

KBCA

**Title:** KBCA review of Hydro One 2018 plans

Document ID: **DocID001**

Version: **1.0**

Last Saved: **2017-11-02 20:28:00**

Document Status: **Draft**

Author: **Neil Thomson**

Product/Release

### Detailed History of Changes

Ver.	Date	Who	Detailed description of Changes
1.0	02Nov 2017	NJT	Created

## Table of Contents

1.	INTRODUCTION .....	1
2.	BACKGROUND AND INTRODUCTION.....	1
3.	MAJOR CHANGES .....	1
4.	UNDERSTANDING THE HYDRO ONE CORRIDOR .....	2
5.	HOW TO TRIM .....	4
5.1	The Wrong Strategy.....	4
5.2	The Right Strategy.....	5
6.	TRANSITIONING TO SUSTAINABLE VEGETATION .....	6
7.	CHANGES TO HOME OWNER/HYDRO ONE RELATIONSHIP .....	6

## 1. INTRODUCTION

This outlines the KBCA's understanding of the Hydro One proposal for "Vegetation Management" for 2018.

The goal of this document is to explain the proposal in simple terms, with diagrams so that anyone affected will understand the proposal.

If this document is not clear, any feedback would be appreciated to [info@kanatabeaverbrook.ca](mailto:info@kanatabeaverbrook.ca)

## 2. BACKGROUND AND INTRODUCTION

- Spring 2017
  - ◊ Counsellor learns of Vegetation Management for the Hydro One corridor in Morgan's Grant/South March for July 2017
  - ◊ With work to follow in Beaverbrook
- Major concerns expressed by Beaverbrook community on Hydro One plans
- Marianne Wilkinson and Community Members reached out to Hydro One
  - ◊ We want a community meeting with Hydro One
  - ◊ We want to understand Hydro One's plans now and in future
- The KBCA - with directly affected community members - met several times with Hydro One. The goals from the KBCA perspective was to
  - ◊ Understand Hydro One's Vegetation Management processes, safety requirements and plans – as they apply to Beaverbrook
  - ◊ Present to Hydro One issues the Community wants to see addressed for 2018 and beyond
  - ◊ We "walked" the "West" corridor to understand the specifics of Beaverbrook and Hydro One's proposed approach
  - ◊ Hydro One has responded with a "Vegetation Management Approach"

