

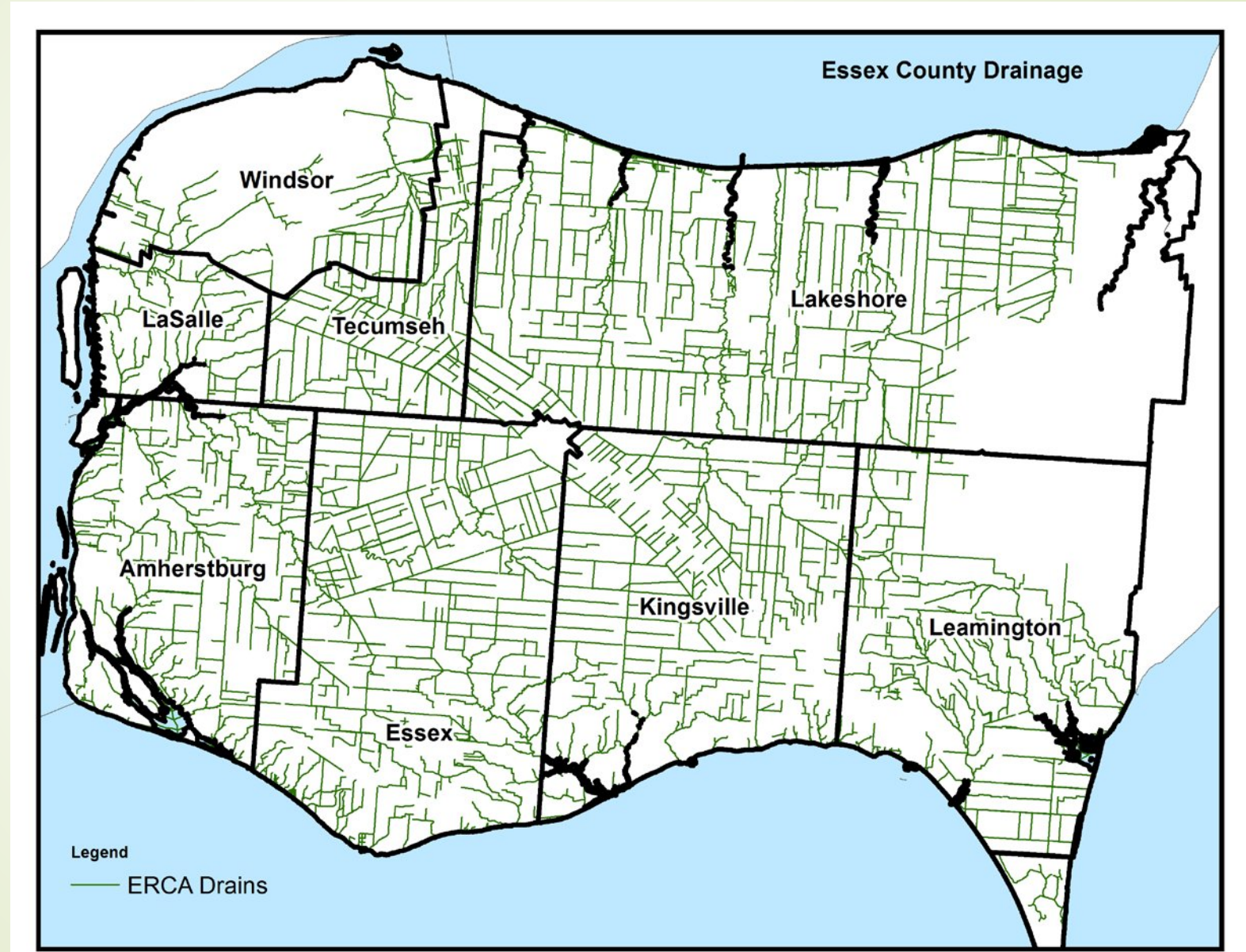
Phragmites & Riparian Buffers




2016

Lu-Ann Marentette
Drainage Superintendent
Municipality of Leamington

ESSEX COUNTY - map



8 Municipalities



Leamington Council over the past few years was asking me, the Drainage Superintendent...How can we get rid of this stuff? ...stuff being Phragmite. At the time, I didn't have a good handle on it or how to combat it. Then there was Janice. Janice was kind enough to come down to Leamington and give a presentation to all stakeholders, landowners, Council members, Drainage Superintendents, etc. of Essex County...kinda like today.

I was given approval within the 2016 budget to start a phragmite program. I began speaking with other superintendents asking them what they do and came to the quick realization that no one was doing the same thing. I then was speaking with Kevin Money, Director of Conservation Services, about a wetland restoration project I am working on and the Phragmite Control discussion came up again.

Out went an email to the Essex County Drainage Superintendents:

"We are all aware of the frustrations and difficulties surrounding phragmite. Can we get together to put our experiences together and come up with some solutions."

We had our first meeting and our local CA is hoping to gain access to funding to help support our efforts.

