



B.

**Agency
Correspondence**

APPENDIX B1

Agency Correspondence Log

Elfrida Subwatershed Study: Agency Correspondence Log
September 2023 to April 2026

From	Agency/Group	To	Date	Comment	Format	Response Date	Sent By	Response
Diana Addley (Stantec)	City of Hamilton, Hamilton Conservation Authority, Niagara Peninsula Conservation Authority	Mark Hartley, Jonathan Bastien, David Deluce	9/22/2023	Email providing background information and request for information to support the Elfrida study.	Email			
Diana Addley (Stantec)	City of Hamilton, Hamilton Conservation Authority, Niagara Peninsula Conservation Authority	Mark Hartley, Jonathan Bastien, David Deluce	10/3/2023	Follow-up email requesting that any available data be provided by Friday, October 6, 2023 into the provided OneDrive folder.	Email			
Diana Addley (Stantec)	City of Hamilton, Hamilton Conservation Authority, Niagara Peninsula Conservation Authority	Mark Hartley, Jonathan Bastien, David Deluce	10/13/2023	Request for the 2014 Terms of Reference to be reviewed, and for the City, HCA, and NPCA to provide any comments or requested edits by Friday October 27th, 2023.	Email			
CITY OF HAMILTON								
Carissa Stauffer (Stantec)	City of Hamilton	Dave Heyworth, Charlie Toman, Gina Holden	4/2/2025	Initial email to coordinate meeting with City of Hamilton to discuss the Terms of Reference, previously used in the Aquafor Beech Subwatershed Study, and other project components including the work completed to date, and future steering committee meetings.	Email		Carissa Stauffer (Stantec)	Correspondence between 04-02-2025 to
Carissa Stauffer (Stantec)	City of Hamilton	Dave Heyworth, Charlie Towman, Mark Hartley, Gavin Norman, Gina Holden	6/25/2025	Email sent with meeting notes from project meeting hosted on May 20, 2025. Included a Request for Information memo, and Terms of Reference with a request for the City to provide any comments by Friday July 25, 2025.	Email w/Attachment			
Bryan Weersink (Stantec)	City of Hamilton	Dave Heyworth, Charlie Towman, Mark Hartley, Gavin Norman, Gina Holden	7/4/2025	Email following up on items outlined in the RFI supporting drainage and stormwater management for the areas west of Highway 56 / Upper Centennial Pkwy draining into the Elfrida study area.	Email			
Gavin Norman Manager, Infrastructure Planning	City of Hamilton	Bryan Weersink, Marlee Sauder, Carissa Stauffer, Tim Gallagher, Diana Addley	7/9/2025	Confirmation that the RFI was reviewed and that the requested information is being retrieved. Applicable fees to be applied for Records Search/Photocopying was provided.	Email w/Attachment	7/9/2025	Bryan Weersink (Stantec)	Agreed to provided fees, but requested that Stantec be notified on what hardcopy files are uncovered before authorizing any printing/scanning. Highlighted the specific information Stantec is interested in (catchment figures, reports, and models, but don't need necessarily need as-built plan/profile or grading drawings for roadways outside or bordering the Elfrida study area.)
Gavin Norman Manager, Infrastructure Planning	City of Hamilton	Bryan Weersink, Marlee Sauder, Carissa Stauffer, Tim Gallagher, Diana Addley	7/9/2025	Yes, for sure we will advise first on what is expected to be photocopied, but it we won't be able to do the same on the actual record search portion; i.e. I don't know how much time it will take to track it all down, but perhaps we can provide updates on the time being spent. I should have mentioned too that we have a engineering consultation fee that will be applied (one-time fee of \$3,440) to account for any meetings we need to discuss what you've described below – you will find that in the schedule as well. We can get started on the SWM probably this week.	Email	7/10/2025	Bryan Weersink (Stantec)	Sounds good Gavin – yes please proceed and if you can provide any status updates as you go that would be greatly appreciated.
Carissa Stauffer (Stantec)	City of Hamilton	Dave Heyworth, Charlie Towman, Gavin Norman, Gina Holden	7/17/2025	Email requesting the City (Gavin Norman) to also confirm receipt and review of the Terms of Reference submitted alongside the RFI.	Email			
Gavin Norman Manager, Infrastructure Planning	City of Hamilton	Bryan Weersink, Marlee Sauder, Carissa Stauffer, Tim Gallagher, Diana Addley	7/17/2025	Hi Carissa, by copy to Mark Hartley he will advise as to the status to the review.	Email	7/23/2025	Carissa Stauffer (Stantec)	Thank you, I will follow up with Mark Hartley to confirm.
Carissa Stauffer (Stantec)	City of Hamilton	Dave Heyworth, Charlie Towman, Mark Hartley, Gavin Norman, Gina Holden	7/23/2025	Email following up on the Terms of Reference submitted with the RFI after the May 20, 2025 meeting, confirming receipt and review status, and requesting confirmation of the 30-day review timeline with comments due by July 25, 2025.	Email w/Attachment			
Mark Hartley	City of Hamilton	Carissa Stauffer (Stantec)	7/23/2025	Automatic response noting that he will be out of the office from July 21, 2025 to July 25, 2025. Returning Monday July 28, 2025.	Email			
Carissa Stauffer (Stantec)	City of Hamilton	Dave Heyworth, Charlie Towman, Mark Hartley, Gavin Norman, Gina Holden	7/30/2025	Email following up on the Terms of Reference submitted with the RFI after the May 20, 2025 meeting, confirming receipt and review status.	Email w/Attachment			
Mark Hartley	City of Hamilton	Carissa Stauffer (Stantec)	8/1/2025	Email confirming receipt of the Terms of Reference and RFI. Both are in review and have been prioritized by the City to get these back in a timely manner. Will provide an update Aug. 11	Email	8/5/2025	Carissa Stauffer (Stantec)	Thank you for confirming receipt and ongoing review of the Terms of Reference and RFI.
Carissa Stauffer (Stantec)	City of Hamilton	Dave Heyworth, Charlie Towman, Mark Hartley, Gavin Norman, Gina Holden	8/27/2025	Email following up on review and data status for the Terms of Reference and RFI.	Email			
Mark Hartley	City of Hamilton	Carissa Stauffer (Stantec)	8/27/2025	Noted that he is working on it this morning and requested a folder to upload the documents to.	Email	8/27/2025	Carissa Stauffer (Stantec)	Email providing a link to a OneDrive folder for the City to upload all documents and comments on the Terms of Reference to. Requested to be uploaded by Friday August 29, 2025, then the link will expire.

Elfrida Subwatershed Study: Agency Correspondence Log
September 2023 to April 2026

From	Agency/Group	To	Date	Comment	Format	Response Date	Sent By	Response
Mark Hartley	City of Hamilton	Carissa Stauffer (Stantec)	8/27/2025	Noted that he will work to have these uploaded by then, but given the nature of this project and number of documents, early next week is more likely.	Email	8/28/2025	Carissa Stauffer (Stantec)	Responded to say that was not a problem, and to reach out if the link expires by the time they are ready to upload the documents.
Carissa Stauffer (Stantec)	City of Hamilton	Richard Paola, Dave Heyworth, Charlie Towman, Mark Hartley, Gavin Norman, Gina Holden	8/27/2025	Email requesting data not available through the City's open data for the UHOP and RHOP schedules.				
Richard Paola	City of Hamilton	Carissa Stauffer (Stantec)	8/27/2025	Email noting that the City is in the process of converting these items over to their open data portal, but in the meantime, can provide these through the Data License agreement. Requested to confirm the GIS format and study details.	Email	8/28/2025	Carissa Stauffer (Stantec)	Email confirming that a georeferenced TIFF file of these documents would work, and provided study details for the data request and updated Data License Agreement.
Carissa Stauffer (Stantec)	City of Hamilton	Dave Heyworth, Charlie Towman, Mark Hartley, Gavin Norman, Gina Holden	9/2/2025	Email following up on the status of documents to be uploaded to the OneDrive folder, provided a new link to a folder for documents to be uploaded into. Requested documents to be uploaded by EOD Thursday September 4th, 2025.	Email			
Richard Paola	City of Hamilton	Carissa Stauffer (Stantec)	9/2/2025	Email requesting the updated Data License Agreement to be signed.	Email w/Attachment	9/2/2025	Tim Gallager (Stantec)	Email with signed data license agreement attached.
Mark Hartley	City of Hamilton	Carissa Stauffer (Stantec)	9/5/2025	Email to note that the link to the OneDrive folders expired, but the stormwater management files and other documents are ready for upload. Requested a new link to the folder.	Email			
Timothy Winterton	City of Hamilton	Carissa Stauffer (Stantec)	9/5/2025	Requested access for another City of Hamilton staff to upload all documents into the OneDrive folder, and provided an excel spreadsheet documenting the data they have collected and what is remaining.	Email	9/5/2025	Carissa Stauffer (Stantec)	Email providing a new link to the OneDrive folder, with additional City of Hamilton staff approved to access the folder.
Mark Hartley	City of Hamilton	Carissa Stauffer (Stantec)	9/8/2025	Email noting that all SWM documents have been uploaded to the folder link.	Email	9/8/2025	Carissa Stauffer (Stantec)	Thank you for putting this together and uploading to the provided SharePoint link - it's greatly appreciated. If there are any further questions, we will be sure to reach out.
Carissa Stauffer (Stantec)	City of Hamilton	Richard Paola, Dave Heyworth, Charlie Towman, Mark Hartley, Gavin Norman, Gina Holden	9/9/2025	Follow-up email requesting to confirm that the signed Data License agreement was received, and following up on the requested data sets.	Email			
Richard Paola	City of Hamilton	Carissa Stauffer (Stantec)	9/9/2025	Confirmed that the data license agreement was received, and provided the georeferenced TIFF files of the UHOP and RHOP schedules requested.	Email w/Attachment	9/10/2025	Carissa Stauffer (Stantec)	Email confirming the files were received.
Carissa Stauffer (Stantec)	City of Hamilton	Richard Paola, Dave Heyworth, Charlie Towman, Mark Hartley, Gavin Norman, Gina Holden	9/10/2025	Email outlining an additional GIS request that came in as part of this study for NHS data.	Email			
Richard Paola	City of Hamilton	Carissa Stauffer (Stantec)	9/10/2025	Email confirming the scope of this data request - within the Elfrida Study area or beyond as well.	Email	9/10/2025	Carissa Stauffer (Stantec)	Email noting that only data within the study area was needed.
Carissa Stauffer (Stantec)	City of Hamilton	Mark Hartley, Timothy Winterton	9/17/2025	Email following-up on the documents that were uploaded to the OneDrive folder to confirm if the right documents were uploaded. Specifically requesting confirmation of the comments provided on the Aquafor Beech Subwatershed study, which were missing from the data provided, and was instead provided with the Elfrida Growth Area Study report comments.				
Richard Paola	City of Hamilton	Carissa Stauffer (Stantec)	10/23/2025	Provided a copy of the requested NHS data.	Email	10/23/2025	Carissa Stauffer (Stantec)	Confirming receipt of NHS data.
Mark Hartley	City of Hamilton	Carissa Stauffer (Stantec)	4/2/2026	Email with letter attachment providing City's comments on the draft Terms of Reference (submitted June 2025).	Email	4/6/2026	Carissa Stauffer (Stantec)	Email confirming receipt of comments, and noted that the study team would follow up if there were any questions following our review.
HAMILTON CONSERVATION AUTHORITY								
Carissa Stauffer (Stantec)	Hamilton Conservation Authority	Alex Nizharadze	10/20/2023	Phone call to discuss HCA meander belt policies	Phone Call		Carissa Stauffer (Stantec)	
Carissa Stauffer (Stantec)	Hamilton Conservation Authority	Alex Nizharadze	10/26/2023	Email to confirm discussions/understanding of Meander Belt widths from call on Friday October 20th, 2023	Email		Carissa Stauffer (Stantec)	
Alex Nizharadze Water Management Engineer	Hamilton Conservation Authority		10/26/2023	Following our phone conversation last week, please be advised that there is no floodway and flood fringe approach for the Stoney Creek watershed and we recommend following our Policy for the meander belt delineation, unless a comprehensive study by a qualified fluvial geomorphologist determines a more precise meander belt width.	Email	10/26/2023	Carissa Stauffer (Stantec)	Thank you for the advisement on the flood plain approach for the Stoney Creek watershed, and further clarifying the meander belt recommendations.

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Carissa Stauffer (Stantec)	Hamilton Conservation Authority	Mike Stone	1/17/2025	Initial email to coordinate meeting with Hamilton Conservation Authority to discuss various aspects of the project, including hydraulics, floodplain characterization, and data/modelling.	Email		Carissa Stauffer (Stantec)	Correspondence between 01-20-2025 to 02-20-2025.
Carissa Stauffer (Stantec)	Hamilton Conservation Authority	Mike Stone, Alex Nizharadze, Laura Warner, Lesley McDonell	3/21/2025	Meeting to provide a project update on the Elfrida Subwatershed Study and receive HCA input on hydraulics, floodplain characterization, and other aspects of the project.	Teams Meeting			
Carissa Stauffer (Stantec)	Hamilton Conservation Authority		5/15/2025	Email sent with meeting notes from project meeting hosted on March 21, 2025. Included a OneDrive link to a ZIP File containing the original RFI and data provided by the HCA in 2023.	Email w/Attachment			
Bryan Weersink (Stantec)	Hamilton Conservation Authority	Laura Warner, Mike Stone	7/4/2025	Email with questions/requestes regarding the hydrologic and hydraulic modelling files within NPCA's jurisdiction to support surface water components of the Elfrida SWS study.	Email			
Laura Warner Senior Planner Watershed Management Services	Hamilton Conservation Authority	Bryan Weersink, Marlee Sauder, Carissa Stauffer, Tim Gallagher, Diana Addley	7/7/2025	Thanks for reaching out. We will see what information we have available and will advise shortly.	Email	7/7/2025	Bryan Weersink (Stantec)	Much appreciated – thank you Laura!
Laura Warner Senior Planner Watershed Management Services	Hamilton Conservation Authority	Bryan Weersink, Marlee Sauder, Carissa Stauffer, Tim Gallagher, Diana Addley	7/16/2025	Email outlining the status of the floodplain modelling/answering questions in Bryan Weersinks original email. Included contact information for further clarification regarding the history of studies related to the Upper Hannon Creek and Stoney Creek watersheds: Alex.Nizharadze@conservationhamilton.ca Office: (905) 525-2181, Ext. 232 Cell: (905) 515-9879	Email			
Carissa Stauffer (Stantec)	Hamilton Conservation Authority	Richard Woodworth, Laura Warner, Mike Stone	8/26/2025	Email requesting GIS data for HCA's regulated boundaries for Ontario Reg. 42/06. Also attached the RFI included at the beginning of the study to confirm if there were any other items that needed to be confirmed.	Email w/Attachment			
Carissa Stauffer (Stantec)	Hamilton Conservation Authority	Richard Woodworth, Laura Warner, Mike Stone	9/3/2025	Follow-up email on GIS data request.	Email			
Richard Woodworth GIS Specialist	Hamilton Conservation Authority	Carissa Stauffer (Stantec)	9/5/2025	Email with requested GIS data attached, as well as an updated Data License agreement for the study.	Email w/Attachment	9/5/2025	Carissa Stauffer (Stantec)	Confirming receipt of data and updated DLA.
Jesse Campbell (SLR Consulting)	Hamilton Conservation Authority	Laura Warner, Mike Stone, Dirk Janas, Josie Mielhausen, Ian Roul, Kate Lillie, Carissa Stauffer, Tim Gallagher	12/18/2025	Email requesting clarification on HCA policies regarding vegetation protection zones and wetlands, and whether these policies take precedence over the Urban Hamilton Official Plan (UHOP), where HCA has jurisdiction.	Email			
Laura Warner Senior Planner Watershed Management Services	Hamilton Conservation Authority	Mike Stone, Dirk Janas, Josie Mielhausen, Ian Roul, Kate Lillie, Carissa Stauffer, Tim Gallagher	12/19/2025	Email response calrifying HCA policies relating to wetland setbacks (30m), and provided HCA full Planning and Regulation Policies document for reference.	Email w/Attachment	12/19/2025	Jesse Snider (SLR Consulting)	Confirmed receipt of email and clarifications. Noted that the study team will adhere to throughout all assessments.
Bryan Weersink (Stantec)	Hamilton Conservation Authority	Laura Warner, Alex Nizharadze	2/26/2026	Email with questions/requestes relating to the proposed hydraulics for the subwatershed study and implementing new crossings. Requesting HCA's policies on flood level increases.	Email			
Bryan Weersink (Stantec)	Hamilton Conservation Authority	Laura Warner, Alex Nizharadze	3/4/2026	Follow-up on email shared February 26, 2026.	Email			
Laura Warner Senior Planner Watershed Management Services	Hamilton Conservation Authority	Bryan Weersink, Marlee Sauder, Carissa Stauffer, Tim Gallagher, Maryam Yavarikia	3/5/2026	Email response noting that HCA does not have a defined threshold as used by other CA's but recommends site specific evaluations, and HCA typical approach to modelling. Noted that they are open to discussing further in regards to modelling.	Email	3/6/2026	Bryan Weersink (Stantec)	Confirmed receipt of email and clarifications. Agreed that a meeting may be helpful to discuss this and the general approach for stormwater management.
Laura Warner Senior Planner Watershed Management Services	Hamilton Conservation Authority	Bryan Weersink, Marlee Sauder, Carissa Stauffer, Tim Gallagher, Maryam Yavarikia	3/10/2026	Email providing potential meeting times to discuss proposed hydraulic and stormwater management modelling.	Email		Bryan Weersink (Stantec)	Correspondence between 03-10-2026 to 03-12-2026.
Bryan Weersink (Stantec)	Hamilton Conservation Authority	Laura Warner, Alex Nizharadze	3/11/2026	Follow-up to meeting invite correspondence from HCA, and also noting that Stantec would like to discuss watershed modelling and flow impacts for other parts of the study area as well.	Email			

Elfrida Subwatershed Study: Agency Correspondence Log
September 2023 to April 2026

From	Agency/Group	To	Date	Comment	Format	Response Date	Sent By	Response
Bryan Weersink (Stantec)	Hamilton Conservation Authority	Laura Warner, Alex Nizharadze, Johnathan Bastien	3/16/2026	Meeting to discuss hydraulic, stormwater management, and overall watershed modelling and HCA policies for the Elfrida SWS study area.	Teams Meeting			
Marlee Sauder (Stantec)	Hamilton Conservation Authority	Laura Warner, Alex Nizharadze, Johnathan Bastien	3/19/2026	Follow-up email for meeting held on Monday March 16, 2026, to see if HCA was able to find the discussed hydrologic / hydraulic modelling files for 3 of the subwatersheds.	Email			
Laura Warner Senior Planner Watershed Management Services	Hamilton Conservation Authority	Bryan Weersink, Marlee Sauder, Carissa Stauffer, Tim Gallagher, Bill Raymond	3/19/2026	Email response from meeting noting that HCA has reviewed existing floodplain studies and determined that new floodplain mapping, flood impact assessments, and potential regional flood control evaluations will be required to support the Elfrida SWS study and an Official Plan Amendment. Current and adapted floodplain mapping provided.	Email		Bryan Weersink (Stantec)	Correspondence between 03-10-2026 to 03-12-2026.
NIAGARA PENINSULA CONSERVATION AUTHORITY								
David Deluce Senior Manager, Environmental Planning & Policy	Niagara Peninsula Conservation Authority	Diana Addley (Stantec)	10/13/2023	Email with link to a OneDrive folder with initial data requested under the RFI.	Email w/Attachment			
Carissa Stauffer (Stantec)	Niagara Peninsula Conservation Authority	David Deluce	10/25/2023	Phone call to discuss NPCA meander belt policies	Phone Call		Carissa Stauffer (Stantec)	
Carissa Stauffer (Stantec)	Niagara Peninsula Conservation Authority	David Deluce	10/25/2023	Email to confirm discussions/understanding of Meander Belt widths from call on Friday October 20th, 2023	Email		Carissa Stauffer (Stantec)	
David Deluce Senior Manager, Environmental Planning & Policy	Niagara Peninsula Conservation Authority	Carissa Stauffer (Stantec)	10/30/2023	Your understanding is correct. Please let m know if you have any further questions.	Email	10/30/2023	Carissa Stauffer (Stantec)	Thank you for confirming that for me. I will be sure to reach out if we have any further questions.
Carissa Stauffer (Stantec)	Niagara Peninsula Conservation Authority	David Deluce, Kim Peters	1/17/2025	Initial email to coordinate meeting with Niagara Peninsula Conservation Authority to discuss various aspects of the project, including hydraulics, floodplain characterization, and data/modelling.	Email		Carissa Stauffer (Stantec)	Correspondence between 01-23-2025 to 02-26-2025.
Carissa Stauffer (Stantec)	Niagara Peninsula Conservation Authority	Kim Peters, Amy Parks, Brendan Buggeln, Carly Mason	3/20/2025	Meeting to provide a project update on the Elfrida Subwatershed Study and receive NPCA input on hydraulics, floodplain characterization, and other aspects of the project.	Teams Meeting			
Kim Peters Manager, Environmental Planning & Policy	Niagara Peninsula Conservation Authority	Carissa Stauffer (Stantec)	4/28/2025	In follow up to our meeting here is a link to modelling for Twenty Mile Creek. Please let us know if you have any problems with the download. Please note the link expires in 3 days on March 20th.	Email	4/29/2025	Carissa Stauffer (Stantec)	Thank you for sending along the modelling for Twenty Mile Creek, there were no issues downloading the shared file. We'll reach out should we have any questions about the modelling.
Carissa Stauffer (Stantec)	Niagara Peninsula Conservation Authority		5/15/2025	Email sent with meeting notes from project meeting hosted on March 20, 2025. Included a OneDrive link to a ZIP File containing the original RFI and data provided by the NPCA in 2023.	Email w/Attachment			
Bryan Weersink (Stantec)	Niagara Peninsula Conservation Authority	Kim Peters	7/4/2025	Email with questions/requestes regarding the hydrologic and hydraulic modelling files within NPCA's jurisdiction to support surface water components of the Elfrida SWS study.	Email			
Bryan Weersink (Stantec)	Niagara Peninsula Conservation Authority	Kim Peters, Carly Mason	7/4/2025	Email (above) forwarded to Carly Mason while Kim Peters is out of the office.	Email			
Carly Mason Water Resources Engineer	Niagara Peninsula Conservation Authority	Bryan Weersink, Marlee Sauder, Carissa Stauffer, Tim Gallagher, Diana Addley	7/9/2025	Email with responses to questions included in Bryan Weersinks original email, as well as a link to the Twenty Mile Creek and Sinkhole Creek models	Email	7/9/2025	Bryan Weersink (Stantec)	Great, thank you Carly! I haven't had a chance to dig into the files, but I was able to successfully download them and it looks like everything is there.
Marlee Sauder (Stantec)	Niagara Peninsula Conservation Authority	Kim Peters, Carly Mason	8/14/2025	Email looking to confirm NPCA floodplain mapping scale to ensure our mapping aligns with their guidelines.				
Carly Mason Water Resources Engineer	Niagara Peninsula Conservation Authority	Bryan Weersink, Marlee Sauder, Carissa Stauffer, Tim Gallagher, Diana Addley	8/18/2025	Email noting that the NPCA floodplain figures are at a 1:2000 scale.	Email	8/18/2025	Marlee Sauder (Stantec)	Great, thanks for confirming Carly.
Bryan Weersink (Stantec)	Niagara Peninsula Conservation Authority	Kim Peters, Carly Mason	9/26/2025	Email looking to confirm NPCA policies and buffers/setbacks for the floodplain limit.				

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September 2023 to April 2026

From	Agency/Group	To	Date	Comment	Format	Response Date	Sent By	Response
Carly Mason Water Resources Engineer	Niagara Peninsula Conservation Authority	Bryan Weersink, Marlee Sauder, Carissa Stauffer, Tim Gallagher, Diana Addley	10/2/2025	Email confirming that the NPCA has no setback buffers from their floodplain.				
Jesse Campbell (SLR Consulting)	Niagara Peninsula Conservation Authority	Kim Peters, Amy Parks, Dirk Janas, Josie Mielhausen, Ian Roul, Kate Lillie, Carissa Stauffer, Tim Gallagher	12/18/2025	Email requesting clarification on NPCA policies regarding vegetation protection zones and wetlands, and whether these policies take precedence over the Urban Hamilton Official Plan (UHOP), where NPCA has jurisdiction.				
Kim Peters Manager, Environmental Planning & Policy	Niagara Peninsula Conservation Authority	Amy Parks, Dirk Janas, Josie Mielhausen, Ian Roul, Kate Lillie, Carissa Stauffer, Tim Gallagher	12/18/2025	Email response identifying which policies apply and general applications of wetland setbacks.	Email	12/18/2025	Jesse Snider (SLR Consulting)	Provided further clarification on the stage of the project and study location.
Kim Peters Manager, Environmental Planning & Policy	Niagara Peninsula Conservation Authority	Amy Parks, Dirk Janas, Josie Mielhausen, Ian Roul, Kate Lillie, Carissa Stauffer, Tim Gallagher	12/18/2025	Email response further clarifying 30m setback for wetlands.	Email	12/19/2025	Jesse Snider (SLR Consulting)	Confirmed receipt of email and clarifications.

