

Summary of Proposed Amendments to the Trent Source Protection Plan and Assessment Report – Woods of Manilla Drinking Water System

Pursuant to Section 34 of Ontario Regulation 287/07 of the Clean Water Act

December 15, 2025

The City of Kawartha Lakes is revising the Wellhead Protection Area (WHPA) for the Woods of Manilla Drinking Water System (DWS) due to the installation of two new wells and the decommissioning of two existing wells. These upgrades have resulted in the Proposed Amendments to the Trent Source Protection Plan (SPP) and Assessment Report (AR) (last updated and approved June 13, 2025) listed below and summarized and highlighted in yellow on the following pages. A strike-through indicates that text is to be removed.

List of Proposed Amendments

SPP

1. Summary of Amendments (second page): Updated.
2. Appendix 2: Updated Policy Applicability Map (to be provided).
3. Appendix 5: Updated to include consultation activities for the Proposed Amendments.
4. Explanatory Document to be updated.

AR: Volume 1

1. Table 5.1-2: Updated well depth of Well 2A and Well 3.
2. Table 5.1-3: Updated average annual pumping rate.
3. Section 5.2: Update list of background reports.
4. Section 5.2.2.1.2: Update Woods of Manilla system information.
5. Section 5.2.2.2.5: Update Vulnerability Background Information
6. Section 5.2.2.2.9: Update Uncertainty Background Information
7. Table 5.2-6: Update Well Information (GUDI status, well #s, model)
8. Table 5.2-7: Updated range of vulnerability scores by WHPA for the Woods of Manilla DWS. – CHECK #s
9. Table 5.2-8: Updated uncertainty ratings for the Woods of Manilla DWS.
10. Table 5.4-3: Updated the threat totals for Woods of Manilla.

AR: Volume 2

11. Appendix F, Groundwater Systems: Water Quality Risk Assessment, Vulnerability Assessment:
Updated list of background reports
12. Appendix G, Section 34 Amendment Approval Letter

AR: Volume 3

13. Map 5-13a, Map 5-13b: Updated mapping

Proposed Amendments to the Trent Source Protection Plan

Amendment 1: Summary of Amendments (second page of SPP)

As Per EBR Registry Number ###-####, the information Notice posted on the Environmental Bill of Rights describes the amendments approved by the Ministry of Environment, Conservation and Parks on (DATE) including:

- A revised wellhead protection area for the Woods of Manilla Municipal Well System; and,
- Revised assessment report maps.

Amendment 2: Appendix 2 – Policy Applicability Map

[To be updated in Appendix after approval from the Ministry of the Environment, Conservation and Parks.]

Amendment 3: Appendix 5

Consultation on the Updated Assessment Report

Pre-consultation on the proposed amendments to the Trent Assessment Report to reflect changes to the Woods of Manilla Municipal Well System resulting from the installation of two new wells was undertaken with Implementing Bodies November 7, 2025 to December 4, 2025.

Public Consultation was undertaken from December 15, 2025 to January 23, 2026.

Consultation on the Updated Source Protection Plan

Pre-consultation on the proposed amendments to the Trent Source Protection Plan to reflect changes to the Woods of Manilla Municipal Well System resulting from the decommissioning of two wells and the installation of two new wells was undertaken with Implementing Bodies November 7, 2025 to December 4, 2025.

Public consultation was undertaken from December 15, 2025 to January 23, 2026.

Amendment 4: Explanatory Document

2.7 CONSULTATION ON NEW THREATS

[To be updated after public consultation.]

Proposed Amendments to the Trent Assessment Report

Amendment 1: Table 5.1-2: Updated well depth of well #2 and #3.

Table 5.1-2: Summary of Wells and Water Treatment Systems for Existing Municipal Residential Groundwater Systems in the Trent Source Protection Areas

System Name	Well(s)								Water Treatment System	
	Location	No. Wells	Depths (m)					GUDI Status	Disinfection	Other Available Treatment Details
			1	2	3	4	5			
Kawartha-Haliburton Source Protection Area										
Woods of Manilla	Manilla	2	45.7 NA	53.9 53.8	NA 53.6	NA	NA	No	Sodium hypochlorite	

Amendment 2: Table 5.1-3: Updated average annual pumping rate.

