

Little Beaver River Bank Failure At 159 Bay Street West

Deputation July 14, 2025 Council Meeting

Sandra Karen John-Chuan
Darren Hunter

Our Ask

We ask Council to reverse the Town's decision to "Do Nothing" per the letter dated June 10, 2025. Specifically, we ask for the Town to take responsibility for the work and the cost of restoring the east bank of the Little Beaver River at 159 Bay Street West.

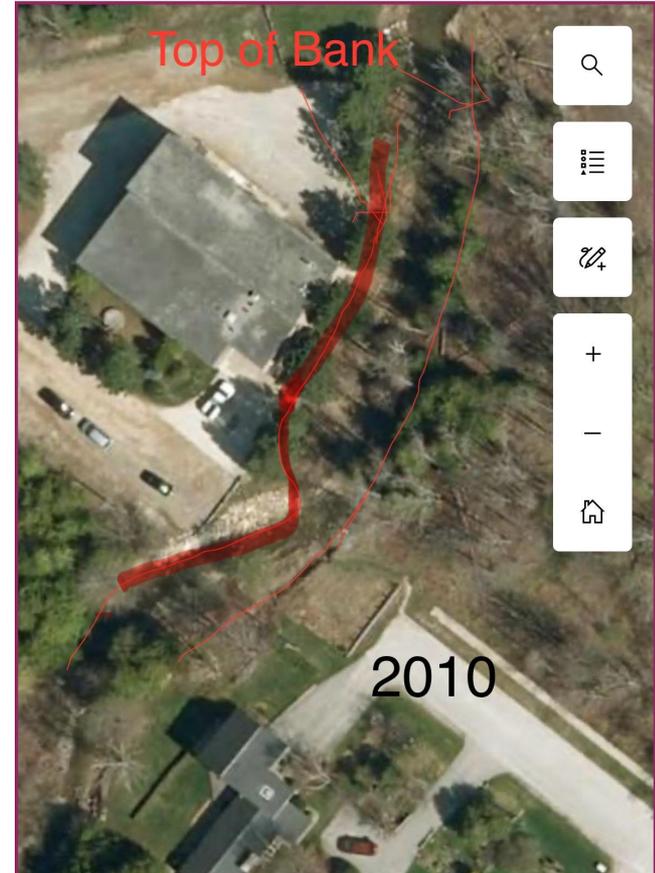
This is Because:

1. The Town manipulated the west bank without any consideration for the damages that would be caused to other property. They hardened the banks at various points to the detriment of the east bank, which was in its original, natural, unprotected state.
2. The river is the primary outlet for stormwater management for Thornbury West and should be managed under the Town Wide Master Drainage Plan.

