



Annual Vegetation Management Program Frequently Asked Questions (FAQs)

Where can I get more information about CN's Vegetation Management Program?

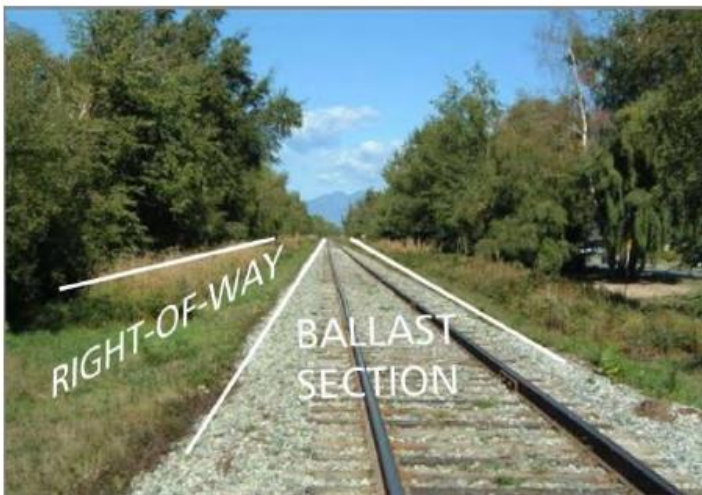
For more details please visit our website at www.cn.ca/vegetation

Why does CN need to remove vegetation along its train tracks annually?

At CN, safety is a core value. Part of maintaining and operating a safe railway is ensuring vegetation is managed along our corridors. CN also has an obligation, pursuant to the *Rules Respecting Track Safety*, adopted under the *Railway Safety Act*, to ensure that vegetation on or immediately adjacent to the railway roadbed is controlled. More specifically, the Rules require federal railways to ensure the track is free of vegetation that could create fire hazards, affect the track integrity or obstruct visibility of operations and inspections. Separate regulations also require removal of vegetation to ensure every grade crossing meets sightline requirements.

Where does CN remove vegetation?

For the purposes of vegetation control, CN divides its rail lines into two components: the ballast section and the right-of-way. The ballast section (graveled area) covers a 16 to 24ft width (4.9 to 7.3m). The right-of-way section covers a 42ft width (13m) on each side of the ballast section.





Vegetation in the right-of-way section needs to be controlled to protect sight lines for train crews to see signal systems and at road crossings, prevent trees from fouling the track during storms, reduce fuel loading to prevent fires, minimize wildlife mortality, ensure good drainage along ditches and culverts, amongst other safety requirements and is primarily controlled mechanically, by mowing and cutting of vegetation. Certain herbicide products are used (excluding glyphosate) to encourage grass rather than shrubs and trees.

The ballast section, on the other hand, is the most critical area as it supports the track infrastructure that supports the movement of freight and passengers and provides an area for train crew to safely inspect their train. Given the crucial role it plays in ensuring the safety and integrity of rail operations, this section must be clear of all vegetation. The only proven way to effectively completely remove vegetation in the ballast section is through chemical application.



How will you manage dry plants that remain once the spraying is completed?

Ensuring vegetation is controlled on an annual basis is the best method to reduce larger volumes of dead and dry plants. This is because it eradicates vegetation before it grows, reducing the amount of dead plant material. CN's program has been developed specifically with this in mind. Most vegetation, once dead, will naturally decay leaving little debris. As for the right-of-way, the herbicides used are selective and the grass cover will remain intact while shrubs or noxious weeds will be controlled.



What herbicides will CN be using?

The choice of chemicals used depends on the specific plants targeted. All pesticides used in Canada are approved for use in Canada and the province in which they are applied. The chemicals for 2022 may include:

Pesticide Product Brand Name	Active Ingredients	PCP Registration Number
VP480 (Dow) Esplanade (Bayer) Detail (BASF) Arsenal Powerline (BASF) Navius (Bayer) Gateway (Corteva) Hasten NT (Norac) VisionMax (Bayer)	Glyphosate (480g/L) Indaziflam (200 g/L) Saflufenacil (29.74%) imazapyr isopropylamine (26.7%) Metsulfuron-methyl (12.6%) Aminocyclopyrachlor (39.5%) Paraffinic Oil (586 g/L) Alkoxylated alcohol non-ionic surfactants (242 g/L) Methyl and ethyl oleate (esterified vegetable oil) 75.20% Glyphosate (540 grams acid equivalent per litre)	 28840 31333 32773 30203 30922 31470 31760 27736

Will you be using Glyphosate. If so, is it dangerous for us or my pets?

All pesticides CN uses in Canada are registered by Health Canada's Pest Management Regulatory Agency (PMRA) and have been approved for use in the province in which they are applied. Protection of human health and the environment is Health Canada's primary objective in the regulation of pesticides and all pesticides must undergo rigorous science-based assessments before being approved for sale in Canada. The PMRA also re-evaluates registered pesticides on a cyclical basis to ensure they continue to meet modern health and environmental standards. The PMRA re-evaluated glyphosate in 2017 and reconfirmed that products containing glyphosate do not present risks to human health or the environment when used in accordance with revised label directions. CN's vegetation control contractor uses glyphosate in accordance with label directions.



Has CN tried any non-chemical weed control options in the past, such as weed whacking? Have they worked?

CN has used weed cutting in the past to control vegetation, but this does not remove the roots, and actually encourages more growth. It is not an effective long-term solution for vegetation removal along railway tracks. The application of steam injection has also been investigated; however it has proven ineffective in killing the roots, which, if left to continue growing, could compromise the integrity of the rail bed, causing unsafe operating conditions.

CN has also explored other options, such as high concentrate vinegar (acetic acid), however this was deemed not to be a viable option as the acid reacts negatively with steel and the sensitive electronic monitoring equipment used to regulate safe movement and operation of our trains.

I am an organic farmer adjacent to your tracks, should I be worried?

Most of the vegetation control focuses on the ballast section (graveled area) which is 16 – 24 feet (4.9 to 7.3 meters) wide, leaving about 42 feet (13 meters) of right-of-way on each side of the ballast. The equipment used for application is a shrouded boom which focuses the spray downward to reduce potential drift. Application must also be done during appropriate weather conditions, including low wind levels.

Many properties back onto the railway. Are Detail, Overdrive, Esplanade, VP480, VisionMax, Arsenal Powerline, Navius, and Gateway safe to use in close proximity to people and pets?

All pesticides used in Canada must be registered by Health Canada's Pest Management Regulatory Agency (PMRA), which has one of the toughest regulatory requirements in the world for approving products for safe use. CN only uses pesticides that have been approved for use in Canada and the province in which they are applied. When used according to label directions, PMRA has evaluated them to be safe.

Can I request my area not be sprayed?

At CN, safety is a core value. CN is governed by the Railway Safety Act and must comply with the laws and regulations. Vegetation control is a key component of keeping our employees and the communities in which we operate safe. Ensuring vegetation is kept clear of our infrastructure, signals, road crossing sight lines and enabling our teams to



inspect and maintain the track is critically important. As a result, all areas of the CN ballast section will be treated to control vegetation.