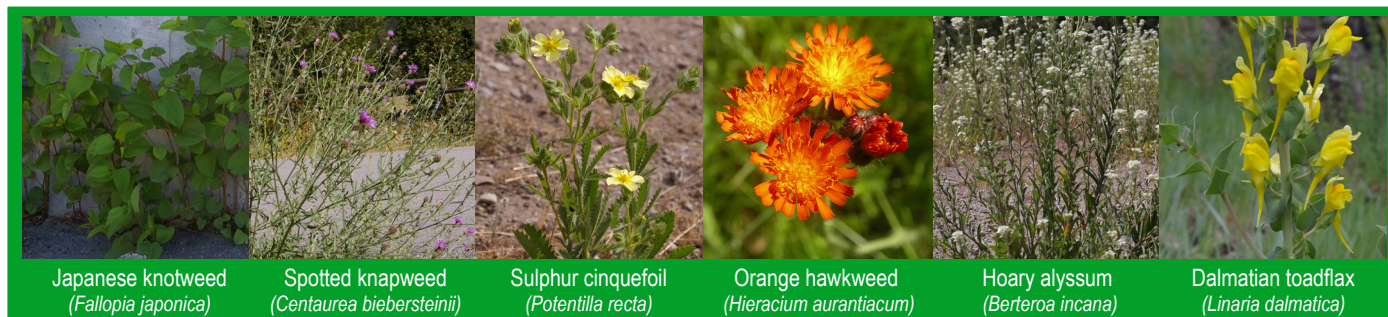


BEST PRACTICES FOR MANAGING INVASIVE PLANTS DURING DEVELOPMENT



WHAT ARE INVASIVE PLANTS? Invasive plants are non-native plants that have been introduced to British Columbia from other countries without the insect predators and plant pathogens that would otherwise keep them in check in their native habitats. The BC Weed Control Act and Regulations have classified some of the most harmful invasive plants as “noxious weeds”. Many of these plants can displace native species and disrupt natural ecological processes and impact agricultural production. Landowners are legally responsible to control invasive plants designated “noxious weeds”.

BEST PRACTICES aimed at preventing invasive plant establishment and spread will prevent future invasive plant problems in a new development. Many of these prevention practices can be employed within land development activities. These practices are always applicable, regardless of the operation, and are not limited to specific operations and activities listed here.



PLANNING

1. **Minimize unnecessary soil disturbance** during design phase. Where possible use existing disturbed areas for roads and building sites.
2. **Survey** property(s) and record the locations of invasive plants prior to any land clearing, filling or other development. Determine priority invasive plant species nearby by contacting the Boundary Invasive Plant Program Coordinator or going onto the online mapping Invasive Alien Plant Program which contains maps with current location information. <http://www.for.gov.bc.ca/hra/Plants/application.htm>
3. **Seek information on effective treatment options and treat infestations** of invasive plants prior to disturbance (pre-treatment). Monitor treatment sites for several years and re-treat as necessary to ensure spread does not continue.

DURING DEVELOPMENT

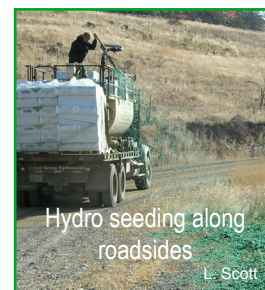
1. **Train** staff and contractors to identify and minimize spread of invasive plant species.
2. **Control** invasive species such as hoary alyssum, knotweeds, thistles and other species on the site, but be careful not to damage the native vegetation. Consult with a local expert for recommendations on effective control methods.
3. **Control** flowering of invasive plants around development sites to avoid infestations. Cutting flowering heads from thistles and other invasive plants prior to seed set can significantly reduce their establishment on development sites.
4. **Ensure all ground disturbing equipment is cleaned** prior to moving onto the site.
5. **Keep equipment out of areas infested** by invasive plants and keep parking and storage areas free of invasive plants. **Regularly inspect the undercarriages of vehicles and equipment** and remove any plant material found. Dispose of plant material at the site of the infestation (if no flowers are present), or bag the plant material and dispose of it (locally) in the garbage (if flowers are present).
6. **Where surface soils contaminated with invasive plants** are excavated, this material should not be re-used in topical applications prior to appropriate treatment with herbicide and/or a suitable quarantine period. Where treatment is not practical, this material should be properly disposed of.
7. **When excavating remove the topsoil** and set aside to use when reclaiming disturbed areas to be revegetated. Without topsoil re-vegetation will be difficult.
8. **Ensure all soil, fill and materials** brought onto the project is ‘**Weed Free**’. Inspect gravel pits and material sources for invasive plants. Inspect supplier storage yards and ensure suppliers prevent invasive plant seeds from hitching a ride on materials like fence posts and pipe.