Judson Morse Drain



2007



Nov 2011 – Full Cleanout



In Aug of 2011 we received a request to clean the Judson Morse Drain. The landowner stated that if we just cut down the weeds maybe the drain wouldn't back up and flood his greenhouses.

In November of 2011 we hired a contractor to brush the phragmites and bring the drain back to theoretical drain bottom. Not a lot of material came out it was more just reshaping caused by the sandy soils.

The grade on this drain is 0.44% to 1.46%

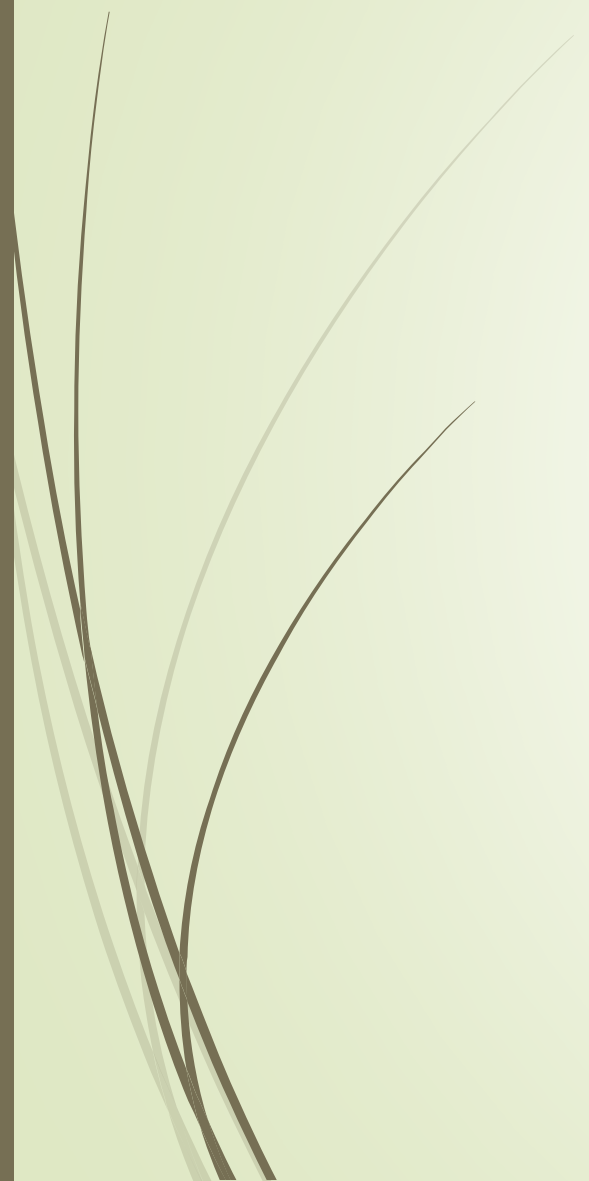
May 2014



May 2014



Storm Water Pond for Greenhouse Development abutting Drain





RIPARIAN BUFFERS

Buffer strips have become an important role to the management of our watercourses and municipal drains. The use of buffer strips on our lands has many benefits:

- they help to control soil and water quality
- they help to reduce sedimentation
- they reduce the frequency of drain cleanouts

They are composed of a permanent vegetative cover which can include trees, shrubs, and grasses.

The buffer strip also delineates between the drain and the farmlands thereby preventing farm equipment damage to the drain banks and creating erosion issues.

As buffer strips become implemented into a Municipal Drain by an Engineer's Report the need to handle the situation in a prompt and fair manner will be required.

1. Compensation due to Loss of Land:

The Drainage Engineer will be responsible for calculating the compensation for loss of land pursuant to Section 30 of the Drainage Act.

2. Width of Buffer Strips:

The standard width for a buffer strip for all drainage reports shall be 3m (10'). This would be required on both sides of the open municipal drains throughout the course of the drain.

3. Activities Within the Buffer Strip:

The area within the limits of the buffer strip:

- * Shall not be tilled
 - * Shall not be sprayed with any herbicide product without consulting the Municipal Drainage Superintendent
 - * Shall comply with the Nutrient Management Act in respect to applying fertilizers.
- *Shall not have drainage furrows cut through the buffer