Top of Bank 2006 vs 2010

2006: Natural banks,
east & west sides

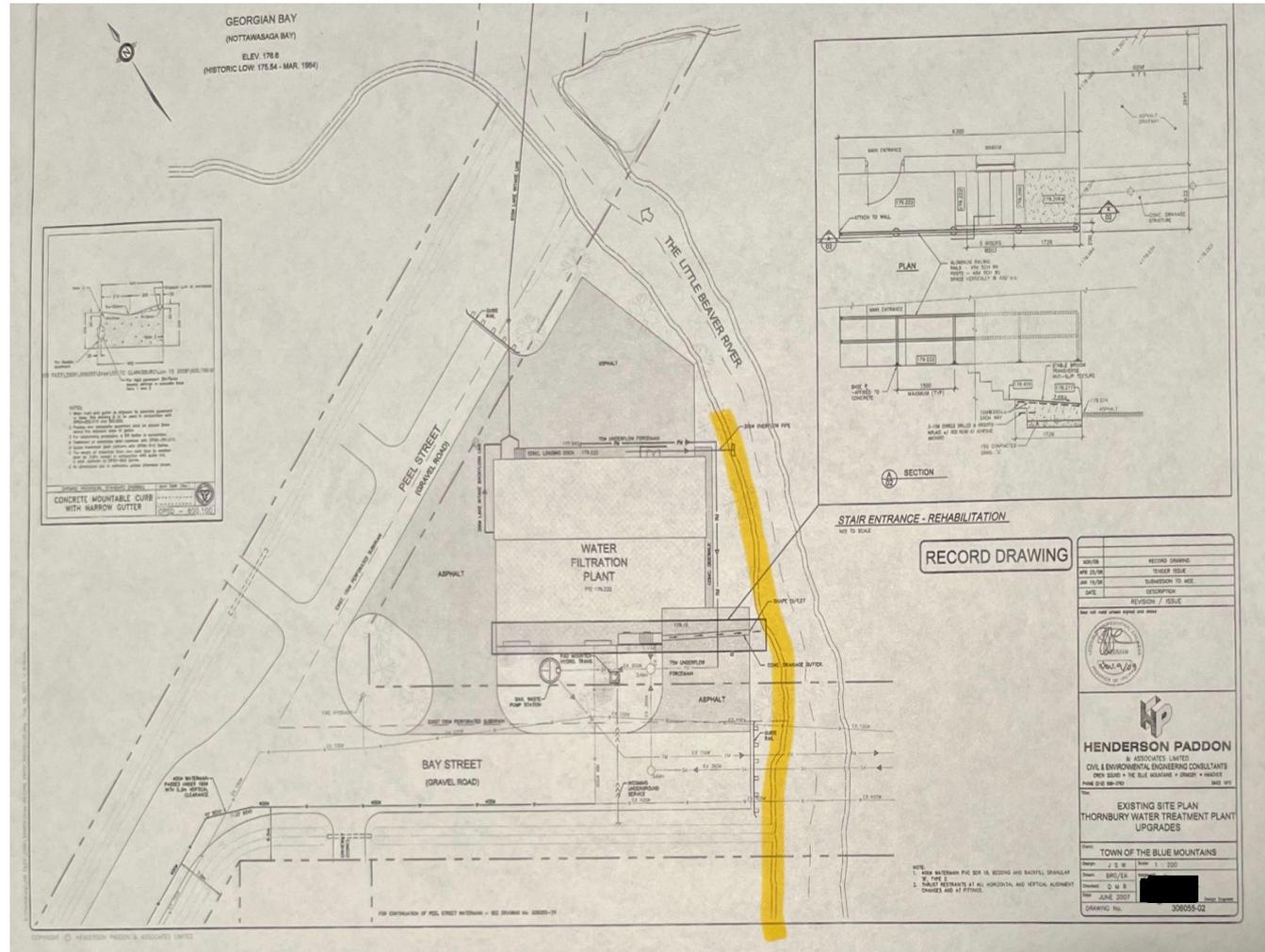
2010: Hardened west
bank at Bay St W,
diverting river directly
at natural,
unprotected east side



Water Treatment Plant Upgrade Design

June 2007

Note the natural top of the river bank and natural path of the river highlighted in yellow before the Town hardened the bank in 2008



Hardening of
west bank that
diverts the river
to the east bank



Photo taken April 2025

Path of
Diverted river
directly at
East bank
and at my
HOME



Hardening along overflow pipe at water treatment plant



Hardening at the Parking Lot



East bank at Bay St West

Clearly shows that hardening of banks protects from erosion around the drainage from the road. Note that where the hardening ends, erosion occurs due to the hardening done on the opposite west bank diverting the river eastwards.



Drainage conflict: natural watercourses

Learn about natural watercourses and the responsibilities of a riparian landowner.

On this page

1. [What is a natural watercourse?](#)
2. [How do I know whether the area on my land would be considered a natural watercourse?](#)
3. [What are the rights and responsibilities of a riparian landowner?](#)
4. [What are some common problems or disputes involving natural watercourses?](#)

Can't interfere with the channel to the detriment of others

Riparian landowners can modify the channel of a natural watercourse provided it doesn't interfere with the general principle that "water flows naturally and should be permitted thus to flow". Any interference with this principle may be grounds for a lawsuit. However, there may also be legislation that regulates work in the channel of a natural watercourse. The local conservation authority and the Ministry of Natural Resources' offices are good starting places to find out what laws may apply.

Drainage Master Plan - Preferred Solutions Map

2021 Town-Wide Master Drainage Plan EA > 90% Report > Maps > Preferred Solutions Maps - AODA

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NO.	REVISION DESCRIPTION	DATE	DESIGNER GROUP
1	ISSUANCE MASTER PLAN FOR PUBLIC SUBMISSION	08/07/2021	
2	ISSUANCE MASTER PLAN FOR PUBLIC SUBMISSION	09/20/2021	

**TOWN OF THE BLUE MOUNTAINS
DRAINAGE MASTER PLAN**

PREFERRED SOLUTIONS MAP

**TATHAM
ENGINEERING**

VERSION	DATE	FILE	ISSUED
001	08/07/2021	DRMP_2021	08/07/2021
002	09/20/2021	DRMP_2021	09/20/2021

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Excerpt from June 10 Letter

The Town of The Blue Mountains has completed a review of the concerns raised regarding the riverbank failure at 159 Bay Street. Following a detailed assessment, the Town has not identified any evidence suggesting that the event was caused by a failure or deficiency in municipal infrastructure, and appears most likely to have resulted from two significant rainfall events occurring between March 30 and April 4, 2025.