Table 5.1-3: Pumping Rates for Existing Municipal Residential Groundwater Systems in the Trent Source Protection Areas

System Name	Monthly Average Pumping Rates (m³/day) ¹												Average Annual Pumping Rate (m³/day)
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Kawartha-Haliburton Source Protection Area													
Canadiana Shores	58	66	63	64	77	68	72	64	56	52	52	58	62
Janetville	37	43	38	39	42	46	44	43	40	38	36	37	40
King's Bay	24	20	21	20	33	40	37	38	35	25	20	27	28
Manorview	19	17	17	19	23	27	19	20	21	18	15	15	19
Mariposa Estates	28	26	23	26	31	35	35	32	38	31	24	26	30
Omeme	38	40	32	34	36	38	32	43	35	33	36	39	36
Pleasant Point	54	54	54	62	76	82	73	70	62	59	65	62	64
Sonya	26	25	26	28	33	40	39	39	29	28	27	27	31
Woods of Manilla	47	46	46	47	60	75	66	59	51	45	44	46	53
Woodfield	13	14	13	14	16	18	17	16	14	11	11	14	14
Victoria Place	85	80	78	92	95	93	95	89	90	85	81	85	87
Blackstock	104	105	103	106	122	138	115	114	108	108	103	102	110
Greenbank	134	136	126	125	143	156	144	138	131	127	124	127	134

Amendment 3: Section 5.2 – Add background report to list

- D.M. Wills Associates Limited., Woods of Manilla Source Water Protection Plan Update, September 2025

Amendment 4: Section 5.2.2.1.2: -

5.2.2.1.2 Vulnerability Methods

Groundwater vulnerability was determined using both index methods and advective transport methods. The use of an index method over an advective transport method or vice versa is somewhat dictated by the availability of geological information and complexity of geology. For example, an index method is preferred in areas of limited information (i.e., wells) whereas areas with adequate information are better suited for an advective transport method. The index methods and advective transport methods were applied using assumptions and approaches that were consistent with the *Technical Rules* and that would result in over-protection of the groundwater source.

For the following systems, the aquifer vulnerability index method was applied by designating geological layers as either an aquifer or an aquitard and applying a K-Factor of 1 for an aquifer and 4 for an aquitard: Greenbank, Port Perry, Birch Point, Canadiana Shores, Janetville, King's Bay, Manorview, Mariposa Estates, Victoria Glen, Pleasant Point, Pinewood, Sonya, Victoria Place, and Woodfield, Woods of Manilla. This method is considered to be a conservative application of the method described in the Ministry of the Environment, Conservation and Parks Guidance Modules, and it was necessary due to the minimal data available to describe the subsurface in the areas around many of the municipal wells. The application of this method resulted in lower index values and thus produced higher vulnerability ratings.

For the Stirling, Grafton, Colborne, Brighton, Keene Heights, Crystal Springs, Millbrook and Woods of Manilla systems, an application of the surface to well advection time (SWAT) was used to determine groundwater vulnerability. SWAT consists of two components: the vertical travel time through the unsaturated zone above the water table (UZAT) and the travel time from the water table to the well through the saturated zone (WWAT). Determining the time of travel through the unsaturated zone is highly complex and depends on a number of parameters that have high uncertainties related to their estimates (unsaturated hydraulic conductivity, soil moisture content, competence of confining units, etc.). Furthermore, surface releases of fluid contaminants (through spills or leaks) can locally saturate the soils and move downward through the unsaturated zone in hours or days rather than years. Thus, because of the uncertainties related to the estimation of the unsaturated zone above the water table (UZAT) and because of the relatively shorter travel time attributed to UZAT (as compared to WWAT), the UZAT was not factored into the calculation of the surface to well advection time (SWAT). SWAT volumes calculated by disregarding UZAT provide lower travel times and thus produce higher vulnerability ratings.

For the Blackstock drinking water system, an application of the surface to well advection time (SWAT) was used to determine groundwater vulnerability. SWAT consists of two components: the vertical travel time through the unsaturated zone above the water table (UZAT) and the travel time from the water table to the well screen through saturated aquifers and aquitards (WWAT). Though determining UZAT can be complicated, the sophisticated semi-integrated surface water flow model

(PRMS) – groundwater flow model (MODFLOW) constructed for the Durham region, provided a means for rigorously estimating UZAT related parameters such as soil moisture content and infiltration rates. Therefore, groundwater vulnerability for the Blackstock drinking water system was determined by the application of the complete SWAT method.

The following sections summarize the results of the WHPA delineation, groundwater vulnerability assessment, and uncertainty analysis for each municipal well system.