APPENDIX B2

Agency Correspondence - City of Hamilton

From: Addley, Diana

Sent: Friday, September 22, 2023 1:56 PM

To: Hartley, Mark <Mark.Hartley@hamilton.ca>; Jonathan Bastien <Jonathan.Bastien@conservationhamilton.ca>; David Deluce <ddeluce@npca.ca>

Cc: Gallagher, Tim <Tim.Gallagher@stantec.com>

Subject: Elfrida SWS - Request for Information

Good afternoon,

Please find attached the list of background data/information being requested to support this study.

Please let us know if you have any questions and/or would like to discuss further.

Kind regards,

Diana Addley

Senior Environmental Planner

Direct: 905 415-6401

diana.addley@stantec.com



From: Addley, Diana
Sent: Tuesday, October 3, 2023 2:19 PM
To: Hartley, Mark ; Jonathan Bastien ; David Deluce
Cc: Gallagher, Tim
Subject: RE: Elfrida SWS - Request for Information

Hello,

In follow up to email request below, could you kindly provide the data/information listed within the attached by **Friday, October 6, 2023**.

To assist with the file transfer process, please upload the reports/data/information to the following folder:

[Elfrida RFI](#)

If you have any questions and/or issues accessing the folder, please do not hesitate to contact me.

Thank you,

Diana Addley
Senior Environmental Planner
Direct: 905 415-6401



From: Addley, Diana

Sent: Friday, October 13, 2023 3:08 PM

To: Hartley, Mark <Mark.Hartley@hamilton.ca>; Jonathan Bastien <Jonathan.Bastien@conservationhamilton.ca>; David Deluce <ddeluce@npca.ca>

Cc: Gallagher, Tim <Tim.Gallagher@stantec.com>

Subject: RE: Elfrida SWS - Request for Information

Good afternoon,

The consultant team has reviewed the 2014 Terms of Reference and provided edits/comments for your consideration – please see attached. Could you please provide your comments by **Friday, October 27th**?

In follow up to the request below, please also kindly provide the requested data/information at your earliest convenience.

Thank you,

Diana Addley
Senior Environmental Planner
Direct: 905 415-6401



From: Stauffer, Carissa

Sent: Wednesday, May 7, 2025 1:45 PM

To: Heyworth, Dave <dave.heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Hartley, Mark <Mark.Hartley@hamilton.ca>; Norman, Gavin <gavin.norman@hamilton.ca>; Holden, Gina <gina.holden@hamilton.ca>

Cc: Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>; Ian Roul <iroul@geoprocess.com>; "dirk.janas@slrconsulting.com" <dirk.janas@slrconsulting.com>; Jamieson, Nathan <Nathan.Jamieson@stantec.com>; Overholt, Chris <chris.overholt@stantec.com>

Subject: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

When: Tuesday, May 20, 2025 2:00 PM-3:00 PM.

Where: Microsoft Teams Meeting

Hello,

We would like to invite you to a meeting on **Tuesday, May 20th, 2025 at 2:00 PM** to provide a project update on the Elfrida Subwatershed Study, discuss the Terms of Reference, previously used in the Aquafor Beech Subwatershed Study, and review other project components, including the work completed to date and plans for future steering committee meetings.

A detailed agenda will be provided prior to the meeting.

In the meantime, please reach out if you have any questions.

Kind regards,

Carissa Stauffer

Junior Environmental Planner & GIS Technician

Direct: 905 944-6872

Carissa.Stauffer@stantec.com

Stantec

300-125 Commerce Valley Drive West

Markham ON L3T 7W4



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● Please consider the environment before printing this email.

Re: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 1 month ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
Location Microsoft Teams Meeting
My response Not yet responded
Required attendees Stauffer, Carissa, Heyworth, Dave, Toman, Charlie, Hartley, Mark, Norman, Gavin, Holden, Gina
Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Wed 2025-06-25 11:34 AM

 3 attachments (8 MB)

Elfrida - SWS Terms of Reference 2025.docx; mem_ElfridaSWS_RFI_fnl_20250613.pdf;
not_ElfridaSWS_CityHamilton_mtg_fnl_20250520.pdf;

Hello,

Thank you for taking the time to meet with the study team to discuss the Elfrida Urban Boundary Expansion application and subsequent Subwatershed Study (SWS).

Please find attached the minutes from our meeting on May 20, 2025, and an official Request for Information (RFI) as discussed.

Following the meeting, the study team reviewed *UBE - Appendix F* as provided by the City. Based on this review, we are requesting that the City review the attached draft SWS Terms of Reference (ToR) in accordance with the commitments outlined in Appendix F. We are requesting a 30-day review period and kindly ask that the City **provide any comments by July 25, 2025**.

As part of this review, we ask that particular attention be given to the background documents identified for review in support of our SWS Phase 1 Report. We would appreciate the City's input on which background documents they consider most relevant to the Elfrida lands, and how these materials may inform or influence the planning context. We encourage the City to highlight the importance of these documents and to suggest any additions or removals to the list as deemed appropriate.

If you have any questions or would like to discuss any of the items further, please don't hesitate to reach out.

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician

Elfrida Subwatershed Study Terms of Reference and Project Update – City of Hamilton

Project/File:	160623199	
Date/Time:	May 20, 2025 / 2:00 PM	
Location:	Microsoft Teams	
Next Meeting:	TBD	
Attendees:	Dave Heyworth	City of Hamilton Director and Senior Advisor of Strategic Growth Initiatives
	Charlie Toman	City of Hamilton Program Lead in Policy Planning & Municipal Comprehensive Review
	Mark Hartley	City of Hamilton Senior Engineer - Stormwater Management
	Timothy Winterton	City of Hamilton Senior Engineer - Capital Planning
	Tim Gallagher	Stantec Consulting Ltd.
	Diana Addley	Stantec Consulting Ltd.
	Carissa Stauffer	Stantec Consulting Ltd.
	Nathan Jamieson	Stantec Consulting Ltd.
	Chris Overholt	Stantec Consulting Ltd.
	Dirk Janas	SLR Consulting (Canada) Ltd.
	Ken Glasbergen	GeoProcess
Absentees:	Gavin Norman	City of Hamilton
	Ian Roul	GeoProcess
Distribution:	All	

Stantec Moment: D.R.I.V.E – A Checklist for Safer Vehicle Trips

Item:	Action:
<p>Introductions / Roles / Responsibilities</p> <ol style="list-style-type: none"> 1. Stantec Consulting Ltd. (Stantec), GeoProcess, and SLR Consulting (Canada) Ltd. (SLR) introduced themselves as the study team to City of Hamilton (City) staff and provided an overview of the Elfrida Subwatershed Study (SWS) background and current project standing. The project was initially started in Fall 2023 but was paused while revisiting the Urban Boundary Expansion (UBE) application. The 'complete' application was resubmitted early March 2025, and the project is now resuming work. The UBE application currently remains with the City. 2. Stantec identified that the study team is aiming for a Fall 2025 completion of the Draft Phase 1 SWS report, conditional on the timing and availability of environmental field investigation windows and other supporting studies. 3. Stantec emphasized that the primary objective of this meeting is to re-establish open communication between the study team and the City to ensure that all reports and deliverables related to the UBE application and future Phase 1 SWS report are consistent with the City's planning objectives, policies, and expectations. 	Info

Overview of Information Prepared to support Urban Boundary Expansion Application

4. Stantec identified that a Preliminary Opportunities and Constraints Mapping Memo (the memo) was prepared in support of the UBE application, which was intended to serve as an interim submission prior to the completion of a Phase 1 SWS report.	Info
5. Stantec asked if City staff attending this call have reviewed the memo being referred to. City staff confirmed they have seen the memo as part of the UBE application.	Stantec, City

Item:	Action:
6. GeoProcess and SLR provided an overview of the comprehensive field investigations that have been completed to date, noting that work was initially started in Summer/Fall 2023 and then resumed in the Winter/Spring of 2024. Additional field investigations have been ongoing in Spring 2025 to collect certain data in the same calendar year. Field investigations completed to date include benthic sampling, water quality sampling, floral inventories, amphibian surveys, breeding birds, winter wildlife studies, and preliminary delineation of woodlands and wetlands within the study area based on the City and Conservation Authority (CA) policies and guidelines.	Info, GeoProcess, SLR
7. GeoProcess noted that winter wildlife studies were completed this past winter, and that rounds 1 and 2 of Headwater Drainage Feature (HDF) assessments and the first round of amphibian surveys were completed this spring. The next round of amphibian surveys and a third round of HDF assessments (if required) still needs to be completed. GeoProcess noted that HDF assessments were completed previously but are being reassessed to have them all completed within the same year.	
8. SLR noted that it has been a priority to identify what features are currently located within the site rather than what was identified years prior and carried forward. This includes updating ecological land classifications (ELC) and wetland classifications on site.	
9. Stantec asked the City to confirm that based upon feedback received, the UBE application has been denied with the requirement of a Phase 1 SWS report to be completed. The City noted that they have not provided their final recommendation/proposal for the UBE application yet but understood that may have been the feedback from the City's Natural Environment staff. The City further clarified that it is still under review and preliminary staff comments have noted that a Phase 1 SWS report will need to be completed, in accordance with Appendix F of their Urban Expansion Guidelines.	Stantec, City
10. Stantec noted that a Phase 1 SWS report is planned for prepared by the Fall 2025 pending the completion of all field work and supporting assessments.	

Review of Background Information Provided / Gaps

11. Stantec identified that there is an existing data gap for existing and adjacent lands to the Elfrida area including Felker, Highgate Pond, and Swayze lands. Stantec noted that any Master Drainage Plans, background reports, or drawings available for these lands would be of particular focus and value to complete the SWS.	Info, Stantec
12. Stantec also requested the Upper Hannon Creek Master Drainage Plan from the City to support the surface water assessments of the SWS.	
13. Stantec noted that the 2014 Aquafor Beech SWS (Aquafor Beech) was provided but not background reports for the surrounding areas. Stantec also noted that a preliminary review of aerial imagery compared to the existing study lands show that the lands have changed significantly since Aquafor Beech was completed. The City noted that this request will require a more detailed review depending on the availability of the information requested, but they can provide some information that would provide an idea on how things have changed between now and then.	Stantec, City
14. GeoProcess and SLR noted that they had all information/data needed for their scope at this time.	GeoProcess, SLR
15. Stantec to follow up with an email after the meeting to formally request all reports and further information for these areas from the City.	Stantec
16. Stantec noted that they wanted to ensure, despite the UBE application, that the City is open to sharing information in support of the Phase 1 SWS. The City confirmed that they can support this and provide information requested.	Stantec, City

Terms of Reference Needs / Discussion

17. Stantec indicated that the current Terms of Reference (TOR) being used for this study is from Aquafor Beech and is very detailed. Stantec noted that it focuses on technical	Info
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Item:	Action:
<p>details rather than planning policy and was revisited by the study team at the beginning of this study to update and identify study specific changes that differed from the initial Aquafor Beech SWS.</p>	
<p>18. Stantec noted that it was understood the City was preparing an updated SWS guideline and more recent planning policies that would apply to this study. Stantec asked the City if these have been approved/finalized. Stantec also asked if the study team should carry forward with the current TOR which was derived from the original SWS ToR or apply the new policies/guidelines.</p>	
<p>19. Charlie Toman (CT) from the City identified that Appendix F: Subwatershed Study (Phase 1) (Urban Boundary Expansion) (https://pub-hamilton.escribemeetings.com/filestream.ashx?DocumentId=445948) was recently approved by Council for UBE applications and would be applicable.</p>	City
<p>20. The City asked if the study team had two approaches:</p> <ul style="list-style-type: none"> i. To proceed with a Phase 1 SWS in support of the UBE application submitted to the City, and; ii. To proceed with a Phase 1 SWS regardless of the outcome of the UBE application. 	City, Stantec
<p>21. Stantec confirmed their understanding is that the recently prepared UBE Guideline indicates that a Phase 1 SWS is to be completed. However, given the timing of the UBE application, an interim memorandum was submitted with the current UBE application, which was intended to identify natural heritage constraints and provide a preliminary vision of the conceptual developed landscape. The intent would be to carry forward with a Phase 1 and Phase 2 SWS report to further support a future Secondary Plan process at a later date.</p>	
<p>22. Stantec further noted that they will be moving forward to prepare a Phase 1 and Phase 2 SWS on behalf of the Elfrida Landowner Group.</p>	
<p>23. Stantec requested clarification from the City on whether to proceed with the current TOR or to adopt the TOR outlined in Appendix F. The study team emphasized the importance of this confirmation to avoid future questions regarding the rationale for selecting one TOR over the other if the City or CA expectations differ from what was selected. Stantec noted that this could lead to costly changes in potential repeat work for the Phase 1 SWS report at a later date.</p>	Stantec, SLR, City
<p>24. Stantec and SLR further noted that this clarification is particularly important for components such as hydrologic and hydraulic modelling, field surveys, and overall technical guidance—areas where Appendix F leaves significant discretion to the consultant.</p>	
<p>25. The City confirmed that the study team will need to satisfy the requirements/TOR shared in Appendix F. Stantec noted that the work being completed under the current TOR satisfies the requirements of Appendix F. The study will move forward with Appendix F as the main TOR guide, but will use the current TOR for details left up to the consultant under Appendix F.</p> <ul style="list-style-type: none"> ▶ Post Meeting Note – Stantec would like to note that the provided Appendix F indicates that the TOR used in the study requires a review and approval by the City. As such, Stantec will provide the City with the current TOR and continue to request their review/approval. 	City, Stantec
<p>26. The City asked if the Phase 1 SWS will be completed for the Ontario Land Tribunal (OLT) hearing if the council denies the UBE application. Stantec noted that the question is more planning related and not something the Subwatershed Study team can comment on.</p>	City, Stantec
<p>27. Stantec noted they are aware the memo submitted in support of this application is high-level given that the Subwatershed Study Team is still in the process of completing the required field work and assessments that will lead to a Phase 1 SWS report.</p>	

Item:	Action:
28. Stantec identified that the Aquafor Beech Subwatershed Study indicates 'Final' on the document; however, also understands that it was never formally approved. The City and Conservation Authorities had previously indicated that there were still outstanding comments that were to be shared in the Fall of 2023 before the Elfrida lands were removed from the Urban Boundary by the Province. Stantec noted that in 2023, the City committed to sharing these comments with the Subwatershed Study Team but noted that these comments were never received.	Info
29. Stantec asked if the City would be able to share the comments received on Aquafor Beech Report to ensure that open/remaining comments are addressed in the future Elfrida Phase 1 SWS report.	Stantec, City
30. The City noted that after September 2023, the lands identified in Aquafor Beech were changed by the Province of Ontario (Province) and were no longer considered part of the urban boundary/urban lands. As a result, comments were never shared.	
31. Stantec highlighted that it would be important for the Elfrida SWS to address these comments as they are still technically relevant to the ongoing work.	
32. The City noted they will investigate the status and contract of Aquafor Beech, as it was addressed to the City, before sharing any comments with the Elfrida SWS study team.	City
33. Stantec opened the discussion to Steering Committee meetings before moving into the Infrastructure topics. <i>[Further discussion on the Steering Committee Meetings is included within 'Future Steering Committee Meetings']</i>	Stantec

Infrastructure

- | | |
|---|------------------------|
| 34. Stantec identified a number of Wastewater and Water Infrastructure projects from the City of Hamilton Development Charge Background Study required to service the Elfrida Lands, and were looking to receive updates on, as described herein: | Stantec,
City, Info |
| 35. Charlie Toman (City) left the meeting at 2:57 PM due to another meeting in his calendar. | |

Dickenson Road Trunk Sanitary Sewer (Project ID HM20-S-23)

- | | |
|---|--|
| 36. Stantec requested the City to provide the latest design calculations, drainage areas and issued for construction (IFC) drawings, and to provide a status update of construction and timing of completion/commissioning. The City noted that as of this past fall/winter, they are aiming for completion in Summer 2027. The City also noted that only draft drawings are currently available. | |
| 37. The City identified that requests should go through Hanna Daniels – Manager, Water & Wastewater Systems Planning, and will be filtered through appropriate Hamilton Water/Wastewater staff. | |

Woodward Avenue Wastewater Treatment Plant & Woodward Avenue Water Treatment Plant

- | | |
|---|--|
| 38. Stantec asked for information related to existing flows and rated capacity of the WWTP, and any triggers/threshold for future upgrades. Similar request was made for the Water Treatment Plant, City staff were unable to provide any feedback and noted that requests for this will go through Hamilton Water/Wastewater, but Timothy Winterton (TW) can assist in facilitating some requests. | |
| 39. Dave Heyworth (DH) requested to be included in all correspondence. | |

Lower Centennial Trunk Sewer (Project ID# SCL11-S-23) & Battlefield Trunk Sewer Upgrades (Project ID# WW-33)

- | | |
|---|--|
| 40. The City noted that these two projects can be considered similar/ the same work and have been on hold for a while. The City confirmed that RJ Burnside is the consultant retained for both projects. | |
| 41. The City noted that a Centennial Secondary Servicing Plan (CSSP) is being prepared by City staff and is looking to increase flow to the lower Centennial Trunk (recommended design). The City could not provide further timelines on this project but | |

Item:

noted that it is still in the design phase with hope that the design will be completed in upcoming months.

42. The City noted that the CSSP project will not have a direct impact on the trunk sewer system within the Elfrida UBE area as it is just examining the local network downstream of the Elfrida lands. The City identified that this project will be looking at improvements and increasing the trunk size of Lower Centennial to support flows being added from Battlefield, which is currently at its maximum capacity. The City noted that Battlefield will have no capacity until the Lower Centennial is complete.
43. Nathan Jamieson (NJ) asked how Stantec can get involved in the project/if this project includes stakeholder consultation. TW noted that he is not involved directly in the consultation process, but that he would assume stakeholder meetings will be organized, and that NJ can follow up after this meeting for more information.
44. Dave Heyworth (City), Diana Addley (Stantec), Ken Glasbergen (GeoProcess), and Dirk Janas (SLR) left the meeting at 3:01 PM.

Trinity Church Elevated Tank (Project ID# HM28-W-23)

45. The City noted that this project was put on hold when the Elfrida lands were pulled out of the Urban Boundary by the Province. City had no timeline for when the project would resume.

400mm diameter watermain extension on Twenty Road (Project ID# HM8-W-23)

46. Similar to the Trinity Church elevated tank, this project is on hold, but the City noted that this project might move forward with planned works to upgrade Trinity Road and eventually provide a watermain feed into the future elevated tank to support development of a new Ikea storage facility. The City noted that this project is in initial discussions with Hamilton Water.

400mm diameter trunk feeder main Fletcher Road and Cemetery Road (Project ID# B7-W-23)

47. The City noted they cannot provide a status update on this project. Currently it is on hold and there are no plans to move forward.

Highland Road Reservoir (additional storage) (Project ID# SCU7-W-23)

48. The City noted they cannot provide an update on this project and would include it in the information request (IR) that Stantec is compiling following this meeting.

New PD7 Booster Pumping Station (Project ID# SCU21-W-23)

49. No timing for completion of this work, but City staff noted it is tied to the completion of the Growth Management Strategy (GRIDS 2).

600mm diameter watermain on Upper Centennial Parkway (Project ID# SCU22-W-23)

50. The City noted that there is currently no timeline or schedule for this project, but it will tie into the completion of the City updated Water and Wastewater Master Servicing Plan (MSP), which will look at infrastructure up to the year 2051. The City noted that the MSP will focus on the main trunk of the Upper Centennial Parkway and Phase 1 is projected for completion at the end of the year before a more comprehensive Phase 2 is undertaken.
51. Stantec requested the Sanitary Model that is being used for the MSP. The City noted that this would come through Hamilton Water, but that it would likely be denied due to legality concerns and will not be released to developers.
52. Stantec asked if they could receive/have access to this in the form of GIS files. The City confirmed that Stantec might be able to receive this data following a data licence agreement between Stantec and the City. Stantec to include this in their IR.
53. Stantec asked if the City's Spyder system was still operational. The City noted they believe so, but it is mainly used to house drawings. The City noted that most data has been moved to their GIS mapping portal and can be requested through a data license agreement/IR.

Action:

Item:

54. TW asked to be copied in the IR/data license agreement to help direct the study team to the right individuals and data in the process of developing the data license agreement.

Action:

Future Steering Committee Meetings

55. Stantec noted that the study team would like to set up Steering Committee meetings with the CA's and City to maintain an open line of communication and transparency on project work while the SWS is being completed. These meetings will be focused on providing study updates, identifying outstanding data/requirements, and gaining feedback on technical and other considerations before decisions are made. The technical focus will include hydrologic/hydraulic, fluvial, aquatic, and terrestrial investigations.

Info

56. Stantec asked if the City is open to engaging in the form of Steering Committee meetings for this project. The City stated that their engagement will be determined based on the outcome of council's decision on the UBE application.

Stantec, City

Next Steps and Other Items

57. The City identified all contacts included in this meeting to be included in future correspondence on this study.
58. Stantec to follow up with the City after the UBE application is submitted to council on June 25, 2025, to gauge City's engagement in Steering Committee meetings.
59. Stantec to submit an IR to the City for all reports, background studies, and data requested to support the Phase 1 SWS report and supporting studies.
60. Stantec to connect with the City to set up a data license agreement for data requested in support of the Phase 1 SWS report and supporting studies, particularly for hydrology/hydraulic and infrastructure data.

City

Stantec

Meeting adjourned at 3:16 PM.

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

Stantec Consulting Ltd.



Carissa Stauffer

Environmental Planner & GIS Technician
Phone: (905) 944-6872
carissa.stauffer@stantec.com

Attachment: City of Hamilton SWS Phase 1 (Urban Boundary Expansion) – Appendix F
Terms of Reference – Elfrida Subwatershed Study
Request for Information Memorandum Elfrida Subwatershed Study, Urban Boundary Expansion Application
Aquafor Beech SWS Phase 1 Figure 3.34



Hamilton

Subwatershed Study (Phase 1) (Urban Boundary Expansion)

PURPOSE:

This document explains the process for the completion of a Subwatershed Study (Phase 1) which is a requirement for the submission of an urban boundary expansion application under the *Planning Act*. The Terms of Reference for this Study is based upon the Technical Memo titled City of Hamilton Review of Urban Area Expansion Criteria, prepared by Dillon Consulting and dated July 26, 2024. A Subwatershed Study (Phase 1) shall follow the requirements referenced in this document unless further scoped through a Formal Consultation prior to the submission of the application. For each Subwatershed Study (Phase 1), the City requires the applicant to develop a Terms of Reference that outlines how they will fulfil the requirements of this document, in consultation with the applicable Conservation Authority. In addition, the applicant should consult with and consider input from Indigenous communities on the proposed Terms of Reference. That Terms of Reference will need to be approved by the City prior to initiation of the study.

The Subwatershed Study (Phase 1) Terms of Reference is specific to urban boundary expansion proposals and takes a phased approach as contemplated in the Provincial Subwatershed Planning Guide (2022) and focuses on existing conditions as an initial impact assessment. Should an urban boundary expansion application be approved, the findings of the Phase 1 study would be incorporated into subsequent Phase 2 and 3 work for the Subwatershed Study completed through Secondary Planning. Phase 2 of the Subwatershed Study focuses on the development of a preferred land use scenario and more refined impact assessment. Phase 3 of the Subwatershed Study focuses on the implementation of the Subwatershed recommendations and management strategies.

The Subwatershed Study (Phase 1) may be submitted in place of an Environmental Impact Study where the subwatershed planning process was carried out as part of a comprehensive planning process to the satisfaction of the City in consultation with the applicable Conservation Authority.

PREPARED BY:

A Subwatershed Study (Phase 1) must be prepared by a qualified expert in fields relevant to the natural environment and civil engineering, including an ecologist,

biologist, hydrogeologist, arborist/forester, or geologist, depending on the area of expertise required. In some cases, expertise in storm water management, geology, aquatic ecology, terrestrial ecology, hydrogeology, or fluvial geomorphology will be required.

CONTENTS:

The Subwatershed Study (Phase 1) shall include the technical studies below which are interrelated and must provide recommendations that considers all technical information:

- Hydrogeology;
- Hydrology and Hydraulics;
- Stream Morphology;
- Surface Water Quality; and,
- Terrestrial and Aquatic Ecology.

While the contents of a Subwatershed Study (Phase 1) may be scoped on a site-by-site basis, the general content incorporated into this Study will include identification of existing conditions and an initial impact assessment, including:

- Confirmation of objectives for the Subwatershed Study (Phase 1);
- Review of the Subwatershed boundaries within the study area taking into consideration broader water resources and natural heritage systems within the watershed;
- Identification and mapping of existing natural features, hydrologic features and hazard lands including the related hydrologic functions and conditions;
- Completion of existing conditions hydrologic modelling. The **detailed hydrologic model** shall be developed and calibrated for the subwatersheds' existing condition for all relevant rain events.
- A **hydrogeology** study should be completed to establish a geological conceptual model for the subwatershed(s), determining the key characteristics of the bedrock and overburden systems, in addition to their functions in terms of controlling groundwater movement, availability, and quality in these subwatersheds. An integral component is to assess the interactions between the groundwater system and the surface water system, and to determine the overall role or function of these interactions in an ecosystem context.
- A **water balance model** shall be developed based on the output of the hydrologic model and hydrogeology of the area. The water budget shall include an estimate of precipitation, evapotranspiration, runoff, and infiltration, including groundwater recharge / discharge estimations. The present low flow status shall be evaluated, and the constraints associated to water takings and land use changes shall be identified.
- A **stream morphology study** shall assess the morphological and fluvial character of the streams, identify physical habitat attributes (e.g., pools, riffles etc.) and diversity and fluvial processes (e.g., bed load transport, energy

reduction through sinuosity, etc.) with the overall objective to prevent increases in erosion and deposition through the maintenance of the hydrological regime.