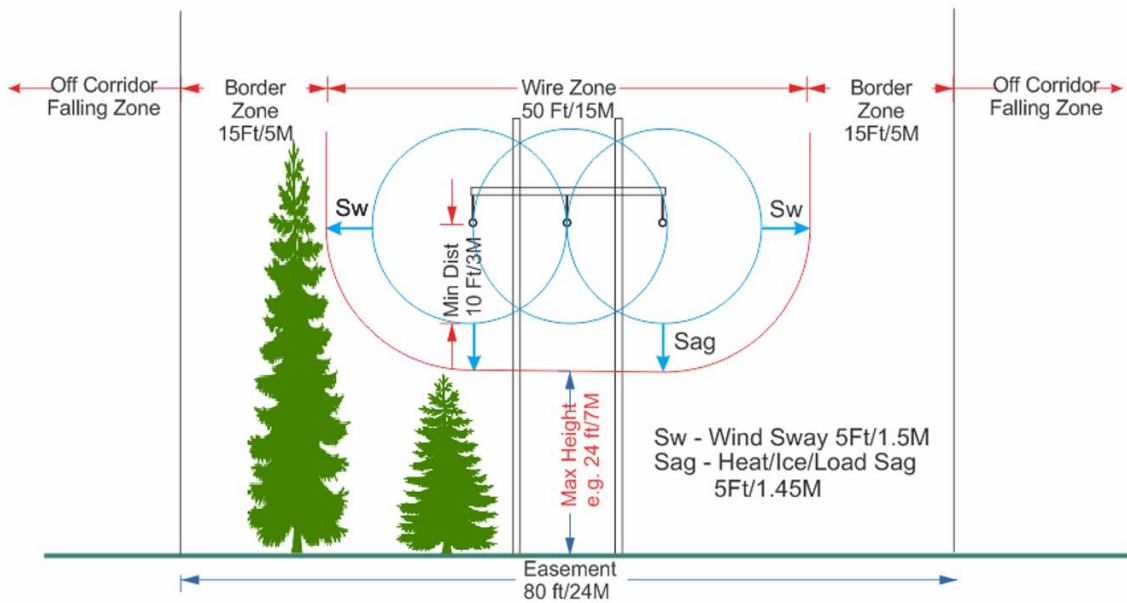
## 3. MAJOR CHANGES

- Schedules – Hydro One will publish their Vegetation Maintenance schedules to the public
- Hydro one will publish lists of Incompatible, Compatible and Maintainable vegetation
- Beaverbrook Veg Maintenance schedule to go to 3 year cycle (2018 to 2021 to 2024) and then to return to 6 year cycles (2024-2030)
- Allowance for Homeowners to transplant moveable "incompatible vegetation" until June 1, 2018
- Homeowners have the option of maintaining vegetation as long as it never exceeds the Max Height for their property
- Hydro One will publish a guide to understanding how Hydro One treats vegetation within different "zones" within the Hydro One Easement for Beaverbrook
- Treat vegetation differently in the "wire zone" vs. the "boundary zone"
- Changes to how Home Owners are consulted on what maintenance is required on their Property

- Definition of different Vegetation Types
  - ◇ Incompatible – trees, hedges, etc. which have a fast growth rate AND a maximum height that will reach past the red line in the Wire Zone. These also tend to be trees and hedges that either do not look cosmetically pleasing or (in many cases) will not survive aggressive trimming to avoid exceeding vertical and horizontal requirements.
  - ◇ Maintainable – trees/hedges that would otherwise be incompatible (e.g. cedar hedges), but can be trimmed by the home owner to be cosmetically acceptable and will withstand aggressive and frequent trimming
  - ◇ Compatible – trees/hedges that either will not grow to a height that exceeds the max height for the home owner’s property

## 4. UNDERSTANDING THE HYDRO ONE CORRIDOR

### Vegetation Height and Width



For the 115KV line that runs through the West side of Beaverbrook, there are 4 “zones” to consider:

- The “Easement” is a region 40 feet each side of the center of the Hydro lines for a total of 80 feet. An Easement is the right to access/action by a 3<sup>rd</sup> party (Hydro One) to your property for a specific purpose – in this case – tree and other vegetation management on your property within the “Easement”.

A formal copy of the easement agreement to your property is available from the City of Ottawa “Land Registry” office.

- The “Wire Zone” is that area under the wires, which are
  - ◇ 10 feet radius around the wire
  - ◇ + 5 feet (or so) vertically for additional “sag” due to electrical load, heat and/or ice load
  - ◇ + 5 feet (or so) horizontal for wind “sway”

For the 115KV line, the Wire Zone is approx. 50 feet wide

This is an **absolute exclusion zone** that vegetation cannot intrude on either from a height perspective below the wire zone or beside the wire in the “Border Zone”

The maximum height for vegetation on any specific property will vary according to the location between the Hydro “towers” and the elevation of that property.

In the example above, the maximum height for a specific property was 24 ft.

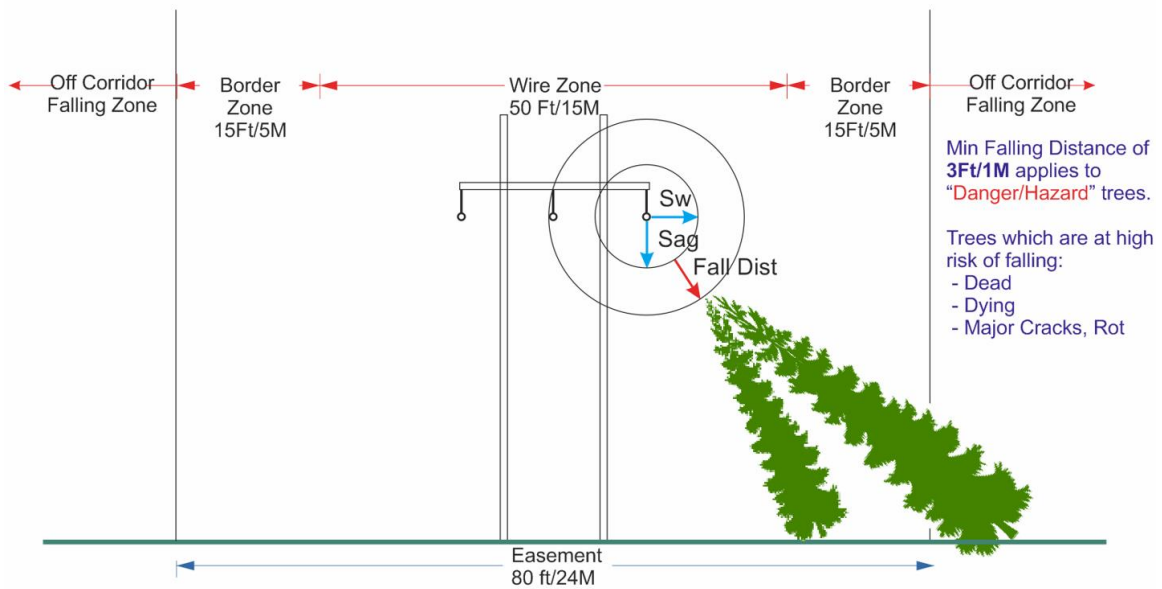
What **MUST** be understood is that the red line that defines **the wire zone has an extremely high danger of electrocution.**

