

Appendix X-1

Public Consultation Report

Appendix X-1 – Public Consultation Report

Appendix X-2 – Environmental Assessment Study Notices

Appendix X-3 – Public Information Centre Materials

Appendix X-4 – Agency and Utility Consultation

Appendix X-5 – First Nations Consultation

Appendix X-6 – Public Consultation Details and Correspondence

Appendix X-7 – Impacted Properties

Newtonbrook Creek Restoration and Water Infrastructure Protection Study

Public Consultation Report

April 16, 2024

Prepared by:

Aadila Valiallah, Senior Coordinator, Public Consultation Unit

Aadila.Valiallah@Toronto.ca

416-338-2985

City of Toronto, Metro Hall

55 John Street, 19th Floor

Toronto, ON. M5V 3C6



Table of Contents

Table of Contents.....	1
Executive Summary	2
Study Summary	4
Notification & Consultation Activities	5
Notification	5
Consultation Activities	6
Feedback Summary	8
Public Event	8
Community Interest Groups.....	10
Email and Phone Comments	11
First Nations Communities.....	12
Agencies and Utilities	12
Survey	12
Appendix A - Survey respondent demographic information	17

Executive Summary

The City of Toronto initiated a study to identify sewer and watermain infrastructure within Newtonbrook Creek and Blue Ridge Creek that is at risk of damage due to erosion impacts as result of high flows from storms and snow melt.

This study looks at how the City's storm sewer and watermain infrastructure can be protected within the creek using recommended solutions to help reduce or prevent future impact to City infrastructure resulting from erosion. This will ensure the City's infrastructure continues to operate and service residents and businesses. The solutions will be part of a Geomorphic Systems Master Plan (GSMP) for the creek to be implemented over a multi-year period.

This report details the activities and feedback received during consultation on the Newtonbrook Creek Study that took place between October 2, 2023 and November 3, 2023. During Consultation, information was provided about the risks to sewer and watermain infrastructure along the creek along with a summary of the recommended solutions. Interested individuals were able to ask questions and provide feedback on the recommended solutions for creek restoration and water infrastructure protection.



Summary of engagement:

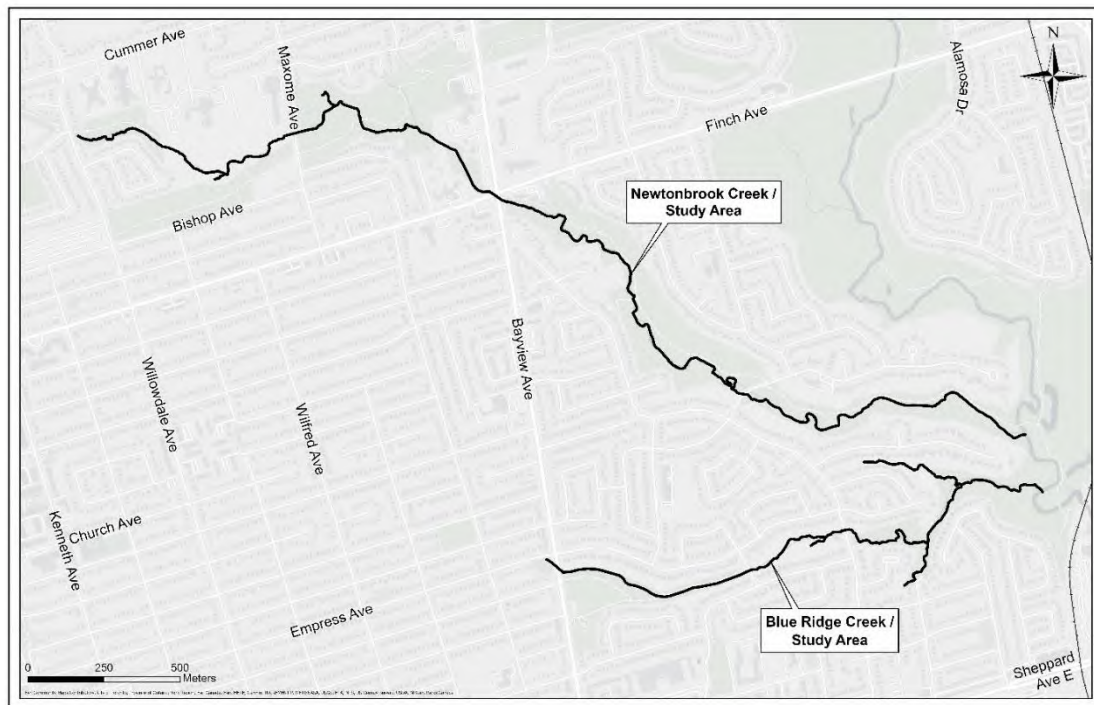
- One public event with 32 participants
- Ten comment submissions from the public via telephone and email
- Seventeen survey responses

Overall, most participants were concerned with erosion along the creek and there was general support for the recommended solutions. Emerging themes from public feedback:

- An interest in technical details about design, improvements, risks related to project work and implementation plans
- Concern for that trail closures during construction will be disruptive for the community and community wellness
- A preference for having the trail return to its current character of natural dirt and pea-gravel
- Concern for impacts of construction on the natural environment including tree and canopy loss and the turtle habitat area downstream
- A desire by the Newtonbrook Nature Stewards to be involved in the restoration and replanting of the areas along the creek post-construction.

Study Summary

Study Area



The study area is the approximately four kilometers along the length of Newtonbrook Creek from Willowdale Avenue south of Cummer Avenue to its confluence with the Don River west of Leslie Avenue. The Study Area also includes the two-kilometer length of Blue Ridge Creek from Bayview Avenue east to its confluence with the Don River.

Within the Newtonbrook Creek study area, a multi-use trail runs along the path of the creek. The trail is used regularly by walking groups, residents, and those within the broader area.

Study Summary

This report summarizes consultation activities and feedback received during consultation for the Newtonbrook Creek Restoration and Water Infrastructure Protection Study (the Study) which took place between October 2, 2023 and November 3, 2023.

The purpose of the Study is to identify the most appropriate solutions for protecting the City's water infrastructure, which is at risk of damage from erosion; mitigating potential damage to surrounding park infrastructure, such as the trail, as a result of creek restoration work will be remediated. The study was carried out following the Municipal Class Environmental Assessment (MCEA) master planning process for Schedule A and Schedule B projects.

Following a risk analysis of 72 water and stormwater infrastructure sites, possible solutions to address 24 priority sites were evaluated according to a range of criteria including overall ability

to address risk to infrastructure, improvements to the physical and natural environment,

Based on the risk assessment and evaluation, the City is recommending creek restoration through natural channel design for four local works projects that are less than 150 metres in reach, and seven local works projects that are greater than 150 metres. Implementation of the recommended projects will be prioritised over the medium to long term, city-wide, and construction is not expected to begin until 2025.

The focus of the study is erosion impacting water infrastructure.

Notification & Consultation Activities

Notification

A variety of communication methods were used to notify interested community groups and members of the public about consultation.

A Notice of Commencement was circulated in October 2022 to First Nations, Agencies and Utilities providing information on the study and the study sssssssssprocess.

The following communications were issued on the week of October 2, 2023 at the onset of the public consultation period:

- An update on the project website including public consultation materials and link to the feedback survey _____
- Canada Post direct mail to 9,809 addresses in study area;
- Notification to private property owners where the potential project areas intersects with or is adjacent to private property;
- Direct email to 23 interested parties including community groups and organizations, institutions and elected officials;
- Direct email to 63 government agencies and utility companies; and
- Direct email to First Nations including those identified by the Ministry of the Environment, Conservation and Parks:
 - Alderville First Nation;
 - Beausoleil First Nation;
 - Chippewas of Georgina Island First Nation;
 - Chippewas of Rama First Nation (Chippewas of Mnjikaning);
 - Curve Lake First Nation;

- Hiawatha First Nation;
- Huron-Wendat First Nation;
- Mississaugas of Scugog Island First Nation;
- Mississaugas of the Credit First Nation; and
- Six Nations of the Grand River.

Consultation Activities

Public Event

A public drop-in event and site walk took place on Wednesday October 18, 2023, 9:00 a.m. – 11:00 a.m. The drop-in was hosted on the front lawn of the Forest Grove United Church at 43 Forest Grove Drive, a short walk from the creek.

Information panels were displayed at the drop-in area and staff were available to provide information and respond to questions. The project team on site included representatives from Engineering & Construction Services and Toronto Water and the engineering consultants working on the study. A site-walk to view the creek and infrastructure at risk was led by the project manager.

The site-walk along the Newtonbrook Creek included stops at infrastructure sites for Project #4 and Project #5. During the site-walk there was an opportunity for further questions, feedback and dialogue.



The event was attended by approximately 32 people although not all participants registered.

The event was attended by approximately 32 people although not all participants registered. Materials prepared for the public event included display panels and handouts for those who joined the site-walk. Event materials were adapted from the project information deck and the Understanding Streams information deck that were available on the project website. Printouts of the complete information decks were available upon request.

Notes were taken during the event although participants were encouraged to provide feedback via the online survey.

Community Interest Groups

A virtual meeting was held with the Newtonbrook Ravine Stewards on October 31, 2023. The Newtonbrook Creek Park Nature Stewards are registered with the Toronto Nature Stewards in

agreement with the City of Toronto Urban Forestry Division to support ecological restoration and clean-up activities. remove invasive species by hand in identified areas of the creek. Their primary interest in study and restoration is in identifying areas of the creek and ravine that will eventually be cleared out for construction as areas to avoid for stewardship.

Nine members of the group participated in the meeting. The meeting provided a platform for the project team to respond to questions that had been raised via email by the Nature Stewards prior to the meeting. During the meeting there was an opportunity for further questions, feedback and dialogue.

Phone & Email Comments

Questions and feedback were accepted via phone, email, or written letter. Eight comment submissions were received between October 2 and November 3, 2023. All comments were recorded and reviewed for consideration and response by the project team.

Online Survey

An online survey was used to collect feedback on the study and recommended projects. The survey was available October 2, 2023 – November 3, 2023. Seventeen responses were received. Participation was anonymous.

Outreach to First Nations Communities

The Provincial Ministry of Environment, Conservation and Parks (MECP) has been delegated by the Crown to ensure consultation with “Aboriginal communities” where there is possibility that treaty rights could be impacted. Consultation with First Nations is a standard process for environmental assessments. The MECP has provided instruction on communications with relevant First Nations communities in the study area. As Newtonbrook Creek is within Treaty 13, 1805 with the Mississaugas and within the Traditional Territory of both the Mississaugas of the Credit and Williams Treaties First Nations (WTFN), the following First Nations communities were contacted:

- Mississaugas of the Credit First Nation;
- Curve Lake First Nation;
- Hiawatha First Nation;
- Alderville First Nation;
- Mississaugas of Scugog Island First Nation;

- Chippewas of Rama First Nation;
- Chippewas of Georgina Island First Nation;
- Beausoleil; and
- Williams Treaties First Nations.

Communications was sent by email at various stages of the consultation process.

An Archaeology Report was completed with the purpose of identifying whether the lands under study potentially contained archaeology value or evidence. The report was shared with First Nations in December 2023 with an invitation to provide feedback.

In October 2023 the Public Consultation notice was circulated to provide information about the study outcomes and recommendations and to invite feedback as part of the public consultation process.

Outreach to Agencies and Utilities

Communications with agencies forms part of the study review process. Communication with utilities ensures there is no infrastructure conflict. Communications with agencies and utilities included circulation of the Notice of Commencement, and Public Consultation notice with an opportunity to provide feedback.

Feedback Summary

There was significant interest in knowing details for recommended projects and potential scheduling and bundling of projects. There was also an interest in seeing work completed prior to conditions worsening. Primary concerns were around tree removals and erosion along the trail. A turtle habitat which should be protected was brought to the attention of the project team.

Public Event

A summary of questions, comments and feedback received during the Public Event are summarized below:

General Feedback and context:

Most participants were concerned with erosion at the creek and supported the recommended projects. There was a desire to see restoration of heavily eroded areas completed as soon as

possible and with minimum impact to the trees and wildlife. The presence of a turtle breeding area was made known and appreciation for the current character of the trail path, which is a dirt and pea-gravel path was expressed. There was concern for trail disruptions during construction as much as possible.

There were several questions for more information on design elements of the project and construction staging which will only be known during the later design phase for project work.

More information was asked about:

- Design and technical details for erosion control measures and channel treatments;
- How creek restoration could change the nature of the creek and surrounding environment;
- Potential opportunities to assist with monitoring construction impacts and replanting during restoration;
- Whether invasive species would be removed as part of the creek restoration;
- Whether removed trees could be left behind to biodegrade and support local ecosystems;
- The prioritisation of projects city-wide and knowing when work at Newtonbrook Creek is likely to take place;
- The length of time for trail closure(s), and the frequency as a result of how many times work will be done in the creek;
- Emergency response protocols should conditions worsen (as a result of a storm); and
- The purpose of tree tagging in the area and whether the tree inventory and species list could be shared.

Participants provided observations on current conditions:

- Erosion along the banks and bed of the creek;
- The concrete rubble and log jams (throughout the creek) are potential hazards and an eyesore; and
- The smell of sewage and whether the sewage is leaking into the creek.

