

#### Invasive Plant Committee Meeting Agenda

### November 19, 2020, 9:00 a.m. 1981 Alaska Avenue, Dawson Creek, BC

			Pages
1.	Call to Order		
2.	Election of Chair and Vice-Chair		
3.	Direct	ors' Notice of New Business	
4.	Adoption of Agenda		
5.	Galler	y Comments or Questions	
6.	Adoption of Minutes		
	6.1.	Invasive Plant Committee Meeting Minutes of February 20, 2020	2
7.	Business Arising from the Minutes		
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9.	Correspondence		
10.	10. Reports		
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11.	New Business		
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14.	Adjournment		



#### PEACE RIVER REGIONAL DISTRICT Invasive Plant Committee Meeting Minutes

DATE:	February 20, 2020	
PLACE:	Regional District Committee room, Dawson Creek, BC	
PRESENT:	Director Hiebert, Electoral Area 'D' Director Goodings, Electoral Area 'B' Director Sperling, Electoral Area 'C'	
	<u>Staff</u> Kari Bondaroff, Environmental Services Manager Naomi Donat, Recorder	
1) Call to Order:	The meeting was called to order at 8:50 a.m.	
2) Election of Chair	The Environmental Services Manager called for nominations for the office Committee Chair for 2020.	
	Director Goodings nominated Director Hiebert for the office of Committee Chair for 2020. Director Sperling seconded the nomination.	
	Director Hiebert accepted the nomination.	
	MOVED by Director Sperling, SECONDED by Director Goodings, That nominations for the office of Committee Chair for 2020 be closed.	
	CARRIED. The Environmental Services Manager declared Director Hiebert Chair of the Invasive Plant Committee for 2020.	
3) Election of Vice-Chair	The Environmental Services Manager called for nominations for the office Committee Vice-Chair for 2020.	
	Director Sperling nominated Director Goodings for the office of Committee Vice-Chair for 2020. Director Hiebert seconded the nomination.	
	Director Goodings accepted the nomination.	
	MOVED by Director Hiebert, SECONDED by Director Sperling, That nominations for the office of Committee Vice-Chair for 2020 be closed.	
	CARRIED. The Environmental Services Manager declared Director Goodings Vice-Chair of the Invasive Plant Committee for 2020.	
NOTICE OF NEW BUSINESS		

#### NOTICE OF NEW BUSINESS:

Director Sperling Use of fertilizer and pesticides within watershed areas

4) Adoption of the Agenda	MOVED by Director Goodings, SECONDED by Director Sperling, That the Invasive Plant Committee meeting agenda for the February 20, 2020 meeting be adopted. Call to Order: Election of Chair/Vice-Chair: Notice of New Business: Adoption of the Agenda:		
	Adoption of the Minutes:		
	M-1 Invasive Plant Committee Meeting Minutes of February 21, 2019		
	Business Arising from the Minutes:		
	Reports:		
	<ul> <li>R-1 February 3, 2020 – Kari Bondaroff, Environmental Services Manager – Strategic</li> <li>Plan and Profile of Invasive Plant Monitoring Committee meeting recommendations</li> <li>from November 26, 2019.</li> </ul>		
	<ul> <li>R-2 February 4, 2020 – Kari Bondaroff, Environmental Services Manager – 2020 Annual</li> <li>Report and Draft 2020 Strategic Plan.</li> </ul>		
	R-3 February 4, 2020 – Kari Bondaroff, Environmental Services Manager – 2020 Budget for Function 520 – Invasive Plants.		
	New Business:		
	NB-1 Use of fertilizer and pesticide within watershed areas		
	Adjournment:		
ADOPTION OF MINUT	ES:		

#### OPTION OF MINUTES:

MOVED by Director Sperling, SECONDED by Director Goodings, 5) M-1 IPC Mtg Min of Feb 21, 2019 That the Invasive Plant Committee Meeting minutes of February 21, 2019 be adopted.

CARRIED.

