

Factors to consider in the development of measures to prevent the introduction and spread of Invasive Plants

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1. Information and locations of Invasive Plants

You can view locations of known invasive plants on the Forest Practices Branch's web site: http://www.for.gov.bc.ca/hfp/invasive/IAP_01.htm. General information on invasive plants can be viewed on the Ministry of Agriculture's web site: <http://www.weedsbc.ca>.

2. Questions No. 15 and 16 of the FRPA Administration Bulletin, number 3, dated November 07, 2005; provide guidance with respect to measures for Invasive Plants.

3. Draft "Invasive Plant Prevention Guidelines for Forest and Range Practices Act operational plans", dated October 2005.

4. The attached "Habitat Susceptibility to Invasive Plants by BEC Zone" table identifies areas that are susceptible to the introduction and spread of invasive plants by plant species and biogeoclimatic variant.

5. Introduction and Spread of Invasive Plants that are of concern locally:

Introduction into the Okanagan-Shuswap Forest District		High Priority to ensure equipment <u>from infested areas</u> is free of Invasive Plants prior to entering the Forest District.
<u>Invasive Plant</u>	<u>Some source locations for Introduction</u>	<u>Risk of Spread</u>
Yellow Star Thistle	Washington and Idaho	Any areas currently infested with Diffuse or Spotted Knapweed (BG, PP & IDF).
Marsh Plume Thistle	Mcbride, BC and 1 site within Trinity Valley	High risk to wet zones (IDF, ICH & ESSF).

Introduction within the Okanagan-Shuswap Forest District		High Priority to ensure equipment that was <u>operating directly within infested areas</u> is free of Invasive Plants prior to entering areas not infested with those plants.
<u>Invasive Plant</u>	<u>Some source locations for Introduction</u>	<u>Risk of Spread</u>
Rush Skeletonweed	Cedar Hills, Yankee Flats, Kelly Mnt, Saint Anns Road and Westside of Okanagan Lake	Coarse textured soils within areas currently infested by Diffuse Knapweed and Sulphur Cinquefoil. (BG, PP & IDF).
Tansy Ragwort	South Okanagan, Okanagan Fire and Highway 33	Wetter sites are most susceptible but will occupy any disturbance (PP, IDF, ICH & MS).
Puncturevine	Private land in the Oliver and Osoyoos areas.	Dry, coarse soils and easily moved by vehicles (BG, PP & IDF).
Scotch Broom	Kingfisher Community & FSR, Cooke Creek FSR.	High risk in the wetter zones (IDFmw & ICH)

<u>Invasive Plant</u>	<u>Some source locations for Introduction</u>	<u>Risk of Spread</u>
Field Scabious	Malakwa-Queest FSR, Salmon River FSR and Kamloops	Wetter sites including ditches and hayfields. (IDF, ICH & MS)
Scotch Thistle	Vernon, Salmon Arm, Skimikin dump, and Turtle Valley	High risk in grassland types. Generally will infest after disturbance (BG, PP & IDF)
Dalmatian Toadflax	Salmon River Road, Yankee Flats, Mable Lake Road, Celista, Sicamous and Vernon	Infests coarse textured soils within the grassland and forest openings throughout the district (BG, PP & IDF)
Leafy Spurge	Salmon River Road, Mt Ida Road, Vernon and Kamloops	Infests grasslands and forest openings and prefers coarse textured soils (BG, PP & IDF) highly invasive once introduced
Hoary Alyssum	Kingfisher FSR, and Vernon	Currently infesting road shoulders and moving into grassland areas. Very invasive in coarse soils (BG, PP, IDF & ICH)
Hound's-tongue	Area west of HWY 97, Lower North Shuswap and Vernon South	Prefers wetter sites and disturbance on medium to coarse soils (BG, PP, IDF & ICH)

6. Forest activities that may result in the introduction and spread of Invasive Plants

<u>INTRODUCTION</u>	<u>SPREAD</u>
<ul style="list-style-type: none"> ○ Moving equipment from infested areas to non-infested FD areas. ○ Moving gravel and fill from sites with invasive plants to non-infested FD areas. ○ Using grass seed contaminated with invasive plant seeds. ○ Moving vehicles, ATVs and equipment from infested areas in non-infested FD areas. ○ Moving Hound's-tongue, Burdock and other burrs to non-infested FD areas. ○ Using hay, straw or mulch contaminated with invasive plants seeds. 	<ul style="list-style-type: none"> ○ Creating soil disturbance within FD areas (road building, maintenance, and deactivation, landings, skid trails and within cut-blocks). ○ Movement of gravel and fill contaminated with invasive plants within FD area. ○ Movement of vehicles, ATVs and equipment through areas of invasive plants to non- infested areas within FD areas. ○ Movement of burrs to non-infested areas within FD areas.

7. Potential measures to prevent the Introduction and Spread of Invasive Plants:

- Invasive plants within proposed road r/w and cut-blocks will be identified during layout to finalize measures to prevent the introduction and spread of those invasive plants.
- Invasive plants that are observed and not identified within provincial data base will be reported to MOFR.
- Where practical, landing and staging areas will be located away from sites with invasive plants.
- Invasive plants within landings and staging areas will be controlled prior to initiating forestry activities to prevent the pick-up and movement of invasive plant seeds.
- Where possible, driving through patches of invasive plants will be avoided; but if necessary, the vehicle and equipment undercarriages will be checked and any invasive plant parts will be removed before leaving that patch of invasive plants. If repeated trips are required, the invasive plants within the vehicle path will be controlled to prevent the pick-up and movement of invasive plant seeds.
- Where invasive plants only (or primarily) occur on the lower portion the access road, grading operations will be completed above the infested area first. Grading operations within the infested area will be graded downhill on both sides of the road.
- Areas of soil disturbance within road r/w, landings and skid trails will be grass seeded with an appropriate seed mix, application rate and timing to ensure successful and rapid re-establishment of vegetation. Areas will be checked the following growing season, and if necessary re-seed area, to ensure successful establishment of desirable species.
- Standard of grass seed utilized on Crown land will be Common #1 or Canada No. 1.
- Workers will be advised of invasive plants within the work site and the necessary measures to prevent the introduction and spread of those plants.
- Burrs will be removed from clothing before leaving sites with invasive plants.
- Equipment and low-beds will be checked for invasive plant parts before leaving an area with invasive plants.
- Equipment and low-beds will be cleaned before moving from an infested area to a non-infested area.