Most comments and concerns were related to project implementation and construction:

- Canopy loss along the creek as a result of tree removals during project implementation;
- The impact of trail closures and restricted access to the multi-use trail for local residents and trail users who use the trail for exercise and leisure;
- Possible damage to the trail during construction and impacts on the trail as a result of heavy equipment being transported to project sites during restoration;

- The number of times work crews will enter the ravine and damage trees as a result project prioritizes, which may render different implementation time frame for the same areas, spread across several years' time:
 - A preference to complete all necessary works within a determined timeframe;
- A preference to maintain the natural trail over potential paving during reconstruction;
- Loss of the natural environment and ambiance as a result of construction and approach to restoration:
 - A preference for natural approaches to landscaping during reconstruction; and
 - Feedback was not in favour of the 'overly engineered' character of the landscaping post-construction at Duncan Creek.

Community Interest Groups – Newtonbrook Ravine Stewards

Most of the questions and concerns were related to areas of stewardship and access to the trail and ravine. The stewards would like to avoid work in areas that overlap with future projects and are interested in maintaining the monitoring site at least another 3 years.

Questions were forwarded to the project team via email in preparation for the meeting.

Below is a summary of concerns raised and feedback received:

More information was asked about:

- Timelines for project implementation, the expected length of time for construction and the order in which projects implementation would happen;
- Areas that will be cleared for project implementation (so that stewards can avoid work in those areas).
- Creek and path closures including the location and type of barriers
- Whether stewardship work can continue during construction.
- Information on the City tree and plant inventory for the area.

Participants provided comments on current conditions and preferences for restoration:

- Current log jams and fallen tree branches should be removed as they are hazardous to trail users;
- Some native plant species have begun to grow (black maple, white snakeroot, beech), and should be retained or relocated, if possible;
- There are invasive species in the area, removing the invasive species during construction would be beneficial;

- There is a preference to see the creek return to a natural winding flow; and
- The stewards have offered their assistance, where possible, with replanting during reconstruction.

Participants shared concerns with project implementation and construction:

- Protection is needed for the birds and the nesting areas along the creek;
- Concerns on the loss of trees during construction, especially for more mature trees;
- The woodchip path was appreciated, there was concerns that trail improvements may change the current character of the gravel path; paving of the path in the future after restoration was not preferred;
- The Nature Stewards' have a monitoring site above Forest Grove Road (approximately 10' X 10'), which was used as an observation and testing area for native plant species; it was requested for the area to remain undisturbed for a minimum of 3 more years for monitoring purposes; and
- Restoration and landscaping should have a natural and rugged design for attracting fish and adding character to the area:
 - The restored landscaping at Duncan Creek was not preferred, as it was considered artificial.

Email and Phone Comments

Comments received via phone/email from members of the public were generally in support of the recommended changes with a few concerns raised.

Comments in support of recommendations:

- Gratitude and support for the study and recommended project works;
- Recognition that the recommended projects are preventative measures for potential future sewage spills as a result of extreme weather events (as a result of climate change);
- Recognition that the creek provides an important role to the recreation park system and as stormwater conveyance for the neighbourhood; and
- A preference for Projects #8, #5, and #3 to be implemented first.

Concerns raised:

- Potential impacts on Cummer Valley Middle School, as the property backs on to the creek; and
- Preserving plant life during reconstruction.

Additional concerns raised which are out of the project scope:

- Litter in the creek; and
- Safety concerns as a result of the increase in homeless and marginally housed people living in and spending increasing amounts of time in the creek.

First Nations Communities

There were no objections to the recommended projects.

The Alderville First Nation would like to participate in any potential Stage 2 archaeological assessments.

All feedback has been shared with the project team and will be resolved or passed forward in the Environmental Study Report.

Agencies and Utilities

There were utilities in the study area that may be impacted. All feedback has been shared with the project team and will be resolved or passed forward in the Environmental Study Report which is the technical report that will move forward with the project.

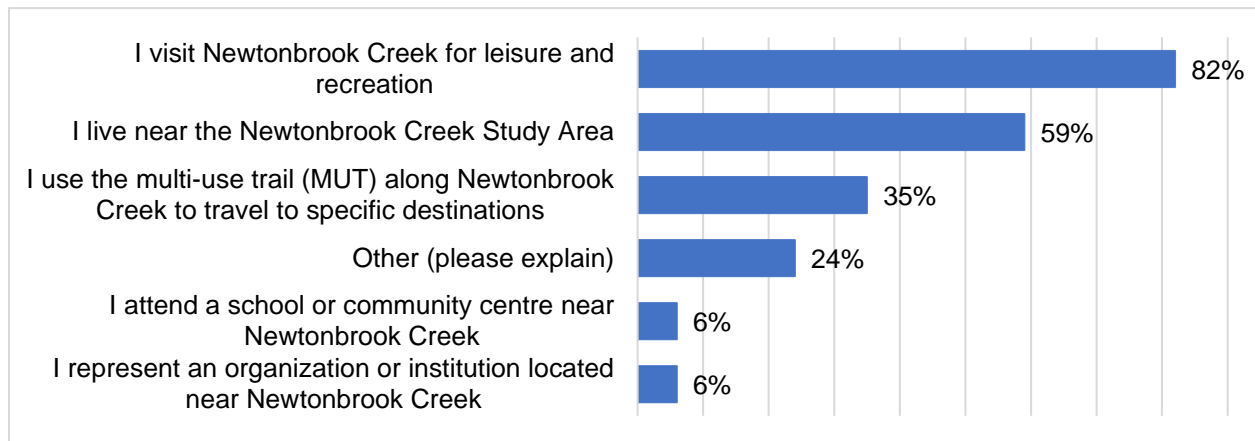
Survey

Responses received to each question in the online survey are described in this section.

About You

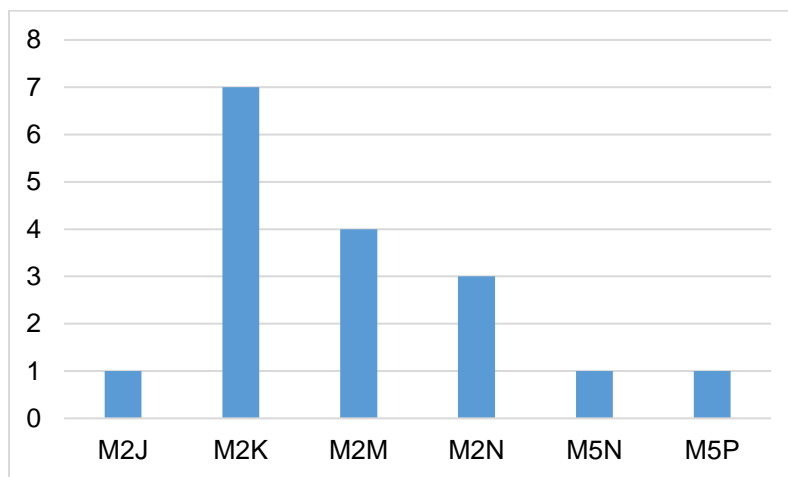
This section of the survey asks respondents about their relationship to the project area which provides context for the responses received.

Which statements best describe your relationship to the project?



Most of the survey respondents (82%) visit Newtonbrook Creek for leisure and recreation. Those who responded with “Other” (24%) identified as working with the Newtonbrook Creek Ravine Stewards (3) or have ‘walked through the creek (1).

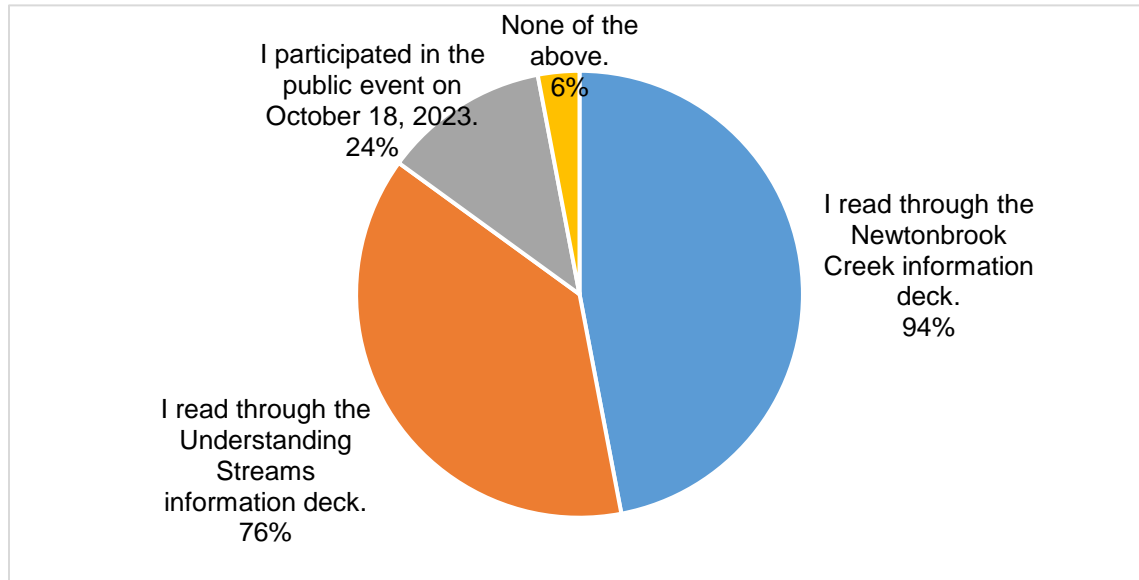
What are the first 3 digits of your postal code?



Postal code data verifies that most respondents were local to the area, with 2 out of 17 respondents visiting from a little farther away.

How did you review project information?

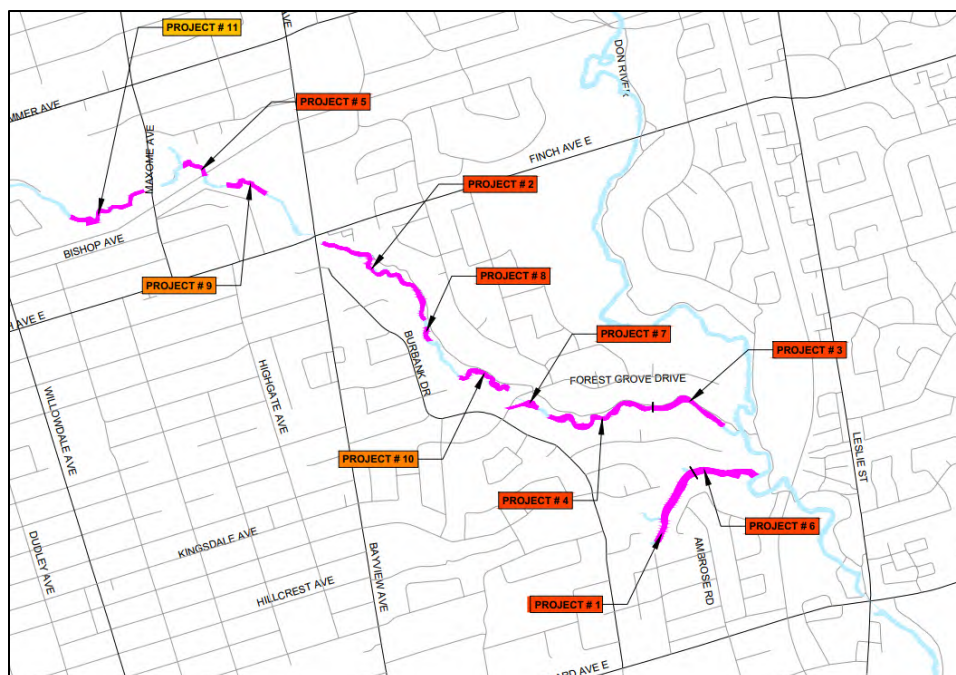
It was recommended that respondents review the project information on the webpage or at the public event prior to giving feedback.



Almost all respondents read through the Newtonbrook Creek information deck which was available on the project webpage and at the public event on October 18, 2023. A majority of respondents also reviewed the Understanding Streams information deck, with several respondents participating in the public event.

Study Details

Respondents were provided with an opportunity to provide feedback on the recommended projects and for the study recommendation overall.



Do you have specific comments for any of the recommended projects?

Feedback repeated across most, or all of the projects included a request for more information and trail realignment and restoration.

Feedback for Projects #1 - #4 and Project #7 and #10. A summary of the comments is in the table below.

Project #1	<ul style="list-style-type: none"> • Support for the proposed alternative as the maintenance hole is exposed • Large tree looks to be in danger of falling • Small American Elm trees are in the area • Preference for the current character of the valley, please do not turn it into a park-like setting • Project falls within the Newtonbrook Stewards area
Project #2	<ul style="list-style-type: none"> • Project falls within the Newtonbrook Stewards area; they would like to be involved where possible and kept updated on activities
Project #3	<ul style="list-style-type: none"> • Bank erosion is extensive • Minimize tree removals • Protection of natural species should be prioritised • Aesthetic of armour stone, may not be pleasing but is preferred over gabion baskets

Project #4	<ul style="list-style-type: none"> • Removal of invasive species
Project #7	<ul style="list-style-type: none"> • Recognition of required project work • Request for minimal tree removals as it affects the view from local properties
Project #10	<ul style="list-style-type: none"> • Project falls within the Newtonbrook Stewards area; they would like to be involved where possible and kept updated on activities

Do you have any general feedback about the study recommendations?