- The Subwatershed Study (Phase 1) shall undertake an existing conditions **erosion potential analysis**, based on the erosion data collected to understand the erosion processes, and to identify areas which are highly prone to erosion, where erosions are occurring, or where structures may be at risk.
- Identification of existing land uses.
- Based on a preliminary land use scenario, completion of an initial assessment of the potential impact of development on the water resource and natural systems (including the associated hydrological and ecological functions) in the Subwatershed Study Area based on a preliminary land use scenario.

Consistent with the City of Hamilton's approved Environmental Impact Statement Guidelines, if field studies have been conducted more than five years before the Subwatershed Study (Phase 1) is submitted, updated field work will be required.

Environmentally Significant Areas Impact Evaluation Group (ESAIEG)

The Environmentally Significant Areas Impact Evaluation Group (ESAIEG) is a voluntary technical group established to advise the Planning and Economic Development Department on the impacts on proposed development within or adjacent to Core. Areas. Their mandate is to provide advice to Planning Division staff on whether the technical information provided is adequate to address impacts, whether the proposal should proceed, and if so, what mitigation measures are needed.

Planning Division staff may refer all or part of a Subwatershed Study (Phase 1) to ESAIEG for review. Where ESAIEG has reviewed, a summary of key feedback from City staff and ESAIEG will be issued by City staff following the ESAIEG meeting. This summary and a summary of any subsequent changes made to the proposal to address the comments is required as part of a resubmission of the Subwatershed Study (Phase 1).

OTHER INFORMATION:

- City of Hamilton Environmental Impact Statement Guidelines
- City of Hamilton Green Standards and Guidelines for Site Servicing (Stormwater)
- City of Hamilton Comprehensive Development Guidelines
- City of Hamilton Linkage Assessment Guidelines (March 2015)
- City of Hamilton Tree Protection Guidelines (revised October 2010)
- Ministry of Environment, Conservation and Parks DRAFT Subwatershed Planning Guide (January 2022)
- Six Nations of the Grand River – Environmental Levy Policy

REVIEWED AND APPROVED BY:

- Natural Heritage staff, Planning and Economic Development Department.
- Growth Management staff, Planning and Economic Development Department.
- Environmentally Significant Areas Impact Evaluation Group (ESAIEG).
- Applicable Conservation Authority.

CONTACT:

Natural Heritage staff: pdgeniq@hamilton.ca

Growth Management staff: Mark.Hartley@Hamilton.ca

Hamilton Conservation Authority: <https://conservationhamilton.ca/>

Conservation Halton: <https://www.conservationhalton.ca/>

Grand River Conservation Authority: <https://www.grandriver.ca/en/index.aspx>

Niagara Peninsula Conservation Authority: <https://npca.ca/>



Request for Information Memo

To: City of Hamilton
From: Stantec Consulting Ltd.
Markham, ON
Project/File: Elfrida Subwatershed Study
Date: June 13, 2025

Reference: Request for Information Memorandum Elfrida Subwatershed Study, Urban Boundary Expansion Application

In support of the ongoing Elfrida Subwatershed Study, this Request for Information (RFI) is issued by Stantec Consulting Ltd. to request the following data and information from the City of Hamilton:

- Upper Hannon Creek Master Drainage Plan and any supporting drawings, figures, models.
- Background Master Drainage Report and/or Stormwater Management Report, Storm Drainage Plans, SWM pond drawings and storm sewer information for Swayze Lands (refer to Figure 3.34 of Aquafor Beech Phase 1 SWS attached)
- Background Master Drainage Report and/or Stormwater Management Report, Storm Drainage Plans, SWM pond drawings and storm sewer information for Highgate Meadow Estates (refer to Figure 3.34 of Aquafor Beech Phase 1 SWS attached)
- Background Master Drainage Report and/or Stormwater Management Report, Storm Drainage Plans, SWM pond drawings and storm sewer information for Felker Lands (refer to Figure 3.34 of Aquafor Beech Phase 1 SWS)
- Any additional background reports originally made available in support of the Aquafor Beech SWS surrounding and surrounding area.
- City of Hamilton 2023 comments on the Aquafor Beech Phase 1 Subwatershed Study Report.
- Latest design calculations, existing and proposed drainage areas, design populations and flow rates, and issued for construction (IFC) drawings for Dickenson Road Trunk Sanitary Sewer (Project ID HM20-S-23)
- Latest design calculations, existing and proposed drainage areas design populations and flow rates, and 'as constructed' or issued for construction (IFC) drawings for Upper Centennial Trunk Sanitary Sewer
- Latest design calculations (or flow monitoring results) for the sanitary sewer system downstream of the Upper Centennial Trunk Sanitary Sewer from King Street to the Woodward Avenue Wastewater Treatment Plant, including existing and proposed drainage areas, design populations and flow rates, and upgrades to the Battlefield Trunk Sanitary Sewer System
- Updates on the design and construction of the Lower Centennial Trunk Sanitary Sewer (Project SCL11-S-23) from King Street to the Woodward Avenue Wastewater Treatment Plant including existing and proposed drainage areas, design populations and flow rates and any preliminary design drawings
- Existing flows and rated capacity of the Woodward Avenue Wastewater Treatment Plant & Woodward Avenue Water Treatment Plant, and any triggers/threshold for future upgrades
- Update on the Highland Road Reservoir (additional storage) (Project ID# SCU7-W-23)
- GIS data for the Sanitary Model and Water Model being used for the Water and Wastewater Master Servicing Plan relevant to the servicing of East Mountain Servicing Area (including the

Reference: Request for Information Memorandum Elfrida Subwatershed Study, Urban Boundary Expansion Application

proposed 600mm diameter watermain on Upper Centennial Parkway (Project ID# SCU22-W-23))

Best regards,

Stantec Consulting Ltd.

A handwritten signature in black ink, appearing to read 'C. Stauffer', written over a thin red horizontal line.

Carissa Stauffer

Environmental Planner & GIS Technician
Mobile: (647) 469-6106
carissa.stauffer@stantec.com

Attachment: Aquafor Beech SWS Phase 1 Figure 3.34

Elfrida Subwatershed Study

Legend

- Study Area
- Watercourse
- Storm Sewer
- Water Main
- Conduits
- Junctions
- Outfalls
- External Model Junctions
- External Model Storages

Subcatchments

- Sinkhole Creek
- Stoney Creek
- Twenty Mile Creek

External Models (by others)

- Felker
- Highgate Pond
- Swayze

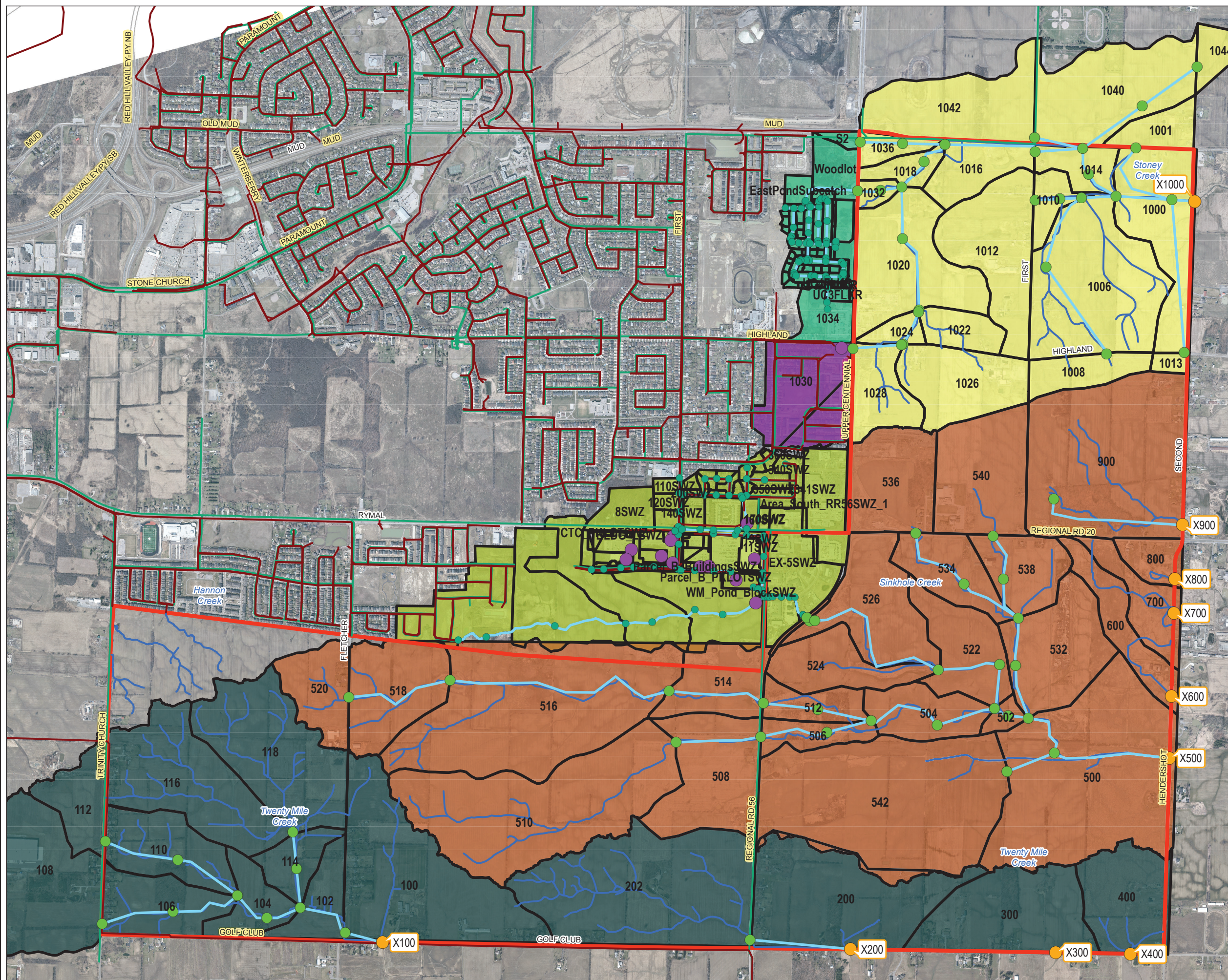
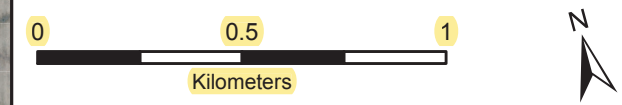


Figure 3.34


Hydrologic Model Setup

Date: October 2017
 Data Source: City of Hamilton 2016



RE: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 2 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
Location Microsoft Teams Meeting
My response Not yet responded
Required attendees Stauffer, Carissa, Heyworth, Dave, Toman, Charlie, Hartley, Mark, Norman, Gavin, Holden, Gina
Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Fri 2025-07-04 9:30 AM

 1 attachment (8 MB)

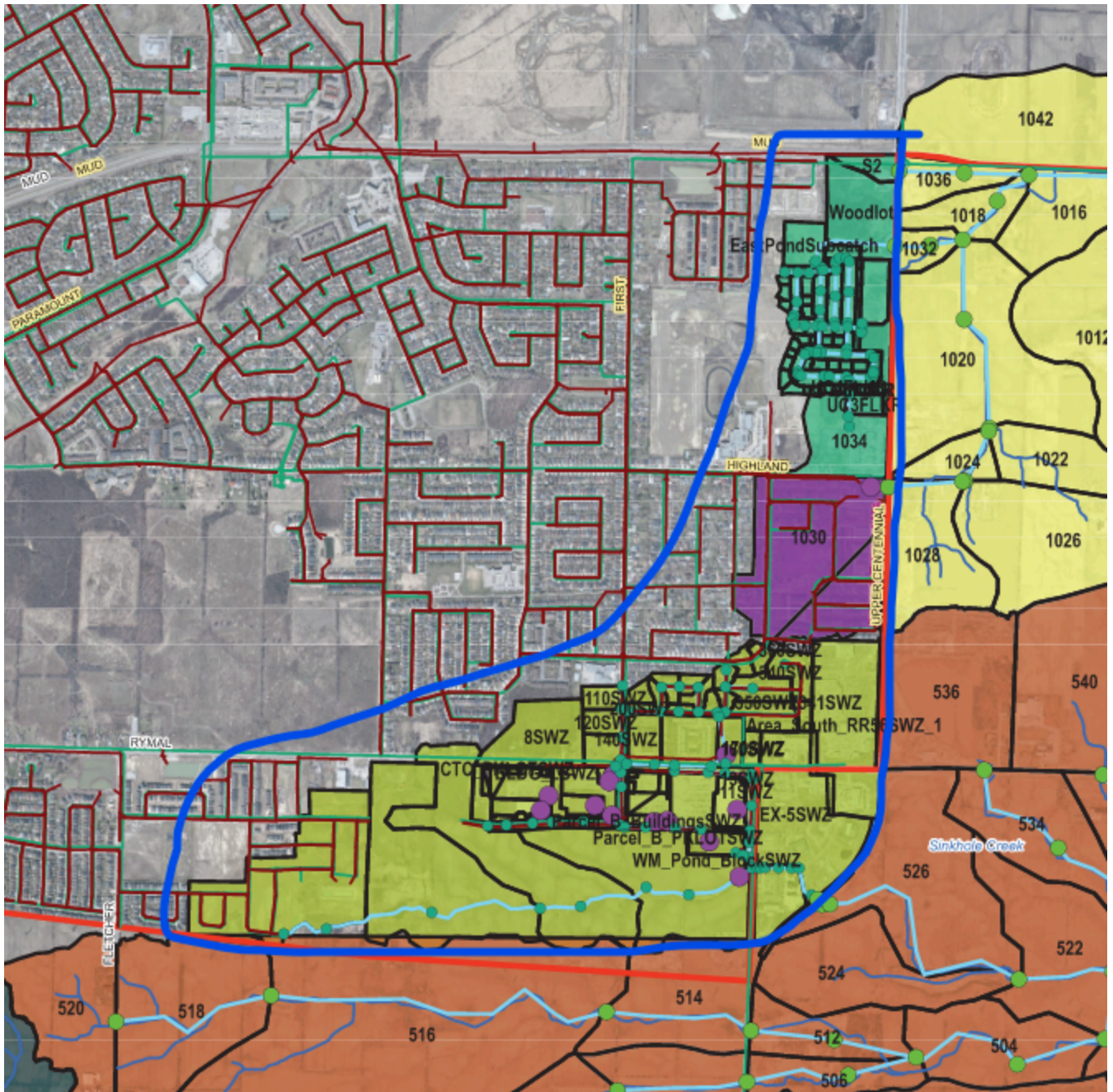
mem_ElfridaSWS_RFI_fnl_20250613.pdf;

Good Morning,

I am emailing to follow up on a few items that were outlined in the RFI shared last week (email below and RFI attached). Specifically, I am looking to obtain any available information related to drainage and stormwater management for the areas west of Highway 56 / Upper Centennial Pkwy draining into the Elfrida study area. This area is outlined in blue below.

The RFI outlined a few specific developments as mentioned in the Aquafor Beech Phase 1 SWS (2018) - Swayze Lands, Highgate Meadow Estates, and Felker Lands - but any additional SWM information for this area is also required. It appears that the 2018 SWS included these listed external developments, apart from the development in the southernmost portion of the blue outlined area below (Summit Park Community?). There is a large SWM Facility north of Dalgleish Trail and west of Highway 56 that appears to control this area, which we will require information on.

If you could please provide any available SWM Reports (including design/drawings) as well as any associated models within this area (circled in blue below), that would be greatly appreciated!



Feel free to reach out if you have any questions.

Thank you,


Bryan Weersink, P.Eng.
Surface Water Team Lead

Office: [Hamilton ON](#)
Direct: [\(905\) 381-3271](tel:(905)381-3271)
Mobile: [\(519\) 831-6554](tel:(519)831-6554)
bryan.weersink@stantec.com



RE: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 2 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
Location Microsoft Teams Meeting
My response Not yet responded
Required attendees Stauffer, Carissa, Heyworth, Dave, Toman, Charlie, Hartley, Mark, Norman, Gavin, Holden, Gina
Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Wed 2025-07-09 3:27 PM

 1 attachment (178 KB)
2025 Growth Management Fees.pdf;

Hi Bryan, I've reviewed the RFI and note that it will take some time to retrieve the information and that it will require involvement from a few or more groups at the City. Also, some information may not be available or may have limited availability. In that respect, we may need to meet to review the specific requests to get clarity on what you want vs. what is available. Given the comprehensive nature of the request I am attaching Growth Management's Master Fees List which we will be applying to complete the request – please refer the Records Search and Photocopying fees in the page of the list under Miscellaneous. I've copied a clip below. Before we get started, please advise if you agree with the fees to be applied. Unfortunately, I am not able to estimate either the length of time of the amount of photocopying that may be required although I can tell you that whatever we already have available digitally will be provided in that format; i.e. we won't be spending time printing something that can be emailed to you.

MISCELLANEOUS	2025 Approved	HST	Fee Total
Record Search (per 15 minutes)	\$20.88	n/a	\$20.88
Photocopying Fee, per page + HST	\$0.46	\$0.06	\$0.52

Gavin Norman, P. Eng.
Manager, Infrastructure Planning
Growth Management Division
Planning and Economic Development Department
City of Hamilton

Service Offered / Fee type	2025 Approved	HST	Fee Total
GROWTH MANAGEMENT FEES			
Subdivision Agreement Preparation			
Subdivision Agreement preparation - New Process	\$4,835.00	n/a	\$4,835.00
Minor Revision to Subdivision (or other agreements) Agreement	\$575.00	n/a	\$575.00
Major Revision/ Alteration to Subdivision Agreement	\$1,145.00	n/a	\$1,145.00
Subdivision (or any other type of) Agreement Amendment	\$1,300.00	n/a	\$1,300.00
Subdivision / External Works Security Reduction Fee (for fourth and subsequent security reduction request)	\$400.00	\$52.00	\$452.00
Engineering Design Review			
Engineering Review Fee (for Subdivision)	\$4,605.00	n/a	\$4,605.00
Engineering Review Fee - Additional Cost per Unit / Residential (for Subdivision)	\$350.00	n/a	\$350.00
Engineering Review Fee - Additional Cost / Hectare / Non Residential (for Subdivision)	\$330.00	n/a	\$330.00
Engineering Review Fee (3 to 10 Units)	\$7,500.00	n/a	\$7,500.00
Engineering Resubmission Review Fees (3-10 units) (3rd and subsequent)	\$1,610.00	n/a	\$1,610.00
Note: The following fee exemptions apply to charitable and not-for-profit organizations proposing affordable housing projects: Review Fees (3 to 10 units): <i>Fee waived</i> Resubmission Review Fees (3rd and subsequent): <i>Fee waived</i>	note	Note	Note
MECP / ECA Sewer Application Process (MECP / ECA Review Fee)	\$1,100.00	n/a	\$1,100.00
Resubmission of Engineering Drawings for review and approval (per page)	\$495.00	n/a	\$495.00
Review of Special Study Administration Fee (Note: for special studies including but not limited to Karst, Geomorphology, Hydrology, Traffic etc.)	\$2,035.00	n/a	\$2,035.00
Engineering Special Studies	Consultant Fee + 25% Project Management Fee	n/a	variable
Engineering Consultation Pre-Application	\$3,440.00	n/a	\$3,440.00
Construction - Engineering Supervision (Determined as a percentage of the net estimated construction value, before overhead as follows:)			
Engineering Construction Supervision- - where total net construction value is less than \$ 166,667	\$10,000.00	\$1,300.00	\$11,300.00
Engineering Construction Supervision- for the portion of net construction value up to \$ 1,000,000	6%	yes (variable)	variable
Engineering Construction Supervision- for the portion of net construction value between \$ 1,000,000 and \$ 2,000,000	5%	yes (variable)	variable
Engineering Construction Supervision - for the portion of net construction value over \$ 2,000,000	4%	yes (variable)	variable
Resubmission of As Built Engineering Drawings (price per page)	\$495.00	n/a	\$495.00

Subdivision Draft Plan and Final Approval Fees			
Subdivision Draft Plan Approved- Minor Revision Fee	\$1,430.00	n/a	\$1,430.00
Subdivision Draft Plan Approved- Extension Fee	\$1,060.00	n/a	\$1,060.00
Subdivision Draft Plan Approved Annual maintenance fee for Subdivision Files older than three (3) years old (Dormant File Fee)	\$605.00	n/a	\$605.00
Final Approval and Registration Fee (Subdivision)	\$1,870.00	n/a	\$1,870.00
Application to Deem Lands Not to be Part of a Registered Plan of Subdivision (NEW)	\$4,715.00	n/a	\$4,715.00
Condo Draft Plan and Final Approval Fees			
Condo Draft Plan Approved Revision fee	\$1,455.00	n/a	\$1,455.00
Condo Draft Plan Approved Extension Fee (Condo Conversion)	\$625.00	n/a	\$625.00
Condominium Draft Plan Approved Annual maintenance fee for Subdivision Files older than three (3) years old (Dormant File Fee)	\$565.00	n/a	\$565.00
Final Approval and Registration Fee (Condominium)	\$1,870.00	n/a	\$1,870.00
SPECIAL AGREEMENTS			
External Works Agreement Preparation (Includes Engineering Review)	\$6,125.00	n/a	\$6,125.00
Special Sewer Service Agreement	\$5,215.00	n/a	\$5,215.00
Special Water Service Agreement	\$5,215.00	n/a	\$5,215.00
Joint Sewer / Water Service Agreement	\$5,215.00	n/a	\$5,215.00
Consent Agreements (Includes Grading Plan Review)	\$5,215.00	n/a	\$5,215.00
Consent Agreement with warning clause only	\$2,605.00	n/a	\$2,605.00
Shoring Agreement & Draining Review	\$9,750.00	n/a	\$9,750.00
Advance on Pre-Grading			
Advance on Pre-Grading (2% of Construction cost with a min of \$2,000 to a max of \$5,000)	2%	yes (variable)	variable
1. Engineering Design Review is a fixed cost which includes 3 submissions of Engineering drawings. Fourth and subsequent submissions will be subject to applicable revision fees in accordance with this fees schedule.	Note	Note	Note
2. Design review fee shall be applied to each and all phases of servicing of the draft plan of subdivision.	Note	Note	Note
LOT GRADING			
Lot Grading Acceptance Inspection per unit- (Single + Semi) (also called "Consent Grading inspection Fee"	\$605.00	\$78.65	\$683.65
Lot Grading Acceptance Inspection per Multi-Unit Block (3 - 8 units)	\$1,235.00	\$160.55	\$1,395.55
Lot Grading Re-inspection fees (3rd and subsequent)	\$275.00	\$35.75	\$310.75
Lot Grading and Service Connection Applications	\$4,510.00	n/a	\$4,510.00

SEWER / WATER SERVICING FEES			
Sanitary Sewer and Water Drawing Review Fee			
Sewer and Water Drawing Review Fee- for Site Plans Major	\$2,070.00	n/a	\$2,070.00
Sewer and Water Drawing Review Fee - for Site Plans Minor	\$1,045.00	n/a	\$1,045.00
Wastewater Allocation Processing Fee	\$580.00	n/a	\$580.00
Video Inspection (Review and Inspection for Rehabilitation or Replacement of Existing Sewer Service)	\$555.00	\$72.15	\$627.15
Disconnection of Services Request (NEW)	\$235.00	n/a	\$235.00
Small Service Water Permit Inspection Fee (Less than 100mm diam.)			
Small Service Water Permit - Administration Fee	\$225.00	\$29.25	\$254.25
Small Service Water Permit - Water/Sewer Inspection Fee	\$685.00	\$89.05	\$774.05
Small Service Water Permit - Additional Cost per meter of Service	\$10.00	\$1.30	\$11.30
Large Sanitary Storm Sewer/Water Permit Inspection Fee (100mm diam & >)			
Large Service Water & Sewer Permit - Administration Fee	\$225.00	\$29.25	\$254.25
Large Service Water & Sewer Permit - Water Inspection & Testing (WTR, STM, SAN, STM&SAN)	\$850.00	\$110.50	\$960.50
Large Service Water & Sewer Permit - Additional Cost per meter of Service (WTR, SAN, STM, STMSAN)	\$10.00	\$1.30	\$11.30
SITE PLAN			
Major (Full) Site Plan Grading Inspection (for all DA, SPA and SPAR appl.)	\$4,025.00	\$523.25	\$4,548.25
Minor Site Plan Grading Inspection (for DAB, DAER, MDA and MDAR appl)	\$390.00	\$50.70	\$440.70
Site Plan Security Reduction Fees (for second and subsequent security reduction request)	\$400.00	\$52.00	\$452.00
After Hours Inspection Fee (Minimum 4 hours)	\$445.00	\$57.85	\$502.85
Site Alteration Permit Process -Residential	\$1,120.00	n/a	\$1,120.00
Site Alteration Permit Process - Non-Residential	\$3,435.00	n/a	\$3,435.00
Site Alteration Process per plan type on 4th submission and thereafter	\$820.00	n/a	\$820.00
Construction Management Plan	\$7,160.00	n/a	\$7,160.00

MISCELLANEOUS			
Record Search (per 15 minutes)	\$20.88	n/a	\$20.88
Photocopying Fee, per page + HST	\$0.46	\$0.06	\$0.52
Street Name Change & Advertising Costs (Municipal street name change)	\$2,870.00	n/a	\$2,870.00
Municipal Street Numbers Request (Municipal Address change)	\$440.00	n/a	\$440.00
Discharge of Agreements	\$520.00	n/a	\$520.00
Compliance Requests	\$150.00	\$19.50	\$169.50
Pay Assurance Administration Fee	\$5,000.00	\$650.00	\$5,650.00
Non- Refundable Surety Bond Application Fee (NEW)	\$310.00	\$40.30	\$350.30
Excavation Permit and Water Meter Refund Processing Fee (NEW)	\$115.00	n/a	\$115.00
MUNICIPAL ACT FLAT FEES, Service Extension Flat Fee			
SANITARY SEWER / UNIT	\$9,615.00	n/a	\$9,615.00
STORM SEWER / UNIT	\$11,230.00	n/a	\$11,230.00
WATERMAIN / UNIT	\$6,740.00	n/a	\$6,740.00
PUBLIC WORKS FEES			
Excavation Permit Fee (Road Cut)	\$668.43	n/a	\$668.43
Water Meter Permit Fee	varies	n/a	varies
Amend Water Licence Process Fee	\$3,520.00	n/a	\$3,520.00
Street Lighting Review and Evaluation	\$7,233.04	\$940.30	\$8,173.34
FINANCE FEES			
Finance Tax Account Fee (Subdivision, Condominium, Consent, Part Lot Control) per lot / block	\$20.95	n/a	\$20.95
Finance Administration Fee or (Finance Fixed Fee or Flat fee)	\$1,714.17	n/a	\$1,714.17
Finance Administration Fee - Additional cost per lot / block	\$17.86	n/a	\$17.86
Finance Best Efforts Admin Fee	\$1,714.17	n/a	\$1,714.17
NSF	\$39.78	\$5.17	\$44.95

RE: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 2 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
Location Microsoft Teams Meeting
My response Not yet responded
Required attendees Stauffer, Carissa, Heyworth, Dave, Toman, Charlie, Hartley, Mark, Norman, Gavin, Holden, Gina
Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Wed 2025-07-09 4:08 PM

Hey Gavin,

Yes, we agree with the fees; however, could you report back on what hardcopy files are uncovered before we authorize any printing/scanning? Hopefully most files are digital and that'll make everyone's lives easier!