Amendment 5: Section 5.2.2.2.5 – Update Vulnerability Background

5.2.2.2.5 2025 Woods of Manilla Wellhead Protection Studies Updates

City of Kawartha Lakes amended the Woods of Manilla Drinking Water System through the decommissioning of two wells (Well 1 and 2) and installation of two replacement wells (Well 2A and Well 3). The new water supply well (Well 2A) was installed by a Licensed Well Contractor in May 2021 to replace Well 2 due to groundwater turbidity issues in Well 2. Well 1 is scheduled for decommissioning and demolition in 2025, and is to be replaced by new standby well, Well 3.

D.M Wills Associates Limited was hired to update the wellhead protection studies completed by Genivar Inc. in 2010 and the MODFLOW-2000 computer groundwater models. Elements of Genivar's model from the 2010 report (i.e.: grid, boundary conditions, and hydraulic conductivities for part of the model) were used to create a revised model with a smaller model domain spanning the area around Manilla and extending for approximately 5 km in all horizontal directions. Grid changes include refining the grid horizontally and adding layers where necessary. The new hydrogeologic model has resulted in an updated WHPA from the 2010 Genivar Report.

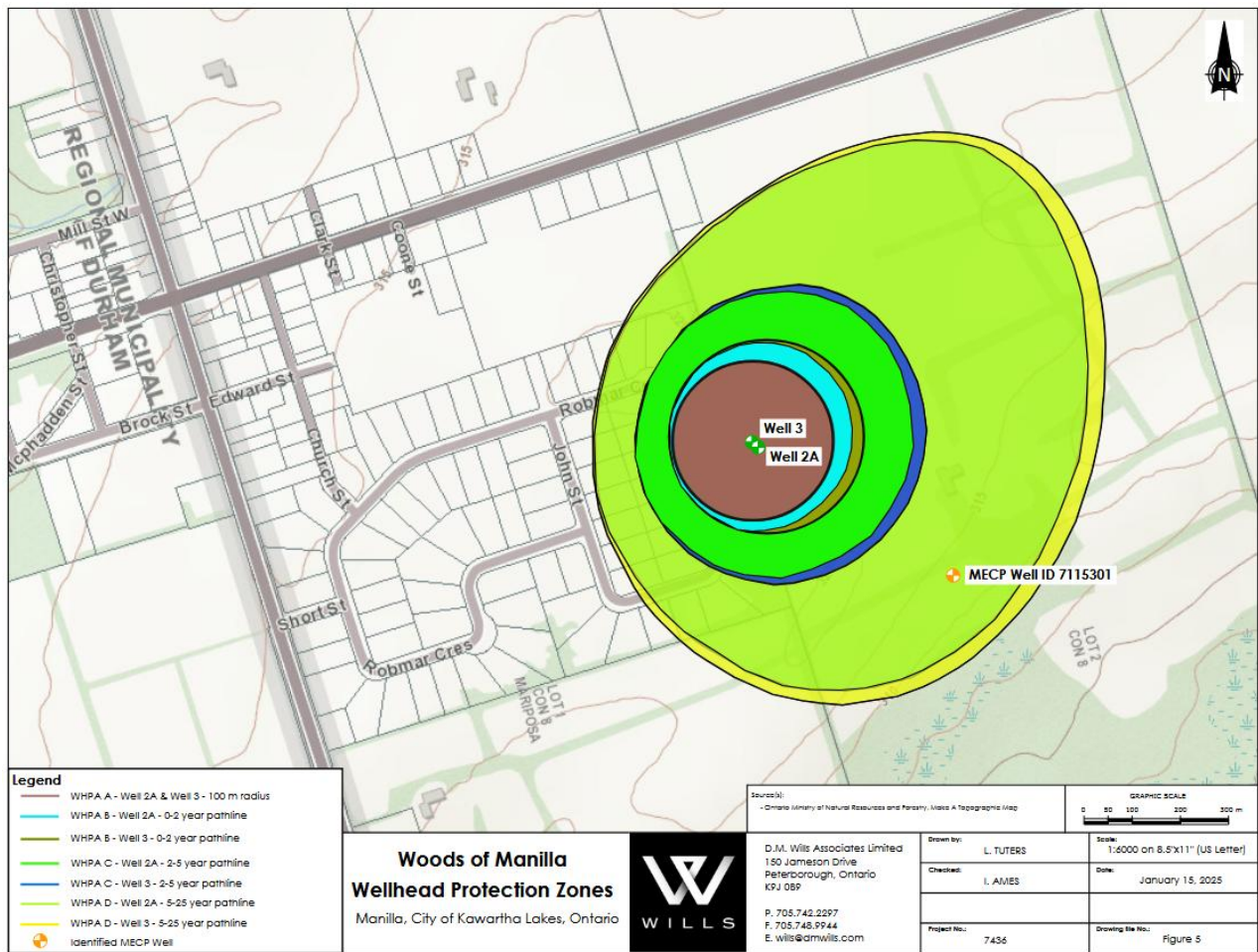
The WHPA delineation is complex due to the municipal wells being located on a groundwater divide corresponding to the surface water divide which separates the South Georgian Bay Lake Simcoe Region domain from the Trent Conservation Coalition Region domain. Consequently, groundwater flow directions can vary considerably over a short distance. This is part of why the updated WHPAs differ from the 2010 WHPAs. Current modelling shows groundwater flow direction near the municipal wells is from the east and east-northeast induced by the drawdown cone of the municipal wells due to pumping rather than the southeast as depicted in the 2010 modelling.

