



Proposed Invasive Plant Pest Management Plan for Southern and Coastal BC 2024-2029

FREQUENTLY ASKED QUESTIONS

What is a Pest Management Plan (PMP)?

- A comprehensive plan that describes how the plan holder (BC Ministry of Forests) and additional ministries that operate under the plan (Ministry of Transportation and Infrastructure, Ministry of Environment and Climate Change Strategy, Conservation and Recreation Division) and Ministry of Water, Land and Resource Stewardship) identify and manage Invasive Plants on Provincial Public Lands.
- It is intended to outline and commit all individuals and agencies working under this PMP to an [Integrated Pest Management](#) (IPM) approach which includes:
 - Prevention of new invasive plant introductions into BC
 - Prevention of invasive plants present in BC from spreading into new areas of the province/beyond their current extent.
 - Identification of invasive plant species and threats/risks to the province.
 - Surveys, inventories, and data management.
 - Developing management strategies and establishing injury thresholds (i.e., the point at which the abundance of pests and the damage they cause or are likely to cause indicates that pest control is necessary or desirable).
 - Selecting and implementing appropriate treatment methods.
 - Monitoring and evaluation.
- A PMP must be developed in accordance with the BC *Integrated Pest Management Act* and include a description of each of the vegetation management methods to be used. The proposed Southern and Coastal BC PMP management methods include mechanical and manual control, cultural control, biological control, and the targeted application of herbicides. Aerial application of herbicide is not permitted under this PMP.
- A PMP is required if herbicide is planned to be used as one of the plant management methods on more than 50 hectares per year on Provincial Public Land.
- All herbicide active ingredients that may be used must be listed in a PMP.
- Handling, storage, transportation, and safe use of herbicides must be described.
- Measures that the Province must use to protect environmental and human health when applying herbicides must be described.
- Ultimately the PMP provides the overarching legal framework and decision making protocols to support all non-native invasive plant management by the Ministries listed above.

Why does the Province manage Invasive Plants?

- Invasive plants are not native to the province or are outside of their natural distribution and negatively impact British Columbia's environment, people and/or economy.
- Once introduced, invasive plants often outcompete native or desirable vegetation as they do not have their natural enemies and other constraints that keep them in check in their native ranges.
- Invasive species are recognized globally as the second greatest threat to biodiversity after direct habitat loss due to humans.
- Invasive plants reduce forage and habitat for wildlife in both terrestrial and aquatic ecosystems, pose a risk to human health, reduce the availability of culturally important native species and result in significant costs and impacts to agriculture and other industries that British Columbians value.
- More information on invasive plants and how the Province is managing them is available on the Inter-Ministry Invasive Species Working Group website:
<https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/invasive-species>

Why does the Ministry of Forests need a PMP?

- There are legislative requirements to control invasive plants including the BC *Weed Control Act* and Regulation that require land occupiers including the Ministries listed on the PMP to control species of listed Noxious Weeds on provincial public lands.
- The BC *Integrated Pest Management Act* and Regulation requires that entities who apply herbicides on more than 50 hectares per year as part of their program operate under a Pest Management Plan.

Why is this called a DRAFT PMP?

- The [PMP document](#) is a DRAFT during the consultation process that has been created based on previous versions of similar PMPs, which incorporated ongoing public and indigenous consultation feedback over the years. This draft is used to solicit feedback and input and will be amended to incorporate input received the consultation period to be incorporated prior to submitting the Final draft to the Ministry of Environment and Climate Change Strategy who is responsible for review and confirmation of the PMP.
- The maximum term a PMP can be in place is 5 years.
- The proposed Southern and Coastal PMP is designed to replace the following three existing PMPs through incorporating into one larger PMP boundary:
 - South Coastal PMP (Confirmation # 402-0677-19-24)
 - Southern Interior PMP (Confirmation # 402-0678-19-24)
 - South Coastal Mainland PMP (Confirmation # 102-0671-21-26)

Why is the Province combining PMPs that have previously been separate?

- The Province is stream-lining the invasive plant PMP administrative process to reduce duplication as the previous three PMPs that will be covered by the new Southern and Coastal PMP area were very similar in language and scope, yet resulted in frequent renewals, overlapping boundaries with individual local

government and indigenous territories, and situations where the multiple PMPs need renewing at the same time.

- The Province is amalgamating PMPs that share similar biogeoclimatic ecosystems.
- The intent of the PMP and the content included will not change substantially with the amalgamation of the previous three plans into one.
- Annual operational planning will still occur on a regional basis.

