community Well Being	<ul style="list-style-type: none"> Alternative No. 1 would not align with Sustainability Principle No. 5 to ensure community well being and economic vitality because no additional sewage collection and treatment capacity would be built to accommodate the approved growth in the UYSS service area. 	<ul style="list-style-type: none"> Alternative No. 2 would align with Sustainability Principle No. 5 to ensure community well being and economic vitality because a new conveyance sewage system would accommodate the approved growth in the UYSS service area. 	<ul style="list-style-type: none"> Alternative No. 3 would align with Sustainability Principle No. 5 to ensure community well being and economic vitality because a new conveyance sewage system and new or expanded existing treatment facility would accommodate the approved growth in the UYSS service area. 	<ul style="list-style-type: none"> Alternative No. 4 would align with Sustainability Principle No. 5 to ensure community well being and economic vitality because a new conveyance sewage system and new or expanded existing treatment facility would accommodate the approved growth in the UYSS service area.
Sustainability Principle No. 6:	Aligns with Sustainability Principle No. 6	Aligns with Sustainability Principle No. 6	Does not align with Sustainability Principle No. 6	Aligns with Sustainability Principle No. 6
Full and equitable funding and value for money	<ul style="list-style-type: none"> Alternative No. 1 would align with Sustainability Principle No. 6 because: <ul style="list-style-type: none"> the full cost of the existing wastewater servicing would be equitably allocated the existing sustainable wastewater servicing programs would be fully funded for its full life cycle 	<ul style="list-style-type: none"> Alternative No. 2 would align with Sustainability Principle No. 6 because <ul style="list-style-type: none"> the full cost of a new conveyance sewage system would be equitably allocated. the new conveyance sewage system would be fully funded for its full life cycle value for money would be achieved 	<ul style="list-style-type: none"> Alternative No. 3 would not align with Sustainability Principle No. 6 because this alternative would not meet treatment performance objectives <ul style="list-style-type: none"> the full cost of wastewater servicing could not be equitably allocated because this treatment facility would not meet treatment regulatory compliance requirements would not be fully funded for its full life cycle value for money would not be achieved 	<ul style="list-style-type: none"> Alternative No. 4 would align with Sustainability Principle No. 6 because <ul style="list-style-type: none"> the full cost of wastewater servicing would be equitably allocated would be fully funded for its full life cycle value for money would be achieved
Sustainability Principle No. 7:	Does not align with Sustainability Principle No. 7	Aligns with Sustainability Principle No. 7	Aligns with Sustainability Principle No. 7	Aligns with Sustainability Principle No. 7
Timely and integrated service delivery	<ul style="list-style-type: none"> Alternative No. 1 would not align with Sustainability Principle No. 7 because the in-service date of 2018 for meeting the approved growth would not be achieved. 	<ul style="list-style-type: none"> Alternative No. 2 would align with Sustainability Principle No. 7 because the in-service date of 2018 for meeting the approved growth would be achieved. 	<ul style="list-style-type: none"> Alternative No. 3 would align with Sustainability Principle No. 7 because the in-service date of 2018 for meeting the approved growth would be achieved. 	<ul style="list-style-type: none"> Alternative No. 4 would align with Sustainability Principle No. 7 because the in-service date of 2018 for meeting the approved growth would be achieved.