Amendment 6: Section 5.2.2.2.9 – Update Uncertainty Background

5.2.2.2.9 2025 Woods of Manilla Updated Wellhead Protection Studies

The groundwater vulnerability was determined following the process outlined in the updated Technical Rules. Per D.M. Wills (2025), the intrinsic vulnerability of the water supply aquifer was estimated using the Surface to Well Advective Time (SWAT) method. This was performed using the numerical groundwater flow model. The SWAT consists of the Unsaturated Zone Travel Time (UZAT) plus the Water Table to Well Advection Time (WWAT). The WWAT was estimated for the combined area of Zone D (25-year capture zone). These simulations involved estimating the time for a conservative contaminant to move from the water table to the municipal water wells using lines of particles forward tracked in the groundwater model.

The Technical Rules document indicates the consideration of Transport Pathways to increase the Vulnerability Rating, with the greatest concern being private wells that do not contain seals to prevent surface water from moving down around the outside of the well casing, or wells that have not been abandoned in accordance with O. Reg. 903. The available data from the Provincial Water Well Information System (WWIS) database was screened to identify wells that penetrate to the water supply aquifers and have the potential to increase the Vulnerability of the natural stratigraphic profile. Well 7115301 (Well Tag No. 060000) is located southeast of the municipal well field (Well 2, Well 2A, and Well 3) within the 25-year WHPA. It was drilled in August 2008, and is cased to bedrock at 51.2 m with an open hole in limestone to 57.0 m. The casing is grouted from ground surface to a depth of 12 m. The well was reportedly for municipal use but was not used. As such the well does not constitute a transport pathway because it is isolated from the Manilla aquifer. The identified well is shown in a figure below (D.M. Wills Associates Ltd., 2025).



[Note: The previous two amendments resulted in the renumbering of several sections under 5.2.2.2]

Amendment 7: Table 5.2-6**Table 5.2-6: Summary of City of Kawartha Lakes Municipal Well Systems**

System	Well	Aquifer Type	Geology	GUDI Status	Groundwater Flow Model
Birch Point	Well #3	confined to semi-confined	overburden	non-GUDI	East Sub-Regional
	Well #4	confined to semi-confined	overburden	non-GUDI	
Canadiana Shores	Replacement Well #1	unconfined to semi-confined	overburden	GUDI	Southwest Sub-Regional
	Well #2	unconfined to semi-confined	overburden	GUDI	
	Well #3	unconfined to semi-confined	overburden	GUDI	
Janetville	Well #3	confined	overburden	non-GUDI	South Sub-Regional
	Well #4	confined	overburden	non-GUDI	
	Well #5	confined	overburden	non-GUDI	
King's Bay	Well #1	confined to semi-confined	overburden	non-GUDI	Southwest Sub-Regional
	Well #2	confined to semi-confined	overburden	non-GUDI	
	Well #3	confined to semi-confined	overburden	non-GUDI	
	Well #4	Confined to semi-confined	overburden	Non-GUDI	
Manorview	Well #1	semi-confined	overburden	GUDI	South Sub-Regional
	Well #2	semi-confined	overburden	GUDI	
Mariposa Estates	Well #2	confined to semi-confined	overburden	non-GUDI	Southwest Sub-Regional
	TW1-03	confined to semi-confined	overburden	non-GUDI	
Victoria Glen	Well #1	confined	overburden	non-GUDI	Victoria Glen
	Well #2	confined	overburden	non-GUDI	
Pleasant	Well #1	confined	overburden	GUDI	Southwest Sub-