Responses are summarized below:

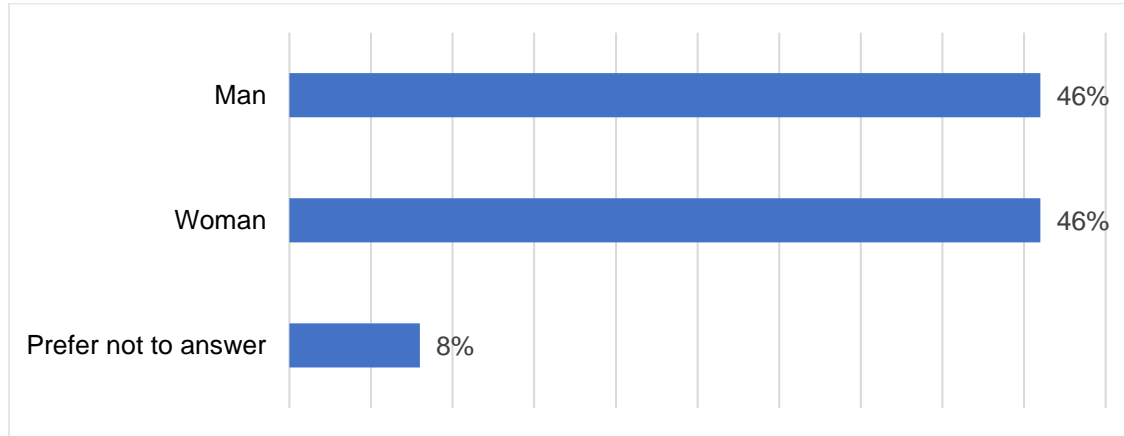
- General support for recommended projects with recognition that work needs to be done:
 - Supports a 'healthy creek';
 - protects the watershed and private residential properties;
 - gratitude for 'looking after' the ravine;
- Appreciation and gratitude for the creek and the role it plays in the lives of local residents;
- Emphasis on minimal damage to nature and minimal tree removals;
- Trail impacts and project restoration:
 - Requests to preserve "natural" trail conditions;
 - Requests for a paved multi-purpose trail;
- Preference to close the trail (all areas) once and implement all projects;
- Request for on-going communication leading up to project implementation and construction; and
- Requests to expand the scope of study to include the trails managed by Parks and Forestry and Recreation.

Appendix A - Survey respondent demographic information

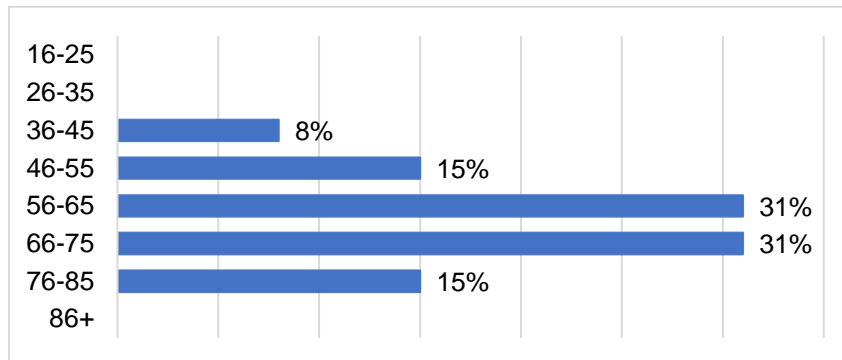
Demographics

A total of 13 of the 17 respondents provided optional demographic information described below.

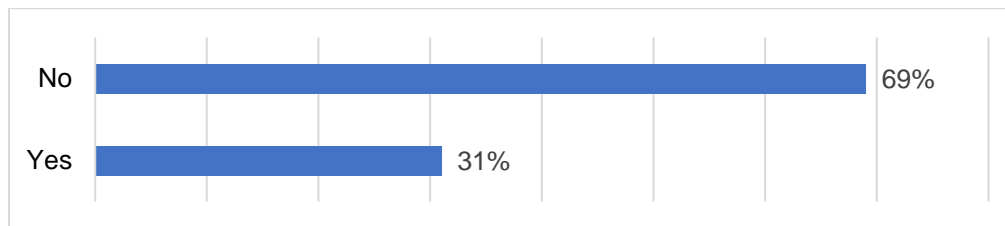
What is your gender identity?



What is your age category?



Do you identify as a person with a disability?



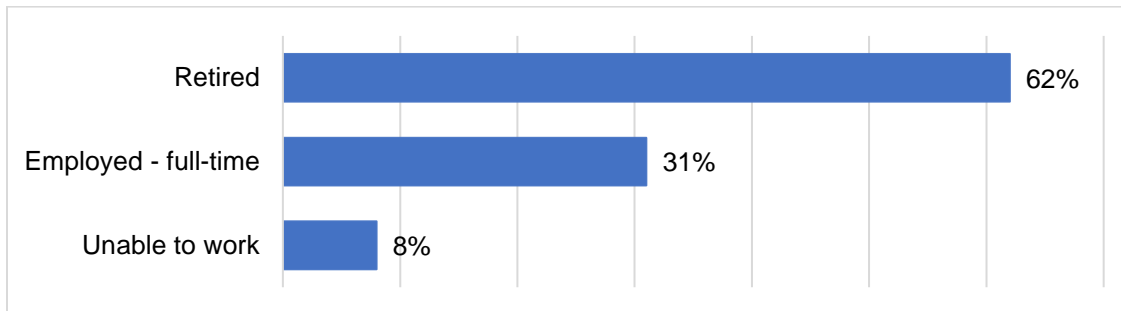
The majority of respondents feel in either the 56-65 age group (31%) or the 66 – 75 age group (31%). The 36 – 45 year old age category is under-represented (8%).

There was an equal response rate among men (46%) and women (46%).

Twenty per cent (31%) of respondents identify with a disability, 69% do not.

Employment

Which of the following best describes your current employment status?

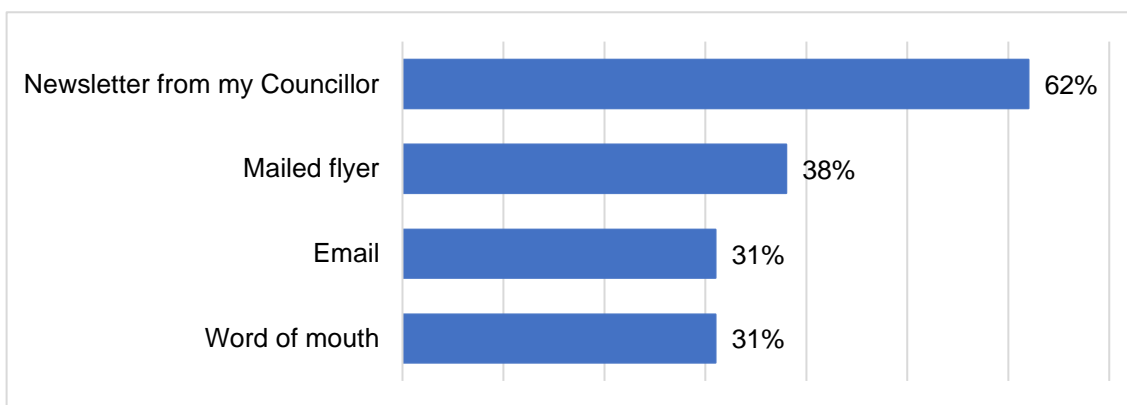


Majority of the 17 respondents are retiree (62%) or unable to work (8%). Those who work full-time contributed 31% of responses.

Source of Information

How did you hear about this study?

Majority of respondents (62%) heard about the study through a Local Councillor's e-newsletter, followed by those who heard about the study from the Public Notice distributed through Canada Post.



Appendix X-2 Environmental Assessment Study Notices

Appendix X-1 – Public Consultation Report
Appendix X-2 – Environmental Assessment Study Notices
Appendix X-3 – Public Information Centre Materials
Appendix X-4 – Agency and Utility Consultation
Appendix X-5 – First Nations Consultation
Appendix X-6 – Public Consultation Details and Correspondence
Appendix X-7 – Impacted Properties

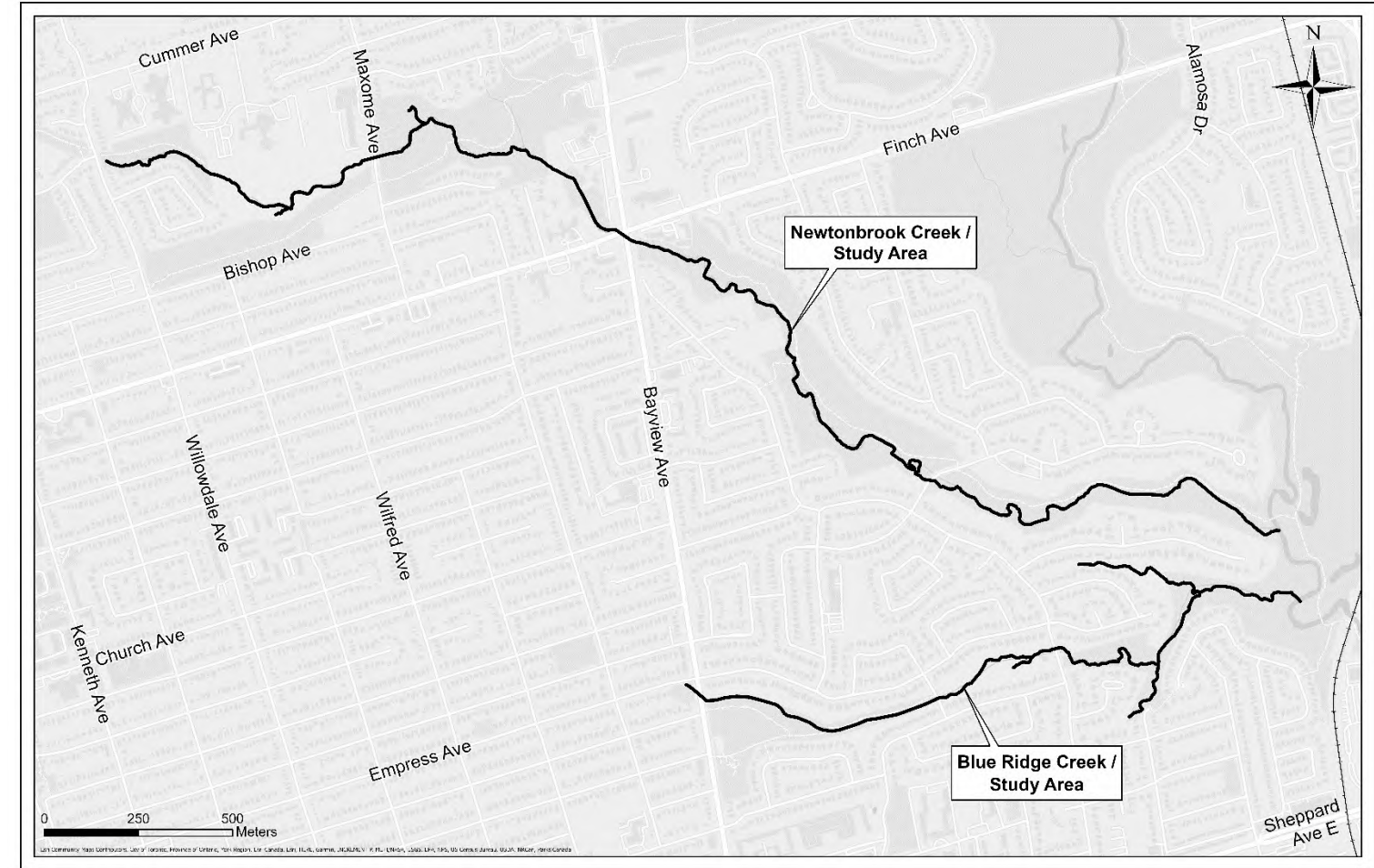
Newtonbrook & Blue Ridge Creeks Geomorphic Systems Master Plan

The City of Toronto has initiated a study to identify sewer and watermain infrastructure located within both Netwtonbrook Creek and Blue Ridge Creek that is at risk of erosion from high flows due to storms and snow melt runoff. The study will evaluate and recommend solutions to reduce these erosion risks through an assessment of the creek's geomorphology (stream processes).

The geomorphology of a creek examines how natural and human factors have shaped its form and function over time. For example, how erosion can affect the path a creek follows (form) and the aquatic and terrestrial habitats the stream supports (function).

Study Area

The study area covers the 4 km length of Newtonbrook Creek from the East Don River to Willowdale Avenue and a 1 km length of Blue Ridge Creek from the East Don River to Bayview Avenue.



Study Details

- The study will focus on:
- Identifying sewers, watermains and outfalls located within the creek that are at risk from erosion caused by flows from storms and snow melt runoff.
 - Developing, evaluating and recommending solutions to reduce erosion impacts on the infrastructure, while improving aquatic and terrestrial habitats.