Let me know if/when you'd like to meet to discuss what we're looking for. In short, we're looking for any information on upstream stormwater management design that will impact flow rates and volumes contributing to the Elfrida Study area, but not necessarily detailed servicing/grading information. For example, we'd be interested in catchment figures, reports, and models, but don't need necessarily need as-built plan/profile or grading drawings for roadways outside or bordering the Elfrida study area.

Thanks in advance for your help on this!

Bryan Weersink, P.Eng.
Surface Water Team Lead



RE: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Wed 2025-07-09 4:46 PM

Yes, for sure we will advise first on what is expected to be photocopied, but it we won't be able to do the same on the actual record search portion; i.e. I don't know how much time it will take to track it all down, but perhaps we can provide updates on the time being spent. I should have mentioned too that we have a engineering consultation fee that will be applied (one-time fee of \$3,440) to account for any meetings we need to discuss what you've described below – you will find that in the schedule as well.

We can get started on the SWM probably this week.

Gavin Norman, P. Eng.
Manager, Infrastructure Planning
Growth Management Division
Planning and Economic Development Department
City of Hamilton

RE: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Thu 2025-07-10 9:15 AM

Sounds good Gavin – yes please proceed and if you can provide any status updates as you go that would be greatly appreciated.

Thanks!

Bryan Weersink, P.Eng.
Surface Water Team Lead

Office: [Hamilton ON](#)
Direct: [\(905\) 381-3271](#)
Mobile: [\(519\) 831-6554](#)
bryan.weersink@stantec.com



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Re: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Thu 2025-07-17 10:03 AM

Hi Gavin,

Thank you for confirming receipt of the RFI, as noted in your response following Bryan Weersink's follow-up email.

Could you kindly confirm whether the Terms of Reference (ToR), submitted alongside the RFI, has also been received and is currently under review?

If any additional information or clarification is needed, please don't hesitate to reach out.

Kind regards,

Carissa Stauffer
Environmental Planner and GIS Technician



RE: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton


Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 2 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Thu 2025-07-17 4:04 PM

Hi Carissa, by copy to Mark Hartley he will advise as to the status to the review.

Gavin Norman, P. Eng.
Manager, Infrastructure Planning
Growth Management Division
Planning and Economic Development Department
City of Hamilton

Re: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 2 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
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My response Not yet responded
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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Wed 2025-07-23 9:00 AM

 2 attachments (618 KB)

not_ElfridaSWS_CityHamilton_mtg_fnl_20250520.pdf; Elfrida - SWS Terms of Reference 2025.docx;

Hi Mark,

I am following up to confirm whether the Terms of Reference (ToR), submitted along with the RFI following our meeting on May 20, 2025, has been received and if it is currently under review. For your convenience, the ToR and meeting notes have been reattached to this email.

As noted in our initial submission, we had requested a 30-day review period, with any **comments to be provided by July 25, 2025**. Could you kindly confirm whether this timeline is still feasible?

Please do not hesitate to reach out should any additional information or clarification be required.

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician



Re: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 5 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Wed 2025-07-30 9:36 AM

Hi Mark,

I hope you're doing well.

I'm following up on my email last week regarding the Terms of Reference (ToR) and meeting notes submitted following our May meeting. As the originally requested comment deadline of July 25 has passed, I wanted to confirm whether the documents (attached in my previous email) have been received and if a review is currently underway.

If possible, could you also kindly provide an updated timeline for when feedback can be expected?

Please let me know if any further information is required to support the review.

Thank you,

Carissa Stauffer

Environmental Planner and GIS Technician



RE: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 5 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
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My response Not yet responded
Required attendees Stauffer, Carissa, Heyworth, Dave, Toman, Charlie, Hartley, Mark, Norman, Gavin, Holden, Gina
Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Fri 2025-08-01 9:26 AM

Hi Carissa,

Thank you for your recent emails. Yes we have received the Elfrida SWS Terms of Reference and its currently being reviewed. We've also received the RFI and are making progress on this request.

We understand your project timelines and consider this file a high priority.

As soon as we have preliminary comments prepared for the ToFR we can give a more accurate delivery date.

Given the number of staff involved and their schedules we will give you an update the week of Aug-11.

Respectfully,

Mark

Mark Hartley, B.Sc.(Freshwater), M.Sc., P.Eng.

Senior Engineer - Stormwater

Growth Management, Infrastructure Planning

Planning and Economic Development

City of Hamilton

Office (905) 546-2424 Ext. 7661

Cell (289) 439-3219



[Green Standards & Guidelines \(City webpage\)](#)

Re: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
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My response Not yet responded
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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Tue 2025-08-05 10:20 AM

Good morning Mark,

Thank you for confirming receipt and ongoing review of the Elfrida Terms of Reference and RFI documents.

We appreciate you prioritizing this file and look forward to your preliminary comments. Please don't hesitate to reach out if any additional information is needed during your review.

Kind regards,

Carissa Stauffer
Environmental Planner and GIS Technician



Re: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Wed 2025-08-27 8:15 AM

Hi Mark,

I am following up on the Elfrida Subwatershed Study (SWS) Terms of Reference (ToR) (see below).

The study team is actively working to complete Phase 1 of the SWS. Feedback from the City with respect to the ToR will help to ensure the SWS aligns with City policies and expectations.

We kindly request that the City provides any remaining comments and feedback on the ToR by **Friday September 5th, 2025**.

If you have any questions or would like to discuss further, please don't hesitate to reach out.

Kind regards,

Carissa Stauffer
Environmental Planner and GIS Technician



RE: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Wed 2025-08-27 8:23 AM

Your timing is impeccable! I am working on this project this morning.
We have collected a number of files. Do you have a project specific file-sharing platform that we could use to upload the files?
M

Mark Hartley, B.Sc.(Freshwater), M.Sc., P.Eng.

Senior Engineer - Stormwater
Growth Management, Infrastructure Planning
Planning and Economic Development
City of Hamilton
Office (905) 546-2424 Ext. 7661
Cell (289) 439-3219
<http://www.hamilton.ca>



[Green Standards & Guidelines \(City webpage\)](#)


Land acknowledgement: The City of Hamilton is situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississaugas. This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes. We further acknowledge that this land is covered by the Between the Lakes Purchase, 1792, between the Crown and the Mississaugas of the Credit First Nation. Today, the City of Hamilton is home to many Indigenous people from across Turtle Island (North America) and we recognize that we must do more to learn about the rich history of this land so that we can better understand our roles as residents, neighbours, partners and caretakers.

Re: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Wed 2025-08-27 8:39 AM

Hi Mark,

That's great, thank you for the update!

We do have a project-specific OneDrive folder that can be used for file sharing. Kindly upload any documents and comments into the following folder:  [City of Hamilton - TOR Upload](#)

Please let me know if you encounter any issues accessing the link. Kindly note as well that the link will expire on **Friday, August 29, 2025**. If access is required beyond that date, I can provide a new link then.

Thank you,

Carissa Stauffer
Environmental Planner and GIS Technician



RE: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 5 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
Location Microsoft Teams Meeting
My response Not yet responded
Required attendees Stauffer, Carissa, Heyworth, Dave, Toman, Charlie, Hartley, Mark, Norman, Gavin, Holden, Gina
Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Wed 2025-08-27 4:01 PM

Thanks for providing an online folder to share the files.

Given the nature of this request I was informed that I need to confirm that the version of the file we have copied for transfer is the correct version as some of the files are saved in multiple folders.

This task may be completed before Friday but I suspect early next week is more likely.

Respectfully,

Mark

Mark Hartley, B.Sc.(Freshwater), M.Sc., P.Eng.

Senior Engineer - Stormwater

Growth Management, Infrastructure Planning

Planning and Economic Development

City of Hamilton

Office (905) 546-2424 Ext. 7661

Cell (289) 439-3219

<http://www.hamilton.ca>



[Green Standards & Guidelines \(City webpage\)](#)

Land acknowledgement: The City of Hamilton is situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississaugas. This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes. We further acknowledge that this land is covered by the Between the Lakes Purchase, 1792, between the Crown and the Mississaugas of the Credit First Nation. Today, the City of Hamilton is home to many Indigenous people from across Turtle Island (North America) and we recognize that we must do more to learn about the rich history of this land so that we can better understand our roles as residents, neighbours, partners and caretakers.

Re: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Thu 2025-08-28 9:59 AM

Good morning Mark,

That's not a problem at all. Kindly let me know once the files are ready for upload, and I will provide a new link if the one shared yesterday has expired.

Will this upload include comments on the Terms of Reference?

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician



Re: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 5 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
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Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Tue 2025-09-02 9:17 AM

Good morning Mark,

Following our discussion last week, please use the updated link below to upload your comments on the Terms of Reference, along with any supporting files:

[City of Hamilton - TOR Upload](#)

Kindly note that this link will expire on **Thursday September 4th, 2025**. If you encounter any issues accessing the link or need additional information, please don't hesitate to reach out.

Thank you,

Carissa Stauffer
Environmental Planner and GIS Technician



RE: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 5 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
Location Microsoft Teams Meeting
My response Not yet responded
Required attendees Stauffer, Carissa, Heyworth, Dave, Toman, Charlie, Hartley, Mark, Norman, Gavin, Holden, Gina
Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Fri 2025-09-05 12:27 PM

Carissa,

I just went to open the link below and noted it has expired. Apologies...for some reason I had Fri Sept 5 in my head; should have read the email more carefully!

I have SWM files ready to upload. Could you please send the link again. I am away from the office this afternoon but will upload first thing Monday.

Regards,

Mark

Mark Hartley, B.Sc.(Freshwater), M.Sc., P.Eng.

Senior Engineer - Stormwater

Growth Management, Infrastructure Planning

Planning and Economic Development

City of Hamilton

Office (905) 546-2424 Ext. 7661

Cell (289) 439-3219

<http://www.hamilton.ca>



[Green Standards & Guildelines \(City webpage\)](#)

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RE: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 5 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
Location Microsoft Teams Meeting
My response Not yet responded
Required attendees Stauffer, Carissa, Heyworth, Dave, Toman, Charlie, Hartley, Mark, Norman, Gavin, Holden, Gina
Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Fri 2025-09-05 12:39 PM

Carissa, if you could ensure Amelia has permission to upload files to the link as well.

Amelia, if Carissa is able to provide an updated link for us, could you upload everything from this folder, save the initial email outlining the request and the excel spreadsheets we're using to track the information we have collected.

[\\mercury\pla_infrastructure planning\06_Growth Planning Projects\8_Urban Boundary Expansion\Elfrida\2025_RFI\Elfrida Subwatershed Study -Information Gathering](#)

Carissa, we are still working on gathering some information, but we do have a number of requested items ready to be sent.

Timothy Winterton, P.Eng.

Senior Engineer, Infrastructure Planning – Capital Planning, Policy and Budgets

Re: Elfrida Subwatershed Study Update & Terms of Reference - City of Hamilton

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 5 months ago (Tue 2025-05-20 2:00 PM - 3:00 PM)
Location Microsoft Teams Meeting
My response Not yet responded
Required attendees Stauffer, Carissa, Heyworth, Dave, Toman, Charlie, Hartley, Mark, Norman, Gavin, Holden, Gina
Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, "dirk.janas@slrconsulting.com", Jamieson, Nathan, Overholt, Chris, Ian Roul, Ken Glasbergen
Message sent Fri 2025-09-05 12:46 PM

Hi Mark and Timothy,

Thank you both very much for the update and action on this request.

Please use the following link to upload all files and comments: [City of Hamilton - TOR Upload](#)

I've updated the folder permissions so that everyone, including Amelia, will have access until September 26. This should help prevent any issues with the link expiring.


Kind regards,

Carissa Stauffer
Environmental Planner and GIS Technician



Elfrida RFI - SWM files

From Hartley, Mark <Mark.Hartley@hamilton.ca>
Date Mon 2025-09-08 3:52 PM
To Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Cc Winterton, Timothy <Timothy.Winterton@hamilton.ca>

 1 attachment (459 KB)
Transmittal_2025-09-08.pdf;

Hi Carissa,
SWM files have been uploaded to the Sharepoint site.
A list of files that were uploaded is attached.
If you have any questions, please don't hesitate to contact me.
Regards,
Mark

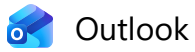
Mark Hartley, B.Sc.(Freshwater), M.Sc., P.Eng.

Senior Engineer - Stormwater
Growth Management, Infrastructure Planning
Planning and Economic Development
City of Hamilton
Office (905) 546-2424 Ext. 7661
Cell (289) 439-3219
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[Green Standards & Guidelines \(City webpage\)](#)

Land acknowledgement: The City of Hamilton is situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississaugas. This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes. We further acknowledge that this land is covered by the Between the Lakes Purchase, 1792, between the Crown and the Mississaugas of the Credit First Nation. Today, the City of Hamilton is home to many Indigenous people from across Turtle Island (North America) and we recognize that we must do more to learn about the rich history of this land so that we can better understand our roles as residents, neighbours, partners and caretakers.



Re: Elfrida RFI - SWM files

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Mon 2025-09-08 4:11 PM

To Hartley, Mark <Mark.Hartley@hamilton.ca>

Cc Winterton, Timothy <Timothy.Winterton@hamilton.ca>

Hi Mark,

Thank you for putting this together and uploading to the provided SharePoint link - it's greatly appreciated.

If there are any further questions, we will be sure to reach out.

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician



Re: Elfrida RFI - SWM files

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Date Wed 2025-09-17 3:46 PM
To Hartley, Mark <Mark.Hartley@hamilton.ca>
Cc Winterton, Timothy <Timothy.Winterton@hamilton.ca>

 1 attachment (243 KB)
2017 07 10 Background Report_City Comment Summary.pdf;

Hi Mark,

I hope all is well. I'm reaching out to confirm the details of one of the documents submitted earlier this month as part of the RFI request (attached for reference).

We were specifically requesting the City's 2023 comments related to the Aquafor Beech Subwatershed Study in the RFI submitted. However, the document provided appears to reference the Elfrida Growth Area Study, completed in 2017. I see in the transmittals document, its noted that this document fulfills that request.

Could you kindly confirm whether the attached document reflects the intended comments for the Aquafor Beech Study?

Kind regards,

Carissa Stauffer
Environmental Planner and GIS Technician



Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Wed 2025-08-27 8:21 AM

To gis-planning&analysis@hamilton.ca <gis-planning&analysis@hamilton.ca>

Cc Norman, Gavin <gavin.norman@hamilton.ca>; Heyworth, Dave <dave.heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <gina.holden@hamilton.ca>; Winterton, Timothy <timothy.winterton@hamilton.ca>; Hartley, Mark <mark.hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

Good morning,

I am reaching out on behalf of Stantec Consulting Ltd. and the Elfrida Subwatershed Study (SWS) team to request data not available through the City's Open Data portal.

As part of the Phase 1 report for the Elfrida SWS, we are working to map existing land uses based on Schedule D of the Rural Hamilton Official Plan (RHOP) and Schedule E-1 of the Urban Hamilton Official Plan (UHOP). However, both schedules include the following user note:

*© Teranet Land Information Services Inc. and its licensors. [2009]
May Not be Reproduced without Permission. THIS IS NOT A PLAN
OF SURVEY*

To support this work, we are requesting access to the City of Hamilton's land use data and any other relevant data shown in the RHOP and UHOP schedules for the study area. If this data is not available, we kindly request permission to georeference and replicate the existing land use schedules for use in our figures.

We understand that accessing this data may require a data license agreement between the City and the consulting team and are able to proceed accordingly, following City direction.

Please do not hesitate to reach out should you have any questions or require further information.

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician

Direct: (905) 944-6872
carissa.stauffer@stantec.com



RE: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Paola, Richard <Richard.Paola@hamilton.ca>

Date Wed 2025-08-27 9:18 AM

To Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <Gavin.Norman@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <Gina.Holden@hamilton.ca>; Winterton, Timothy <Timothy.Winterton@hamilton.ca>; Hartley, Mark <Mark.Hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

You don't often get email from richard.paola@hamilton.ca. [Learn why this is important](#)

Hello Carissa.

We are in the process of converting our Official Plan schedules to GIS format, however we can provide you with a Georeferenced GeoTiff file of the OP schedules as an alternative.

To clarify, you indicated existing land use, did you also require that, or just the OP land use designations ?

In order to put together a data license agreement to share the data, can you please provide the following information:

- Project or Study name
- Full mailing address for your office
- Signing authority contact name & title
- List of data requirements & study area

Thank you.

Richard Paola
City Of Hamilton
Planner 1-GIS
Planning & Economic Development
Heritage & Urban Design – GIS
71 Main Street West, 4th Floor
Hamilton, ON
905-546-2424


Re: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Thu 2025-08-28 11:29 AM

To Paola, Richard <Richard.Paola@hamilton.ca>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <gavin.norman@hamilton.ca>; Heyworth, Dave <dave.heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <gina.holden@hamilton.ca>; Winterton, Timothy <timothy.winterton@hamilton.ca>; Hartley, Mark <mark.hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

 1 attachment (10 KB)

ElfridaSWS_08282025.zip;

Hi Richard,

Thank you for your quick response.

A georeferenced TIFF file of the UHOP and RHOP schedules would be perfect. If available, we would like to request both the existing land use data and the land use designations as defined in the Official Plan schedules.

Please find the requested information below to support the preparation of a data license agreement:

- **Project Name:** Elfrida Subwatershed Study
- **Office Mailing Address:** 300-125 Commerce Valley Drive West, Markham, ON L3T 7W4
- **Signing Authority Contact Name & Title:** Tim Gallagher, P. Eng. - Project Manager
- **Data Requirements & Study Area:**
 - Georeferenced land use designations from the RHOP and UHOP schedules
 - Existing land use designations
 - Elfrida Study area (zip file attached above).

Please let me know if any additional details are required.

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician


RE: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Paola, Richard <Richard.Paola@hamilton.ca>

Date Tue 2025-09-02 9:25 AM

To Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <Gavin.Norman@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <Gina.Holden@hamilton.ca>; Winterton, Timothy <Timothy.Winterton@hamilton.ca>; Hartley, Mark <Mark.Hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

 1 attachment (592 KB)

HamiltonDataDisseminationPolicyAndLicenceAgreement_StantecElfrida.pdf;

Some people who received this message don't often get email from richard.paola@hamilton.ca. [Learn why this is important](#)

Good morning Carissa.

Please have your staff sign the attached data license agreement and email it back so that I can begin sending over the data.

Thank you.

Richard Paola
City Of Hamilton
Planner 1-GIS
Planning & Economic Development
Heritage & Urban Design – GIS
71 Main Street West, 4th Floor
Hamilton, ON
905-546-2424

RE: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Gallagher, Tim <Tim.Gallagher@stantec.com>

Date Tue 2025-09-02 1:49 PM

To Paola, Richard <Richard.Paola@hamilton.ca>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <Gavin.Norman@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <Gina.Holden@hamilton.ca>; Winterton, Timothy <Timothy.Winterton@hamilton.ca>; Hartley, Mark <Mark.Hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>

 1 attachment (769 KB)

HamiltonDataDisseminationPolicyAndLicenceAgreement_StantecElfrida.pdf;

Hi Richard –

Please see attached. Kindly return the City executed copy for our file as well. thx

Tim Gallagher

Senior Principal, Operations Leader



Re: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Tue 2025-09-09 4:09 PM

To Paola, Richard <Richard.Paola@hamilton.ca>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <gavin.norman@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <gina.holden@hamilton.ca>; Winterton, Timothy <timothy.winterton@hamilton.ca>; Hartley, Mark <mark.hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

Hi Richard,

I'm following up on the GIS data request discussed below. In summary, we're looking for a georeferenced TIFF file of the UHOP and RHOP schedules, along with existing and designated land use data from the Official Plan schedules.

Can you confirm that the Data License Agreement, signed by Tim, was received last Tuesday, September 2, 2025? If possible, can you also provide an estimated timeline on when we can expect the data?

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician




RE: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Paola, Richard <Richard.Paola@hamilton.ca>

Date Tue 2025-09-09 4:28 PM

To Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <Gavin.Norman@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <Gina.Holden@hamilton.ca>; Winterton, Timothy <Timothy.Winterton@hamilton.ca>; Hartley, Mark <Mark.Hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

 7 attachments (23 MB)

RuralOPSchD_LandUseDesSept2019_GeoTiff.tif; RuralOPSchD_LandUseDesSept2019_GeoTiff.tfw;
RuralOPSchD_LandUseDesSept2019_GeoTiff.tif.aux.xml; UHOP_SchedE1_Feb2022_GeoTiff.tfw;
UHOP_SchedE1_Feb2022_GeoTiff.tif.aux.xml; UHOP_SchedE1_Feb2022_GeoTiff.tif; Elfrida_LandUsePrimary.zip;

Hi Carissa, I was just speaking with our staff about this, I apologize for the delay.

I have the data ready for you, see attached:

- Georeferenced RHOP Schedule D tiff file
- Georeferenced UHOP Schedule E1 tiff file
- Primary Land Use (block level) shapefiles for Elfrida area

Please review and let me know if you have any further requirements or concerns.

Richard Paola
City of Hamilton
HUD-GIS Section

Re: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Wed 2025-09-10 9:01 AM

To Paola, Richard <Richard.Paola@hamilton.ca>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <gavin.norman@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <gina.holden@hamilton.ca>; Winterton, Timothy <timothy.winterton@hamilton.ca>; Hartley, Mark <mark.hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

Good morning Richard,

Thank you for sending these materials along, its greatly appreciated.

I reviewed everything this morning, and it looks to be exactly what we need at this time. I'll be sure to reach out if we have any questions or require additional information.

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician



Re: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Wed 2025-09-10 1:04 PM

To Paola, Richard <Richard.Paola@hamilton.ca>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <gavin.norman@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <gina.holden@hamilton.ca>; Winterton, Timothy <timothy.winterton@hamilton.ca>; Hartley, Mark <mark.hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

Hi Richard,

One additional request came in this afternoon following the data you shared yesterday.

Would you be able to provide the land cover or NHS data from Schedule B of the RHOP in either GeoTIFF or shapefile format?