System	Well	Aquifer Type	Geology	GUDI Status	Groundwater Flow Model
Point	Well #2	confined	overburden	GUDI	Regional
Pinewood	Well #2	semi-confined	overburden	non-GUDI	South Sub-Regional
	Well #3	semi-confined	overburden	non-GUDI	
	Well #4	confined	overburden	non-GUDI	
	Well #5	confined	overburden	Non-GUDI	Principle of Superposition
Sonya	Well #1	confined to semi-confined	overburden	non-GUDI	Southwest Sub-Regional
	Well #3	confined to semi-confined	overburden	GUDI	
Victoria Place	Well #1	semi-confined	bedrock	non-GUDI	East Sub-Regional
	Well #2	semi-confined	bedrock	non-GUDI	
	Well #3	semi-confined	bedrock	non-GUDI	
	Well #7	semi-confined to confined	bedrock	non-GUDI	
Woodfield	Well #1	Confined	bedrock	non-GUDI	South Sub-Regional
	Well #2	confined	bedrock	non-GUDI	
Woods of Manilla	Well #1 #2A	confined	overburden	non-GUDI	Woodville/Woods of Manilla
	Well #2 #3A	confined	overburden	non-GUDI	

Amendment 8: Table 5.2-7: Updated Vulnerability Scores for Woods of Manilla DWS

Table 5.2-7: Vulnerability Scores for City of Kawartha Lakes Municipal Residential Well Systems

System	Well(s)	Method ¹	Transport Pathways by WHPA ²					Range of Groundwater Vulnerability Ratings by WHPA				Range of Vulnerability Scores by WHPA				
			A	B	C	D	E	A	B	C	D	A	B	C	D	E
Birch Point	All	AVI	-	-	-	-	N/A	High	High	High	High	10	10	8	6	N/A
Canadiana Shores	All	AVI	-	-	-	W	-	Med-high	Low-high	Low-high	Low-high	10	6-10	4-8	2-6	5.6
Janetville	All	AVI	-	-	-	-	N/A	Low	Low	Low	Low	10	6	4	2	N/A
King's Bay	All	AVI	-	-	-	-	N/A	Med-high	Med-high	Med-high	Low-high	10	8-10	6-8	4-6	N/A
Manorview	All	AVI	-	-	-	-	-	Med-high	Med-high	Med-high	Low-high	10	10	4-8	2-6	5.6
Mariposa Estates	Well #2	AVI	-	-	-	-	N/A	Med-high	Med-high	Med-high	Low-med	10	8-10	6-8	2-4	N/A
	TW1-03					W/Q	N/A	Med-high	Med-high	Med-high	Med-high	10	10	6-8	4-6	N/A
Victoria Glen	All	AVI	-	W	W	W	N/A	High	Med-high	Med-high	Med-high	10	8-10	6-8	4-6	N/A
Pleasant Point	Well #1	AVI	-	-	-	W	SUC	Med	Low-med	Low-med	Low-med	10	6-8	4-6	2-4	5.6

System	Well(s)	Method ¹	Transport Pathways by WHPA ²					Range of Groundwater Vulnerability Ratings by WHPA				Range of Vulnerability Scores by WHPA				
			A	B	C	D	E	A	B	C	D	A	B	C	D	E
	Well #2	AVI	-	-	-	W	D	Med	Low-med	Low-med	Low-med	10	6-8	4-6	2-4	5.6
Pinewood	All	AVI	-	-	-	-	N/A	Low	Low	Low	Low	10	6	4	2	N/A
Sonya	All	AVI	-	-	W	W	N/A	Med-high	Medium	Med-high	Med-high	10	8	6-8	4-6	N/A
Victoria Place	All	AVI	-	-	-	-	N/A	High	High	High	High	10	10	8	6	N/A
Woodfield	All	AVI	-	W	-	W	N/A	Low	Low-med	Low	Low-med	10	6-8	4	2-4	N/A
Woods of Manilla	All	AVI SWAT	-		-	W -	N/A	Low	Low	Low	Low-med	10	6	4 2	2-4	N/A

²W = Well; Q = Quarry; SUC = Subsurface Utility Corridor; D = Ditch (dashes indicate no transport pathways)