#### **REPORTS:**

6) R-1 re: SPPIPMC Discussion at the November 26, 2019 Strategic Plan and Profile of Invasive Plant Monitoring meeting Committee noted that the BC Oil and Gas Commission (BCOGC) has no jurisdiction over abandoned sites until after the site has been official declared "abandoned." The BCOGC is recommendation working on a process to deal with these types of sites. It was felt that the BCOGC may not be aware of the location of invasive plant infestations on these sites. It was suggested that,

> in the interim, the BCOGC be encouraged to focus on controlling invasive plant infestations on abandoned sites to keep them from spreading to neighbouring properties.

> Patrick Smook, BC Oil and Gas Commission, has advised that the Commission will continue to review concerns received from the Regional District, on a case by case basis.

MOVED by Director Goodings, SECONDED by Director Sperling, That the Invasive Plant Committee recommends to the Regional Board that a letter be forwarded to the BC Oil and Gas Commission requesting information on current weed control strategies being implemented on "abandoned" well sites by the BC Oil and Gas Commission.

CARRIED.

Discussion ensued regarding responsibility for abandoned wells. It was noted that the Delegation Agreement specifies maintenance and reclamation is required. It was suggested that a legal opinion be obtained on who is responsible for control of noxious weeds on abandoned versus orphaned well sites.

6) R-1 continued	Should the Regional District incur costs to protect landowners, how would those cost recouped?	:s be
	MOVED by Director Sperling, SECONDED by Director Goodings, That the Invasive Plant Committee recommends to the Regional Board that a legal op be obtained to determine which agency has jurisdiction and responsibility for control noxious weeds on abandoned well sites.	
		RIED.
7) R-2 Annual Report and draft 2020 Strategic Plan	MOVED by Director Sperling, SECONDED by Director Goodings, That the Invasive Plant Committee recommends to the Regional Board that the 2019 Invasive Plant Program Report be approved for publication to the Regional District's website.	Annual
		RIED.
	MOVED by Director Sperling, SECONDED by Director Goodings, That the Invasive Plant Committee review and provide edits to the draft of the Invasiv Plant Strategic Plan and Profile 2020; further that the Plan and Profile be approved by Committee; and further,	
	That the Committee recommends to the Regional Board that the 2020 Invasive Plant Strategic Plan and Profile be approved for publication to the Regional District's websi	
	CAR	RIED.
	Discussion ensued regarding meetings of the Strategic Plan and Profile of Invasive Plant Monitoring Committee.	
	MOVED by Director Sperling, SECONDED by Director Goodings, That a Strategic Plan and Profile of Invasive Plant Monitoring Committee meeting be scheduled for the fall of 2020, including a delegation of noteworthy interest to partic and provide time on the agenda to allow stakeholders an opportunity to discuss strat tried and successes; and	-
	further, that stakeholders be contacted soliciting ideas for planned activities for the upcoming weed season.	
	CAR	RIED.
	MOVED by Director Sperling, SECONDED by Director Goodings, That the Invasive Plant Committee recommends to the Regional Board that the draft budget for Function 520 – Invasive Plants be included in the 2020 Annual Financial Pla	
	CAR	RIED.
	It was noted that complaints related to weeds on roads will be forwarded to the Mini Transportation and Infrastructure (MoTI). It was felt that the Regional District should more visible during the weed season.	-

<b>NEW BUSINESS:</b> 8) NB-1 re: fertilizer and pesticide use around watersheds	Concern was expressed regarding the use of cosmetic fertilizers and pesticides within watershed areas. It was noted that this is strictly enforced by the Ministry of Environment and Ministry of Agriculture. It was felt that this use should be prohibited, by bylaw, on residential properties within 1 kilometre of Charlie Lake. Director Sperling will review with landowners, staff and elected officials.
9) Committee Report	MOVED by Director Goodings, SECONDED by Director Sperling, That the recommendations from the Invasive Plant Committee meeting of February 20, 2020 be recommended to the Regional Board for approval.
	CARRIED.
10) Adjournment	The meeting adjourned at 9:45 am.