Thank you in advance,

Carissa Stauffer

Environmental Planner and GIS Technician



RE: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Paola, Richard <Richard.Paola@hamilton.ca>

Date Wed 2025-09-10 4:14 PM

To Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <Gavin.Norman@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <Gina.Holden@hamilton.ca>; Winterton, Timothy <Timothy.Winterton@hamilton.ca>; Hartley, Mark <Mark.Hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

Hi Carissa, in respect to shapefile format, would this be for the immediate Elfrida study area only, or the entire rural area ?

Re: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Wed 2025-09-10 4:58 PM

To Paola, Richard <Richard.Paola@hamilton.ca>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <gavin.norman@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <gina.holden@hamilton.ca>; Winterton, Timothy <timothy.winterton@hamilton.ca>; Hartley, Mark <mark.hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

Hi Richard,

We would just need the located within the immediate Elfrida area only.

Thank you,

Carissa Stauffer

Environmental Planner and GIS Technician



Re: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Paola, Richard <Richard.Paola@hamilton.ca>

Date Thu 2025-10-23 2:28 PM

To Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <Gavin.Norman@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Toman, Charlie <Charlie.Toman@hamilton.ca>; Holden, Gina <Gina.Holden@hamilton.ca>; Winterton, Timothy <Timothy.Winterton@hamilton.ca>; Hartley, Mark <Mark.Hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

 2 attachments (105 KB)

SchedB_CoreRHOPelfrida.zip; SchedB_CoreUHOPelfrida.zip;

Some people who received this message don't often get email from richard.paola@hamilton.ca. [Learn why this is important](#)

hello Carissa, sorry for the delay on this.
please see core areas from Schedule B for the Elfrida area.

Richard Paola

City Of Hamilton

Planner 1-GIS

Planning & Economic Development

Heritage & Urban Design – GIS

71 Main Street West, 4th Floor

Hamilton, ON

905-546-2424

Re: Elfrida Subwatershed Study - Data Licensing Agreement/Permission Request

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Thu 2025-10-23 4:22 PM

To Paola, Richard <Richard.Paola@hamilton.ca>; Dukacz, Krysha <Krysha.Dukacz@hamilton.ca>; Cook, David <David.Cook@hamilton.ca>

Cc Norman, Gavin <gavin.norman@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Toman, Charlie <charlie.toman@hamilton.ca>; Holden, Gina <gina.holden@hamilton.ca>; Winterton, Timothy <timothy.winterton@hamilton.ca>; Hartley, Mark <mark.hartley@hamilton.ca>; Jesse Snider <jesse.snider@slrconsulting.com>; Addley, Diana <Diana.Addley@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

Hi Richard,

No worries, thank you for sending this over to us. I'll reach out if there is any further information required, but that should be all for now.

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician



Elfrida UBE - Subwatershed Study Terms of Reference

From Hartley, Mark <Mark.Hartley@hamilton.ca>

Date Thu 2026-04-02 3:25 PM

To Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Cc Norman, Gavin <Gavin.Norman@hamilton.ca>; Bigness, Matt <Matt.Bigness@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Korah, Binu <Binu.Korah@hamilton.ca>; Moniruzzaman, Monir <Monir.Moniruzzaman@hamilton.ca>; Bainbridge, Mark <Mark.Bainbridge@hamilton.ca>

 1 attachment (95 KB)

2026-04-02_UBE_Elfrida_SWS_Final.pdf;

Hello Carissa,
Please find attached our comments for the Elfrida SWS.
If you have any questions or comments, please feel free to contact me.
Regards,
Mark

Mark Hartley, B.Sc.(Freshwater), M.Sc., P.Eng.

Senior Engineer - Stormwater

Growth Management, Infrastructure Planning

Planning and Economic Development

City of Hamilton

Office (905) 546-2424 Ext. 7661

Cell (289) 439-3219

<http://www.hamilton.ca>



[Green Standards & Guidelines \(City webpage\)](#)

Land acknowledgement: The City of Hamilton is situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississaugas. This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes. We further acknowledge that this land is covered by the Between the Lakes Purchase, 1792, between the Crown and the Mississaugas of the Credit First Nation. Today, the City of Hamilton is home to many Indigenous people from across Turtle Island (North America) and we recognize that we must do more to learn about the rich history of this land so that we can better understand our roles as residents, neighbours, partners and caretakers.

Date: April 2 2026

To: Dave Heyworth
Manager, Sustainable Communities
Planning & Economic Development

From: Mark Hartley, P.Eng., Senior Engineer - Stormwater
Infrastructure Planning, Growth Management
Planning & Economic Development

Subject: **Elfrida – Subwatershed Study (SWS)
Terms of Reference - Jun 25 2026**

Growth Management Division received a request for comment in June 2025 on the Terms of Reference for a Subwatershed Study for an Urban Boundary Expansion (UBE) for the Elfrida Lands (bound by Upper Centennial Parkway, Mud Street East, Second Road East and Hendershot Road, Golf Club Road, Trinity Church Road and a Hydro Corridor) in Stoney Creek & Glanbrook.

The Subwatershed Study Terms of Reference included the following Appendices:

- Appendix A – Suggested Data Collection Requirements
- Appendix B – Proposed Hydrology Plan
- Appendix C – Proposed Hydrogeological Plan
- Appendix D – Tractive Force Analysis
- Appendix E – Proposed Protocol to Sample Benthic Invertebrates
- Appendix F – General Criteria for Stormwater Management

1.0 Main Report

Section 1.1 Study Area

1. It is stated in this section that *“the Hannon Creek Subwatershed Study is currently being undertaken through the Upper Hannon Creek Master Drainage and Servicing Study (HCMDSS) assignment. The recommendations coming out of the HCMDSS will be included in the overall Elfrida Subwatersheds Study”*. The “Upper Hannon Creek Master Drainage Plan Municipal Class Environmental Assessment was completed in October 2017; if this is what is being referred to as the HCMDSS, please update this statement and any subsequent references in the ToFR (Section 2.1).

Section 2.0 Subwatersheds Study Staging

2. Please refer to the three parts of the SWS as “phases”, not stages, in keeping with all other references to SWS.
3. It is noted that a Technical Steering Committee is proposed and “anticipated” to consist of a number of representatives from the City and the NPCA and HCA. Please be more specific as to the makeup of this Committee.

Section 2.1 Stage 1 – Subwatershed Characterization

4. Please note that an updated Comprehensive Development Guidelines is expected to be publicized in 2026.

Section 2.1.1 Hydrology and Hydraulics

5. It is preferred that HEC-HMS be used as the hydrologic model for this area. Existing models of Twenty Mile Creek, prepared by the NPCA, and of Stoney Creek, prepared by the HCA, should be obtained for use for this study. It should be noted that the northern part of this site is upstream of the Saltfleet Wetland Project recently constructed by the HCA.
6. In addition to the 25mm and 2 to 100 year events, the 29mm event (90th percentile rain event) should be simulated.
7. A continuous hydrologic model should be built for use in the water balance assessment and the stormwater management strategy.

Section 2.1.3 Stream Morphology

8. In the second paragraph it's stated that "drones were used to collect information"; does this mean that some recent data has already been collected or should it state that "drones will be used to collect information"? If so, prepare a detailed drone data collection methodology for review and approval by the Technical Steering Committee.

Section 2.1.5 Aquatic Environment

9. Data sets that were collected during previous studies (i.e. "Natural Heritage System within the Rural Hamilton Official Plan") should be supplemented with additional data collection programs conducted during this study. For example, headwater drainage feature classifications should be confirmed and updated as required. Additional stream temperature monitoring should be conducted to evaluate the possible change in watercourse thermal regime.

Section 2.2 Stage 2 – Subwatershed Management Strategies

10. The overall work plan presented for Stage 2 (change to Phase 2) is generally reasonable; however, the details of this work plan are highly dependent on the outcome of Stage 1 (Phase 1). A revised Stage 2 (Phase 2) Terms of Reference should be prepared that incorporate the outcomes of the Stage 1 work. This revised ToFR should be reviewed and approved by the Technical Steering Committee.
11. It is expected that some elements of the data collection program will continue through Stage 2 (Phase 2) including, but not limited to, the hydrometric monitoring program.

Section 2.3 Stage 3 – Implementation and Monitoring Plan

12. Similar to the Stage 2 Terms of Reference, the work plan presented for Stage 3 (change to Phase 3) is generally reasonable; however, the details of this work plan are highly dependent on the outcome of Stage 2 (Phase 2). A revised Stage 3 (Phase 3) Terms of Reference should be prepared

that incorporate the outcomes of the Stage 2 work. This revised ToFR should be reviewed and approved by the Technical Steering Committee.

2.0 Appendices

Appendix A - Suggested Data Collection Requirements

13. The data collection program presented in this Appendix is described as “suggested”. Some work is described “where necessary” or “if data gaps exist”. The data sets listed (rainfall, stream flow, surface water quality, stream geomorphology/channel erosion, groundwater and natural heritage) must be sufficiently documented which may include a combination of existing data sets and the need for updated data sets. Most of these data sets change with time; so it is expected that some level of data collection will be required for each one.
14. A hydrometric (rainfall, stream flow and groundwater) monitoring program should be prepared and implemented. The work plan for this program should be reviewed and approved by the Technical Steering Committee.

Appendix B - Proposed Hydrology Plan

15. The work proposed in Item 4 of the section on “Hydrology and Hydraulics”, namely the calibration and verification of the hydrologic model, should be discussed in Section 2.1.1 of the Main Report. Referring to this work in an appendix risks the possibility it will be overlooked.

Appendix D – Tractive Force Analysis

16. The cross-section data collection (Item 4) should be detailed enough to enable a thorough analysis of the section geometry. Bank parameters should include, but not be limited to, bankfull depth, bank angle, rooting depth, soil profile and extent of undercutting (if any).
17. The location of bank soil/sediment samples should consider the strata of the banks; if two different strata are present, a sample should be collected from each one for grain size analysis.
18. Boundary shear stress (Item 7) should consider shear stress on the bed as well as the banks. Points along the channel boundary (bed and banks) that are vulnerable to erosion should be identified and analyzed.

Appendix F – General Criteria for Stormwater Management

19. The stormwater management criteria should include source retention targets as outlined in the City’s Green Standards and Guidelines for Site Servicing (2025).

Respectfully,

Mark Hartley, P.Eng.

Cc: Binu Korah, Director – Development Engineering

Monir Moniruzzaman, Manager – Development Engineering
Gavin Norman, Manager – Infrastructure Planning
Mark Bainbridge, Director, Water & Wastewater Planning & Capital

Re: Elfrida UBE - Subwatershed Study Terms of Reference

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Mon 2026-04-06 9:51 AM

To Hartley, Mark <Mark.Hartley@hamilton.ca>

Cc Norman, Gavin <Gavin.Norman@hamilton.ca>; Bigness, Matt <Matt.Bigness@hamilton.ca>; Heyworth, Dave <Dave.Heyworth@hamilton.ca>; Korah, Binu <Binu.Korah@hamilton.ca>; Moniruzzaman, Monir <Monir.Moniruzzaman@hamilton.ca>; Bainbridge, Mark <Mark.Bainbridge@hamilton.ca>; Gallagher, Tim <Tim.Gallagher@stantec.com>

Hi Mark,

Thank you for sharing the City's comments on the Terms of Reference for the Elfrida SWS.

We'll be sure to reach out if we have any questions, or would like to discuss any of these items further.

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician



Elfrida Subwatershed Plan - Terms of Reference
 City of Hamilton Comments - Received April 2, 2026

Report / Appendix Section	City Comment	Subwatershed Team Response
Terms of Reference - Main Report		
Section 1.1 - Study Area	<p>1 It is stated in this section that “the Hannon Creek Subwatershed Study is currently being undertaken through the Upper Hannon Creek Master Drainage and Servicing Study (HCMDSS) assignment. The recommendations coming out of the HCMDSS will be included in the overall Elfrida Subwatersheds Study”. The “Upper Hannon Creek Master Drainage Plan Municipal ClassEnvironmental Assessment was completed in October 2017; if this is what is being referred to as the HCMDSS, please update this statement and any subsequent references in the TofR (Section 2.1).</p>	<p>Through our previous engagement with the City and Hamilton Conservation Authority (HCA) we obtained a copy of the noted HCMDSS (dated October 2017). A copy of the more recent "Red Hill Creek Floodplain Mapping Study - Hydrologic Modelling Report", dated April 2, 2025, and the "Redhill Creek Floodplain Mapping - Hydraulic Modelling Report", also dated April 2, 2025, were both obtained. This information helped to inform the proposed stormwater management strategy for portions of Elfrida that are within the Hannon Creek subwatershed.</p>
Section 2.0 - Subwatershed Study Phasing	<p>2 Please refer to the three parts of the SWS as “phases”, not stages, in keeping with all other references to SWS.</p>	<p>While referred to as "stages" in the original Terms of Reference, the study team has referred to phases of a Subwatershed Study throughout our reporting.</p>
	<p>3 It is noted that a Technical Steering Committee is proposed and “anticipated” to consist of a number of representatives from the City and the NPCA and HCA. Please be more specific as to the makeup of this Committee.</p>	<p>This can be discussed as part of future coordination efforts. Given the UBE application denial the Consultant Team has proceeded to develop a Phase 1 and Phase 2 Subwatershed Plan independently. There were consultation meetings scheduled with the City, HCA and NPCA in the spring of 2025 with subsequent requests for information, which has been integrated into the Subwatershed Plan. Records of agency correspondence are provided in Appendix B of the Subwatershed Plan. We can collaborate further with agencies as part of future coordination efforts to ultimately work toward a final/approved Subwatershed Plan.</p>
Section 2.1 - Stage 1 Subwatershed Characterization	<p>4 Please note that an updated Comprehensive Development Guidelines is expected to be publicized in 2026.</p>	<p>Noted</p>
Section 2.1.1 - Hydrology and Hydraulics	<p>5 It is preferred that HEC-HMS be used as the hydrologic model for this area. Existing models of Twenty Mile Creek, prepared by the NPCA, and of Stoney Creek, prepared by the HCA, should be obtained for use for this study. It should be noted that the northern part of this site is upstream of the Saltfleet Wetland Project recently constructed by the HCA.</p>	<p>Visual OTTHYMO was used for the hydrologic modelling for the study area. The existing regulatory HEC-HMS models were rerun to include the Elfrida land use plan to assess downstream flood risk implications of the proposed Secondary Plan. This assessment is documented in the Phase 2 report.</p>
	<p>6 In addition to the 25mm and 2 to 100 year events, the 29mm event (90th percentile rain event) should be simulated.</p>	<p>The 25 mm, 2-100 year events and the Hurrican Hazel event were simulated, consistent with the TOR.</p>
	<p>7 A continuous hydrologic model should be built for use in the water balance assessment and the stormwater management strategy.</p>	<p>Water balance calculations are based on the Thornthwaite-Mather method and will be provided in the Phase 2 report.</p>

Elfrida Subwatershed Plan - Terms of Reference
 City of Hamilton Comments - Received April 2, 2026

Report / Appendix Section	City Comment	Subwatershed Team Response
Section 2.1.3 - Stream Morphology	<p align="center">8</p> <p>In the second paragraph it's stated that "drones were used to collect information"; does this mean that some recent data has already been collected or should it state that "drones will be used to collect information"? If so, prepare a detailed drone data collection methodology for review and approval by the Technical Steering Committee.</p>	<p>Inaccessible lands were generally assessed using satellite imagery, with drones used to collect site photos at select locations. Additional data collection (e.g. photogrammetry) was not undertaken, but may be considered in future for post-construction monitoring. Post-construction monitoring plans, including drone data collection methodology, will be provided to the Agencies for approval prior to undertaking post-construction monitoring.</p>
Section 2.1.5 - Aquatic Environment	<p align="center">9</p> <p>Data sets that were collected during previous studies (i.e. "Natural Heritage System within the Rural Hamilton Official Plan") should be supplemented with additional data collection programs conducted during this study. For example, headwater drainage feature classifications should be confirmed and updated as required. Additional stream temperature monitoring should be conducted to evaluate the possible change in watercourse thermal regime.</p>	<p>Headwater drainage feature assessments were completed following the TRCA/CVC (2014) protocol.</p> <p>Stream temperature monitoring is being conducted to inform thermal regime.</p>
Section 2.2 - Stage 2 Subwatershed Management Strategies	<p align="center">10</p> <p>The overall work plan presented for Stage 2 (change to Phase 2) is generally reasonable; however, the details of this work plan are highly dependent on the outcome of Stage 1 (Phase 1). A revised Stage 2 (Phase 2) Terms of Reference should be prepared that incorporate the outcomes of the Stage 1 work. This revised ToFR should be reviewed and approved by the Technical Steering Committee.</p>	<p>While referred to as "stages" in the original Terms of Reference, the study team has referred to phases throughout our reporting. It is noted that a Phase 2 subwatershed study has already been advanced. We can collaborate further with agencies as part of future coordination efforts to ultimately work toward a final/approved Subwatershed Plan.</p>
Section 2.2 - Stage 2 Subwatershed Management Strategies	<p align="center">11</p> <p>It is expected that some elements of the data collection program will continue through Stage 2 (Phase 2) including, but not limited to, the hydrometric monitoring program.</p>	<p>This can be discussed with the agencies further in future. We have concerns with the ability to collect and derive any meaningful conclusions from hydrometric monitoring given the smaller tributaries within the Elfrida lands. There is further context in the Subwatershed Plan prepared on behalf of the ECBG. We can collaborate further to discuss what (if any) additional data collection may be warranted.</p>
Section 2.3 - Stage 3 Implementation and Monitoring Plan	<p align="center">12</p> <p>Similar to the Stage 2 Terms of Reference, the work plan presented for Stage 3 (change to Phase 3) is generally reasonable; however, the details of this work plan are highly dependent on the outcome of Stage 2 (Phase 2). A revised Stage 3 (Phase 3) Terms of Reference should be prepared that incorporate the outcomes of the Stage 2 work. This revised ToFR should be reviewed and approved by the Technical Steering Committee.</p>	<p>Noted - further discussion regarding Phase 3 content can be discussed in future.</p>

Elfrida Subwatershed Plan - Terms of Reference
 City of Hamilton Comments - Received April 2, 2026

Report / Appendix Section	City Comment	Subwatershed Team Response
Terms of Reference - Appendices		
Appendix A - Suggested Data Collection Requirements	<p>13 The data collection program presented in this Appendix is described as “suggested”. Some work is described “where necessary” or “if data gaps exist”. The data sets listed (rainfall, stream flow, surface water quality, stream geomorphology/channel erosion, groundwater and natural heritage) must be sufficiently documented which may include a combination of existing data sets and the need for updated data sets. Most of these data sets change with time; so it is expected that some level of data collection will be required for each one.</p>	<p>For the ecological studies, a standard approach was taken whereby background and secondary sources were compiled and reviewed to complete a gap analysis. Landscape and site level existing information was used to determine where further details or supplement data collection was needed, with the surveys completed based on standard protocols. Surface water quality, stream geomorphology, groundwater and natural heritage system data is documented in the Phase 1 Report.</p>
	<p>14 A hydrometric (rainfall, stream flow and groundwater) monitoring program should be prepared and implemented. The work plan for this program should be reviewed and approved by the Technical Steering Committee.</p>	<p>Due to the headwater nature of the watercourses within the Study Area, flow is intermittent and collecting usable stream flow data was not possible. Similar challenges were noted by Aquafor Beech in their previous Subwatershed Study, dated 2018. Surface water quality data and groundwater monitoring data have been collected across the Study Area to help characterize existing conditions.</p>
Appendix B - Proposed Hydrology Plan	<p>15 The work proposed in Item 4 of the section on “Hydrology and Hydraulics”, namely the calibration and verification of the hydrologic model, should be discussed in Section 2.1.1 of the Main Report. Referring to this work in an appendix risks the possibility it will be overlooked.</p>	<p>Noted. As noted above, we have significant concerns with the ability to use any hydrometric data to calibrate hydrology models for headwater tributary areas. This same challenge was noted by Aquafor Beech in the previous Subwatershed Study (2018), which ultimately led to the conclusion that none of the data collected could be used. It was a similar finding by Water's Edge when they prepared the Hydrology Report for Stoney and Battlefield Creek (2020). Stantec also has similar experiences in other subwatershed studies as well. As such, the hydrology model was compared to background NPCA/HCA models, Flood Frequency Analyses, Unified Ontario Flood Method and Rural Regression to validate the model we've prepared.</p>
Appendix D - Tractive Force Analysis	<p>16 The cross-section data collection (Item 4) should be detailed enough to enable a thorough analysis of the section geometry. Bank parameters should include, but not be limited to, bankfull depth, bank angle, rooting depth, soil profile and extent of undercutting (if any).</p>	<p>Detailed cross-section surveys were undertaken, capturing key inflection points, bankfull depth and bank angle were measured. Rooting depth was not measured; since the influence of in-channel vegetation is largely seasonal, the tractive force analysis used a conservative approach by excluding the stabilizing influence of the root matrix. The soil profile was interpreted from nearby borehole data/soil survey reports, and visually confirmed in the field. Where applicable, the extent of undercutting was noted.</p>

Elfrida Subwatershed Plan - Terms of Reference
 City of Hamilton Comments - Received April 2, 2026

Report / Appendix Section	City Comment	Subwatershed Team Response
	<p align="center">17</p> <p>The location of bank soil/sediment samples should consider the strata of the banks; if two different strata are present, a sample should be collected from each one for grain size analysis.</p>	<p>Bed and bank material within the study area was observed to be generally cohesive and non-alluvial. For this reason, direct sampling/grain size analysis of bed and bank substrate was not undertaken. Soil strata were interpreted from nearby boreholes/soil survey reports and confirmed by visual observations of the channel banks. This approach is considered appropriate in non-alluvial systems, where bed and bank substrates are predominantly a function of the local Quaternary geology.</p>
	<p align="center">18</p> <p>Boundary shear stress (Item 7) should consider shear stress on the bed as well as the banks. Points along the channel boundary (bed and banks) that are vulnerable to erosion should be identified and analyzed.</p>	<p>Since the bed and bank soils are generally consistent, critical discharges were established based on the shear stress acting on the channel bed, which is generally higher than the shear stress acting on the banks. Areas of localized erosion sensitivity or active erosion were noted; however, it is not practical to model erosional processes on a micro-scale. Shear stress and velocity thresholds were established based on cross-sectionally averaged channel hydraulics, and interpreted in the context of any observed instances of localized erosion sensitivity.</p>
<p>Appendix F - General Criteria for Stormwater Management</p>	<p align="center">19</p> <p>The stormwater management criteria should include source retention targets as outlined in the City's Green Standards and Guidelines for Site Servicing (2025).</p>	<p>The Phase 2 report will include reference to the source retention targets and an LID screening matrix.</p>

APPENDIX B3

Agency Correspondence – Hamilton Conservation Authority

From: Addley, Diana

Sent: Friday, September 22, 2023 1:56 PM

To: Hartley, Mark <Mark.Hartley@hamilton.ca>; Jonathan Bastien <Jonathan.Bastien@conservationhamilton.ca>; David Deluce <ddeluce@npca.ca>

Cc: Gallagher, Tim <Tim.Gallagher@stantec.com>

Subject: Elfrida SWS - Request for Information

Good afternoon,

Please find attached the list of background data/information being requested to support this study.

Please let us know if you have any questions and/or would like to discuss further.

Kind regards,

Diana Addley

Senior Environmental Planner

Direct: 905 415-6401

diana.addley@stantec.com



From: Addley, Diana
Sent: Tuesday, October 3, 2023 2:19 PM
To: Hartley, Mark ; Jonathan Bastien ; David Deluce
Cc: Gallagher, Tim
Subject: RE: Elfrida SWS - Request for Information

Hello,

In follow up to email request below, could you kindly provide the data/information listed within the attached by **Friday, October 6, 2023**.

To assist with the file transfer process, please upload the reports/data/information to the following folder:

[Elfrida RFI](#)

If you have any questions and/or issues accessing the folder, please do not hesitate to contact me.

Thank you,

Diana Addley
Senior Environmental Planner
Direct: 905 415-6401



From: Addley, Diana

Sent: Friday, October 13, 2023 3:08 PM

To: Hartley, Mark <Mark.Hartley@hamilton.ca>; Jonathan Bastien <Jonathan.Bastien@conservationhamilton.ca>; David Deluce <ddeluce@npca.ca>

Cc: Gallagher, Tim <Tim.Gallagher@stantec.com>

Subject: RE: Elfrida SWS - Request for Information

Good afternoon,

The consultant team has reviewed the 2014 Terms of Reference and provided edits/comments for your consideration – please see attached. Could you please provide your comments by **Friday, October 27th**?

In follow up to the request below, please also kindly provide the requested data/information at your earliest convenience.

Thank you,

Diana Addley
Senior Environmental Planner
Direct: 905 415-6401



From: Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Sent: October 26, 2023 10:24 AM
To: Alex Nizharadze <alex.nizharadze@conservationhamilton.ca>
Subject: Stantec Follow Up RE: Watershed Phone Call

Hi Alex,

Thank you for speaking with me last week, Friday October 20th 2023, to answer a few questions on HCA flood plain and meander belt policies.

Further to our conversation, **Stantec understands that there are no minimum setback requirements for flood plains/meander belts as defined by HCA policies.**

Can you confirm Stantec's understanding is consistent with HCA expectations by kindly replying to this email?