WATERCOURSE / OUTLET	SWMF ID	ACTIVE STORAGE VOLUME (m ³)		PEAK FLOW REDUCTION	
		Required	Provided	1:5-Year Minor Storm	1:100-Year Major Storm
Silver Creek (50)	50401	15,754	16,490	87%	77%
	50402	1,746	1,419	77%	66%
Watercourse 52	52401	349	671	70%	69%
	52402	477	495	51%	41%
Little Beaver River (54)	54401	1,502	1,365	94%	94%
	54402	5,842	5,440	89%	67%
	54404	653	647	82%	90%
	54405	624	738	49%	41%
Outlet 56	56401	53,139	59,520	48%	10%
Outlet 57	57401-4 ²	473	178	56%	59%

1. SWMF information incomplete. SWMFs excluded from VO and PCSWMM models.
2. SWMFs 57401-57404 are in series. The Active Storage presented is the value from the outlet pond (Pond 4 (57401)).

Example of Deficiencies in
3 of the 4 Storm Water
Management Facilities
from the Master Drainage
Plan for volume
See pg 40, 62, 63 of the
DMP

13 Development Framework

Stormwater management is required to mitigate the effects of land use changes (urbanization) on the hydrologic cycle including increased runoff (volume and frequency), decreased infiltration, degradation of water quality, degradation of aquatic habitat, and increased flooding and erosion which, if not mitigated properly, can potentially lead to environmental degradation, property damage and hazards to public safety. Stormwater management strategies should be developed considering these potential impacts and watershed and land use planning on a larger scale. A combination of lot-level, conveyance, and end-of-pipe stormwater management practices are usually required to satisfy the objectives of stormwater management.

13.1 STORMWATER QUANTITY CONTROL

The past approach to stormwater quantity control in the Town typically required post development peak flows leaving a development site be controlled to pre-development rates at the site outlet for the 1:2-year through 1:100-year return frequency design storms. The Town understands this approach is effective on a site-specific level and may be effective for individual development sites at the downstream end of a watershed. However, on a watershed level, this approach can lead to increased peak flows in receiving watercourses as this approach ignores the temporal distribution of runoff and streamflow in the watershed. For example, the SWM controls implemented in a development may attenuate post development flows to pre-development rates on a site-specific basis, but by doing so alter the timing of the peak discharge leaving the site to coincide with the peak flow in the outlet watercourse, increasing the overall peak flow in the watercourse.

The past approach to stormwater management also ignored the potential cumulative increase in runoff volume which generally results from development unless runoff volume reducing measures such as low impact development measures, specifically infiltration-based measures, are implemented and the local water balance is maintained. Although a development's SWM measures may provide the necessary stormwater quantity controls to Town and provincial standards, increases in runoff volume have the potential to exacerbate flooding downstream, particularly along watercourses susceptible to flooding or with known drainage issues.

As the Town understands the limitations of the past approach to stormwater quantity control, the Town has recently required stormwater management controls be designed to maintain pre-development conditions throughout the watershed, not just at the site outlet. Specifically, the Town has required that a development's stormwater management plan demonstrate no increase in the depth, duration and frequency of flooding downstream to Georgian Bay where flooding and/or erosion is known to occur.

Through this development framework, the Town's current approach to water quantity control is to be adopted throughout the Town. Specifically, stormwater quantity controls are to be evaluated on a watershed basis (watershed-based approach) instead of a site-by-site basis and recommendations herein are presented for both new development and retrofit scenarios.