The study will not examine trail conditions or recommend improvements to trails, forestry or ravine amenities. The City may undertake separate efforts in the future to address these features.



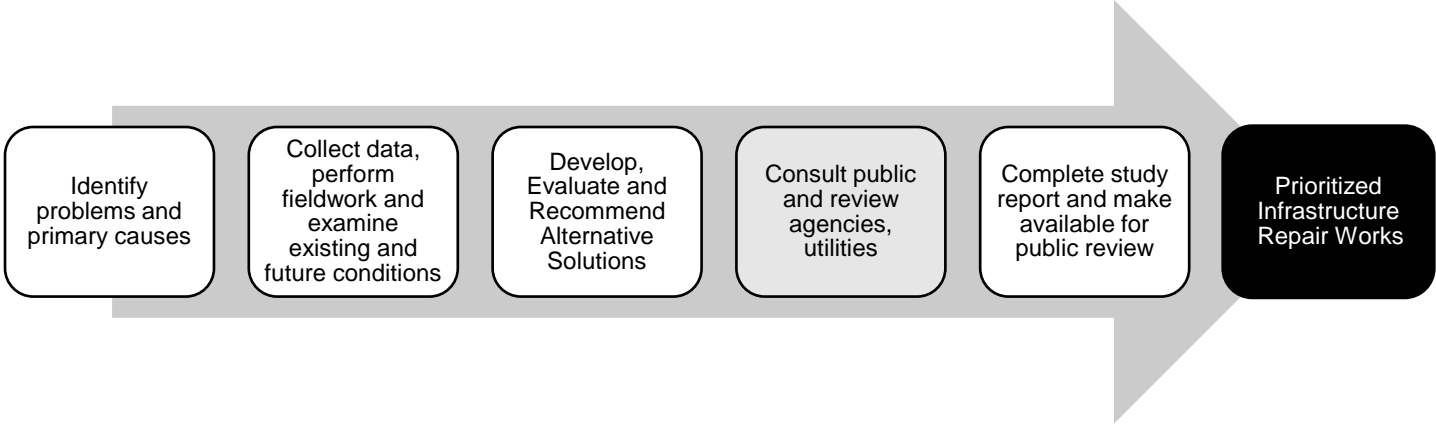
Exposed manhole in the bank



Significant bank erosion between the exposed sewer crossing and manhole

Process

This study is being undertaken as a Master Plan which is a long-range plan that examines the issues and solutions within a geographic area and provides a framework and vision to implement recommended improvements. The study will follow the Municipal Class Environmental Assessment study process, an approved planning process under the Ontario Environmental Assessment Act, which includes providing opportunities for public input.



Next Steps

- Develop and evaluate alternative solutions for each at-risk infrastructure location
- Share recommended solutions for feedback before completing the study

More Information

Tracy Manolakakis
Manager, Public Consultation Unit
Metro Hall, 19th Floor, 55 John Street
Toronto, ON M5V 3C6

Email: newtonbrook@toronto.ca
Tel: 416-392-2990

* Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

如果需要普通话协助, 请拨 311
如果需要廣東話協助, 請致電 311

Newtonbrook & Blue Ridge Creeks Geomorphic Systems Master Plan

Municipal Class Environmental Assessment Notice of Study Commencement

Study Overview

The City of Toronto has initiated a Municipal Class Environmental Assessment (EA) study to identify sewer and watermain infrastructure located within Newtonbrook Creek and Blue Ridge Creek that is at risk of erosion from high flows due to storms and snow melt runoff. The study will evaluate and recommend solutions to reduce these erosion risks through an assessment of the creek's geomorphology (stream processes). The study area covers the 4 km length of Newtonbrook Creek from the East Don River to Willowdale Avenue and a 1 km length of Blue Ridge Creek from the East Don River to Bayview Avenue.

The Process

This study is being undertaken as a Master Plan which is a long-range plan that examines the needs within a geographic area and provides a framework and vision to implement recommended improvements. The study will follow the Municipal Class Environmental Assessment study process, an approved planning process under the Ontario Environmental Assessment Act, which includes providing opportunities for public input. Public consultation activities are expected to take place in late 2022. Details on how to participate will be posted at toronto.ca/newtonbrook

We want to hear from you:

Visit the project website for more information or contact us if you want to be placed on our mailing list for updates.

Tracy Manolakakis
Manager, Public
Consultation Unit
Metro Hall, 55
John Street 19th
Floor, Toronto ON
M5V 3C6



Tel: 416-392-2990

Email: newtonbrook@toronto.ca



Visit: toronto.ca/newtonbrook

Issue Date: August 2022

Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record

October 2, 2023

Newtonbrook Creek
Restoration and Infrastructure Protection Study

The City of Toronto is carrying out a study to identify sewer and watermain infrastructure within Newtonbrook Creek that is at risk of damage due to erosion impacts as a result of high flows from storms and snow melt.

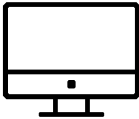



This study looks at how the City’s storm sewer and watermain infrastructure can be protected within the creek using recommended solutions to help reduce or prevent future impact. This will ensure the City’s infrastructure continues to operate and service residents and businesses. The solutions will be part of a Newtonbrook Geomorphic Systems Master Plan for the creek that is implemented over a multi-year period.

The public is invited to learn more about the study, ask questions and provide feedback on potential impacts of the recommended solutions.

Study Area



The study area extends approximately 4 kilometers along the length of Newtonbrook Creek from Willowdale Avenue south of Cummer Avenue to its confluence with the Don River, west of Leslie Avenue. The study area also includes the 2 kilometers length of Blue Ridge Creek from Bayview Avenue east to its confluence with the Don River.

<div>Learn More</div> <div></div> <div>View project information on the website and provide feedback.</div> <div>toronto.ca/newtonbrook</div>	<div>Meeting details - attend a site walk</div> <div></div> <div>Visit the study area with the project team or drop-in to discuss the study recommendations and ask questions.</div> <div>Wednesday October 18, 2023 (rain or shine)</div> <div>Drop in 9:00 a.m. – 11:00 a.m.</div> <div>Site walk begins at 9:00 a.m.</div>	<div>Provide Feedback</div> <div></div> <div>Complete an online survey or request a printed copy. Submit comments by email, mail or phone.</div> <div>Comment deadline:</div> <div>Friday November 3, 2023</div>
<div>Meeting point and parking at Forest Grove United Church 43 Forest Grove Drive, M2K 1Z4.</div> <div>Drop-in information table will be hosted at the church 9:00 a.m. – 11:00 a. m.</div> <div>Please note that the trail to the creek is steep. The drop-in information table at the church is wheelchair/mobility device accessible. If you have a specific accessibility need or require other accommodation, please contact us.</div>		

Study Details

The geomorphology of a creek examines how natural and human factors have shaped its form and function over time. Erosion can affect the path a creek follows (form) and the aquatic and terrestrial habitats the stream supports (function). Erosion results in gradual changes to the form and function of the creek and creek bed. Significant changes to water levels during storms have contributed to increased erosion, which poses risks to the City’s sewer and watermain infrastructure located in or adjacent to the creek.

Impacts from erosion can be corrected and further prevented through natural channel design by reconstructing the bed and bank of a stream with natural rock and/or vegetation, which allows for a new stable path for the creek. The following alternative solutions for natural channel design were evaluated for infrastructure at risk of erosion throughout the study area:

- Alternative 1: Do nothing, no planned interventions, only ongoing monitoring
- Alternative 2: Improvements through local works less than 150 metres
- Alternative 3: Improvements to a segment of the creek greater than 150 metres

Study Recommendations

Based on a risk assessment of 72 infrastructure sites along Newtonbrook Creek, 24 sites were identified as being at high risk of damage from erosion. Following a detailed evaluation of the alternative solutions for high risk sites, the City is recommending 11 projects to stabilize the creek bed and banks of the creek through natural channel design. Seven projects are recommended for work in a segment of the creek greater than 150 metres, four projects are recommended for local works less than 150 metres.

- Future implementation of the recommended projects require:
- Tree removal, to be followed by habitat restoration and replanting with native trees and shrubds

• Pedestrian trail realignment to allow the stream to have a natural course and avoid future erosion

Temporary construction impacts will be communicated prior to construction.

Process

The study is following the Municipal Class Environmental Assessment study process for Master Plans, which is an approved planning process under the Ontario Environmental Assessment Act and includes opportunities for public input.



Next Steps

Following public consultation, a Master Plan report will be prepared with the final study recommendations. The report will be filed with the provincial Ministry of Environment Conservation and Parks for a 30-day public review period before being approved. Once approved, the recommended solutions will be included in the City’s Stream Restoration and Erosion Control Program and implementation will be prioritized across all GSMPs City-wide. The public will be notified prior to any construction.

More Information

Aadila Valiallah, Senior Coordinator
Public Consultation Unit
Metro Hall, 19th Floor, 55 John Street
Toronto, ON. M5V 3C6

Email: newtonbrook@toronto.ca
Tel: 416-338-2985



Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

Appendix X-3

Public Information Centre Materials

Appendix X-1 – Public Consultation Report

Appendix X-2 – Environmental Assessment Study Notices

Appendix X-3 – Public Information Centre Materials

Appendix X-4 – Agency and Utility Consultation

Appendix X-5 – First Nations Consultation

Appendix X-6 – Public Consultation Details and Correspondence

Appendix X-7 – Impacted Properties



Newtonbrook Creek Restoration and Water Infrastructure Protection Study Geomorphic Systems Master Plan

Public Consultation: October 2023

Newtonbrook Creek Geomorphic Systems Master Plan

In 2021, the City of Toronto initiated the Newtonbrook Creek Geomorphic Systems Master Plan (GSMP) Environmental Assessment (EA), as one of five GSMPs across the City to identify and assess water and stormwater infrastructure in Newtonbrook Creek and Blue Ridge Creek that is at risk of damage due to erosion impacts as a result of high flows from storms and snowmelt runoff.

Study Purpose:

- To identify concerns related to erosion that may damage the City's water and stormwater infrastructure
- To develop solutions that protect the City's sewer and water infrastructure from excessive erosion processes within the stream
- To improve stream functions, such as increasing stream bank stability, reducing erosion, enhancing stormwater conveyance, and improving aquatic and terrestrial habitats

i

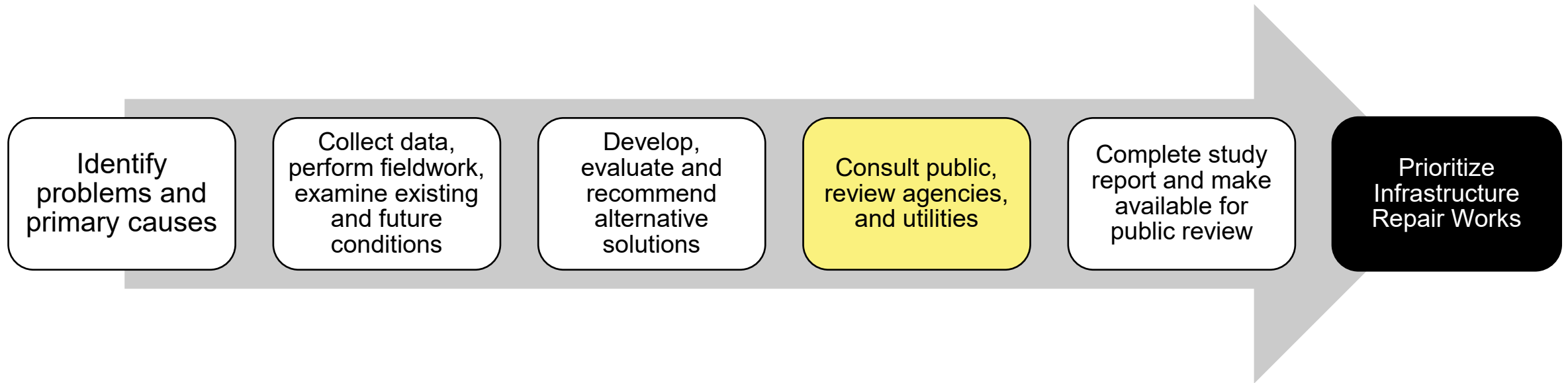
The City's sewer and water infrastructure in and alongside streams include:

- **Watermains** to supply drinking water to homes and businesses
- **Storm sewers** to collect rain and snowmelt from streets and properties and discharge it into streams (via outfalls)
- **Sanitary sewers** to collect and transport sewage from homes and businesses for treatment

This study is not focused on trails, trail access, trees, invasive species or other park features.

Study Process

This study is being undertaken as a Master Plan which is a long-range plan that examines the needs within a geographic area and provides a framework and vision for recommended improvements. The study will follow the Municipal Class Environmental Assessment study process, an approved planning process under the Ontario Environmental Assessment Act, which includes providing opportunities for public input.