Any tree or hedge that is beyond the red line is effectively a conductor at 115,000 volts, so even touching or working on the tree – even from ground level – presents an extreme risk of electrocution.

- The “Border Zone” is the remaining width within the Easement outside the Wire Zone. This is approx. 15 feet wide. In this zone, vegetation can be any height with the following exceptions:
  - ◊ If branches extend into the Wire Zone horizontally, they have to be trimmed/removed
  - ◊ If the tree is a “danger” tree (one with a major risk of falling – due to being dead, dying, major structural rot or flaws), then it must be removed.
- The “Off Corridor” or “Falling Zone”
 

In this zone, “danger trees” outside of the corridor, that could still come within the minimum falling distance will also be removed.

### Falling Vegetation



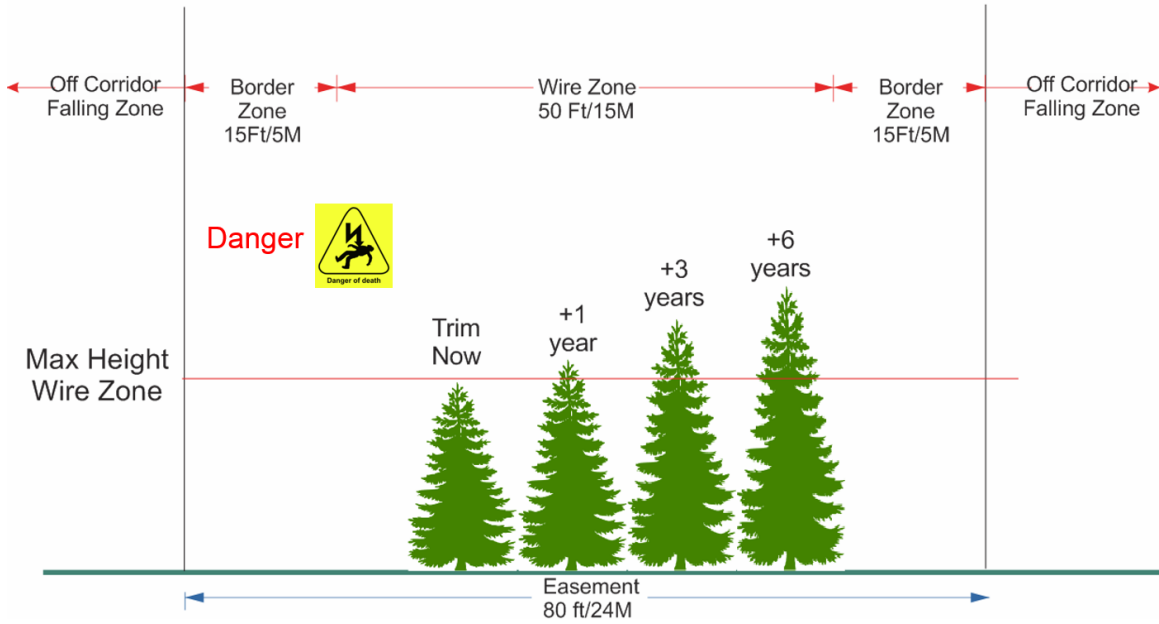
## 5. HOW TO TRIM

Vegetation must be maintained in such a way that at no time will the vegetation enter the "Wire Zone"

### 5.1 The Wrong Strategy

So trimming to the "Wire Zone" red line and then letting it grow beyond that in the next 1 to 6 years is not acceptable:

Vegetation : Trimming to meet Standards



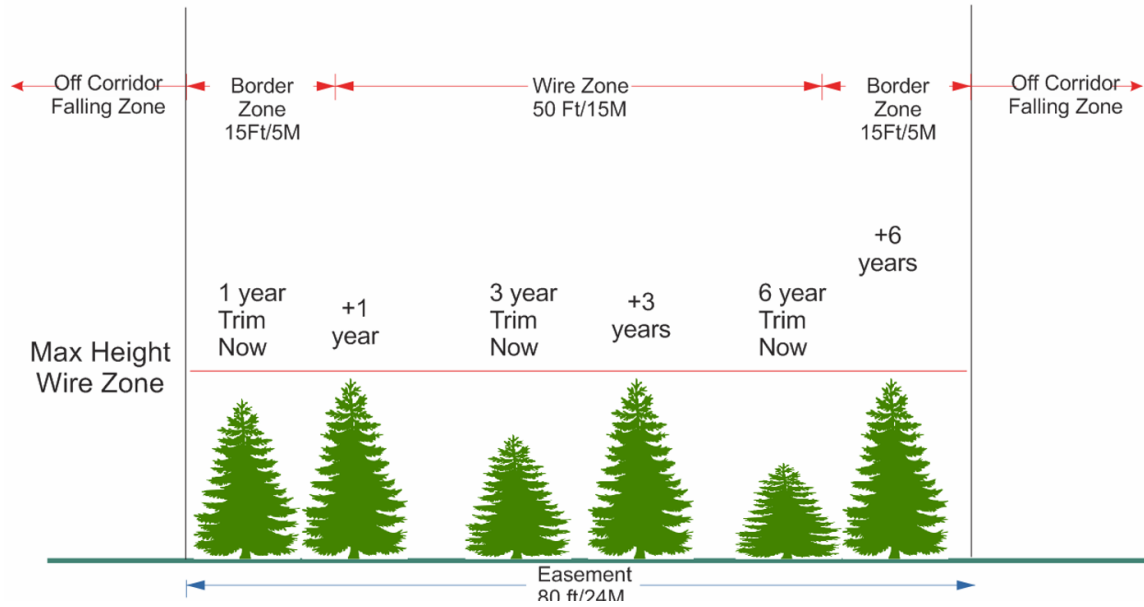
## 5.2 The Right Strategy

The right strategy is to trim such that at no time will the vegetation exceed the red line.

For example, if a tree/hedge species grows an average of 12" per year, then the trimming schedule needs to be as follows

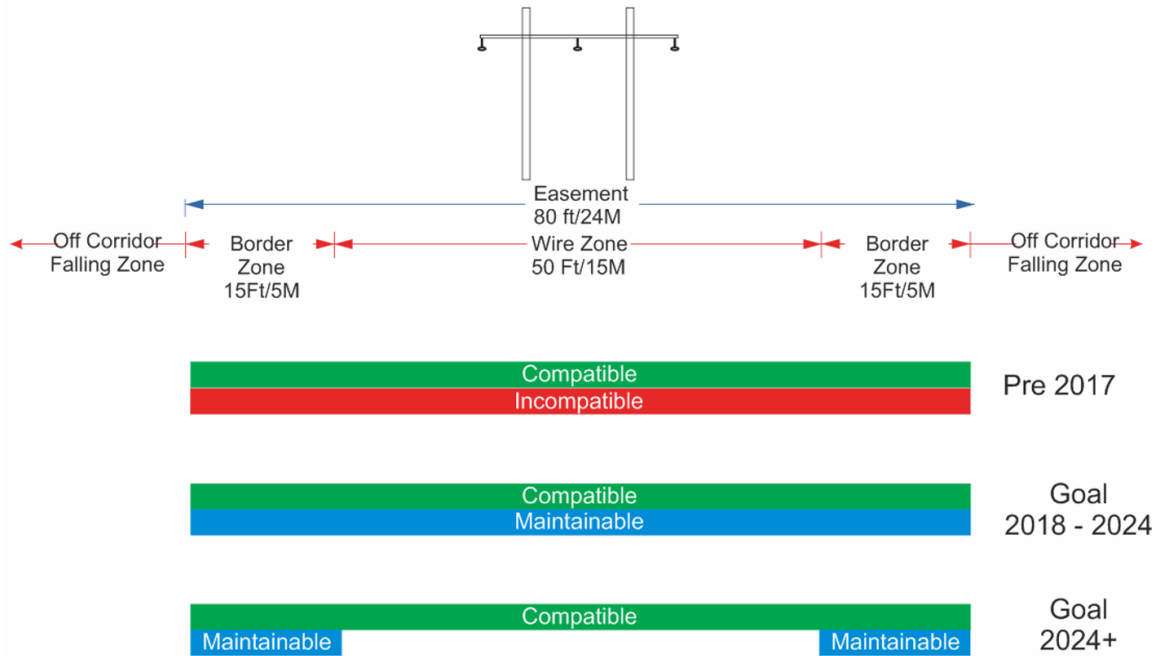
- Trim every 12 months – 1 foot
- Trim every 3 years – 3 feet
- Trim every 6 years – feet