What areas does this PMP cover?

- The PMP holder will be the BC Ministry of Forests (FOR); however, the PMP also applies to The Ministry of Transportation and Infrastructure (MOTI), the Ministry of Water, Land and Resource Stewardship (WLRS) and Ministry of Environment and Climate Change Strategy's Conservation and Recreation Division (CARD).
- The PMP Area will be specific to Provincial Public Land under the jurisdiction of FOR, MOTI, WLRS and CARD within the following geographical area:
 - Vancouver Island, the Central Coast, and Haida Gwaii including the following Regional Districts: Capital, Cowichan Valley, Nanaimo, Alberni-Clayoquot, Comox Valley, Strathcona, Mount Waddington, Central Coast, and North Coast (Haida Gwaii only).
 - South Coastal Mainland including the following Regional Districts: Metro Vancouver, Fraser Valley, Squamish-Lillooet and Sunshine Coast
 - Southern Interior including the following Regional Districts: Okanagan-Similkameen, Central Okanagan, North Okanagan, Kootenay Boundary, Central Kootenay, East Kootenay, Columbia-Shuswap, Thompson-Nicola, and Cariboo.

Is the PMP an annual work plan?

- No – the PMP is an overview document that describes the whole invasive plant management program. Annual workplans are determined each year following engagement and coordination with other land managers, government agencies, indigenous communities, industry groups and non-profit invasive species organizations.

What types of Environmental Protections are used?

- All sensitive environmental areas are identified before starting herbicide application.
- No treatment zones (NTZs) and Pesticide Free Zones (PFZs) are used to protect riparian areas and water sources from herbicides.
- Herbicides are only applied during appropriate weather conditions – eg. when it is not raining, wind speeds are less than 8 km/hr, air temperatures are within label requirements, etc.
- Selecting herbicides that have favorable environmental profiles.
- Signage and flagging tape is used to identify areas that have been treated or that require protection.
- Blue dye is mixed with the herbicide to confirm the exact location of the application.
- The risk of the invasive plant species spreading must always outweigh any risk of the treatment method chosen.
- More information on the various set back from water and sensitive areas that are required is included in the [draft PMP](#).

How much herbicide has the Province used on invasive plants in this area in the past each year?

- The table below shows the amount of herbicide used on Provincial Public Land within the proposed PMP area (37,162,564ha) of the Province each year over the past 10 years.
- The proposed PMP area encompasses 37,162,564 ha of British Columbia’s total 94,473,500 ha.
- Herbicide is only one treatment method that the Province uses and it is only used on non-native invasive plants under this PMP. The majority of vegetation management by the Province is done using mechanical methods such as roadside mowing and brushing.

Year	Number of Sites Treated	Area Treated (Ha)	Total Amount of Undiluted Herbicide Used (L)	Average Amount of Herbicide Used Per Site (L)
2013	4289	705	2089	0.487
2014	4638	850	2931	0.632
2015	4639	1117	1532	0.330
2016	4983	1271	1591	0.319
2017	5044	1981	2201	0.436
2018	5928	1520	2301	0.388
2019	5242	1318	1998	0.381
2020	5204	1326	2240	0.430
2021	5487	1180	1397	0.255
2022	4699	1102	1247	0.265

Which herbicides does the Province use on Invasive Plant Management under this PMP?

- Herbicide selection is driven first by the conditions of the site and second by the target species.
- The Province uses a wide variety of herbicides and the decision on which herbicide to use is made by the applicator at the site after considering all treatment options and assessing the site conditions and species.
- The list of herbicide active ingredients with example Trade Names shown in the PMP includes all possible active ingredients that may be used within the term of this PMP. However, not all active ingredients will be used in all areas of the PMP, and some may not be used often or at all.
- The list of active ingredients within the PMP is designed to enable not only treatment of known, existing invasive plants, but also to be able to respond rapidly to new introductions of invasive plants before they establish and spread. The exact location and products required over the 5 year term of the PMP will depend on the location of new and existing invasive plant sites, program budgets, climatic conditions, natural disasters, and prioritization of species during that time.
- This PMP only describes spot (targeted) treatment of invasive plants. No herbicide is applied using aerial broadcast application – helicopters, planes, etc. and no native plants are targeted for treatment under this PMP.
- Herbicides are used when no other method of control is practical or effective after careful consideration of all the above listed IPM treatment options.
- All herbicides are applied on a targeted or spot application basis to control invasive plants with the goal of reducing herbicide use on each site over time. Preventing spread to new areas and managing outlier populations before the expand are the top priority for treatment overall.

