Frequently Asked Questions

What is Knotweed and how does it spread?

Knotweed is a very aggressive invasive plant with a large, deep root system. In Hatzic Valley it has taken over drainage ditches, canals, sloughs, creeks, streams, and other areas. Knotweed has no natural predators in this region and can spread rapidly. Although it can spread by seed, it most commonly spreads through small plant pieces. Even tiny fragments can grow into new plants, allowing knotweed to spread quickly and crowd out other vegetation. Along waterways, broken pieces can float downstream and start new infestations.

In early spring, knotweed sprouts from its roots, and the new shoots look like red asparagus. It can grow extremely fast, up to 10 centimetres per day, and can reach about two metres tall in summer. After flowering in July or August, the plant begins to turn yellow as it prepares to go dormant. When frost arrives, the stems die back and dry out, but they remain standing through the winter. The plant then starts this growth cycle again the following spring.

→BC Government Knotweed information

What is a Pesticide Use Permit and why is it needed in Hatzic Valley?

The use of herbicides and pesticides in British Columbia is regulated under the **Integrated Pest Management Act**. Most pesticide use on private land does not require a permit, but applicators must still meet licensing and certification requirements. Chemicals are not allowed to be sprayed within one metre of a waterbody, the pesticide-free zone (PFZ) without special approvals.

Knotweed commonly grows along waterbody edges, riparian areas, and around waterbodies. To treat and eradicate this invasive species, a pesticide use permit (PUP) allows for special approvals to treat problematic species in sensitive areas. The permit will allow for the treatments at the proposed sites for a period of three years.

The Hatzic Valley has some historical knotweed disposal but has been mostly limited to roadside treatments. In addition, Electoral Area F is not part of the Fraser Valley Regional

District Weed control program, Knot On My Property | Fraser Valley Invasive Species Society.

Where are the problematic treatment sites?

Under the Pesticide Use Permit (PUP) there are 64 sites to be treated in the Hatzic Valley. These site locations have knotweed plants growing in drainage culverts/ditches, along rivers and sloughs, and adjacent to creeks/streams where they have potential to cause lasting negative impacts.

When will treatment occur?

The best time to control the knotweed is while the plants are actively growing which allows herbicide to move through the plant into the roots. Treatments are anticipated to start **August 1, 2026** and continue periodically until **August 1, 2029**.

There will be one or two treatments in late summer 2026, and subsequent treatments will be repeated at 6 to 8 week intervals as needed until the plants go dormant (October-November) following years the treatments will likely follow these windows: late May-June, August-September, and October-November.

Treatment timing will be adjusted to ensure that work is being done outside of the salmon spawning window and will consider when water levels are at their lowest during the dry part of the summer. All treated sites will be re-visited after treatment to monitor and assess the efficacy of initial treatments, and re-treated if necessary or possible.

How will Knotweed be managed in the Hatzic Valley?

To control knotweed, there are three methods of herbicide application that could be used: Stem injection, Foliar spray, and Wipe-on.

Selective herbicides are the best option and will use the following active ingredients as identified in the 2019 Herbicide Guidelines for Control of Knotweed Species on Crown Land:

1. Imazapy and a surfactant blend or,
2. Glyphosate

The herbicide glyphosate may be used as it is the only herbicide which is able to be applied via the stem injection method. This is a necessary application method as depositing the herbicide directly into the knotweed stems can eliminate the risk of pesticide drift away from the plant. Studies have also shown that glyphosate is non-persistent in soil and water, which means it does not stay active when it meets soil and water. Instead, it is degraded by

microbial organisms (bacteria and fungi). This prevents leaching and uptake from other plants that did not have the herbicide applied onto it.

The herbicide application method chosen will be based on the site, and will depend on site conditions, such as proximity to walking foot-traffic, water, other infrastructure.

Foliar Spray:

- Herbicide is carefully applied onto the knotweed leaves using low flow backpack or hand-held sprayers and spray wands.
- Tarps will be used as herbicide drift shielding precaution to eliminate contact with either non-target vegetation or adjacent water.

Stem Injection:

- Herbicide is deposited directly into the hollow knotweed stems using hand-held injection devices. All stems of the plants will be injected, which requires the stems to be at least 0.5 inches for application to occur.
- Risk of pesticide drift should be eliminated due to depositing herbicide directly within the plant.

Wipe-On:

- Herbicide is wiped-on the leaves using wick applicators, which consist of an absorbent pad or brush device.
- Risk of pesticide drift should be eliminated due to depositing herbicide directly onto the plant.

Why does it have to be treated by herbicide?

Alternatives to treating knotweed with herbicide include taking no action, using a biological control or using a mechanical control. Currently there are no known biological controls. In comparison, mechanical controls for knotweed have been extensively studied. Although some studies have shown success with mechanical control, we believe the risks of prolonged treatment and fragmentation spread, outweigh the known success. With chemical controls, results are typically more than 80% dieback through initial herbicide treatments, and 100% eradication through subsequent treatments.