### Vegetation : Trimming to meet Standards



## 6. TRANSITIONING TO SUSTAINABLE VEGETATION

Hydro One is looking to work the Beaverbrook residents to migrate from the current vegetation mix to a long term sustainable vegetation mix over the next 6 to 12 years:

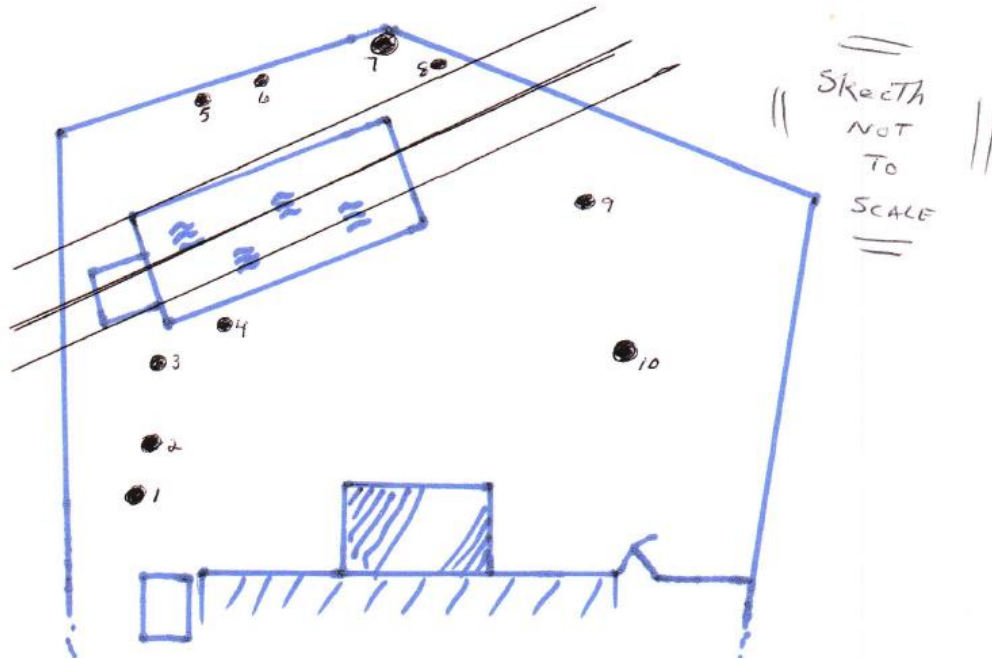


## 7. CHANGES TO HOME OWNER/HYDRO ONE RELATIONSHIP

- Consultation – will happen months in advance, with the option of even earlier for “Snow Birds”
- Consultation Report
  - ◊ When Hydro One crews meet with you to assess your property for maintenance, they will provide a Consultation Report. This will detail
    - ◆ The max height for vegetation in your yard
    - ◆ Provide a drawing identifying any vegetation that needs trimming/removal
    - ◆ Provide a written list of which trees, hedges, etc. will be trimmed or removed
    - ◆ Which trees/hedges you agree to maintain

The following is a hand draft of what a Consultation Report would look like. This will be updated with a specific proposal from Hydro One in the near future:

Address:     x (Sample)    



#	Vegetation	Zone	Action
1	SPRUCE ≈ 60 FT	Boundary	nil
2	Flaming Bush	Border	"
3	Crab Apple	wire	MAINTAIN @ x ft
4	Japanese Lilac	wire	" " "
5	MOUNTAIN Ash	Border	
6	" "	"	
7	CHINESE Elm - 60 FT	Border	
8	Spruce - 16 FT	wire	??
9	Spruce - 30 FT	Boundary	
10	Silo-a-Maple - 80 FT	"	TRIM wire side

Signed:  
 Hydro \_\_\_\_\_ Homeowner \_\_\_\_\_