Amendment 9: Table 5.2-8: Updated Uncertainty Ratings for Woods of Manilla DWS

Table 5.2-8: Uncertainty Ratings for City of Kawartha Lakes Municipal Residential Well Systems

Groundwater System	Method ¹	Uncertainty Ratings for WHPA Delineation					Uncertainty Ratings for Assignment of Vulnerability					Final Uncertainty Rating				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
Birch Point	AVI	Low	High	High	High	N/A	Low	High	High	High	N/A	Low	High	High	High	N/A
Canadiana Shores	AVI	Low	High	High	High	High	Low	High	High	High	High	Low	High	High	High	High
Janetville	AVI	Low	High	High	High	N/A	Low	High	High	High	N/A	Low	High	High	High	N/A
King's Bay	AVI	Low	High	High	High	N/A	Low	High	High	High	N/A	Low	High	High	High	N/A
Manorview	AVI	Low	High	High	High	Low	Low	High	High	High	Low	Low	High	High	High	Low
Mariposa Estates	AVI	Low	High	High	High	N/A	Low	High	High	High	N/A	Low	High	High	High	N/A
Victoria Glen	AVI	Low	High	High	High	N/A	Low	High	High	High	N/A	Low	High	High	High	N/A
Pleasant Point	AVI	Low	High	High	High	Low	Low	High	High	High	Low	Low	High	High	High	Low
Pinewood	AVI	Low	High	High	High	N/A	Low	Low	Low	Low	N/A	Low	High	High	High	N/A
Sonya	AVI	Low	High	High	High	N/A	Low	High	High	High	N/A	Low	High	High	High	N/A
Victoria Place	AVI	Low	High	High	High	N/A	Low	High	High	High	N/A	Low	High	High	High	N/A

Groundwater System	Method ¹	Uncertainty Ratings for WHPA Delineation					Uncertainty Ratings for Assignment of Vulnerability					Final Uncertainty Rating				
		A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
Woodfield	AVI	Low	High	High	High	N/A	Low	High	High	High	N/A	Low	High	High	High	N/A
Woods of Manilla	AVI SWAT	Low	High	High	High	N/A	Low	High	High	High	N/A	Low	High	High	High	N/A

Amendment 10: Update Significant threat count

Table 5.4-3: Summary of Significant Threats for Groundwater Systems in the Trent Source Protection Areas (Listed by System)

Drinking Water Threats		Minden	Lutterworth Pines	Cardiff	Dyno Estates	Alpine Village	Buckhorn Lake	Norwood	Blackstock	Greenbank	Port Perry	Havelock	Grafton	Colborne	Brighton	Crystal Springs	Keene Heights	Millbrook	Stirling	Fraserville	Birch Point	Canadiana Shores	Janetville	Kings Bay	Manorview	Mariposa Estates	Victoria Glen	Pleasant Point	Pinewood	Sonya	Victoria Place	Woodfield	Woods of Manilla	TOTAL
No.	Prescribed Drinking Water Threats																																	
1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act	1					1				1			3					3															9
2	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage	0	1 5	2	7	4 9	1 6	1 9	5	1 7	3	1 4	1	1 0	6	1	1 8	2	96	2	5 9	2 0	1 4	2	3 5	1 8		1 5	1 0	1 4	2 8	1 0	5	51 1

[illegible]

Drinking Water Threats		Prescribed Drinking Water Threats																																
		Minden	Lutterworth Pines	Cardiff	Dyno Estates	Alpine Village	Buckhorn Lake	Norwood	Blackstock	Greenbank	Port Perry	Havelock	Grafton	Colborne	Brighton	Crystal Springs	Keene Heights	Millbrook	Stirling	Fraserville	Birch Point	Canadiana Shores	Janetville	Kings Bay	Manorview	Mariposa Estates	Victoria Glen	Pleasant Point	Pinewood	Sonya	Victoria Place	Woodfield	Woods of Manilla	TOTAL
							0				4																							
15	The handling and storage of fuel	10	5	1	7	12	5	0	0	1	5		6		1	0	2	9		9	9	1		2	1		8	4	1	12	1		103	
16	The handling and storage of a dense non- aqueous phase liquid	3					5	0			1		8				5	6															28	
17	The handling and storage of an organic solvent	1					1						1					1															4	
18	The management of runoff that contains chemicals used in the de-icing of aircraft																																0	
21	The use of land as livestock grazing or pasturing land, an outdoor confinement area, or a farm- animal yard					1		0	0	1			1		0			16	0			0				1				1			21	
22	The establishment and operation of a liquid hydrocarbon pipeline.																																	
Total No. Significant Prescribed Drinking Water Threats		48	21	3	14	51	18	41	5	25	4	35	1	33	6	4	20	9	145	3	68	29	15	6	37	27	5	23	14	15	43	11	512	791
Total No. Parcels Affected by Significant Prescribed Drinking Water Threats		34	18	2	7	51	18	35	5	21	3	32	1	21	6	3	20	9	121	3	59	24	14	4	35	25	2	15	10	14	29	10	310	658
Local Drinking Water Threats																																		