Thank you,

Carissa Stauffer

Environmental Planner

Carissa.Stauffer@stantec.com

Stantec
300W-675 Cochrane Drive
Markham ON L3R 0B8



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From: Alex Nizharadze <Alex.Nizharadze@conservationhamilton.ca>
Sent: Thursday, October 26, 2023 10:37 AM
To: Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Cc: Mike Stone <Mike.Stone@conservationhamilton.ca>
Subject: RE: Stantec Follow Up RE: Watershed Phone Call

Hi Carissa,

Following our phone conversation last week, please be advised that there is no floodway and flood fringe approach for the Stoney Creek watershed and we recommend following our Policy for the meander belt delineation, unless a comprehensive study by a qualified fluvial geomorphologist determines a more precise meander belt width.

Thanks,

Alex Nizharadze, P. Eng.

Water Management Engineer

Hamilton Conservation Authority
P.O. Box 81067, 838 Mineral Springs Road,
Ancaster, Ontario, L9G 4X1

Office: (905) 525-2181, Ext. 232 || Cell: (905) 515-9879
anizhara@conservationhamilton.ca



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Re: Stantec Follow Up RE: Watershed Phone Call

Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Thu 2023-10-26 3:39 PM

To: Alex Nizharadze <Alex.Nizharadze@conservationhamilton.ca>

Cc: Mike Stone <Mike.Stone@conservationhamilton.ca>

Hi Alex,

Thank you for the advisement on the flood plain approach for the Stoney Creek watershed, and further clarifying the meander belt recommendations.

Kind regards,

Carissa Stauffer

Environmental Planner

Carissa.Stauffer@stantec.com

Stantec

300W-675 Cochrane Drive

Markham ON L3R 0B8



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Re: Elfrida Subwatershed Study Progress Update and Discussion - HCA

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 1 month ago (Fri 2025-03-21 2:00 PM - 3:00 PM)
Location Microsoft Teams Meeting
My response Not yet responded
Required attendees Stauffer, Carissa, Mike Stone, Alex Nizharadze
Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, Dirk Janas, Ian Roul
Message sent Thu 2025-05-15 10:00 AM

 2 attachments (1 MB)

ElfridaSWS_HCA_Data_2023.zip; not_Elfrida_SWS_HCA_mtg_minutes_fnl_3-21-2025.pdf;

Hello,

Please find attached the meeting minutes from our meeting on March 21, 2025 regarding the Elfrida Subwatershed study. As discussed, I have also included a ZIP file containing the original RFI and the data provided by HCA in 2023.

Kind regards,

Carissa Stauffer

Junior Environmental Planner & GIS Technician

Direct: 905 944-6872



Elfrida Subwatershed Study Progress Update and Discussion - HCA

Project/File: 160623199

Date/Time: March 21, 2025 / 2:00 PM

Location: Microsoft Teams

Next Meeting: TBD

Attendees:	Mike Stone	Hamilton Conservation Authority, Senior Manager, Watershed Planning
	Alex Nizharadze	Hamilton Conservation Authority, Water Management Engineer
	Laura Warner	Hamilton Conservation Authority, Senior Planner
	Lesley McDonell	Hamilton Conservation Authority, Supervisor Ecological Stewardship, Terrestrial Ecologist
	Tim Gallagher	Stantec Consulting Ltd.
	Diana Addley	Stantec Consulting Ltd.
	Carissa Stauffer	Stantec Consulting Ltd.
	Ian Roul	GeoProcess
	Jesse Snider	SLR Consulting (Canada) Ltd.
Absentees:	Dirk Janas	SLR Consulting (Canada) Ltd.
Distribution:	All	

Stantec Moment: Renewable Energy

Item:	Action:
Introductions / Roles / Responsibilities	
1. Stantec Consulting Ltd. (Stantec) provided an overview of the Elfrida Subwatershed Study (SWS) background and current project standing. The project was initiated in Fall 2023 but was paused due to changes in provincial legislation. A second Urban Boundary Expansion application (the application) was submitted in early March 2025. The application was deemed complete by the City of Hamilton (City) on March 20, 2025. More details will be provided as information for the SWS is prepared to support development of the Secondary Plan in the future.	Info
2. Stantec asked if the City had circulated the Hamilton Conservation Authority (HCA) on the application. HCA noted that they received a package from the City via email regarding the application very recently but had not received anything since 2023.	Stantec, HCA
3. Stantec asked HCA to note that the application submission was based on high-level input, and that all features and constraints are subject to further refinement as part of the SWS for the proposed boundary expansion.	Stantec, HCA
Overview of Information Prepared to Support Urban Boundary Expansion Application	
4. GeoProcess provided an overview of the comprehensive field investigations that have been completed to date, noting that work was initiated in Summer/Fall 2023 and resumed in May 2024. Field investigations completed to date include benthic sampling, fish sampling, water quality sampling, floral inventories, amphibian surveys, breeding bird surveys, winter wildlife studies, and preliminary delineation of woodlands and wetlands within the study area based on the City and Conservation	Info

Item:	Action:
<p>Authority (CA) policies and guidelines, and that Headwater Drainage Features (HDF) are currently being assessed in the field.</p> <p>5. GeoProcess specified that woodland and wetland features have been generally delineated but not staked in the field.</p> <p>6. GeoProcess noted that investigations related to locally rare species within the Hamilton region have been completed.</p> <p>7. GeoProcess added that detailed hedgerow and watercourse assessments have been completed beyond what is typically included to ensure that all protections and features are included and not missed in the Environmental Impact Statement (EIS).</p>	
<p>8. HCA asked if updates to the Terms of Reference had been completed, as discussed at the previous meeting held in relation to this study in 2023. Stantec noted that the Terms of Reference has not been updated but will be discussed with the City in the coming weeks.</p> <p><i>[Further discussion on the Terms of Reference is included within 'Terms of Reference Needs/Discussion']</i></p>	HCA, Stantec
<p>9. Stantec added that an extensive fluvial geomorphology study is being completed. A geotechnical and hydrogeological field program was completed by LandTech between Fall 2024 and winter 2025. The hydrogeological investigation report will be available as part of the Phase 1 Existing Conditions SWS report.</p> <p>10. Stantec indicated that surface water hydrology and hydraulics have not been reassessed as landowners did not want to advance the full scope of the SWS until the boundary was approved. As such, the Urban Boundary Expansion application carried the same floodplain delineation as presented in the Aquafor Beech SWS Phase 1 Report (May 2018).</p>	Info
Review of Background Information Provided / Gaps	
<p>11. Stantec summarized the data previously provided by the HCA in 2023, and outlined what information and data is still being requested to support the SWS (as shown in the RFI). Stantec to provide the Request for Information (RFI) to HCA for reference.</p> <p>12. Stantec noted that HCA's coverage within the study area is limited to the small portion of Davies Creek (small section in the lower left quadrant of the preliminary mapping), Hannon Creek, and Stoney Creek (upper right quadrant of the study area). Stoney Creek has the largest area within the study area. Stantec highlighted that information pertaining to the hydrology and hydraulics of Hannon Creek and Stoney Creek would be of particular focus and value.</p>	Info, Stantec
<p>13. HCA confirmed that they have the hydrology and hydraulic model for these creeks and can provide them to Stantec. HCA also noted that the City completed the Upper Hannon Creek Master Drainage Plan in 2018 and that the study team should request this report (and applicable data) from the City. HCA noted they can also provide this upon City approval.</p>	HCA, Stantec
<p>14. HCA noted that HEC-RAS is used for hydraulic modelling but would need to confirm the modelling for hydrology.</p>	HCA
<p>15. Stantec noted that a response to the previous data request was completed in November 2023 by Scott Peck (HCA); however, the data was GIS focused and did not include the hydrologic and/or hydraulic models. HCA indicated that the data request was likely being completed when work was paused in 2023, and that all data received should be reviewed and updated again. Stantec to provide the data received from HCA in 2023.</p>	Stantec, HCA
<p>16. HCA identified Laura Warner as the main contact for this project, however this will be confirmed.</p>	HCA
<p>17. HCA asked for the RFI and 2023 HCA data to be sent to Mike Stone and Laura Warner. Materials can be distributed amongst staff as needed.</p>	HCA, Stantec

Item:	Action:
Terms of Reference Needs / Discussion	
18. Stantec indicated that the current Terms of Reference is from the Aquafor Beech SWS and is very detailed. It was also noted that it was understood that the City was preparing an updated SWS guideline, however it has not been completed or made available yet.	Info
19. Stantec asked if the HCA had any preference in using the current Terms of Reference or in building a new one based on update City guidelines. HCA noted that they don't have a preference but can see benefits in carrying forward the old Terms of Reference for consistency. HCA stated that it is ultimately the City's decision.	Info
20. Stantec will confirm the Terms of Reference with the City and will revisit this part of the discussion in future meetings.	Stantec
Future Steering Committee Meetings	
21. Stantec noted that a Steering Committee meeting will likely occur in late spring 2025, and fall 2025 before submitting with HCA, NPCA, and the City. These meetings will be focused gaining feedback on technical and other considerations before decisions are made. The technical focus will include hydrologic/hydraulic, fluvial, aquatic, and terrestrial investigations.	Info, Stantec
22. HCA noted that staff interest and participation will vary depending on the technical topic being discussed in each meeting. Stantec to send main contact the agenda in advance of meetings to help identify which staff should be included future meetings.	HCA, Stantec
Next Steps and Other Items	
23. Stantec noted that NPCA expressed interest in completing site visits to identify and confirm HDF, woodland, and wetland features, and asked if HCA would also have interest in this. HCA confirmed that they would like to have aquatic ecologists and other staff on the ground to confirm these features as well. 24. HCA noted that their scope is limited due to changing policies and legislation and that their focus would remain on HDF, wetlands, and watercourses. Woodlands fall under the City's responsibility.	Stantec, HCA
25. Stantec asked if there would be any concerns with relying on seasonal site visits spanning between 2023 and 2025. HCA noted that it can be challenging if conditions differed, particularly if one year was a drought year. HCA further noted that having current years data would be helpful.	Stantec, HCA
26. In follow up, Stantec asked if the ecologists working on the project determined that a conclusion could be drawn from the data, would the HCA support this conclusion? HCA confirmed that they would.	Stantec, HCA
27. It was agreed that the use of 2D modelling would be discussed and reviewed as part of future Steering Committee meetings. Stantec's preference would be to carry forward to use 1D HEC-RAS models to be consistent with the other areas of the watershed(s).	HCA, Stantec
28. Stantec confirmed that this the current SWS is being carried out as an update to 2018 Phase 1, and that Phase 2 might be addressed once Phase 1 has been completed. Stantec also noted that there may be a request to complete Phase 2 at the same time.	HCA, Stantec
29. HCA noted that comments on the original Phase 1 report were submitted in 2018, and that the City had prepared a comment tracking spreadsheet. It was suggested that obtaining this record of comments from the City could be helpful to the SWS team. HCA (Mike Stone) could provide these if required.	HCA, Stantec

Item:	Action:
30. Stantec will reach out to the City for the Upper Hannon Creek Master Drainage Plan, to obtain the 2018 comment tracking spreadsheet, and to confirm the Terms of Reference.	Stantec
31. Stantec will share the RFI with HCA and will share the Terms of Reference after discussions with the City. The first Steering Committee meeting will be organized by Stantec in late Spring, and the objective is to submit the Phase 1 Existing Conditions SWS report in Fall 2025.	Stantec

Meeting adjourned at 2:55 PM.

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

Stantec Consulting Ltd.



Carissa Stauffer
Environmental Planner & GIS Technician
Phone: (905) 944-6872
carissa.stauffer@stantec.com

Attachment: Elfrida Subwatershed Study – RFI
Zip file of HCA data provided in 2023

Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Weersink, Bryan <Bryan.Weersink@stantec.com>

Date Fri 2025-07-04 12:00 PM

To lwarner@conservationhamilton.ca <lwarner@conservationhamilton.ca>; mike.stone@conservationhamilton.ca <mike.stone@conservationhamilton.ca>

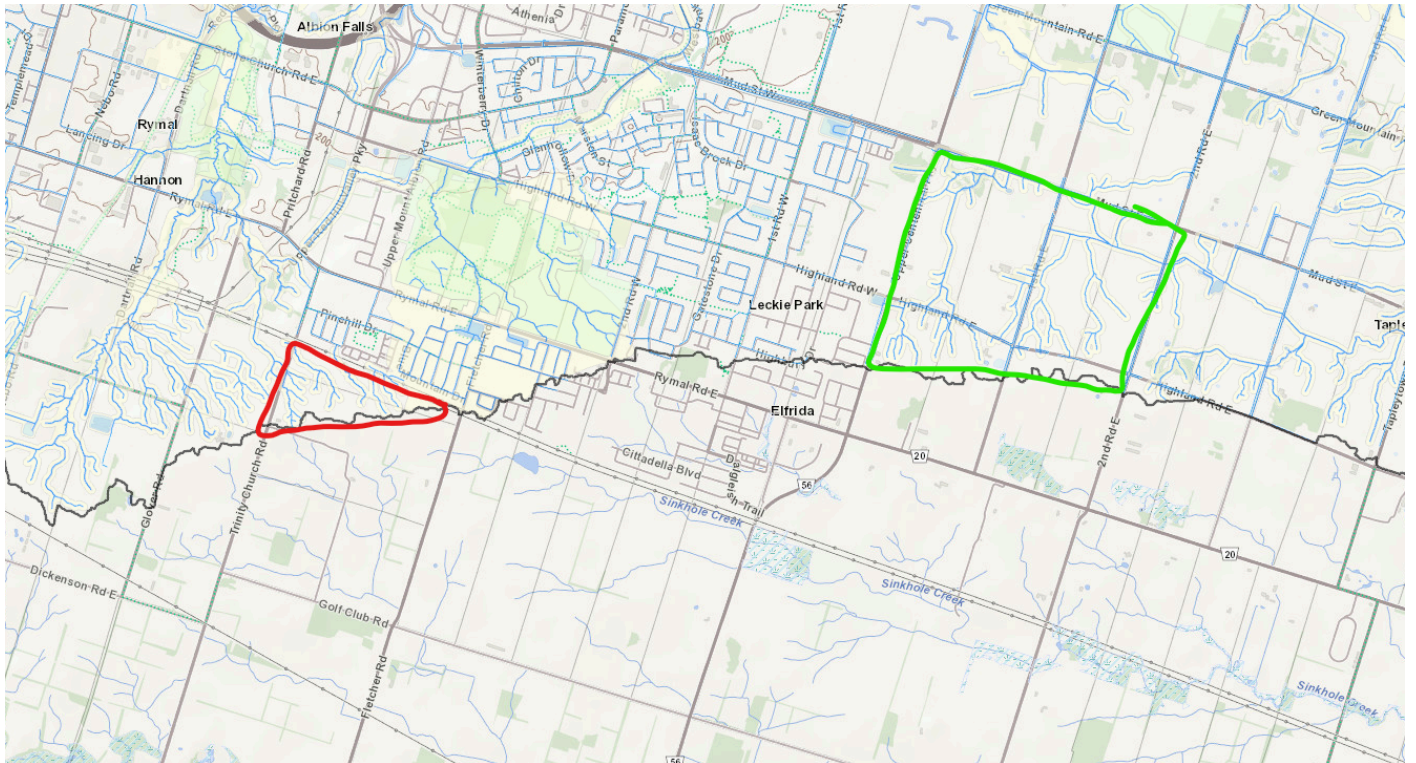
Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>

Good Afternoon Laura and Mike,

I am working on the surface water components of the Elfrida Subwatershed Study and am looking for available hydrology/hydraulic models and related information within HCA's jurisdiction. To date, we have only received GIS files from HCA (provided back in 2023) and I wanted to follow up on the availability of any hydrologic or hydraulic models.

I believe you are aware, but I have outlined the two main areas where the study boundary is contained within HCA's jurisdiction. The red area is in the Hannon Creek subwatershed while the green area is within the Stoney Creek subwatershed.

Are you able to provide any hydrology or hydraulic models, with associated reports, mapping, etc., for these two subwatersheds? I understand there was a Master Drainage Plan completed for Upper Hannon Creek that we are working on obtaining from the City as well.



Feel free to reach out if you have any questions.

Thank you in advance for your help!

Bryan Weersink, P.Eng.
Surface Water Team Lead

Office: [Hamilton ON](#)
Direct: [\(905\) 381-3271](#)
Mobile: [\(519\) 831-6554](#)
bryan.weersink@stantec.com



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RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Laura Warner <lwarner@conservationhamilton.ca>

Date Mon 2025-07-07 8:43 AM

To Weersink, Bryan <Bryan.Weersink@stantec.com>; Mike Stone <Mike.Stone@conservationhamilton.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>

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Hi Bryan,

Thanks for reaching out. We will see what information we have available and will advise shortly.

Best,
Laura

Laura Warner

Senior Planner

Watershed Management Services

Hamilton Conservation Authority

838 Mineral Springs Road, P.O. Box 81067

Ancaster, ON L9G 4X1

Phone: 905-525-2181 Ext. 132

Email: lwarner@conservationhamilton.ca

Website: www.conservationhamilton.ca



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RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Weersink, Bryan <Bryan.Weersink@stantec.com>

Date Mon 2025-07-07 8:47 AM

To Laura Warner <lwarner@conservationhamilton.ca>; Mike Stone <Mike.Stone@conservationhamilton.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>

Much appreciated – thank you Laura!

Bryan Weersink, P.Eng.

Surface Water Team Lead



RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Laura Warner <lwarner@conservationhamilton.ca>

Date Wed 2025-07-16 11:37 AM

To Weersink, Bryan <Bryan.Weersink@stantec.com>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>

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Hi Bryan,

Metropolitan Consulting is currently working on floodplain modeling for the development at 198 First Road West. This model covers the headwaters of Stoney Creek and includes the proposed drainage pattern changes near the Upper Centennial Parkway and Mud Street intersection. Both models are owned by the City of Hamilton and can be obtained directly from them.

The Upper Hannon Master Drainage Plan (MDP) is the most recent study and can be referenced for additional information on the Upper Hannon Creek watershed in relation to the Elfrida study. Previous studies such as the North Glanbrook Industrial Business Park MDP is tied in the Upper Hannon MDP report, are also available through the City of Hamilton.

If you would like further clarification regarding the history of studies related to the Upper Hannon Creek and Stoney Creek watersheds, you are welcome to contact our Water Management Engineer (Alex Nizharadze) directly by email or phone and he would be happy to provide further details. I have included Alex's contact information below.

Alex.Nizharadze@conservationhamilton.ca

Office: (905) 525-2181, Ext. 232 || Cell: (905) 515-9879

I will note that we are still looking into what hydrology and hydraulics information we have available for the Saltfleet area.

I hope this helps for now!

Kind regards,
Laura

Laura Warner

Senior Planner

Watershed Management Services

Hamilton Conservation Authority

838 Mineral Springs Road, P.O. Box 81067

Ancaster, ON L9G 4X1

Phone: 905-525-2181 Ext. 132

Email: lwarner@conservationhamilton.ca

Website: www.conservationhamilton.ca


Elfrida Subwatershed Study - HCA Data Request

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Tue 2025-08-26 3:03 PM

To Richard.Woodworth@conservationhamilton.ca <Richard.Woodworth@conservationhamilton.ca>

Cc Laura Warner <lwarner@conservationhamilton.ca>; Mike Stone <mike.stone@conservationhamilton.ca>

 2 attachments (478 KB)

DLA 2023-10 Stantec.docx; rfi_elfrida_sws_20230922.docx;

Hi Richard,

I am reaching out on behalf of Stantec Consulting Ltd., and the Subwatershed Study team working on the Elfrida SWS in Hamilton. I have previously connected with Laura and Mike on this project (cc'd above), but am reaching out to request a few items on the GIS end of this study.

Would you be able to provide me with Hamilton Conservation Authorities Regulated Boundary, as identified under Ontario Reg. 42/06. I'm not sure if this will require a new signed data agreement, please see the agreement signed above in 2023 (when this project originally started).

I have also attached the original RFI shared with HCA in 2023. If there are any additional items that you can share from this list, it would be greatly appreciated.

On a slightly unrelated note to this project - while looking through the HCA's new Open Data portal, I noticed that the HCA Watershed Jurisdictional Boundary is currently appears in the middle of the Mediterranean Sea. I assume its just an error in the coordinate system, but wanted to flag!

Please let me know if you have any questions or would like to discuss the requested data further.

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician

Direct: (905) 944-6872

carissa.stauffer@stantec.com



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Re: Elfrida Subwatershed Study - HCA Data Request

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Wed 2025-09-03 4:56 PM

To Richard.Woodworth@conservationhamilton.ca <Richard.Woodworth@conservationhamilton.ca>

Cc Laura Warner <lwarner@conservationhamilton.ca>; Mike Stone <mike.stone@conservationhamilton.ca>

Hi Richard,

I am following up on my request for the Elfrida Subwatershed Study (SWS) that I submitted last Tuesday (please see below).

We are requesting Hamilton Conservation Authorities Regulated Boundary, as identified under Ontario Reg. 42/06. I don't believe this information is available through HCA's portal. Any additional data that you can provide as highlighted in the RFI below would also be greatly appreciated.

We understand that accessing this data may require a new data license agreement between HCA and the consulting team and are able to proceed accordingly, following HCA direction.

If you have any questions or would like to discuss further, please don't hesitate to reach out.

Thank you,

Carissa Stauffer

Environmental Planner and GIS Technician




RE: Elfrida Subwatershed Study - HCA Data Request

From Rick Woodworth <Richard.Woodworth@conservationhamilton.ca>

Date Fri 2025-09-05 9:04 AM

To Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Cc Laura Warner <lwarner@conservationhamilton.ca>; Mike Stone <Mike.Stone@conservationhamilton.ca>

 2 attachments (2 MB)

Stantec.zip; DLA 2023-10 Stantec_update.docx;

Hi Carissa,

Please see attached.

In the dataset I included both the regulated area and the jurisdictional boundary for HCA (both full geographic extents for simplicity). The updated DLA has been appended from the original agreement from 2023. Please retain for your records – no further action is required.

Regards,

Rick

Richard Woodworth

G.I.S. Specialist

Hamilton Conservation Authority

838 Mineral Springs Road, P.O. Box 81067

Ancaster, ON L9G 4X1

Phone: 905-525-2181 Ext. 161

Cell: 289-527-6724

Email: Richard.Woodworth@conservationhamilton.ca

www.conservationhamilton.ca



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Re: Elfrida Subwatershed Study - HCA Data Request

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Fri 2025-09-05 9:39 AM

To Rick Woodworth <Richard.Woodworth@conservationhamilton.ca>

Cc Laura Warner <lwarner@conservationhamilton.ca>; Mike Stone <mike.stone@conservationhamilton.ca>

Hi Richard,

That's perfect, thank you for sending along.

Thank you for updating the DLA as well - I really appreciate it.

Have a great weekend!

Kind regards,

Carissa Stauffer

Environmental Planner and GIS Technician



Minimum Vegetation Protection Zones for Wetlands Within HCA Jurisdiction

From Jesse Snider <Jesse.Snider@slrconsulting.com>

Date Thu 2025-12-18 8:30 AM

To lwarner@conservationhamilton.ca <lwarner@conservationhamilton.ca>

Cc mike.stone@conservationhamilton.ca <mike.stone@conservationhamilton.ca>; Dirk Janas <dirk.janas@slrconsulting.com>; Josie Mielhausen <jmielhausen@geoprocess.com>; Ian Roul <iroul@geoprocess.com>; Kate Lillie <klillie@geoprocess.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

Good morning Laura,

Our project team (CC'd) is currently working on a site within the City of Hamilton that is subject to the policies and regulations of the Urban Hamilton Official Plan (UHOP). Our site contains a number of natural features and as such these features are subject to the minimum vegetation protection zones (MVPZs) of the UHOP. We do recognize; however, that hazard lands, which include wetland features, are subject to conservation authorities' policies and regulations.

According to the UHOP, Provincially Significant Wetlands (PSWs) are subject to a 30 m MVPZ, while Locally Significant Wetlands and unevaluated wetlands are subject to a 15 m MVPZ. As per the Hamilton Conservation Area (HCA) website, the HCA is in the process of "updating its Planning and Regulation Policies to reflect recent changes to the Conservation Authorities Act." Until such time; however, the 2011 Planning & Regulation Policies and Guidelines are in effect. Within Section 3.1.7.c of this document, it indicates that "no development, site alteration, and/or interference with wetlands is permitted within 30 m of any wetland." Given that updates to the Planning and Regulation Policies are underway, we wanted to confirm with the HCA whether we should adhere to the 2011 HCA policies or the UHOP policies when applying MVPZs to wetland features.

Your guidance on this matter would be much appreciated.

Thank you,

Upcoming Vacation Notice - I will be out of the office between December 22nd and January 4th. I will be periodically checking my emails between December 29th and Jan 2nd.

Jesse Snider B.Sc., EPT

Project Manager - Ecology & Biodiversity

O +1 905 415 7248

M +1 416 936 2082

E Jesse.Snider@slrconsulting.com

SLR Consulting (Canada) Ltd.