Sustainability Principles	Alternative No. 1: Do Nothing	Alternative No. 2: Discharge to Lake Ontario	Alternative No. 3: Discharge to Lake Simcoe	Alternative No. 4: Innovative Wastewater Treatment Technology
Sustainability Principle No. 8:	Aligns with Sustainability Principle No. 8	Aligns with Sustainability Principle No. 8	Aligns with Sustainability Principle No. 8	Aligns with Sustainability Principle No. 8
Climate Change and Energy Efficiency	<ul style="list-style-type: none"> ▪ Alternative No. 1 would align with Sustainability Principle No. 8 because design and operation of current water and wastewater infrastructure would reflect the following: 	<ul style="list-style-type: none"> ▪ Alternative No. 2 would align with Sustainability Principle No. 8 because its design and operation will reflect the following: 	<ul style="list-style-type: none"> ▪ Alternative No. 3 would align with Sustainability Principle No. 8 because its design and operation will reflect the following: 	<ul style="list-style-type: none"> ▪ Alternative No. 4 would align with Sustainability Principle No. 8 because its design and operation will reflect the following:
Climate Change	<ul style="list-style-type: none"> - Design for expected future peak flow conditions that may increase with climate change - Implement adaptive system maintenance strategies and programs to accommodate future peak flows 	<ul style="list-style-type: none"> - Design for expected future peak flow conditions that may increase with climate change - Implement adaptive system maintenance strategies and programs to accommodate future peak flows 	<ul style="list-style-type: none"> - Design for expected future peak flow conditions that may increase with climate change - Implement adaptive system maintenance strategies and programs to accommodate future peak flows <p><u>Potential Benefits:</u></p> <ul style="list-style-type: none"> - Treated effluent discharged to surface water courses will enhance flow regime during drought periods, and help adapt to the potential increase in frequency and duration of droughts caused by climate change - Discharge to surface water courses will improve watershed water balance 	<ul style="list-style-type: none"> - Design for expected future peak flow conditions that may increase with climate change - Implement adaptive system maintenance strategies and programs to accommodate future peak flows <p><u>Potential Benefits:</u></p> <ul style="list-style-type: none"> - Reclaimed water used for non-potable uses, such as irrigation, will provide a reliable and sustainable water source not impacted by potential climate change effects - WRC treated effluent discharged to surface water courses will enhance flow regime during drought periods, and help adapt to the potential increase in frequency and duration of droughts caused by climate change - Use of reclaimed water for irrigation and discharge to surface water courses will improve watershed water balance - Use of reclaimed water will permit use of nutrients in wastewater thereby reducing level of treatment required, resulting in a carbon sink

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Energy Efficiency	<ul style="list-style-type: none"> ▪ Energy usage and efficiency will be optimized during the design and operation of the proposed works. 	<ul style="list-style-type: none"> ▪ Energy usage and efficiency will be optimized during the design and operation of the proposed works. The Lake Ontario solution requires significant energy to convey this volume of water over the Oak Ridges Moraine. Conveyed sewage flow travel is approximately 80km to the Duffin Creek WPCP where it will receive secondary treatment. Odour Control will be required along the conveyance systems. - The Duffin Creek WPCP utilizes incineration for Biosolids stabilization. - Energy use and GHG emissions for the Lake Ontario solution include energy for pumping and treatment at Duffin Creek WPCP. - GHG emissions during construction estimated to be more than the Lake Simcoe Innovative solution. 	<ul style="list-style-type: none"> ▪ Energy usage and efficiency will be optimized during the design and operation of the proposed works. Reverse Osmosis (RO) is a high energy user, particularly if all flows require RO treatment. An energy reduction strategy using sustainable wastewater treatment design principles will be implemented. These strategies include: <ul style="list-style-type: none"> - Optimize MF & RO treatment processes such that these two streams could be blended to achieve final effluent limits. Potential exists to achieve a 50/50% or greater MF/RO split. - Energy use and GHG emissions include energy for treatment at the WRC which is increased somewhat by RO energy use. GHG emissions during construction estimated to be less than the Lake Ontario Solution. - Implement Cogeneration to off set energy and heat demands. 	<ul style="list-style-type: none"> ▪ Energy usage and efficiency will be optimized during the design and operation of the proposed works. Reverse Osmosis (RO) is a high energy user, particularly if all flows require RO treatment. An energy reduction strategy using sustainable wastewater treatment design principles will be implemented. These strategies include: <ul style="list-style-type: none"> - Maximize water reuse. Potential exists for plant to utilize a high volume of reclaimed water for a variety of sustainable irrigation functions in the future (after 5 years) thus minimizing the volume of RO treatment required. - Optimize MF & RO treatment processes such that these two streams could be blended to achieve final effluent limits. Potential exists to achieve a 50/50% or greater MF/RO split. - Energy use and GHG emissions include energy for treatment at the WRC which is increased somewhat by RO energy use. GHG emissions during construction estimated to be less than the Lake Ontario Solution - Continue to develop and implement watershed TP off sets through improved storm water management and septic systems located within 100 m of a water course. - Implement Water Reclamation Centre Cogeneration to off set energy and heat demands.