April 2025

Diverted
River Path
due to the
Town's
hardening of
the west bank
at Bay St W



Photos of Damage from April 4

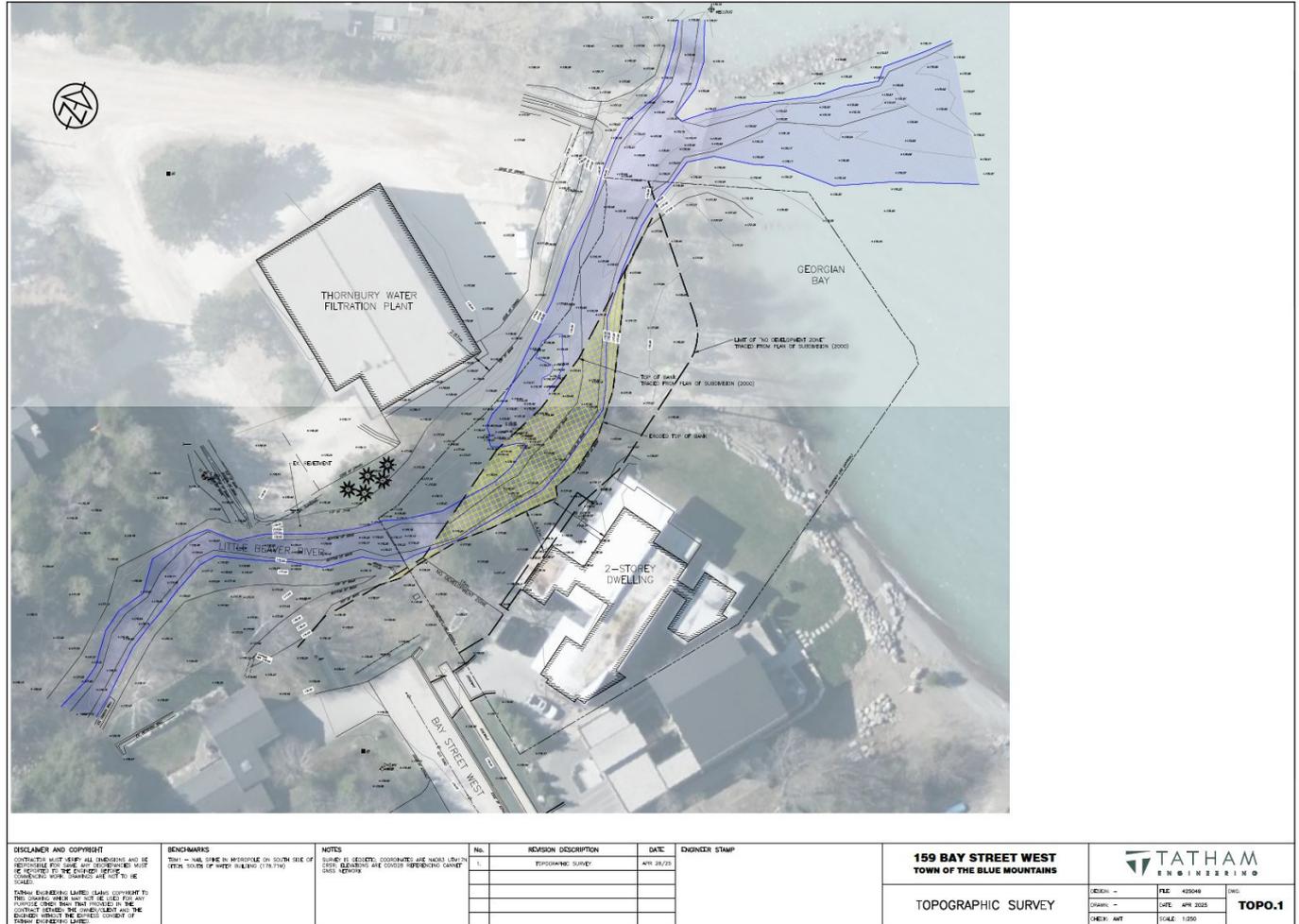


April 2025 Survey

Yellow highlight is the land and vegetation lost since April 3 - 340 square metres

15m setback to building required lost

Clearly shows the path of the river diverted by the Town's hardening of the bank at Bay St W



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159 BAY STREET WEST
TOWN OF THE BLUE MOUNTAINS

TATHAM
 ENGINEERING

TOPOGRAPHIC SURVEY

DESIGN - [Name]
 DRAWN - [Name]
 CHECK - [Name]

Impact on vegetation lost due to the Town's hardening of west bank to the detriment of the east bank



June 30 Damage

Close to 500 square metres
of land and vegetation lost

Continued damage caused
by the Town's hardening of
the west bank that diverted
the path of the river into the
east bank



Summary

We are asking the Town to take ownership of this project to restore the land and vegetation lost for the 2 reasons we've walked through in this deputation.

From May 8 to May 27, we thought we had a working relationship with the Town and we were presented with a project plan, including alternate solutions and a preferred solution. We left the DMP consultation meeting on May 27, with the understanding that we, and Grey Sauble, would receive a design for review and permitting. Tatham and the Town stated to Grey Sauble that they were working towards a design for long term bank stabilization, bypassing emergency works, due to time constraints. The concern was that this had to be completed before next winter and more critically, next spring's melt as my home would not survive.

We were shocked to receive the June 10 letter that informed us of the Town's decision to "Do Nothing".