300 Town Centre Blvd, Suite 200, Markham, ON, Canada L3R 5Z6


RE: Minimum Vegetation Protection Zones for Wetlands Within HCA Jurisdiction

From Laura Warner <lwarner@conservationhamilton.ca>

Date Thu 2025-12-18 3:18 PM

To Jesse Snider <jesse.snider@slrconsulting.com>

Cc Mike Stone <Mike.Stone@conservationhamilton.ca>; Dirk Janas <dirk.janas@slrconsulting.com>; Josie Mielhausen <jmielhausen@geoprocess.com>; Ian Roul <iroul@geoprocess.com>; Kate Lillie <klillie@geoprocess.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

 1 attachment (2 MB)

Planning and Regulation Policies_Sept 2025.pdf;

Hi Jesse,

HCA's new Planning and Regulation Policies are now updated and available on our website at the link below. I have also attached a PDF copy for your reference.

<https://conservationhamilton.ca/hca-regulation-permits/>

Generally, HCA still recommends maintaining a 30 metre wetland setback for all new development. However, the new policies within Section 5.6 do provide some leniency for development within 30 metres to a wetland provided the wetland is located outside the Greenbelt Area, development is setback from the wetland to the greatest extent possible, there is no adverse impacts on the hydrologic functions and features of the wetland, and that mitigation measures will be implemented to minimize impacts on the wetland. Please refer to Section 5.6.2.3 for more detail.

I hope this helps! I am happy to discuss these policies further if you have any questions.

Best,
Laura

Laura Warner

Senior Planner

Watershed Management Services

Hamilton Conservation Authority

838 Mineral Springs Road, P.O. Box 81067

Ancaster, ON L9G 4X1

Phone: 905-525-2181 Ext. 132

Email: lwarner@conservationhamilton.ca

Website: www.conservationhamilton.ca



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RE: Minimum Vegetation Protection Zones for Wetlands Within HCA Jurisdiction

From Jesse Snider <Jesse.Snider@slrconsulting.com>

Date Fri 2025-12-19 12:05 PM

To Laura Warner <lwarner@conservationhamilton.ca>

Cc Mike Stone <Mike.Stone@conservationhamilton.ca>; Dirk Janas <dirk.janas@slrconsulting.com>; Josie Mielhausen <jmielhausen@geoprocess.com>; Ian Roul <iroul@geoprocess.com>; Kate Lillie <klillie@geoprocess.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

Great, thank you Laura! This clears things up. I will ensure that we adhere to these policies when completing our assessment.

Happy Holidays!

Upcoming Vacation Notice - I will be out of the office between December 22nd and January 4th. I will be periodically checking my emails between December 29th and Jan 2nd.

Jesse Snider B.Sc., EPT

Project Manager - Ecology & Biodiversity

O +1 905 415 7248

M +1 416 936 2082

E Jesse.Snider@slrconsulting.com

SLR Consulting (Canada) Ltd.

300 Town Centre Blvd, Suite 200, Markham, ON, Canada L3R 5Z6

RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Weersink, Bryan <Bryan.Weersink@stantec.com>

Date Thu 2026-02-26 1:32 PM

To Laura Warner <lwarner@conservationhamilton.ca>; Alex.Nizharadze@conservationhamilton.ca <Alex.Nizharadze@conservationhamilton.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>; Yavarikia, Maryam <Maryam.Yavarikia@stantec.com>

Hey Laura and Alex,

Hope all is well!

We are working through the proposed hydraulics for the subwatershed study and with that, looking at sizing new crossings through the secondary plan area. As the landscape is very flat and resultant floodplain quite wide – it can make it challenging to have no upstream impact when implementing a new crossing (where nothing was before). This is specifically challenging along Stoney Creek adjacent to Mud Street, with backwater effects carrying to the north side of Mud Street.

I know in other CA's I have seen the threshold of no increase upstream by 0.1m or more, but haven't seen a specific value in HCA policies.

Can you please confirm what HCA's policy is on flood level increases?

Let me know if you'd like to discuss at all or have any questions.

Thanks!

Bryan Weersink, P.Eng.

Team Lead, Water Resources Engineer

Office: [Hamilton ON](#)

Direct: [\(905\) 381-3271](#)

Mobile: [\(519\) 831-6554](#)

bryan.weersink@stantec.com



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Outlook

RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Weersink, Bryan <Bryan.Weersink@stantec.com>

Date Wed 2026-03-04 5:12 PM

To Laura Warner <lwarner@conservationhamilton.ca>; Alex.Nizharadze@conservationhamilton.ca <Alex.Nizharadze@conservationhamilton.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>; Yavarikia, Maryam <Maryam.Yavarikia@stantec.com>

Hey Laura and Alex,

I just wanted to follow up to confirm you received my email and if you have any questions.

We are on a bit of a time crunch, so I'd appreciate a response at your earliest convenience.

Thanks!

Bryan Weersink, P.Eng.

Team Lead, Water Resources Engineer



RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Laura Warner <lwarner@conservationhamilton.ca>

Date Thu 2026-03-05 10:39 AM

To Weersink, Bryan <Bryan.Weersink@stantec.com>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>; Yavarikia, Maryam <Maryam.Yavarikia@stantec.com>; Alex Nizharadze <Alex.Nizharadze@conservationhamilton.ca>

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Hi Bryan,

Unfortunately HCA does not have a defined numerical threshold as used by other CA's but recommends a site specific evaluation rather than a fixed numerical allowance. That being said, our policies require no adverse hydraulic and fluvial impacts which is defined as *“any increase in flood elevation or impedance of flood and ice flows and/or an increase in the risk of flooding and erosion on adjacent upstream and/or downstream properties”*. This would especially be applicable to the Elfrida catchment, given its headwater location within the Stoney Creek system.

For modelling precision, we generally accept a 1cm deviation in floodplain elevation, as this level of difference is within the expected range of model algorithm.

If it would be helpful to discuss the above or the modeling specifically, please let me know!

Thanks,
Laura

Laura Warner

Senior Planner

Watershed Management Services

Hamilton Conservation Authority

838 Mineral Springs Road, P.O. Box 81067

Ancaster, ON L9G 4X1

Phone: 905-525-2181 Ext. 132

Email: lwarner@conservationhamilton.ca

Website: www.conservationhamilton.ca



RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Weersink, Bryan <Bryan.Weersink@stantec.com>

Date Fri 2026-03-06 9:22 AM

To Laura Warner <lwarner@conservationhamilton.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>; Yavarikia, Maryam <Maryam.Yavarikia@stantec.com>; Alex Nizharadze <Alex.Nizharadze@conservationhamilton.ca>

Hey Laura,

Thank you for getting back to me.

I think it may be useful to have a quick meeting to discuss this as well as just our general approach for proposed stormwater management and hydrologic/hydraulic modelling.

Can you let me know some dates/times that work for you and your team to meet? Thinking maybe later next week if possible, or early the week after.

Thanks!

Bryan Weersink, P.Eng.

Team Lead, Water Resources Engineer



RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Laura Warner <lwarner@conservationhamilton.ca>

Date Tue 2026-03-10 9:34 AM

To Weersink, Bryan <Bryan.Weersink@stantec.com>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>; Yavarikia, Maryam <Maryam.Yavarikia@stantec.com>; Alex Nizharadze <Alex.Nizharadze@conservationhamilton.ca>

Some people who received this message don't often get email from lwarner@conservationhamilton.ca. [Learn why this is important](#)

Hi Bryan,

We can certainly meet to discuss further and are available the following dates and time this week and next:

- Wednesday March 10: 10:00am-12:00pm
- Friday March 13: 10:30am-12:00pm
- Monday March 16: 10:30am-12:00pm
- Tuesday March 17: 1:00pm-4:00pm

Please let me know what works best on your side. I can also provide additional times for later next week if needed!

Thanks,
Laura

Laura Warner
Senior Planner
Hamilton Conservation Authority
T: 905-525-2181 Ext. 132

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RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Weersink, Bryan <Bryan.Weersink@stantec.com>

Date Wed 2026-03-11 4:35 PM

To Laura Warner <lwarner@conservationhamilton.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>; Alex Nizharadze <Alex.Nizharadze@conservationhamilton.ca>

 1 attachment (903 KB)

RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models;

Hey Laura,

I know we asked previously for any modelling along Stoney Creek that HCA has, and nothing was provided outside of the attached email. In doing a bit more digging, it appears that there is some modelling associated with the 2018 "Flood and Erosion Control Project for Upper Battlefield Creek and Upper Stoney Creek Community of Stoney Creek" prepared by AMEC, as well as design of SC-8 done by Water's Edge (October 2024), which our study area is contained within. I pulled some reports from HCAs website that talk about modelling that cover our study area all the way to the Lake.

<https://conservationhamilton.ca/saltfleet-conservation-area-wetland-restoration-project/>

We are hoping to obtain the latest overall watershed models to assess how any flow impacts will propagate through the downstream system, in turn to help us ensure we are mitigating any negative downstream impacts.

I just wanted to point this out to see if you can pull any modelling files ahead of our meeting on Monday.

Thanks!

Bryan Weersink, P.Eng.

Team Lead, Water Resources Engineer



RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Laura Warner <lwarner@conservationhamilton.ca>

Date Thu 2026-03-12 2:21 PM

To Weersink, Bryan <Bryan.Weersink@stantec.com>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>; Alex Nizharadze <Alex.Nizharadze@conservationhamilton.ca>

Hi Bryan,

I know we will be able to provide some of the modelling you have identified below and are looking into it further. Hopefully we can get them to you ahead of our meeting on Monday!

Cheers,
Laura

Laura Warner

Senior Planner

Watershed Management Services

Hamilton Conservation Authority

838 Mineral Springs Road, P.O. Box 81067

Ancaster, ON L9G 4X1

Phone: 905-525-2181 Ext. 132

Email: lwarner@conservationhamilton.ca

Website: www.conservationhamilton.ca



A Healthy Watershed for Everyone

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RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Sauder, Marlee <Marlee.Sauder@stantec.com>

Date Thu 2026-03-19 10:58 AM

To Laura Warner <lwarner@conservationhamilton.ca>; Alex Nizharadze <Alex.Nizharadze@conservationhamilton.ca>; Jonathan.Bastien@conservationhamilton.ca <Jonathan.Bastien@conservationhamilton.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Raymond, Bill <Bill.Raymond@stantec.com>; Weersink, Bryan <Bryan.Weersink@stantec.com>

Hi Laura, Alex, Jonathan,

Thanks again for the meeting on Monday. I am following up to see if you have had any luck tracking down the hydrologic / hydraulic modeling files for Stoney, Hannon and Davis Creeks for our reference and use?

Best,

Marlee Sauder, P.Eng., CAN-CISEC
Water Resources Engineer
She/Her



From: Laura Warner <lwarner@conservationhamilton.ca>

Sent: Thursday, March 12, 2026 2:21 PM

To: Weersink, Bryan <Bryan.Weersink@stantec.com>

Cc: Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>; Alex Nizharadze <Alex.Nizharadze@conservationhamilton.ca>

Subject: RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

Hi Bryan,

I know we will be able to provide some of the modelling you have identified below and are looking into it further. Hopefully we can get them to you ahead of our meeting on Monday!

Cheers,
Laura

Laura Warner
Senior Planner
Watershed Management Services
Hamilton Conservation Authority
838 Mineral Springs Road, P.O. Box 81067
Ancaster, ON L9G 4X1
Phone: 905-525-2181 Ext. 132
Email: lwarner@conservationhamilton.ca
Website: www.conservationhamilton.ca

RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Laura Warner <lwarner@conservationhamilton.ca>

Date Thu 2026-03-19 4:42 PM

To Sauder, Marlee <Marlee.Sauder@stantec.com>; Weersink, Bryan <Bryan.Weersink@stantec.com>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Raymond, Bill <Bill.Raymond@stantec.com>; Alex Nizharadze <Alex.Nizharadze@conservationhamilton.ca>; Jonathan Bastien <Jonathan.Bastien@conservationhamilton.ca>

Hi Marlee and Bryan,

We have reviewed HCA's current adopted floodplain mapping studies to determine if additional floodplain mapping and flood impact assessments will be required as part of the Elfrida SWS study.

For Elfrida developments in both the Stoney Creek and Redhill Creek watersheds, additional floodplain mapping and flood impact assessment are expected to be required. Since the current City of Hamilton Official Plans do not include future development within the Elfrida development area, HCA will require the following evaluations to support the Official Plan Amendment (Please note that there are additional Official Plan Amendment requirements from the City of Hamilton):

1. An update to the current adopted flood plain mapping, to include the proposed Elfrida development.
2. A comparison between the current adopted flood plain mapping and the updated flood plain mapping – For Regional Event flood levels without any regional flood controls within the Elfrida development, with a focus on flood levels in Stoney Creek and Redhill Creek downstream of the Elfrida area.
3. As necessary, revised updated flood plain mapping - For Regional Event flood levels with any Elfrida development regional flood controls that are necessary to mitigate any identified increases in downstream flood levels (that are determined to be greater than 1 cm).
4. Conceptual design of the necessary regional flood controls

The current adopted floodplain mapping for Stoney Creek is based on the Stoney & Battlefield Creeks FPM study (Waters Edge, 2020). The current adopted floodplain mapping for Redhill Creek is based on the Redhill Creek FPM study (Aquafor Beech, 2025). To assist in your review and assessments, the reports, models and floodplain maps from these two studies can be found within the OneDrive webpage below:

 [For Stantec - Elfrida SWS 2026](#)

We are happy to discuss further once you get a chance to review.

Kind regards,
Laura

Laura Warner
Senior Planner

APPENDIX B4

Agency Correspondence – Niagara Peninsula Conservation Authority

From: Addley, Diana

Sent: Friday, September 22, 2023 1:56 PM

To: Hartley, Mark <Mark.Hartley@hamilton.ca>; Jonathan Bastien <Jonathan.Bastien@conservationhamilton.ca>; David Deluce <ddeluce@npca.ca>

Cc: Gallagher, Tim <Tim.Gallagher@stantec.com>

Subject: Elfrida SWS - Request for Information

Good afternoon,

Please find attached the list of background data/information being requested to support this study.

Please let us know if you have any questions and/or would like to discuss further.

Kind regards,

Diana Addley

Senior Environmental Planner

Direct: 905 415-6401

diana.addley@stantec.com



From: Addley, Diana
Sent: Tuesday, October 3, 2023 2:19 PM
To: Hartley, Mark ; Jonathan Bastien ; David Deluce
Cc: Gallagher, Tim
Subject: RE: Elfrida SWS - Request for Information

Hello,

In follow up to email request below, could you kindly provide the data/information listed within the attached by **Friday, October 6, 2023**.

To assist with the file transfer process, please upload the reports/data/information to the following folder:

[Elfrida RFI](#)

If you have any questions and/or issues accessing the folder, please do not hesitate to contact me.

Thank you,

Diana Addley
Senior Environmental Planner
Direct: 905 415-6401



From: Addley, Diana

Sent: Friday, October 13, 2023 3:08 PM

To: Hartley, Mark <Mark.Hartley@hamilton.ca>; Jonathan Bastien <Jonathan.Bastien@conservationhamilton.ca>; David Deluce <ddeluce@npca.ca>

Cc: Gallagher, Tim <Tim.Gallagher@stantec.com>

Subject: RE: Elfrida SWS - Request for Information

Good afternoon,

The consultant team has reviewed the 2014 Terms of Reference and provided edits/comments for your consideration – please see attached. Could you please provide your comments by **Friday, October 27th**?

In follow up to the request below, please also kindly provide the requested data/information at your earliest convenience.

Thank you,

Diana Addley
Senior Environmental Planner
Direct: 905 415-6401



From: David Deluce <ddeLUce@npca.ca>


Sent: Friday, October 13, 2023 4:02 PM

To: Addley, Diana <Diana.Addley@stantec.com>

Cc: Gallagher, Tim <Tim.Gallagher@stantec.com>; Kehler, Mark <Mark.Kehler@hamilton.ca>; Brian Lee <blee@npca.ca>

Subject: RE: Elfrida SWS - Request for Information -NPCA Data

Hi Dianan,

Sorry for the delay. Information we have available can be found in the OneDrive folder here:  [Elfrida Subwatershed Study - NPCA Data](#). Also our GIS Administrator included a guide for accessing our GIS files. Please let me know if you have any questions.

Best Regards,



David Deluce, MCIP,
RPP
Senior Manager,
Environmental
Planning & Policy

**Niagara Peninsula
Conservation Authority
(NPCA)**

250 Thorold Road
West, 3rd Floor |
Welland, ON L3C
3W2

905.788.3135
www.npca.ca
ddeLUce@npca.ca

Elfrida GIS Transfer List

1. Aerial imagery for the study area (including historical/prior to 1995)

- Best way to consume this imagery is via a Web Service:

https://gis.npca.ca/image/rest/services/Imagery/SWOOP_2020_NPCA/ImageServer

2. Geospatial data for the study area (including stream network shapefiles and property parcels with permissions to use)

- Streams (Contemporary_Mapping_of_Watercourses.shp) – in OneDrive Folder
- Parcels – Need to reach out to the corresponding municipality to acquire those

3. Best Available Topographic Mapping available through either City or CAs (GIS format if possible)

- Breaklines – (Breaklines_2020_DTM.shp) – In OneDrive Folder
- Contours – (Contours_2020_DTM.shp) – In OneDrive Folder
- Other Topo products can be found here:

<https://gis-npca-camaps.opendata.arcgis.com/pages/digital-terrain-model-2020>

4. ELC shapefiles (based on Aquafor Beech SWS), mapping, data collection sheets

- ELC_NPCA_2022 – In OneDrive Folder

5. Wetland and woodland specific data

- Wetland – (Regulated_Wetlands_NPCA.shp) – In OneDrive Folder
- Woodland – please refer to the ELC_NPCA_2022.shp

6. Floodplain Mapping (including hydraulic model cross-section locations)

- Floodplains (Regulated_Floodplains_NPCA.shp) – In OneDrive Folder
- Cross Sections (Cross_Sections_for_Floodplains.shp) – In OneDrive Folder

7. SubCatchment Area Mapping in GIS

- Subwatersheds (Subwatersheds.shp) – In OneDrive Folder

8. Conservation Authority Regulated Area Mapping in GIS

- Regulated Areas (Approximated_Regulation_Lands_NPCA.shp) – In OneDrive Folder

9. *Ecologically Significant Groundwater Recharge Area Mapping (GIS)*

- Significant Recharge Area (Significant_Groundwater_Recharge_Areas_NPCAs.shp) – In OneDrive Folder

10. *High Volume Groundwater Recharge Area Mapping (GIS)*

- We do not have this layer

11. *Hydrologic Soil Group Mapping and/or Soil Texture Mapping (GIS)*

- Soils – (Soils_OMAFRA.shp) – In OneDrive Folder

From: Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Sent: Wednesday, October 25, 2023 3:31 PM

To: David Deluce <ddeLUce@npca.ca>

Subject: Stantec Follow Up RE: Phone Call

Hi David,

Thank you for speaking with me this afternoon to answer a few questions on NPCA flood plain and meander belt policies.

Further to our conversation, Stantec understands that there are no minimum setback requirements for flood plains/meander belts as defined by NPCA policies. In addition, Stantec understands that the following are true according to NPCA policies:

- The flood plain minimum is defined as the boundary line of the 100 Year Flood Plain mapping;
- The meander belt, calculated as outlined in NPCA policy document, has no minimum setback requirements, but any development proposed within the meander belt will need to be supported by an Engineering Study or EIS

Can you confirm Stantec's understanding is consistent with NPCA expectations by kindly replying to this email?

Thank you,

Carissa Stauffer

Environmental Planner

Carissa.Stauffer@stantec.com

Stantec

300W-675 Cochrane Drive

Markham ON L3R 0B8



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From: David Deluce <ddeluce@npca.ca>
Sent: Monday, October 30, 2023 3:21 PM
To: Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Subject: RE: Stantec Follow Up RE: Phone Call

Hi Carissa,

Your understanding is correct. Please let me know if you have any further questions.

Best Regards,



David Deluce, MCIP, RPP
Senior Manager, Environmental Planning & Policy

Niagara Peninsula Conservation Authority (NPCA)
250 Thorold Road West, 3rd Floor | Welland, ON L3C 3W2

905.788.3135
www.npca.ca
ddeluce@npca.ca

Re: Stantec Follow Up RE: Phone Call

Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Mon 2023-10-30 4:20 PM

To: David Deluce <ddeLUce@npca.ca>

Hi David,

Thank you for confirming that for me. I will be sure to reach out if we have any further questions.

Have a great rest of your day!

Carissa Stauffer

Environmental Planner

Carissa.Stauffer@stantec.com

Stantec

300W-675 Cochrane Drive


Markham ON L3R 0B8




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Re: Elfrida Subwatershed Study Progress Update and Discussion - NPCA

Organizer Stauffer, Carissa <Carissa.Stauffer@stantec.com>
Meeting time This event occurred 1 month ago (Thu 2025-03-20 1:00 PM - 2:00 PM)
Location Microsoft Teams Meeting
My response Not yet responded
Required attendees Stauffer, Carissa, Kim Peters, Amy Parks, Brendan Buggeln, Carly Mason
Optional attendees Addley, Diana, Gallagher, Tim, Ian Roul, Dirk Janas, Ian Roul
Message sent Thu 2025-05-15 1:04 PM

 1 attachment (266 KB)
not_Elfrida_SWS_NPCA_mtg_minutes_fnl_3-20-2025.pdf;

Hello,

Please find attached the meeting minutes from our meeting on March 20, 2025 regarding the Elfrida Subwatershed study. As discussed, I have added a ZIP file containing the original RFI and the data provided by NPCA in 2023 in the following folder in OneDrive:  [ElfridaSWS_NPCA_Data_2023.zip](#)

Please let me know if you have any issues accessing this folder, or any further questions.

Kind regards,

Carissa Stauffer

Junior Environmental Planner & GIS Technician
Direct: 905 944-6872



Elfrida Subwatershed Study Progress Update and Discussion - NPCA

Project/File: 160623199

Date/Time: March 20, 2025 / 1:00 PM

Location: Microsoft Teams

Next Meeting: TBD

Attendees:	Kim Peters	Niagara Peninsula Conservation Authority, Manager, Environmental Planning and Policy
	Amy Parks	Niagara Peninsula Conservation Authority, Manager, Planning Ecology
	Carly Mason	Niagara Peninsula Conservation Authority, Water Resources Engineer
	Tim Gallagher	Stantec Consulting Ltd.
	Diana Addley	Stantec Consulting Ltd.
	Carissa Stauffer	Stantec Consulting Ltd.
	Dirk Janas	SLR Consulting (Canada) Ltd.
	Ian Roul	GeoProcess
Absentees:	Brendan Buggeln	Niagara Peninsula Conservation Authority
Distribution:	All	

Stantec Moment: The Importance of Regular Vehicle Maintenance

Item:	Action:
Introductions / Roles / Responsibilities	
1. Stantec Consulting Ltd. (Stantec) provided an overview of the Elfrida Subwatershed Study (SWS) background and current project standing. The project was initiated in Fall 2023 but was paused due to changes in provincial legislation. A second submission of the Urban Boundary Expansion application was submitted in early March 2025. The current application is with the City of Hamilton (the City) for review.	Info
Overview of Information Prepared to Support Urban Boundary Expansion Application	
2. SLR Consulting (Canada) Ltd. (SLR) provided an overview of the comprehensive field investigations that have been completed to date, noting that work was initiated in Summer/Fall 2023 and resumed in May 2024. Field investigations completed to date include benthic sampling, water quality sampling, floral inventories, amphibian surveys, breeding bird surveys, winter wildlife studies, and preliminary delineation of woodlands and wetlands within the study area based on the City and Conservation Authority (CA) policies and guidelines. SLR noted that Headwater Drainage Features (HDF) are currently being assessed in the field.	Info
3. SLR noted that investigations have been completed and updated as needed to address any changes with the boundary area and/or relevant policies.	
4. GeoProcess added that detailed Hedgerow and watercourse assessments have been completed beyond what is typically included to ensure that all protections and features are included and not missed in the Environmental Impact Statement (EIS).	
5. Stantec added that extensive soil and groundwater were completed by LandTech between Fall 2024 and winter 2025.	