Drinking Water Threats	Minden	Lutterworth Pines	Cardiff	Dyno Estates	Alpine Village	Buckhorn Lake	Norwood	Blackstock	Greenbank	Port Perry	Havelock	Grafton	Colborne	Brighton	Crystal Springs	Keene Heights	Millbrook	Stirling	Fraserville	Birch Point	Canadiana Shores	Janetville	Kings Bay	Manorview	Mariposa Estates	Victoria Glen	Pleasant Point	Pinewood	Sonya	Victoria Place	Woodfield	Woods of Manilla	TOTAL
None																																0	
TOTAL (All Significant Drinking Water Threats)																																	
Total No. Significant Drinking Water Threats	4 8	2 1	3	1 4	5 1	1 8	4 1	2 3	2 5	4	3 5	1	3 3	6	4	2 0	9	145	3	6 8	2 9	1 5	6	3 7	2 7	5	2 3	1 4	1 5	4 3	1 1	3 7	
Total No. Parcels Affected by Significant Drinking Water Threats	3 4	1 8	2	7	5 1	1 8	3 5	8	2 1	3	3 2	1	2 1	6	3	2 0	9	121	3	5 9	2 4	1 4	4	3 5	2 5	2	1 5	1 0	1 4	2 9	1 0	3	651

Note: the total number of affected parcels may be less than the total number of drinking water threats because more than one threat may occur on some parcels

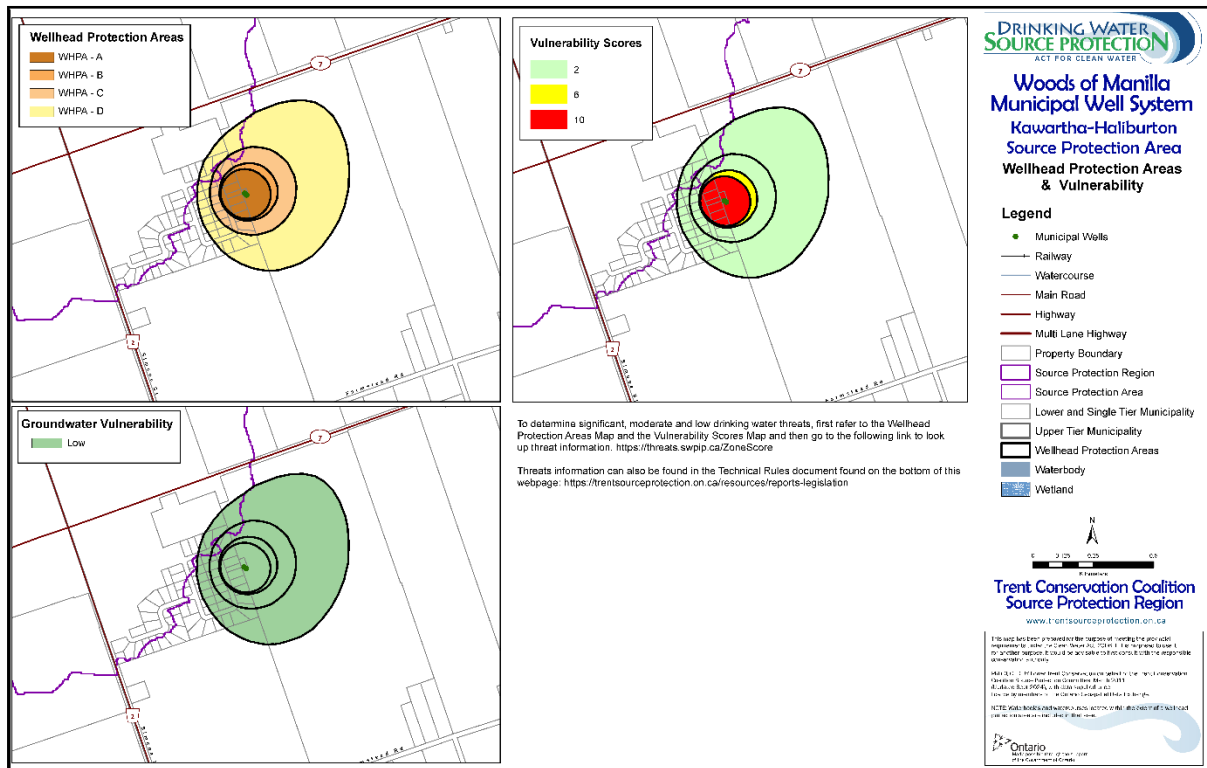
**Amendment 11: Appendix F, Groundwater Systems: Water Quality Risk Assessment,
Vulnerability Assessment: Updated list of background reports**