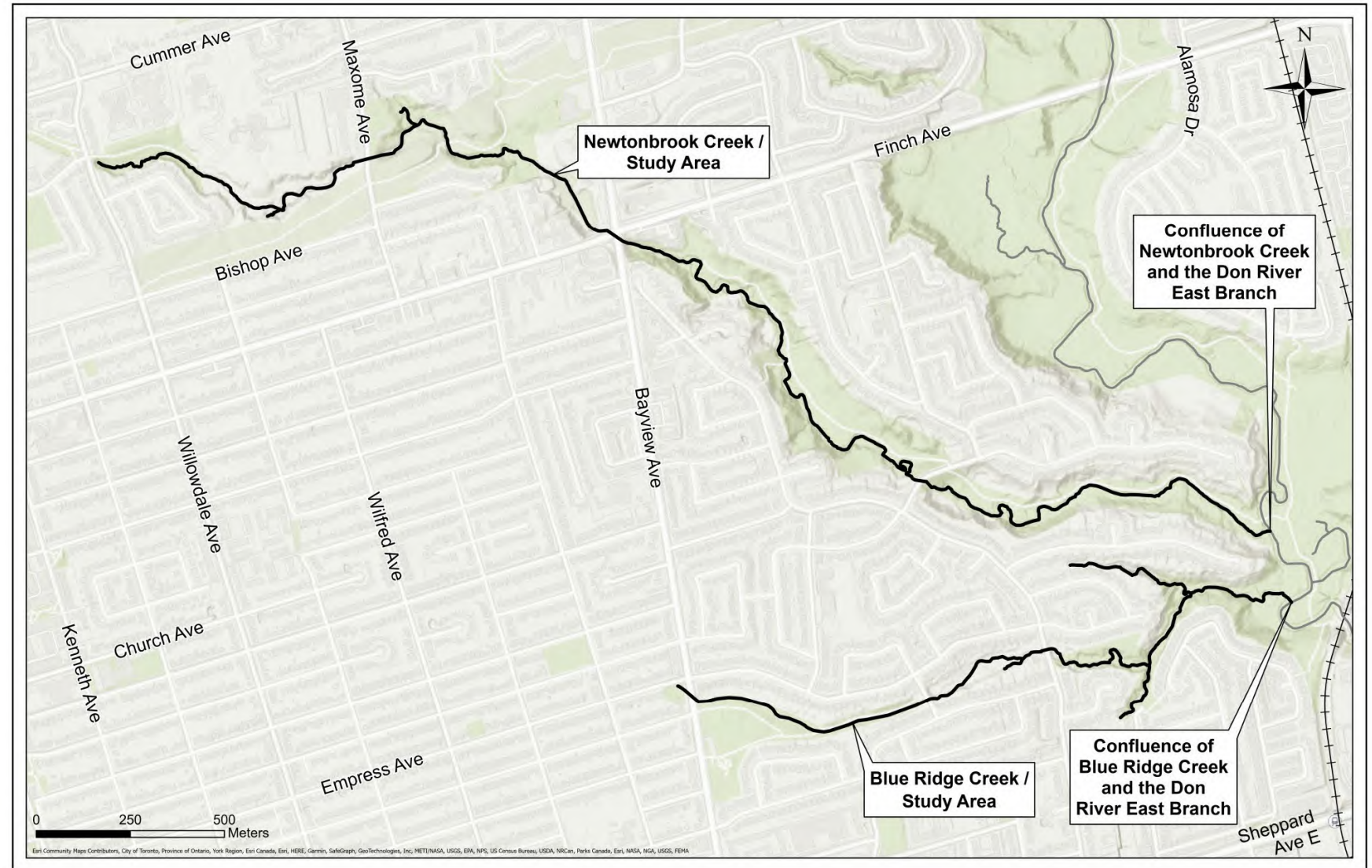
After the study completion the City will:

- Prioritise projects from all five GSMPs based on a city-wide approach for creek and river restoration and erosion control work.

Study Area

The study area includes:

- The entirety of Newtonbrook Creek from Willowdale Avenue to the confluence with the Don River (~4km)
- The entirety of Blue Ridge Creek from Bayview Avenue to the confluence with the Don River (~2km)



Level of Erosion Risk

The level of erosion risk to the City's sewer and water infrastructure was characterized based on a technical assessment which evaluated the likelihood of exposure and/or failure at 72 erosion sites identified within the study area

Very Low Risk Sites

- Infrastructure and site conditions are very stable

Low Risk Sites

- Infrastructure and site conditions are stable; Limited monitoring is required

Medium Risk Sites

- Infrastructure and site conditions are relatively stable; Limited/some monitoring may be required

High Risk Sites

- Infrastructure is not exposed but exposure is expected within near the future;
- Regular monitoring required

Very High Risk Sites

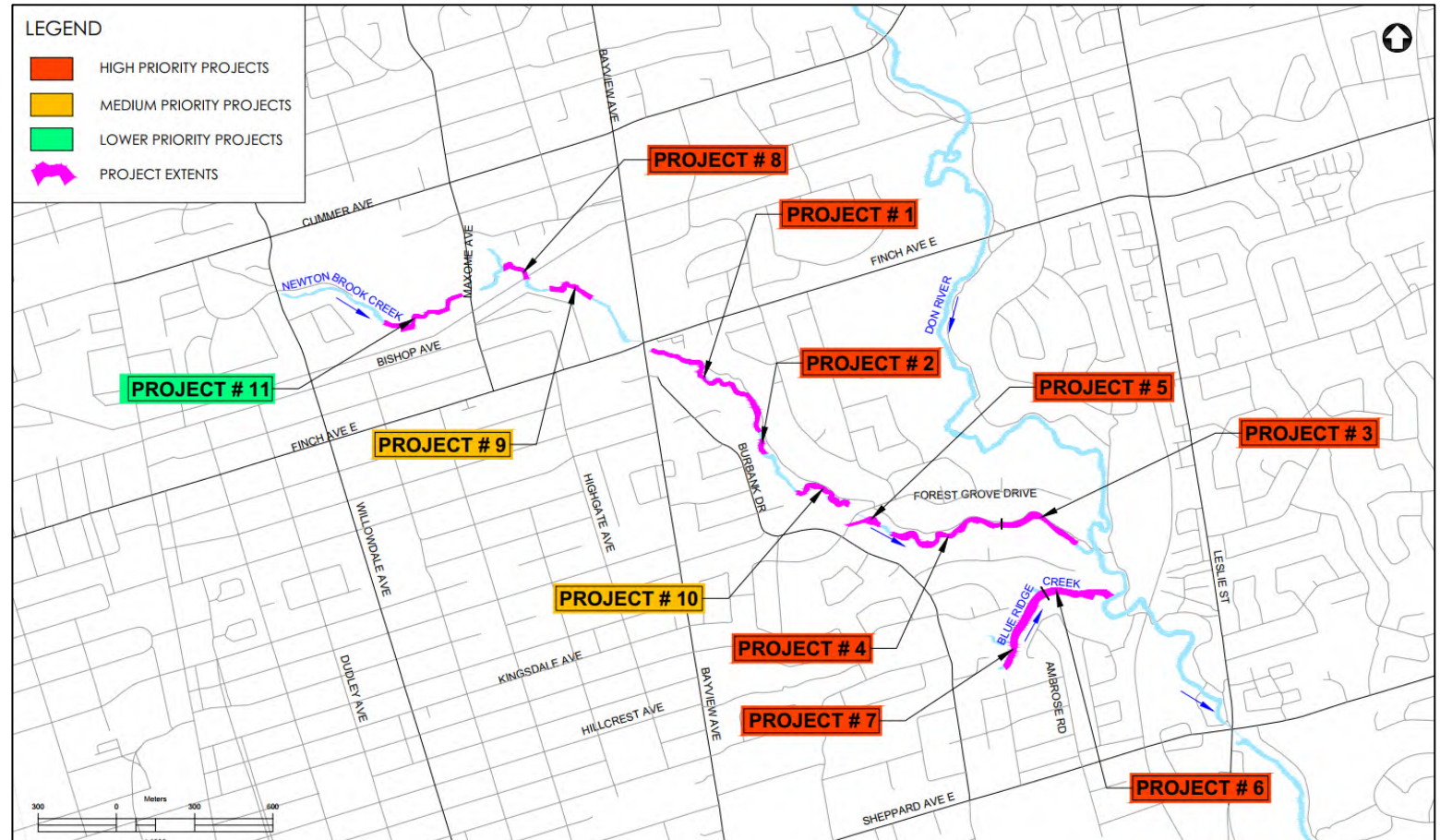
- Infrastructure is exposed and/or at significant risk of failure; requires immediate attention
- Regular monitoring and improvements to the infrastructure are required

Proposed Priority Projects

- Of the 72 erosion sites, 24 priority sites were selected for improvement
- These 24 high priority sites were grouped into 11 projects, due to their close proximity
- These 11 projects were grouped into 3 priority levels

Legend

- High Priority Projects 1-8
- Medium Priority Projects 9 -10
- Lower Priority Projects 11
- Project Extents



Risk Assessment - Project #1

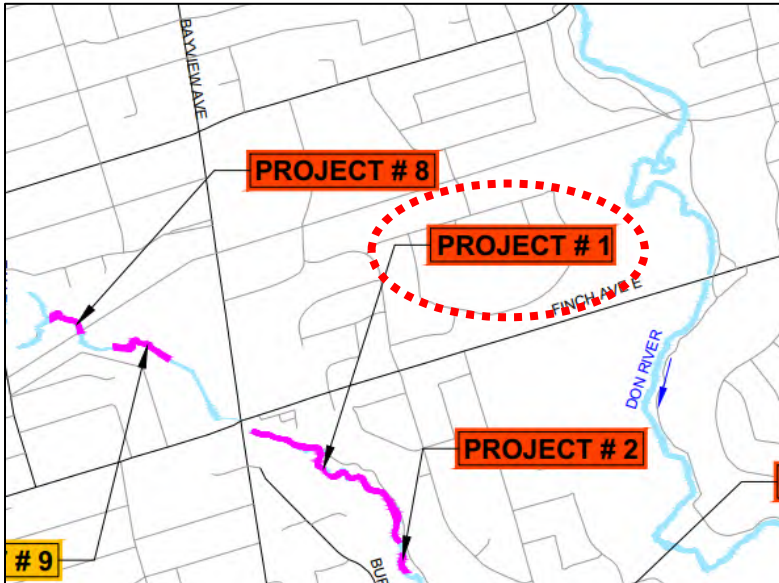
Multiple sanitary sewer infrastructure risks downstream of Bayview and Finch

Priority level

High Priority

Description of conditions

- x4 Exposed sanitary sewer crossings
- x1 Exposed sanitary sewer maintenance hole
- x4 Sanitary sewer laterals (where the bank is eroding towards the sewer)
- x2 Degraded storm sewer outfalls



Risk Assessment - Project #2

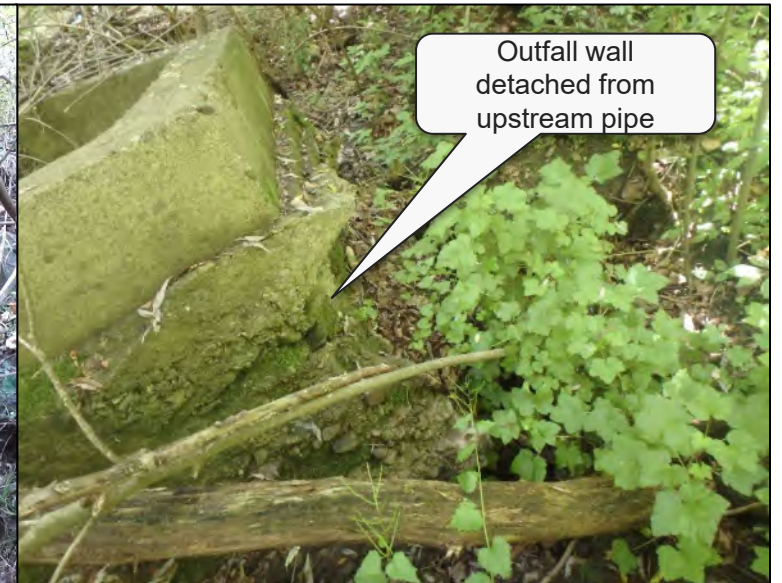
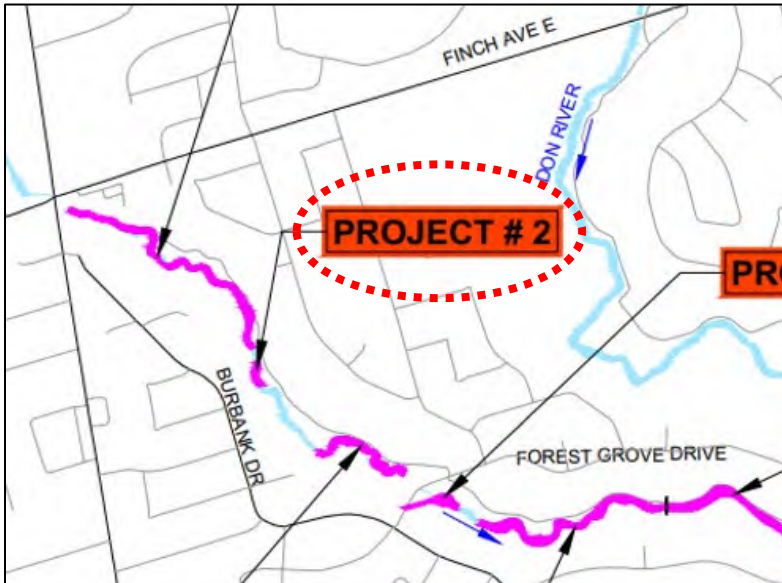
Failed storm sewer outfall by Canary Crescent