Item:	Action:
6. Stantec indicated that surface water hydrology and hydraulics had not yet been reassessed as landowners did not want to advance the full scope of the SWS until the boundary was approved. As such, the Urban Boundary Expansion application carried the same floodplain delineation as presented in the Aquafor Beech SWS Phase 1 Report (May 2018).	
7. Stantec noted that the Niagara Peninsula Conservation Authority (NPCA) previously provided catchment and hydraulic/hydrology model information, but this will need to be resurveyed and reviewed against the recently collected detailed topographic survey.	NPCA
8. Stantec noted that all existing conditions shared will be summarized in a Phase 1 Existing Conditions report as part of the SWS. This will include a plan to support future development while respecting existing natural feature boundaries and constraints to mitigate impacts.	Stantec
9. NPCA expressed interest in participating in Steering Committee meetings to discuss existing conditions and coordinating time to complete a site visit with SLR and GeoProcess to confirm the delineated wetlands and woodlands, and other features within the study area. Stantec and SLR confirmed that there would be an opportunity to visit the site and confirm these details, and that this will be discussed later in the meeting. <i>[Further discussion on site visits and meetings within 'Future Steering Committee Meetings']</i>	All
Review of Background Information Provided / Gaps	
10. Stantec summarized the data previously provided by the NPCA in 2023, and outlined what information and data is still needed (as shown in the RFI). Stantec to provide the Request for Information (RFI) to NPCA for reference.	Info, Stantec
11. NPCA confirmed that they can review what data was previously provided and see what is currently available, and if there are any updates needed. NPCA also noted that to the best of their knowledge there are no additional background studies other than the Aquafor Beech SWS.	NPCA
12. Stantec requested hydraulic/hydrology modelling from NPCA. NPCA indicated that hydraulic modelling has been completed with HEC-RAS, and hydrology modelling is HEC-HMS. NPCA to provide Stantec with the hydrology model, and hydraulic model if there have been any changes.	Stantec, NPCA
Terms of Reference Needs / Discussion	
13. Stantec indicated that the Terms of Reference currently being used is from the Aquafor Beech SWS and is very detailed. It was also noted that the City was preparing a SWS guideline, but that it has not been completed or made available yet. 14. NPCA noted that other than the most recent Ministry guidelines, they are not aware of any changes or updates to the SWS guidelines and policies.	
15. Stantec will confirm the Terms of Reference with the City and will revisit this part of the discussion in future meetings.	Stantec
Future Steering Committee Meetings	
16. NPCA identified Kim Peters as the main contact for this project. 17. Stantec described that future Steering Committee Meetings would allow the study team to share more details and open discussions between the study team, the City, and CAs. Stantec invited NPCA to extend the invitation to other staff representing Ecology and Surface Water.	NPCA

Item:	Action:
18. NPCA noted that they still support City projects in regard to Ecology, but that is more to review natural hazards, flooding, and erosion hazards. NPCA described it as a different lens underneath the new guidelines.	
19. SLR and NPCA confirmed that the site visits are intended to review delineated wetland and woodland features. It was discussed that two site visits would be required to cover the study area, and that it would be best to assess these features jointly. NPCA also noted that they would like to investigate defined watercourses in the study area to confirm and verify their presence.	NPCA, SLR, GeoProcess
20. NPCA to complete a background review of watercourses to identify what watercourses need to be confirmed during site assessments.	NPCA
21. SLR and GeoProcess to provide ELC and HDF mapping to provide NPCA with a starting point for field investigations. SLR and GeoProcess to provide Preliminary Constraints mapping closer to field investigations, or as requested by NPCA.	SLR, GeoProcess
22. SLR and NPCA noted that woodland and wetland features identified in the field would vary slightly from LIO features.	
Next Steps and Other Items	
23. Stantec will share the RFI with NPCA, will circle back on the Terms of Reference after discussions with the City. The first Steering Committee meeting will be organized by Stantec in the Spring, and the objective is to aim for a Fall 2025 submission of the Phase 1 Existing Conditions SWS report.	Stantec

Meeting adjourned at 1:50 PM.

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

Stantec Consulting Ltd.



Carissa Stauffer
 Environmental Planner & GIS Technician
 Phone: (905) 944-6872
 carissa.stauffer@stantec.com

Attachment: Elfrida Subwatershed Study – RFI
 Zip file of NPCA data provided in 2023

Re: Twenty Mile Creek Hydraulics and Hydrology

From: Kim Peters <kpeters@npca.ca>

Sent: Monday, April 28, 2025 4:22 PM

To: Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Cc: Carly Mason <cmason@npca.ca>

Subject: FW: Twenty Mile Creek Hydraulics and Hydrology

Hi Carissa,

In follow up to our meeting here is a link to modelling for Twenty Mile Creek:

<https://we.tl/t-Ry1oMSV46J>

Please let us know if you have any problems with the download. Please note the link expires in 3 days.

on March 20th,



Kim Peters, MCIP RPP (she/her)
Manager, Environmental Planning & Policy

Niagara Peninsula Conservation Authority (NPCA)



Re: Twenty Mile Creek Hydraulics and Hydrology

From Stauffer, Carissa <Carissa.Stauffer@stantec.com>

Date Tue 2025-04-29 3:57 PM

To Kim Peters <kpeters@npca.ca>

Cc Carly Mason <cmason@npca.ca>

Hi Kim,

Thank you for sending along the modelling for Twenty Mile Creek, there were no issues downloading the shared file.

We'll reach out should we have any questions about the modelling.

Kind regards,

Carissa Stauffer

Junior Environmental Planner & GIS Technician

Direct: 905 944-6872



Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Weersink, Bryan <Bryan.Weersink@stantec.com>

Date Fri 2025-07-04 11:08 AM

To kpeters@npca.ca <kpeters@npca.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>

Good Morning Kim,

I am working on the surface water components of the Elfrida Subwatershed Study and have a few questions / requests regarding the hydrologic and hydraulic modelling files within NPCA's jurisdiction.

We have received a few models and reports from NPCA to date, which include:

- Twenty Mile Creek HEC-HMS model
- Twenty Mile Creek HEC-RAS model – for the main channel (not including Sinkhole Creek)
- Sinkhole Creek Floodplain Mapping Report (April, 2006)

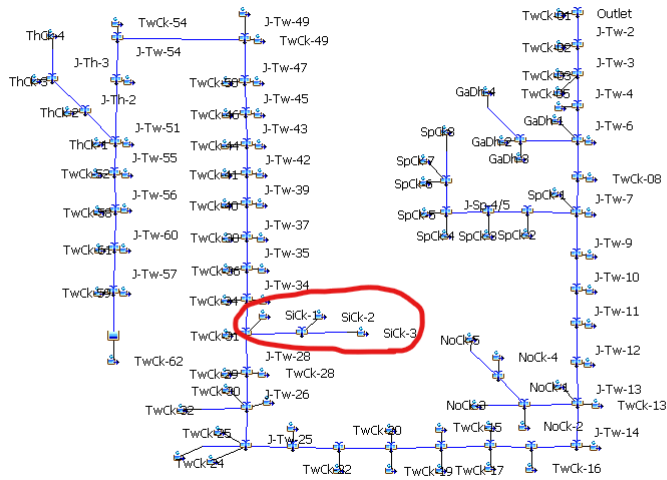
This information has been very helpful, but I do have a few questions as it relates to the hydrology.

The HEC-HMS model we received appears to cover the entire Twenty Mile Creek watershed, while the only report we have (Sinkhole Creek Floodplain Mapping Report) covers just a portion of this model. Additionally, the HMS model we do have lists only 3 catchments in Sinkhole Creek, where as the Sinkhole Creek Report contains 7 (see screenshots below). We don't, however, have a catchment figure to be able to identify the exact locations of the catchments within the overall HMS model.

So, my requests/questions are:

1. Is there a catchment plan (or better yet, shape files) that align with the overall Twenty Mile Creek HEC-HMS model we have received?
 - a. This is likely contained within a report as well – is there a report for this overall watershed model?
2. Is there a HEC-HMS model specifically for Sinkhole Creek that matches the 2006 report we have received?
3. Is there any other hydrologic or hydraulic modelling information we should be aware of?

Overall HECHMS schematic (Sinkhole Creek subcatchments circled):



Sinkhole Creek catchment figure (2006), showing 7 catchments. I have approximated the 3 catchments in the overall Twenty Mile Creek HMS model in green (Elfrida limits in blue).

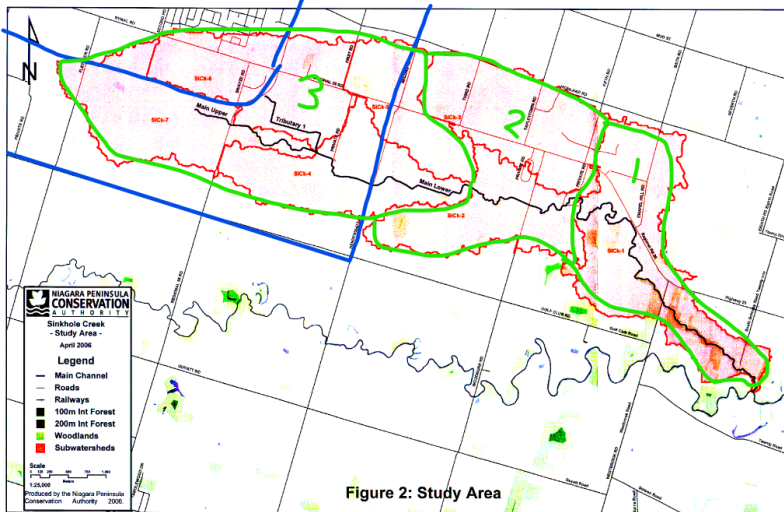


Figure 2: Study Area

Let me know if you have any questions or would like to discuss.

Thanks in advance for your help!

Bryan Weersink, P.Eng.
Surface Water Team Lead

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Mobile: [\(519\) 831-6554](#)
bryan.weersink@stantec.com



With every community, we redefine what's possible.

RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Weersink, Bryan <Bryan.Weersink@stantec.com>

Date Fri 2025-07-04 11:12 AM

To cmason@npca.ca <cmason@npca.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>; kpeters@npca.ca <kpeters@npca.ca>

Hey Carly,

I see Kim is out of office for a few weeks, so I am forwarding you my email below as I believe you have been involved with this project so far and hoping you can help in her absence.

Thanks!

Bryan Weersink, P.Eng.
Surface Water Team Lead



RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models


From Carly Mason <cmason@npca.ca>

Date Wed 2025-07-09 11:53 AM

To Weersink, Bryan <Bryan.Weersink@stantec.com>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>; Kim Peters <kpeters@npca.ca>

Good Afternoon Bryan,

Please find our Twenty Mile Creek and Sinkhole Creek studies and models available for download here:  [Elfrida Study](#)

1. Is there a catchment plan (or better yet, shape files) that align with the overall Twenty Mile Creek HEC-HMS model we have received? **No shapefiles, it may be in the report**
 - a. This is likely contained within a report as well – is there a report for this overall watershed model?
Report is provided
2. Is there a HEC-HMS model specifically for Sinkhole Creek that matches the 2006 report we have received?
Hydrology model provided
3. Is there any other hydrologic or hydraulic modelling information we should be aware of? **None that I am aware of**

Thank you,
Carly

RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Weersink, Bryan <Bryan.Weersink@stantec.com>

Date Wed 2025-07-09 3:42 PM

To Carly Mason <cmason@npca.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>; Kim Peters <kpeters@npca.ca>

Great, thank you Carly!

I haven't had a chance to dig into the files, but I was able to successfully download them and it looks like everything is there.

Regards,

Bryan Weersink, P.Eng.
Surface Water Team Lead

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RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Sauder, Marlee <Marlee.Sauder@stantec.com>

Date Thu 2025-08-14 2:46 PM

To Carly Mason <cmason@npca.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Kim Peters <kpeters@npca.ca>; Weersink, Bryan <Bryan.Weersink@stantec.com>; Yavarikia, Maryam <Maryam.Yavarikia@stantec.com>

Hi Carly,

I am looking to confirm if NPCA has a standard scale for floodplain mapping figures? We are preparing the figures for the Elfrida SWS and want to make sure they align with any guidelines the NPCA may have.

Thanks for your help!

Marlee Sauder, P.Eng., CAN-CISEC
Water Resources Engineer
She/Her



RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Carly Mason <cmason@npca.ca>

Date Mon 2025-08-18 10:00 AM

To Sauder, Marlee <Marlee.Sauder@stantec.com>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Kim Peters <kpeters@npca.ca>; Weersink, Bryan <Bryan.Weersink@stantec.com>; Yavarikia, Maryam <Maryam.Yavarikia@stantec.com>

Some people who received this message don't often get email from cmason@npca.ca. [Learn why this is important](#)

Good Morning Marlee,

NPCA floodplain mapping figures are 1:2000 scale.

Thank you,



Carly Mason P.Eng
Water Resources Engineer

Niagara Peninsula Conservation Authority (NPCA)
3350 Merrittville Highway, Unit 9, Thorold, Ontario L2V 4Y6

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The NPCA completed its [Watershed-based Resource Management](#) and [Conservation Area](#) Strategies, paving the way for sustainable conservation across the Niagara Peninsula watershed. It's [Watershed Natural Asset Analysis and Valuation](#) for the Niagara Peninsula watershed offers new insights that redefine how we view nature. **Explore them today!**

RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Sauder, Marlee <Marlee.Sauder@stantec.com>

Date Mon 2025-08-18 10:58 AM

To Carly Mason <cmason@npca.ca>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Kim Peters <kpeters@npca.ca>; Weersink, Bryan <Bryan.Weersink@stantec.com>; Yavarikia, Maryam <Maryam.Yavarikia@stantec.com>

Great, thanks for confirming Carly.

Best,

Marlee Sauder, P.Eng., CAN-CISEC

Water Resources Engineer

She/Her



RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From: Weersink, Bryan <Bryan.Weersink@stantec.com>

Sent: September 26, 2025 4:37 PM

To: Carly Mason <cmason@npca.ca>; Sauder, Marlee <Marlee.Sauder@stantec.com>

Cc: Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Kim Peters <kpeters@npca.ca>; Yavarikia, Maryam <Maryam.Yavarikia@stantec.com>

Subject: RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

Hey Carly,

I have a quick question for you. Based on my review of NPCA policies, it does not appear that there is any setback or buffer required from the floodplain limit. I know a setback (such as 15m) exists in other CAs, so I just wanted to confirm that one does not exist in NPCA (specifically within the City of Hamilton).

Thanks!

Bryan Weersink, P.Eng.
Surface Water Team Lead

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RE: Elfrida Subwatershed Study - Hydrologic/Hydraulic Models

From Carly Mason <cmason@npca.ca>

Date Thu 2025-10-02 1:37 PM

To Weersink, Bryan <Bryan.Weersink@stantec.com>; Sauder, Marlee <Marlee.Sauder@stantec.com>

Cc Gallagher, Tim <Tim.Gallagher@stantec.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Addley, Diana <Diana.Addley@stantec.com>; Kim Peters <kpeters@npca.ca>; Yavarikia, Maryam <Maryam.Yavarikia@stantec.com>

Good Afternoon,

Correct, we have no setback from our floodplain.

Thanks,
Carly

Minimum Vegetation Protection Zones for Wetlands Within NPCA Jurisdiction

From Jesse Snider <Jesse.Snider@slrconsulting.com>

Date Thu 2025-12-18 8:59 AM

To kpeters@npca.ca <kpeters@npca.ca>; aparks@npca.ca <aparks@npca.ca>

Cc Dirk Janas <dirk.janas@slrconsulting.com>; Josie Mielhausen <jmielhausen@geoprocess.com>; Ian Roul <iroul@geoprocess.com>; Kate Lillie <klillie@geoprocess.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>

Good morning Kim and Amy,

Our project team (CC'd) is currently working on a site where a portion of the Study Area is within the Niagara Peninsula Conservation Authority's (NPCA's) jurisdiction. This portion of the Study Area is also subject to the policies and regulations of the Urban Hamilton Official Plan (UHOP). Our site contains several natural features and as such these features are subject to the minimum vegetation protection zones (MVPZs) of the UHOP. We do recognize; however, that hazard lands, which include wetland features, are subject to conservation authorities' policies and regulations.

According to the UHOP, Provincially Significant Wetlands (PSWs) are subject to a 30 m MVPZ, while Locally Significant Wetlands and unevaluated wetlands are subject to a 15 m MVPZ. As per the Policies for Planning and Development in the Watersheds of the Niagara Peninsula Conservation Authority (2022 Consolidation) document (Section 8.2.3.1), "where development is proposed adjacent to a wetland, a minimum 30 metre buffer shall be provided." Given recent changes to many environmental policies, we wanted to confirm with the NPCA whether we should be adhering to NPCA 2022 consolidation policies or to UHOP policies when applying MVPZs to wetland features.

Your guidance on this matter would be much appreciated.

Thank you,

Upcoming Vacation Notice - I will be out of the office between December 22nd and January 4th. I will be periodically checking my emails between December 29th and Jan 2nd.

Jesse Snider B.Sc., EPT

Project Manager - Ecology & Biodiversity

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M +1 416 936 2082

E Jesse.Snider@slrconsulting.com

SLR Consulting (Canada) Ltd.

300 Town Centre Blvd, Suite 200, Markham, ON, Canada L3R 5Z6

RE: Minimum Vegetation Protection Zones for Wetlands Within NPCA Jurisdiction

From Kim Peters <kpeters@npca.ca>

Date Thu 2025-12-18 10:06 AM

To Jesse Snider <jesse.snider@slrconsulting.com>

Cc Dirk Janas <dirk.janas@slrconsulting.com>; Josie Mielhausen <jmielhausen@geoprocess.com>; Ian Roul <iroul@geoprocess.com>; Kate Lillie <klillie@geoprocess.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>; Amy Parks <aparks@npca.ca>

Hi Jesse,

Thanks for reaching out and Happy Holidays.

You may want to take a look at our 2024 [Policy Document](#), which was updated following the coming into force of O. Reg. 41/24. Specifically, I direct you to sections 8.1 and 8.2.

Unevaluated Wetlands:

As per policy 8.1.2.3(a), NPCA requires a wetland evaluation for most development activities proposed within 30 metres of an unevaluated wetland. If a 30-metre buffer can be maintained around an unevaluated wetland, no evaluation is necessary because the development activity would not be regulated by NPCA.

Non-PSWs (as confirmed through a wetland evaluation):

Policy 8.2.3.1 speaks specifically to wetland buffers, and the exceptions that would allow for a reduction of the 30-metre buffer around non-PSWs. Essentially, a reduction in the buffer will only be considered when there is no reasonable alternative and the reduced buffer is supported by an EIS.

I hope this helps. If you can share the exact location, we can check and see if we have any site-specific information on file.

Best regards,

Kim



Kim Peters, MCIP RPP (she/her)
Manager, Environmental Planning & Policy

Niagara Peninsula Conservation Authority (NPCA)
3350 Merrittville Highway | Unit 9 | Thorold, ON L2V 4Y6

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The NPCA completed its [Watershed-based Resource Management](#) and [Conservation Area](#) Strategies, paving the way for sustainable conservation across the Niagara Peninsula watershed. It's [Watershed Natural Asset Analysis and Valuation](#) for the Niagara Peninsula watershed offers new insights that redefine how we view nature. **Explore them today!**

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RE: Minimum Vegetation Protection Zones for Wetlands Within NPCA Jurisdiction

From Jesse Snider <Jesse.Snider@slrconsulting.com>

Date Thu 2025-12-18 11:03 AM

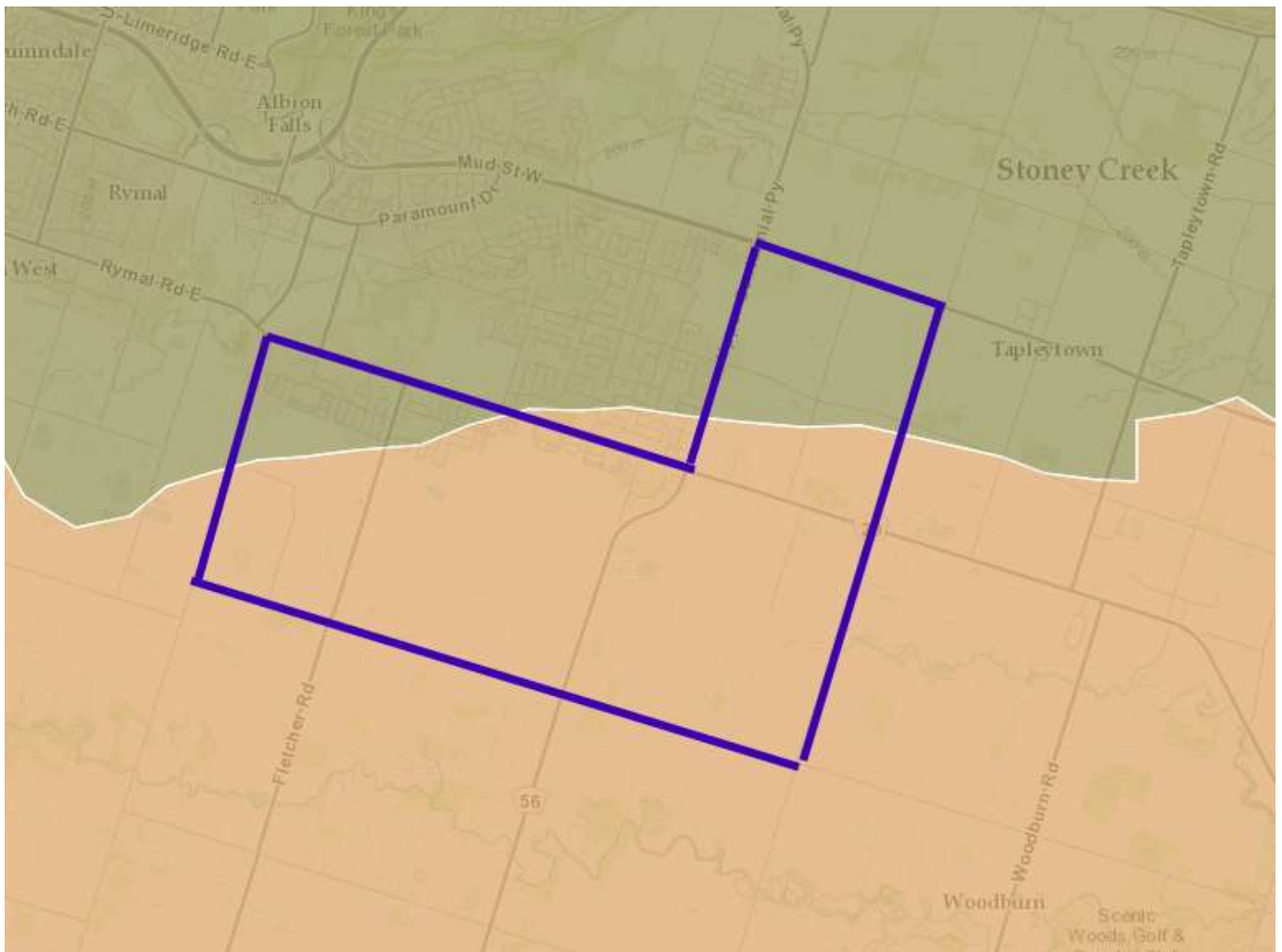
To Kim Peters <kpeters@npca.ca>

Cc Dirk Janas <dirk.janas@slrconsulting.com>; Josie Mielhausen <jmielhausen@geoprocess.com>; Ian Roul <iroul@geoprocess.com>; Kate Lillie <klillie@geoprocess.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>; Amy Parks <aparks@npca.ca>

Hi Kim,

Thank you for your prompt reply. I have provided our general Study Area below (orange layer depicts lands with NPCA's jurisdiction), with Rymal Rd E and Upper Centennial Parkway being the main intersection. Based on the policy you provided below, if I am interpreting it correctly, all wetlands would require a 30 m buffers. Non-PSWs may have the opportunity to have a reduced buffer is supported by an EIS.

We are not currently at the EIS stage. At this point in time, we are just trying to gain an understanding of the potential ecological constraints across the landscape. So, is it safe to say that to be conservative that we should be applying a 30 m buffer to all wetlands within NPCA's jurisdiction?



Kind regards,

Upcoming Vacation Notice - I will be out of the office between December 22nd and January 4th. I will be periodically checking my emails between December 29th and Jan 2nd.

Jesse Snider B.Sc., EPt
Project Manager - Ecology & Biodiversity

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RE: Minimum Vegetation Protection Zones for Wetlands Within NPCA Jurisdiction

From Kim Peters <kpeters@npca.ca>

Date Thu 2025-12-18 2:49 PM

To Jesse Snider <jesse.snider@slrconsulting.com>

Cc Dirk Janas <dirk.janas@slrconsulting.com>; Josie Mielhausen <jmielhausen@geoprocess.com>; Ian Roul <iroul@geoprocess.com>; Kate Lillie <klillie@geoprocess.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>; Amy Parks <aparks@npca.ca>

Thanks, Jesse.

This relates to the Elfrida urban boundary expansion? We don't have anything more to offer right now since our next step would be a site visit to stake the features. In our comments earlier this year, we did state that we supported the 30-m buffer for wetlands, and a 15 m setback for watercourses

Your interpretation below is correct. From the NPCA perspective, the "path of least resistance" would be to establish a 30-m buffer around ALL wetlands.

Best regards,

Kim

RE: Minimum Vegetation Protection Zones for Wetlands Within NPCA Jurisdiction

From Jesse Snider <Jesse.Snider@slrconsulting.com>

Date Fri 2025-12-19 12:00 PM

To Kim Peters <kpeters@npca.ca>

Cc Dirk Janas <dirk.janas@slrconsulting.com>; Josie Mielhausen <jmielhausen@geoprocess.com>; Ian Roul <iroul@geoprocess.com>; Kate Lillie <klillie@geoprocess.com>; Stauffer, Carissa <Carissa.Stauffer@stantec.com>; Gallagher, Tim <Tim.Gallagher@stantec.com>; Amy Parks <aparks@npca.ca>

Hi Kim,

You are correct. This deals with Elfrida. Thank you for confirming regarding the policy interpretation.

Happy Holidays!

Upcoming Vacation Notice - I will be out of the office between December 22nd and January 4th. I will be periodically checking my emails between December 29th and Jan 2nd.

Jesse Snider B.Sc., EPt

Project Manager - Ecology & Biodiversity

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