BEST PRACTICES FOR MANAGING INVASIVE PLANTS DURING DEVELOPMENT

SEEDING

1. **Re-vegetate** disturbed areas as soon after disturbance as possible using an appropriate combination of scarification, seeding, fertilizing and/or mulching. Ensure that seed or stock used to re-vegetate will meet site objectives.
2. Where appropriate, **select seed mixtures** that are comprised of native species, appropriate non-invasive agroeconomic species, or a combination of both. Use **Canada Common No.1 Forage Mixture or better quality** (grade) with respect to weed seed tolerances.
3. **Ask** the seed supplier for a copy of the seed lot's Seed Analysis Certificate to learn of any invasive plant species that are present in, or adjacent to, the seed lot. If possible, select seed mixtures produced in the same region of the province as where they will be used.
4. **Prepare the site for seeding.** For example, apply a starter fertilizer, if necessary and appropriate. Hydroseeding with mulch can be a very effective way to revegetate roadsides in hot dry areas. Coordinate seeding with favourable conditions (e.g. spring or early fall). Apply at the recommended seeding rate. For more information on seeding go to www.bcinvasives.ca/resources/outreach-materials/activities-tips



AFTER DEVELOPMENT

Provide the landowners with information on invasive plants and encourage them to manage invasive plants on their new property.

For developments where the developer will continue to maintain the roads and some infrastructure it is important to **include invasive plant management in the property management plan**. Some *Prevention Practices* include:

1. Establish an **annual invasive plant management program** for roads and common areas.
2. Establish an annual mowing/brushing schedule **timing the mowing prior to seed set** and, whenever possible, schedule the route so that activities start in un-infested areas and move toward infested areas so seed is not spread to new areas.
3. Avoid mowing grasses and vegetation lower than 15cm above ground level – this is particularly important for steep slopes where erosion potential is high.
4. **Wash equipment regularly** to ensure you don't spread seed to new locations.
5. When **cleaning ditches and culverts** retain desirable native vegetation ground cover when possible and encourage its spread. Do not dump ditch waste above or below the ditch where desirable vegetation is established. Instead, dispose of waste materials at a designated disposal site so it can be monitored for new invasive plant growth. Record the source location of the disposed material so it can be monitored for new invasive plant growth.
6. **Grade roads in directions** that does not encourage spread of invasive plants.
7. **Provide timely road shoulder grading** to avoid significant disturbance to aggregate when removing established invasives.
8. **Minimize the removal of desirable vegetation** and the exposure of bare soils.
9. **Ensure winter abrasive (sand) source/pit** is free of invasive plants.



Other resources:

Develop with Care available at

<http://www.env.gov.bc.ca/wld/documents/bmp/devwithcare/>

Targeted Invasive Plant Solutions (T.I.P.S) fact sheets on

Seed Mixtures and **Invasive Plant Species** available at

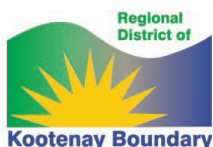
www.bcinvasives.ca/resources/outreach-materials/activities-tips

Information on management of invasive plants www.weedsbc.ca

Develop with Care to Help Keep our Ecosystems Healthy



"We acknowledge the financial assistance of the Province of British Columbia"



For further information
contact the Boundary Invasive Plant Program (250) 446-2232 or boundaryinvasives@gmail.com
Or visit:
www.boundaryinvasives.com



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