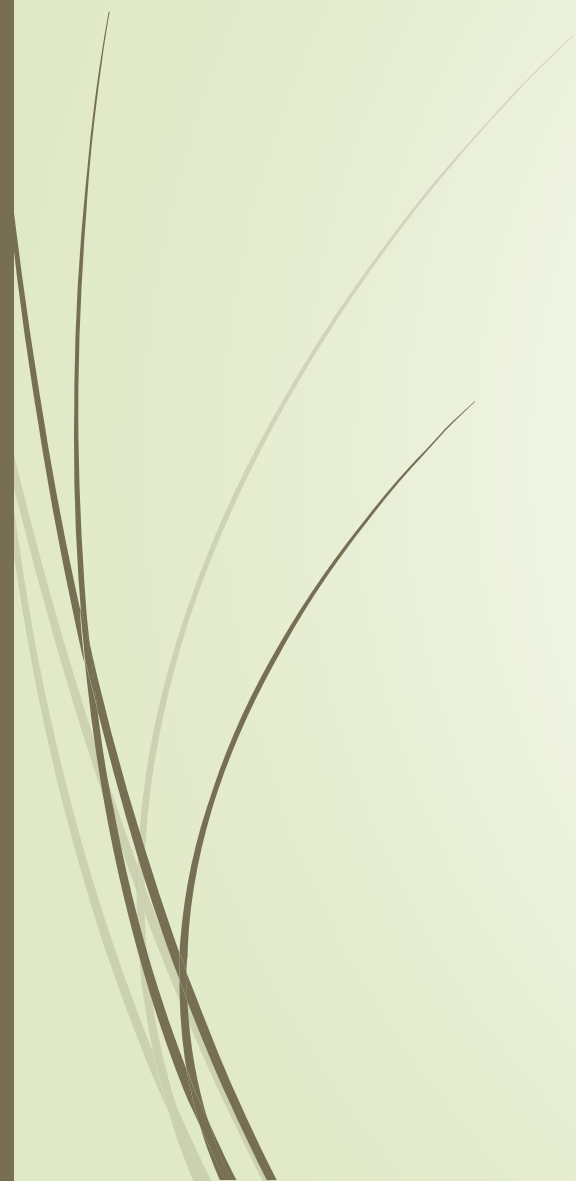
4. Landowner Damaging a Buffer Strip Contained within An Engineer's Report:

Notify the landowner in writing (in accordance with Section 80 of the Drainage Act)

- a) Of the damage which has been caused, the extent of the repairs and the length of time in which the landowner has to repair the damage.
- b) And that if the landowner does not comply within the written order of the municipality, the municipality will make the necessary repairs and the costs incurred will be charged to the landowner (Section 80(1)).
- c) And if the owner of the land does not pay the cost of the repairs to the municipality, the municipality will pay the costs and subsequently place their costs on the collector's roll for this property and collect them as taxes accordingly (Section 80(2)).

5. Maintenance of Buffer Strips Contained within an Engineer's Report:

That "normal" maintenance of buffer strips will be completed by the Drainage Superintendent as described in the Engineer's Report. However, should the land owner desire a manicured lawn buffer strip or specific landscaped quality, the landowner will be responsible for maintaining the buffer strip at their time and expense.











Outlet for A & B Concession Road Drain

5) Maintenance of buffer strips contained within an Engineer's Report

Landowners will be responsible for the maintenance of buffer strips located on their properties.

It has been required by E.R.C.A. and D.F.O. that grassed buffer strips be installed along the length of the farmland which flows on the north side of the A & B Concession Road Drain.

The grassed buffer strips will be a total of 2042.40 m long by 3.0 m wide measured perpendicular from the top of the drain bank.

It has been determined that the average value of farmlands in this area is \$13,000.00/ha, which has been used to determine the compensation for lands taken in order to construct the grassed buffer strips.

COMPENSATION TO PROPERTY OWNERS FOR LANDS TAKEN TO CONSTRUCT GRASSED BUFFER STRIPS

The amount of compensation for lands taken has been included in our estimated cost.


Owner's Name	Roll No.	Area (ha)	Compensation
Walter & Catherine Balsam	480-01900	0.0888	\$ 1,154.00
Martin Rahn	480-01800	0.0891	\$ 1,158.00
Rempel Farms (Wheatley) Ltd.	480-01601	0.0879	\$ 1,143.00
Roy Campbell & Myrna Hicks	480-01600	0.0429	\$ 558.00
Robert Pews	480-01500	0.0453	\$ 589.00
Denis & Georgia Campeau	480-01400	0.0471	\$ 612.00
Murray Settingington	480-01300	0.0399	\$ 519.00
Ron & Barbara Wiper	480-01200	0.0457	\$ 594.00
Rita Grubb	480-00800	0.0207	\$ 270.00
Martin Tiessen	480-00900	0.0918	\$ 1,193.00
Anna Isley	490-02250	0.0617	\$ 802.00
Jema International Foods Products Inc.	490-02300	0.0135	\$ 175.50
	TOTAL		\$8,767.50

14) 6250 Square metres of grassed buffer strips to be constructed along the north side of the drain. The buffer strips should be 3.0 m wide measured perpendicular to the drain. The buffer strips should be constructed on native ground, which has been loosened, planted by broadcasting grass seed then rolled.

Complete at \$ 0.72 per square metre.

\$ 4,500.00

The E.R.C.A. will provide a grant in the amount of 50% of the construction cost of the buffer strip which in this project would be estimated to be \$2250.00. The grant does not include any land costs or incidental costs that might be incurred above the construction cost.



Maintaining and Enforcement of Riparian Buffers Pros and Cons from a Superintendent's Perspective

Pros

- Landowners buy in
- Landowner maintains it – alerts as to problems with drain
- Less maintenance

Cons

- Tenant Farmers
- Furrows
- Recreate buffer once its been damaged – access, timing, etc.



Questions
are
guaranteed in
life;
Answers
aren't.