



## Report to Council

Department: Infrastructure Services  
Division: Drainage  
Date: August 12, 2024  
Prepared by: Norm Nussio C.E.T., CRS-I, Manager of Operations, and Drainage  
Report Number: Drainage-2024-08  
Subject: Best Management Practices for Buffer Strips  
Number of Pages: 4

### Recommendation(s)

**That** Drainage-2024-08 entitled Best Management Practices for Buffer Strips prepared by Norm Nussio, Manager of Operations and Drainage dated August 12, 2024, be received.

### Purpose

This report has been prepared to update Council on a public education campaign for the planning and installing of Buffer Strips on private lands.

In accordance with the **Town's** Corporate Objective 2.2 of the Climate Change Adaptation Plan (CCAP) to develop a Buffer Strip Policy, this report has been drafted to outline initiatives to encourage best practices for buffer strips throughout the municipality.

### Background and Discussion

Buffer strips are a protective zone of permanent vegetation between a farm field and a waterway that protects water quality. Buffer strips slow and filter storm runoff while helping

to hold soil in place. As a result, the amount of harmful phosphorus that reaches our lakes may be reduced, which in turn reduces the risk of harmful algae blooms that are prevalent in the surrounding Great Lakes. A typical buffer strip is shown below:



Around Ontario, agricultural operators have established buffer strips to protect watercourses such as ditches and natural watercourses from harmful runoff and erosion. Beef and dairy producers have fenced cattle out of heavily grazed lands alongside streams and other water bodies. Local fish and wildlife conservation groups have volunteered time and resources to plant trees and make other habitat improvements in buffer areas on private land. And all

levels of governments have collaborated with farm and environmental groups to help establish buffer strips in rural Ontario.

The benefits of a properly functioning buffer strip and healthy riparian zones is that they:

- act as living filters, trapping and treating sediments and other materials from upland activities
- stabilize streambanks, helping to prevent erosion
- **increase soil's water**-holding capacity, reducing the impacts of flooding and drought
- provide fish and wildlife habitat through added shade, cleaner and cooler water, and greater plant diversity
- decrease costs associated with drain cleanouts
- decrease the occurrence of water-related health issues (such as foot rot) in livestock

**Healthy buffer strips and riparian zones also give strong testimony to a landowner's due diligence and civic mindedness.** Unprotected water bodies and damaged streambanks suggest otherwise and may even be in violation of provincial legislation.

When planning to establish buffer strips and managing them there are many factors to consider such as:

- Function – what do you want this buffer strip to do?
- Design – what are the site features and considerations that will make the most effective design for your property?
- Plants – what grasses, trees, and shrubs would work best in your buffer strip?
- Establishment – what steps should you take to get your buffer strip in place?

By using the Ontario Best Management Practices for Buffer Strips, agricultural operators will be able to pinpoint the best type of buffer strip for their operation, the best location, and how to manage their buffer strip with positive results.

In consultation with the Essex Region Conservation Authority (ERCA), they are also another key partner when planning for buffer strips. ERCA has annual programs to help plan, build, and fund the creation of buffer strips. The supply of funding does change on yearly basis so getting in contact with them prior to building a buffer strip would be a proactive approach.

Through investigation, administration has created the attached pamphlet highlighting the benefits of buffer strips, various contact information, and illustrations and pictures of good buffer strip practices. As part of an education campaign, the pamphlets will be available at town hall and will be inserting copies of the pamphlets into applicable drainage bills on an ongoing basis. In addition, we will be creating a webpage dedicated to information on the benefits of buffer strips to agricultural operators and the natural environment.

## **Financial Impact**

Cost associated with printing the Buffer Strip pamphlets will be captured in our operations budget. The cost to print 500 brochures would be \$225.00 plus applicable taxes and administration will monitor the need to print more on an annual basis.

## **Consultations**

Kevin Girard, Director of Infrastructure Services

## Link to Strategic Priorities

- Embrace asset management best practices to build, maintain, and continuously improve our municipally owned infrastructure.
- Leverage our Town's competitive advantages to promote jobs and economic investment.**
- Take care of our natural environment and strengthen the sense of belonging to everyone **who makes Essex "home"**.
- Deliver friendly customer service in an efficient, effective, and transparent manner while providing an exceptional working environment for our employees.
- Build corporate-level and community-level climate resilience through community engagement and partnership and corporate objectives.

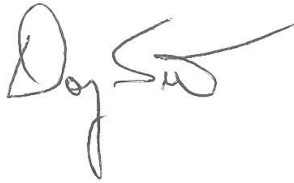
**Report Approval Details**

Document Title:	Buffer Strip Best Practices - Drainage-2024-08.docx
Attachments:	- Bufferstrip_Brochure_2024_Final (002).pdf
Final Approval Date:	Sep 9, 2024

This report and all of its attachments were approved and signed as outlined below:

**No Signature - Task assigned to Kevin Girard, Director, Infrastructure Services was completed by workflow administrator Joseph Malandrucolo, Director, Legal and Legislative Services/Clerk**

**Kevin Girard, Director, Infrastructure Services - Sep 9, 2024 - 2:37 PM**

A handwritten signature in black ink, appearing to read "Doug Sweet". The signature is stylized with a large "D" and a long horizontal stroke extending to the right.

**Doug Sweet, Chief Administrative Officer - Sep 9, 2024 - 3:20 PM**