Priority level

High Priority

Description of conditions

- x1 Failed storm sewer outfall
- Slope erosion/failure observed along the upstream pipe alignment
- Ongoing bank erosion



Risk Assessment - Project #3

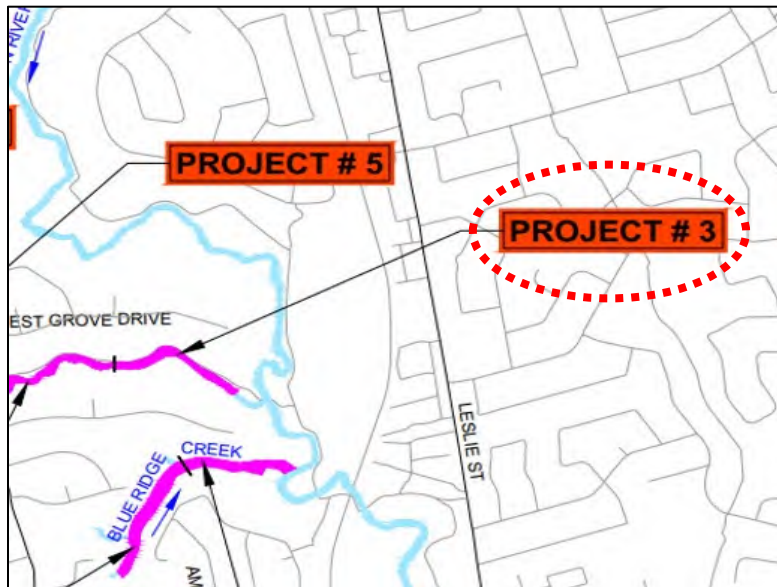
Exposed sanitary sewer maintenance hole near Don River confluence

Priority level

High Priority

Description of conditions

- x1 Exposed sanitary sewer maintenance hole
- x1 Exposed sewer crossing
- x1 Additional crossing with less than 1.0 m cover
- x2 Sanitary sewer laterals (where the bank is eroding towards the sewer)



Risk Assessment - Project #4

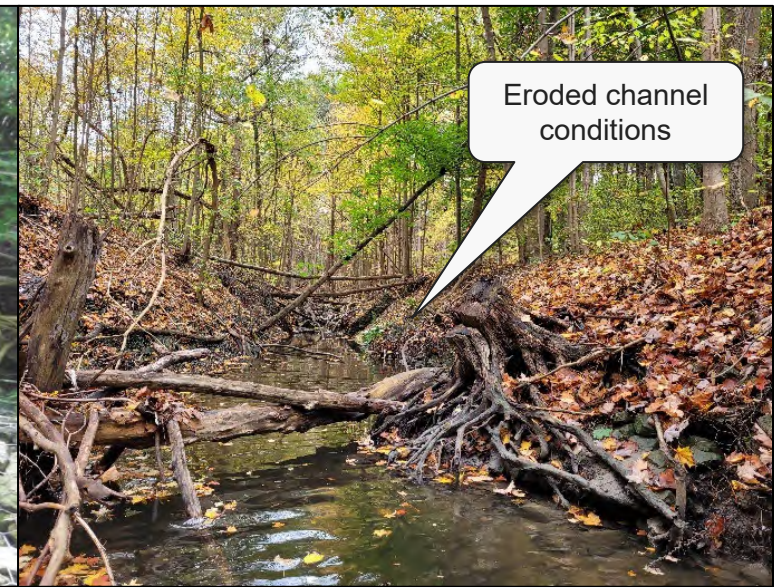
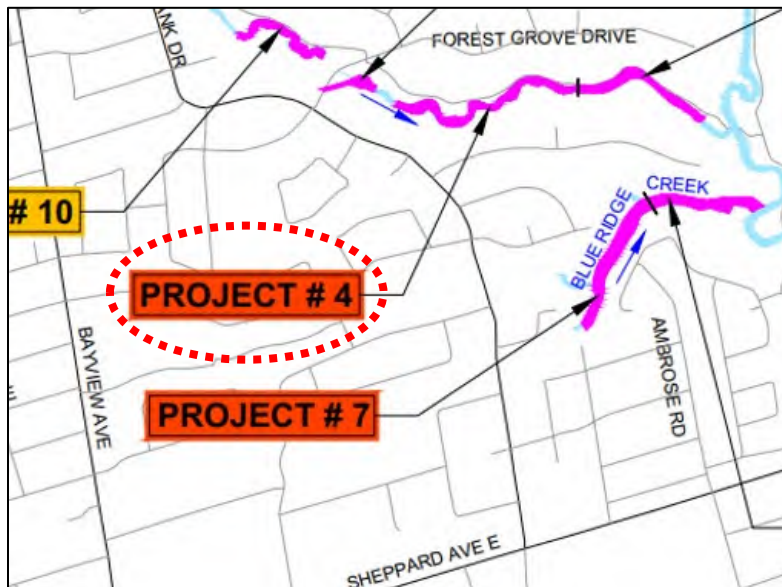
Exposed sanitary sewer crossing downstream of Forest Grove Drive

Priority level

High Priority

Description of conditions

- x1 Exposed sanitary sewer crossing
- x1 Additional crossing with less than 1.0 m cover
- x2 Sanitary sewer lateral risks (where the bank is eroding towards the sewer)



Risk Assessment - Project #5

Failed storm sewer outfall downstream of Forest Grove Drive

Priority level	High Priority
Description of conditions	<ul style="list-style-type: none">• x1 Failed storm sewer outfall• x1 Sanitary sewer lateral risk (where the bank is eroding towards the sewer)• Slope erosion/failure observed along the upstream pipe alignment



Risk Assessment - Project #6

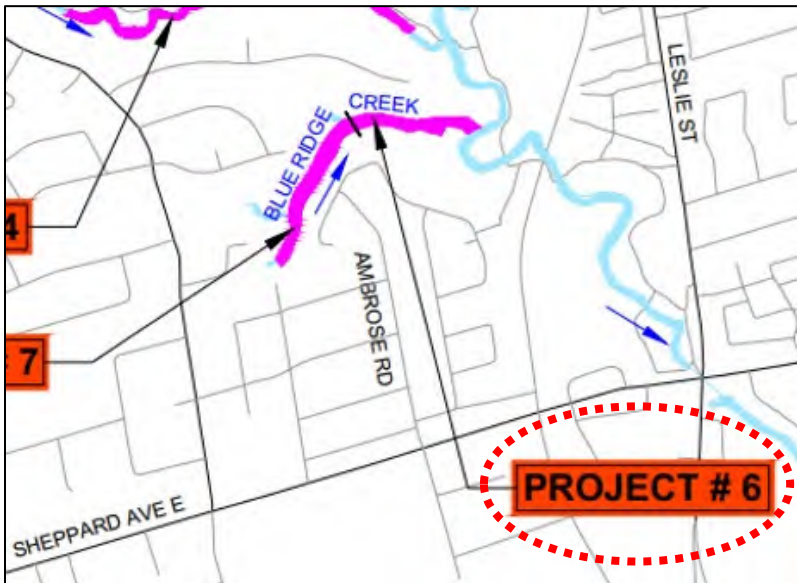
Failed storm sewer outfall by Hi-Mount Drive

Priority level

High Priority

Description of conditions

- x1 Failed storm sewer outfall
- x2 Sanitary sewer lateral risks (where the bank is eroding towards the sewer)
- Slope erosion/failure observed along the upstream pipe alignment



Risk Assessment - Project #7

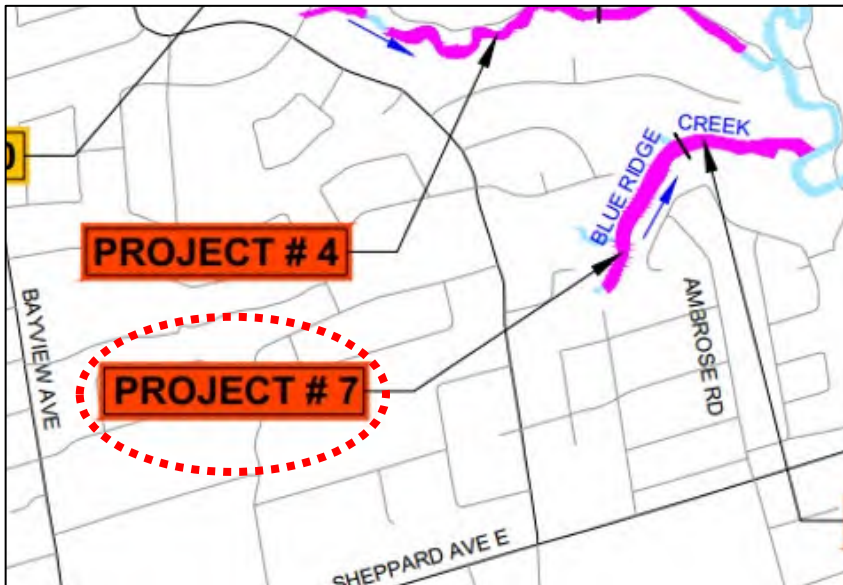
Exposed sanitary sewer crossing and failed storm sewer outfall by Sifton Court

Priority level

High Priority

Description of conditions

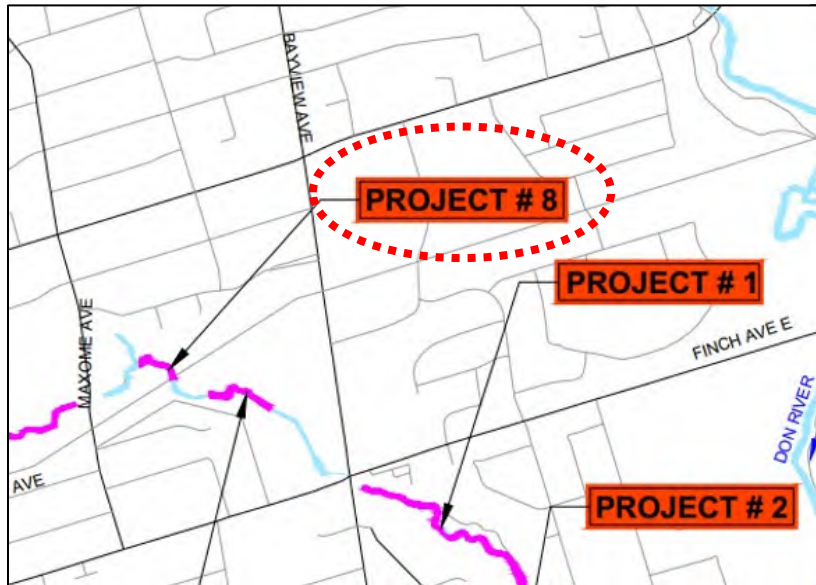
- x1 Exposed sanitary sewer crossing
- x1 Failed storm sewer outfall
- Slope erosion/failure observed along the upstream pipe alignment
- x4 Sanitary sewer laterals (where the bank is eroding towards the sewer)



Risk Assessment - Project #8

Exposed sanitary sewer crossing downstream of Maxome Avenue

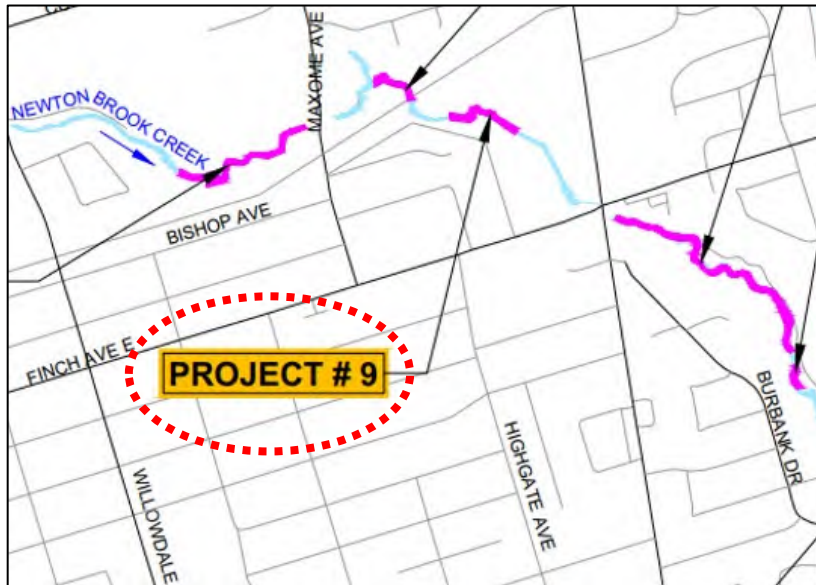
Priority level	High Priority
Description of conditions	<ul style="list-style-type: none">• x1 Exposed sanitary sewer crossing• x1 Additional crossing with less than 2.0 m cover• x1 Degraded storm sewer outfall• x3 At risk oil pipeline crossings