Why does the Province use Herbicides?

- Few treatment options can effectively control and eradicate invasive plant populations on their own. Herbicide is one of the IPM tools, which are often used in conjunction with each other, needed to effectively control invasive plants on a landscape level.
- Invasive plants often have adaptations that enable them to spread quickly and regrow aggressively following cutting, smothering or mowing, for example and mechanical methods can actually stimulate the spread for some priority invasive plant species such as invasive knotweeds, and make the situation worse.
- Mechanical methods are not recommended in locations where they will result in compaction, erosion and sedimentation, excess soil disturbance, impacts to native or desirable species, potential damage to archaeological values or exposing invasive plant seeds.
- All treatment options are considered after it has been established that a species or a site is designated as a high priority for control.
- Herbicides are used when no other method of control is practical or effective, after careful consideration of all the IPM treatment options.
- When used according to label instructions, herbicide is a safe and effective tool at controlling harmful invasive plants.
- The risk of not managing a particular invasive plant site must always be balanced with any risk of a treatment method chosen.
- Invasive plants generally have unhindered growth and reproduction because of the absence of natural predators that would affect them in their native habitat. Their ability to outcompete native and desirable plants often results in large, dense infestations which reduce biodiversity and cause ecological, social, and economic harm.

What is the communication/consultation process with Indigenous Nations?

- FOR Indigenous Relations staff help to identify all Indigenous Communities within the PMP boundary area, as well as any existing government to government agreements or communication preferences that have been expressed by each community.
- Invasive plant specialists leading the development of this PMP then reach out to all Indigenous Communities within the PMP area to initiate meaningful engagement on the draft PMP as well as the Invasive Plant Programs in general. Opportunities for ongoing annual engagement and partnerships for managing invasive plants on provincial public lands are also explored.
- All communication regarding the Draft PMP becomes part of the Province's consultation process for the development of Pest Management Plans and the draft PMP is revised to include any feedback/input/changes required.
- prior to confirmation of the PMP, the Ministry of Environment and Climate Change Strategy's Environmental Standards Branch confirms adequate Indigenous consultation has occurred including efforts to mitigate any potential concern received.
- While the consultation period is designed to focus efforts during the 6 months prior to expiring of previous similar PMPs for managing invasive plants, Indigenous Consultation is an ongoing process and Indigenous Communities are encouraged and welcomed to provide feedback/input at any point during the duration of the PMP.

- In the spring of each year, information sharing occurs with Indigenous Communities that have expressed interest in annual work planning where operations are planned within their traditional territory.
- The Province has various formal partnerships with Indigenous communities throughout BC to conduct invasive plant planning, surveys and treatments and is actively working to establish additional partnerships where possible.

What is the communication/consultation process with the Public?

- Public input on the PMP is solicited through 2 advertisements in newspapers in a 2 week period and the Draft PMP is posted on the FOR website for the duration of the public consultation period: <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/invasive-species/integrated-pest-management/pmp-pup>
- All communication regarding the Draft PMP form part of the Province's consultation process for the development of Pest Management Plans and all feedback received is reviewed and incorporated into the final draft of the PMP prior to submission to the Ministry of Environment and Climate Change Strategy for confirmation.
- Communication regarding the PMP and treatment locations is on-going through the life of the PMP.

How is a PMP Confirmed?

- The Province must submit a Pesticide Use Notice application to the Ministry of Environment and Climate Change Strategy's Environmental Standards Branch along with a summary of indigenous and public consultation and the draft PMP with sufficient time for review and confirmation before any treatments can occur under this PMP.
- A Notice of Intent to Treat must also be submitted annually to the Environmental Standards Branch at least 21 days prior to treatments each year and at the end of each calendar year an annual report is submitted summarizing all Integrate Pest Management (IPM) methods used that year under the authority of the PMP.
- A PMP is valid for a 5-year term from the date of confirmation.

Where can I see locations of invasive plant infestations and treatments?

- You can view historical invasive plants sites (IAPP) and current InvasivesBC observations by going to the InvasivesBC website (www.invasivesbc.gov.bc.ca) and clicking on the map icon at the top of the page. Zoom in to the area that you are interested in to see what has been found and recorded there. Decisions are made each year in the spring on where treatment will occur and are based on invasive species priorities, budgets and usually occur at or near existing sites. If you have questions or concerns about a particular site, please share those details with us.

Who do I contact for more information?

The Ministry of Forests Invasive Plant Program at invasive.plants@gov.bc.ca