D.M. Wills Associates Limited., Woods of Manilla Source Water Protection Plan Update, September 2025

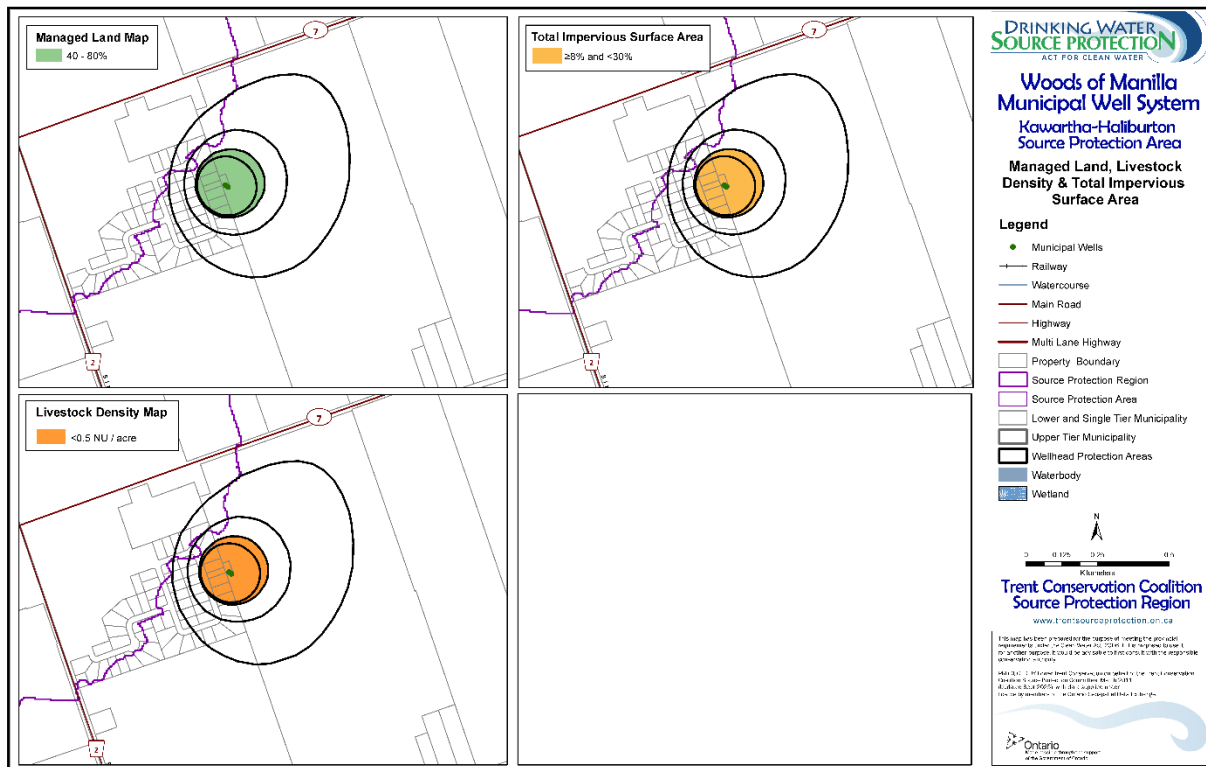
Amendment 12: Appendix G, Section 34 Approval Letter

[To be included in Appendix following approval of S.34 amendment submission to MECP.]

Amendment 13: Map 5-13a, Map 5-14b: Updated



Trent Assessment Report Map 5-13a



Trent Assessment Report Map 5-13b