Risk Assessment - Project #9

Exposed watermain chamber upstream of Finch and Bayview

Priority level	Medium Priority
Description of conditions	<ul style="list-style-type: none">• x1 Exposed watermain chamber• x1 Watermain crossing with less than 1.0 m of cover• x1 Sanitary sewer crossing with less than 2.0 m of cover• x1 Degraded storm sewer outfall



Risk Assessment - Project #10

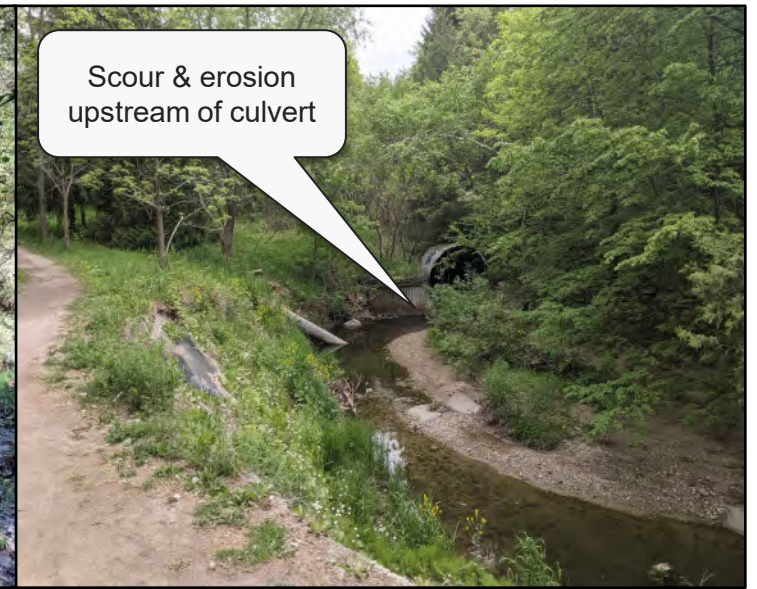
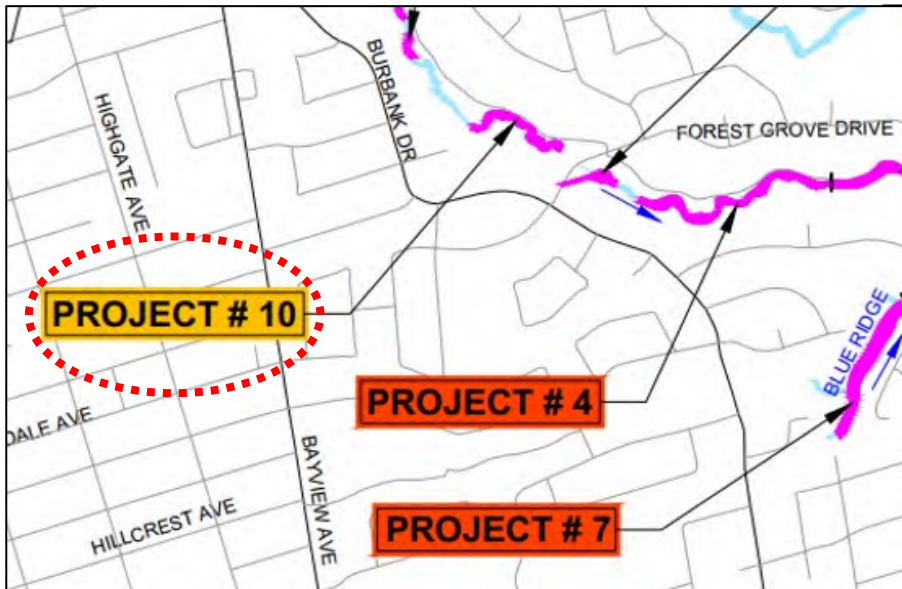
Lateral erosion risks to sanitary sewer infrastructure upstream of Forest Grove Drive

Priority level

Medium Priority

Description of conditions

- x2 Sanitary sewer lateral risks (where the bank is eroding towards the sewer)
- Actively eroding channel banks
- Scour and erosion upstream of the Forest Grove Drive culvert



Risk Assessment - Project #11

Lateral erosion risks to sanitary sewer infrastructure upstream of Maxome Avenue

Priority level

Low Priority

Description of conditions

- x2 Sanitary sewer lateral risks (where the bank is eroding towards the sewer)
- x2 Sanitary sewer crossings with less than 1.0 m cover
- Actively eroding channel banks



Alternative Solutions Descriptions

Three potential solutions to address these erosion risks have been proposed. The alternative solutions have been evaluated for each of the 11 projects encompassing the 24 high risk erosion sites.

Alternative 1: Do Nothing

No planned interventions in the stream, continued monitoring, infrastructure will continue to be at risk of failure due to channel erosion processes

Alternative 2: Local Works

Channel engineering works less than 150 meters in length (minor local adjustment to the creek bed)

Bank erosion protection (armourstone walls)

Outfall replacement / restoration

Alternative 3: Sub-Reach Scale Works

Natural channel design in channel length greater than 150 meters

Channel realignment at select locations

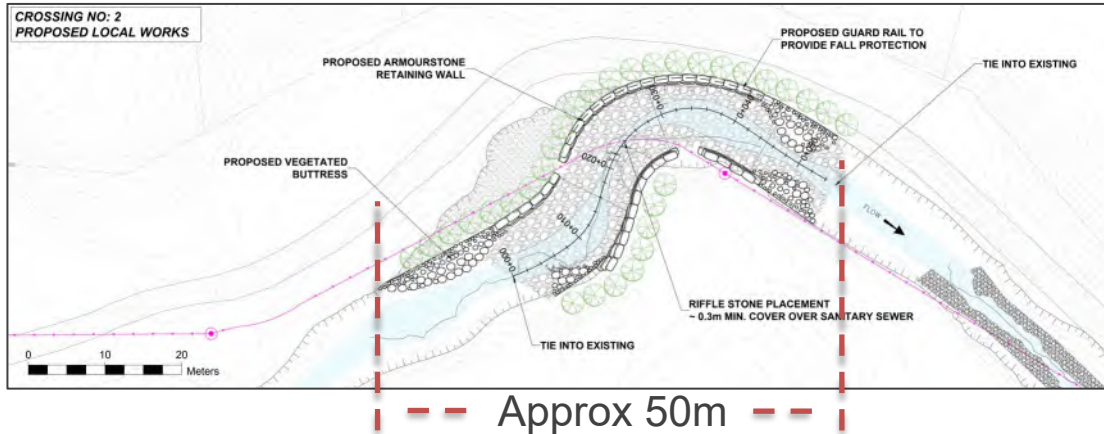
Outfall replacement / restoration

Bank erosion protection (armourstone walls, vegetated buttresses and plantings).

The specific methods and materials for carrying out this work will be determined through detailed design after the Master Plan is completed.

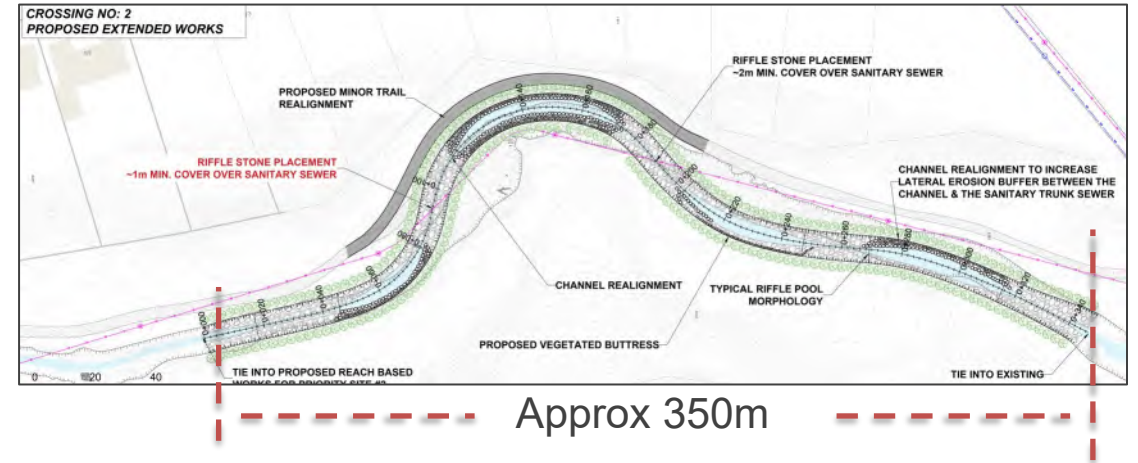
Overview of Alternative Solutions

Alternative 2 – Example of Local Works



- Local channel works (less than 150 metres)
- Engineered protection of water infrastructure
- No work between priority sites
- Fewer sites addressed with this alternative, other sites may need to be addressed separately if they are a priority risk site

Alternative 3 – Example of Sub-Reach Scale Works



- Extensive channel work (greater than 150 metres)
- Partial realignment of trail and channel
- Connectivity between priority sites
- Multiple water infrastructure sites are protected

Example of Alternative 2 – Local Works, from Massey Creek



Massey Creek - Sanitary sewer maintenance hole within the creek channel (during-construction)



Massey Creek – Creek has been realigned away from maintenance hole with Armourstone walls built as bank protection (post-construction but pre-restoration)

Example of Alternative 3 – Sub Reach Scale Works, from Duncan Creek



Duncan Creek Phase 2 – Deteriorated gabion lined channel (pre-construction)



Duncan Creek Phase 2 – Rehabilitated creek corridor (post-construction)

Evaluation Criteria

The following 5 categories of criteria were used to evaluate alternative solutions

Physical & Natural Environment

Improves stability of stream and valley walls, flood conveyance, groundwater quality, vegetation, aquatic and terrestrial habitats including habitat for at-risk species, and minimised tree removals

Economic Considerations

Evaluate total capital costs against recurring costs for maximum improvements and outcomes over a span of 30 years

Infrastructure Risk

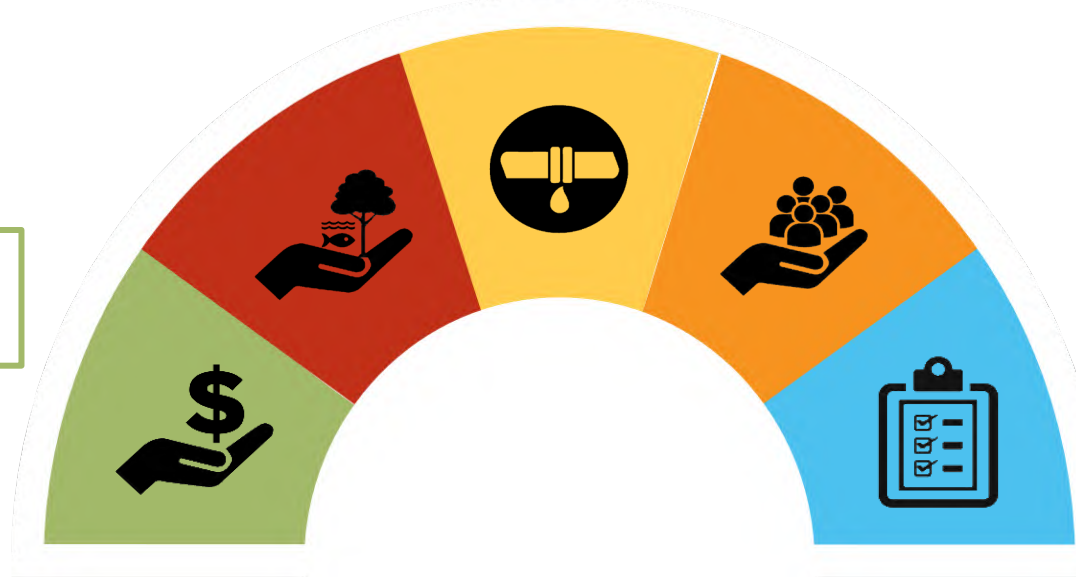
Addresses erosion and risk to City's water and sewer infrastructure

Social & Cultural Environments

Protects built and cultural heritage as well as landscape and archaeological resources, long term benefits for the community, minimum or short term negative impacts, and consideration for impacts on private property

Technical & Engineering Considerations

Evaluate regulatory agency standards, availability of staff and technical resources, maximum improvement for ecosystem and infrastructure



Recommended Solution – Local Works

Project No.	Evaluation Details
2	<ul style="list-style-type: none"> Addresses identified erosion risks while minimizing the area of environmental disturbance. Lower capital costs and more economically efficient than the sub-reach scale alternative given the isolated nature of the project site. <p>Future implementation of the recommended natural channel design projects requires tree removal, to be followed by restoration and replanting with native trees and shrubs.</p>
5	<ul style="list-style-type: none"> Same as Project No. 2 above
8	<ul style="list-style-type: none"> Same as Project No. 2 above
9	<ul style="list-style-type: none"> Same as Project No. 2 above



 Project 2



Project 5



Project 8



Project 9

Recommended Solution – Sub-Reach Scale Works

Project No.	Evaluation Details
1	<ul style="list-style-type: none"> Addresses identified erosion risks through an extended restoration design improving the geomorphic stability of the degraded channel. Achieves resource allocation and costing efficiencies by addressing multiple risks, located in close proximity to each other, through a single construction project. <p>Future implementation of the recommended natural channel design projects requires tree removal, to be followed by restoration and replanting with native trees and shrubs and pedestrian trail realignment to allow the stream to have a natural course and avoid future erosion</p>
3	<ul style="list-style-type: none"> Same as project No. 1 above.
4	<ul style="list-style-type: none"> Same as project No. 1 above.
6	<ul style="list-style-type: none"> Same as project No. 1 above.
7	<ul style="list-style-type: none"> Same as project No. 1 above.
10	<ul style="list-style-type: none"> Same as project No. 1 above.
11	<ul style="list-style-type: none"> Same as project No. 1 above.