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Sustainability Principle No. 9:	Aligns with Sustainability Principle No. 9	Aligns with Sustainability Principle No. 9	Aligns with Sustainability Principle No. 9	Aligns with Sustainability Principle No. 9
Communications, Consultation, and Engagement	<ul style="list-style-type: none"> ▪ Alternative No. 1 would align with Sustainability Principle No. 9 because planning of this alternative is being carried out through an Environmental Assessment (EA) that reflects an open, transparent, and accountable process based on broad consultation, citizen engagement, and strong communications building public consensus toward the need to practice sustainability. 	<ul style="list-style-type: none"> ▪ Alternative No. 2 would align with Sustainability Principle No. 9 for the following reasons: <ul style="list-style-type: none"> - Planning of this alternative is being carried out through an Environmental Assessment (EA) that reflects an open, transparent, and accountable process based on broad consultation, citizen engagement, and strong communications building public consensus toward the need to practice sustainability. - Implementing this alternative, if identified as the preferred undertaking, following approval by the Minister of the Environment would be carried out in accordance with (1) the on-going consultation plan developed as part of the UYSS EA, (2) any specific consultation commitments developed as part of the UYSS EA, and (3) any specific consultation Conditions of Approval issued by the Minister of the Environment. 	<ul style="list-style-type: none"> ▪ Alternative No. 3 would align with Sustainability Principle No. 9 for the following reasons: <ul style="list-style-type: none"> - Planning of this alternative is being carried out through an EA that reflects an open, transparent, and accountable process based on broad consultation, citizen engagement, and strong communications building public consensus toward the need to practice sustainability. - Implementing this alternative, if identified as the preferred undertaking, following approval by the Minister of the Environment would be carried out in accordance with (1) the on-going consultation plan developed as part of the UYSS EA, (2) any specific consultation commitments developed as part of the UYSS EA, and (3) any specific consultation Conditions of Approval issued by the Minister of the Environment. 	<ul style="list-style-type: none"> ▪ Alternative No. 4 would align with Sustainability Principle No. 9 for the following reasons: <ul style="list-style-type: none"> - Planning of this alternative is being carried out through an EA that reflects an open, transparent, and accountable process based on broad consultation, citizen engagement, and strong communications building public consensus toward the need to practice sustainability. - Implementing this alternative, if identified as the preferred undertaking, following approval by the Minister of the Environment would be carried out in accordance with (1) the on-going consultation plan developed as part of the UYSS EA, (2) any specific consultation commitments developed as part of the UYSS EA, and (3) any specific consultation Conditions of Approval issued by the Minister of the Environment.

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Sustainability Principle No. 10:	Aligns with Sustainability Principle No. 10	Aligns with Sustainability Principle No. 10	Aligns with Sustainability Principle No. 10	Aligns with Sustainability Principle No. 10
Monitoring, Performance Measurement and Adaptive Management	<ul style="list-style-type: none"> ▪ Alternative No. 1 would align with Sustainability Principle No. 10 because: <ul style="list-style-type: none"> - York Region would continue to monitor and report on the implementation and operation of the water and wastewater sustainability strategies, learning and adapting from successes and failures, and practicing continual improvement towards sustainable leadership if this alternative is identified as the preferred undertaking. 	<ul style="list-style-type: none"> ▪ Alternative No. 2 would align with Sustainability Principle No. 10 because: <ul style="list-style-type: none"> - York Region would continue to monitor and report on the implementation and operation of the water and wastewater sustainability strategies, learning and adapting from successes and failures, and practicing continual improvement towards sustainable leadership if this alternative is identified as the preferred undertaking. 	<ul style="list-style-type: none"> ▪ Alternative No. 3 would align with Sustainability Principle No. 10 because: <ul style="list-style-type: none"> - York Region would continue to monitor and report on the implementation and operation of the water and wastewater sustainability strategies, learning and adapting from successes and failures, and practicing continual improvement towards sustainable leadership if this alternative is identified as the preferred undertaking. 	<ul style="list-style-type: none"> ▪ Alternative No. 4 would align with Sustainability Principle No. 10 because: <ul style="list-style-type: none"> - York Region would continue to monitor and report on the implementation and operation of the water and wastewater sustainability strategies, learning and adapting from successes and failures, and practicing continual improvement towards sustainable leadership if this alternative is identified as the preferred undertaking.