Creek Restoration and Protection Work Requirements

Future implementation of the recommended projects requires:

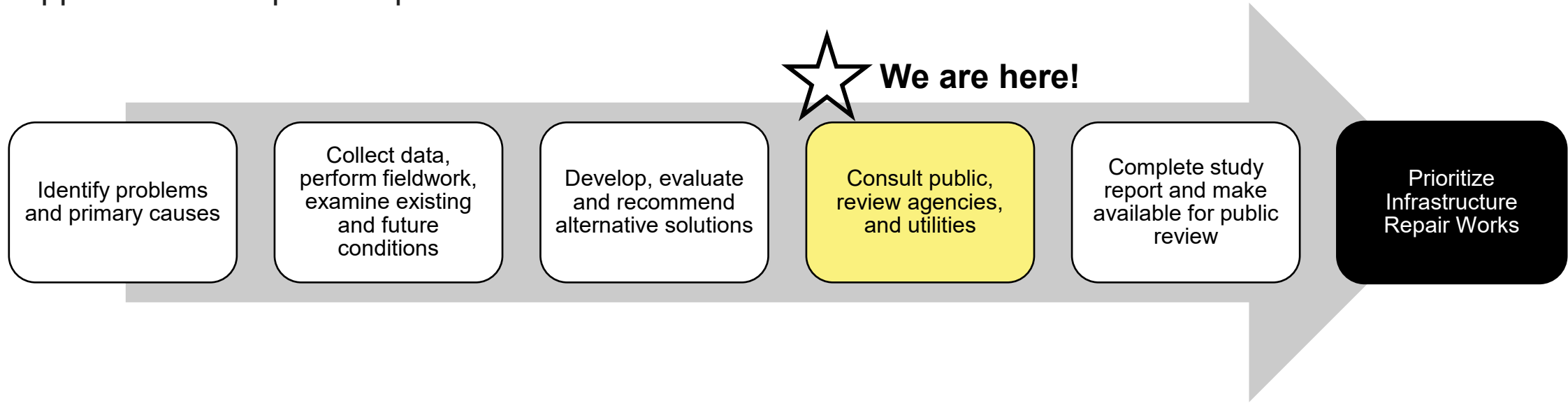
- Tree and vegetation removal – to be replaced with healthy native species, to be further analyzed during detailed design
- Pedestrian trail realignment to allow the stream to have a natural course and avoid future erosion

Construction Impacts:

- Residents will be notified prior to any construction
- A restoration plan will be developed prior to construction

Next Steps in Study Process

The study is following the Municipal Class Environmental Assessment study process for Master Plans, which is an approved planning process under the Ontario Environmental Assessment Act and includes opportunities for public input.







Once a GSMP is approved, recommended solutions will be included in the City's Stream Restoration and Erosion Control Program which will prioritize and allocate budget for detailed engineering design and construction.

Residents will be notified prior to any construction occurring.

Public Consultation

Public Consultation - Activities

Learn More	Attend a Site Walk	Provide Feedback
<p>View project information on the website and provide feedback</p> <p>toronto.ca/newtonbrook</p> 	<p>Visit the study area with the project team to discuss the study recommendations and ask questions</p> <p>Wednesday October 18th, 2023 Drop in 9:00 – 11:00 AM Site Walk at 9:00 AM</p> 	<p>Complete an online survey or request a printed copy. Submit comments by email, mail or phone.</p> <p>Comment deadline: Wednesday November 1, 2023</p>  

Forest Grove United Church 43 Forest Grove Drive, M2K 1Z4

This location is wheelchair/mobility device accessible. If you have a specific accessibility need or require accommodation, please contact us in advance.

Parking is available.

Staff Contacts

Project Manager

Devin Coone

Acting Senior Project Manager, Stormwater Management Infrastructure
Design & Construction - Linear Underground Infrastructure
Engineering & Construction Services

Toronto Water

Bill Snodgrass

Senior Engineer, Infrastructure Planning & Programming
Water Infrastructure Management
Toronto Water

Public Consultation Unit

Aadila Valiallah

Senior Coordinator, Public Consultation Unit
Policy, Planning, Finance & Administration

[Toronto.ca/newtonbrook](https://toronto.ca/newtonbrook)

Email: newtonbrook@toronto.ca

Telephone: 416-338-2985



Newtonbrook Creek Restoration & Water Infrastructure Protection

Public Event

Date: Wednesday, October 18, 2023

Meeting Type: Drop-in and Site walk

Start time: 9:00 a.m. **End Time:** 11:00 a.m.

Meeting Objectives:

- Inform the public of the Study and present preferred solutions for the Newton Brook Creek Geomorphic Systems Master Plan
- Visit 3 high risk infrastructure sites on site walk
- Provide information to members of the public who participate in the walk and drop-in
- Encourage and facilitate feedback during the event and via the survey

Meeting Overview:

The meeting was facilitated by Aadila Valiallah, Public Consultation Unit. Devin Coone, the Project Manager, Engineering and Construction Services and Bill Snodgrass, Senior Engineer, Toronto Water presented information and responded to questions from the public.

There were approximately 32 participants, several people attended without signing in.

Questions & Comments

The following questions and answers were provided during the meeting. Questions have been grouped according to general themes.

*Items for follow-up

Theme	Comment	Response
Questions about recommended projects	Are we raising the walls of the creek?	Yes
	Will the depth of the creek be increased?	In some sections, yes.

Theme	Comment	Response
	If the creek will be deeper will it also be more narrow?	We try to maintain the creek width and the floodplain connection.
	Will the trail be raised post construction with a berm to prevent flooding of the trails?	No. From a water management perspective a (managed) flood is not bad as it reconnects the flood plain, which is beneficial for the (semi-aquatic) species
	Will there be handrails/ guard rails installed next to the restored armour stone banks?	Handrails/ guard rails will only be installed if the trail is within 2 meters from the restored armour stone banks.
	Will the trail remain a dirt trail? <ul style="list-style-type: none"> • One of the things we appreciate about this trail is that it is a dirt trail and feels more natural. • We prefer the dirt trail. • Hope to retain the current natural/ gravel path upon completion of restoration works. • We would rather not upgrade to paved paths 	<ul style="list-style-type: none"> • The City will reinstate the trail to its current “as is” condition. There are no plans for Engineering or Toronto water to upgrade the trail into a paved trail. • However, PR&R may have other plans for trail upgrades. • With reference to Duncan creek where there were tree removals, it has been 3 years and the vegetation is coming back. Just as important is that the animals are coming back
Comment and concerns about the natural environment and habitat	The trail along the creek is at present is covered with natural foliage – will there be vegetation disruption during construction?	<ul style="list-style-type: none"> • There is a chance that how the creek meanders may shift as part of the restoration works (which will disturb the present foliage). • Trees that are in the way, which in many cases are non-native species, will be removed and replanted with native species after construction is complete. <p>With reference to restoration works done at Duncan Creek 3 years ago, the approximate level and rate of revegetation will be similar.</p>
	Reference to Duncan Creek <ul style="list-style-type: none"> • There are concerns about the creek looking like Duncan Creek with significant canopy loss that will take decades to re-establish. • Duncan Creek looks overly engineered 	

Theme	Comment	Response
	<p>The Nature Stewards would like to be involved in the project and to play a role in monitoring impacts during construction and restorations (post-construction)</p> <ul style="list-style-type: none"> Stewards would like to support the replanting during restoration. (Stewardship area is west of Forrest Grove) Stewards would like details on where projects are located so they do not concentrate efforts removing invasive species where project work will be carried out (and the areas cleared). 	*Follow-up with ravine nature stewards.
	<p>What will be done with the trees that are removed?</p> <p>There is a request to relocate logs to the forest area where they can be habitats for moss and insects</p>	
	There was mention of a turtle nest protection group down stream (by the tennis courts). Gary from the Nature Stewards may know more information.	*Project team to get more information on turtle habitats.
Construction Concerns	<p>What impacts will there be to the trail during construction?</p> <p>Will we lose access to the walking path?</p>	<p>Heavy equipment will be required for the restoration and reconstruction works. Mitigation measures for minimizing impacts to trail will be explored during the detailed design stage.</p> <p>Sections of the trail will be closed during construction.</p>
	There is concern about trail closures, and the length of time access will be limited	Details will be known during the design phase. We will try to limit disturbances to the trail and keep the trail as open as possible.
	<p>What will the access route for construction be?</p> <p>Please minimise footprint of damage</p>	This will be determined during detailed design.
	There is a willow tree that is currently next to priority project #1, there is a concern that it will fall if its root system is disturbed during construction.	

Theme	Comment	Response
Process / Prioritization and timing	How do we get to implementation?	<ol style="list-style-type: none"> 1. Master Plan 2. Detailed design 3. Permitting 4. Construction
	Questions about project details <ul style="list-style-type: none"> • How will projects be prioritized? • When will projects be implemented? • How long will it take? • Will all projects be done at the same time or according to their respective at-risk levels? • Will there be continuous construction on a year-over-year basis? 	<ul style="list-style-type: none"> • This will be determined in the next 1 – 2 years following the completions of several studies throughout the City • The projects and works will be prioritized across the City with other City projects. • Works to be carried out are seasonal and carried out in sections along the creek. • Projects will be stretched out over a number of years
	What happens if the damage from erosion acts faster than the City's prioritized projects?	Emergency work will be carried out, ahead of the queue.
	Is the emergency works budget separate from capital works budget?	Emergency works is paid for by the water rate.
Questions on technical details	What happens if the sewer breaks?	The break would be treated as an emergency spill and emergency work to contain the spill and fix the problem will be done by the City and Province. A rebuild will follow after the initial response. There have only been 3 emergencies in in my lifetime (SIC - Bill Snodgrass)
	What is the diameter of the sewage pipe?	The diameter of the sewage pipe is 750cm
	What are guardrails?	The guardrails provide protection where the armour stone is.
	When there is the smell of sewage is it overflow going into the creek?	No, the smell is coming from the maintenance hole.

Theme	Comment	Response
	What if the trail is damaged?	We return the trail to the condition as it is.
	How will you access the project sites? Some areas have more invasive species than others. Can access be through those areas?	This will be determined during detailed design.
	Will the creek continue to flood?	The design will accommodate increased water flow.
	More information on improvements is needed: What are channel treatments? What is erosion control?	Additional information can be found in the Understanding Streams section of the study webpage.
Study Scope – several questions were asked that are outside of the study scope, or that may be addressed during later stages of design and implementation	There are tags on the trees. What are they for?	Tags are a documentation and count of the trees. For every tree that is removed, we will plant 3. *Identify who did the tree tagging
	Will there be an opportunity to improve (other) infrastructure in the creek.	The focus of the study and improvement is Toronto Water infrastructure.
	Concern for log jams and concrete rubble, as it is dangerous and an eyesore. <ul style="list-style-type: none"> Will log jams be addressed? Will concrete rubble be removed (where old armour stone has fallen)? 	In the locations where we work, we will clean up the area. Any debris that currently sits in the creek bed will be removed (including the concrete blocks and fallen tree trunks)
	Will beds and banks that have been eroded be restored?	Depending on the degree of erosion and the location of at-risk water infrastructure. Creek beds would likely be raised at sewer crossings. Realignment of the creek may be required to protect the infrastructure. Recommendations have been identified for each project site.
	There is a sewer line that runs through private property on Burbank with open grates. Is the City aware of it?	--

Project Team

Ward Councillors	Councillor Shelly Carroll, Ward 17 Don Valley North
	Councillor Lily Cheng, Ward 18 Willowdale
ECS	Devin Coone, Senior Project Manager, Design and Construction, ECS
	Hazel Bretton Manager, Stormwater Management Infrastructure
	Niloufar Mohajerani, Senior Engineer, Design and Construction, ECS
	Keyra Kam, Design and Construction, ECS
	Chunying Zao
Consultant: Aquafor Beech	Rob Amos
	Jacob Ursulak
	Chad Cota
Toronto Water	Bill Snodgrass, Senior Engineer, Infrastructure and Planning, Toronto Water
	Robert Chan, Senior Engineer
PCU	Aadila Valiallah, Senior Coordinator, Public Consultation Unit
	Carol Lee, Coordinator, Public Consultation Unit)
	Daniela Castellanos Forero, Coordinator, Public Consultation Unit
	Carol Tsang, Senior Coordinator, Public Consultation Unit
	Stephanie Gris-Bringas, Supervisor, Public Consultation Unit
Parks, Forestry & Recreation	Supervisor, North District
Toronto Region Conservation Authority	Daniel Dyce, Erosion Risk Management