Leonard Hiebert Chair Naomi Donat Recorder



REPORT

To:Invasive Plant CommitteeReport Number: ENV-IPC-001From:Kari Bondaroff, Environmental Services ManagerDate: November 10, 2020Subject:Invasive Plant Program 2020 Annual Report

#### **RECOMMENDATION #1:**

That the Invasive Plant Committee recommend that the Regional Board approve the "2020 Invasive Plant Program Annual Report" for publication to the Regional District's website.

#### **BACKGROUND/RATIONALE:**

An annual report is created for the Invasive Plant Program in order to align with the requirements of the Ministry of Forests, Lands, and Natural Resource Operations and Rural Development (M.FLNRORD) Coordination Grant funding. Within the 2020 Strategic Plan and Profile for the Invasive Plant Program, a detailed work plan is outlined on pages 13-16. The 2020 Invasive Plant Program Annual Report outlines the results of those planned activities.

#### **ALTERNATIVE OPTIONS:**

- 1. That the Invasive Plant Committee recommend that the "2020 Invasive Plant Program Annual Report-ENV-IPC-001" be emailed to all Strategic Plan and Profile of Invasive Plants Monitoring Committee for review, comments, and edits prior to seeking approval from the Regional Board to publish the report to the website.
- 2. That the Invasive Plant Committee provide further direction.

#### **STRATEGIC PLAN RELEVANCE:**

Partnerships

Collaboration with Local and First Nations governments

#### FINANCIAL CONSIDERATION(S):

Annual reporting of activities is required for the 3-year Government Transfer Grant Agreement – 1150-20/GR18HRA011 in which the PRRD received funds totaling \$144,000.00 for the 2018-2020 operating years.

#### **COMMUNICATIONS CONSIDERATION(S):**

The 2020 Invasive Plant Program Annual Report will be emailed to all registered participants within the Strategic Plan and Profile of Invasive Plants Monitoring Committee. The document will also be a part of the reporting package that is submitted to the M.FLNRORD for reported use of the Coordination and Partnership Grant Funding.

#### **OTHER CONSIDERATION(S):**

Staff Initials: //B

Dept. Head:

None at this time.

#### Attachments:

1. 2020 Invasive Plant Program Annual Report

External Links:

1. 2020 Strategic Plan and Profile - <u>https://prrd.bc.ca/wp-content/uploads/page/plans-reports-invasive-plants/2020-Strategic-Plan-and-Profile.pdf</u>

# 2020 Invasive Plant Program Work Plan Priorities and Results

Priorities	Results
Planning	
Update the list of PRRD owned/occupied properties and cross-reference the properties for historical invasive plant infestation using the IAPP data.	An updated list was created for the Area Controller contract. This included the new Area B water stations. GIS continues to update the property list as new information becomes available. 62 sites were surveyed, 57 sites were treated, same as in 2019.
Create a schedule of treatment months to ensure proper timing of treatment.	Treatments occurred from June-September 2020 by MGP Contracting.
Evaluate the PRRD IAPP data for invasive species infestations and outline sensitive areas that need to be visited in 2020.	All report-a-weed notifications that came in late in the 2019 season were visited. As well, the newly reported and treated sites on private lands were inspected.
Inventory current outreach materials and update/purchase as required.	New carabiner cards were printed to outline the integrated approach to invasive plant control. More destroy daisy packages made. Old inventory shared with Northwest Invasive Plant Committee.
Inventory and Surveys	
Site visits required for 1/3 of PRRD owned/occupied lands.	Contractor visited all PRRD sites as per the contractual obligations. 57 sites were treated and all parks and SW sites were monitored for efficacy.
Survey of historical Regional EDRR sites for 10% of sites entered into IAPP.	The following plants were surveyed in the 2020 season: 1- Diffuse Knapweed 1- Himalayan Balsam 3- Cypress Spurge 1- Bighead Knapweed 1- Baby's Breath
Treatment	
Treat all invasive species surveyed/inventoried on PRRD owned/occupied lands using the designated three pass system.	All PRRD sites were visited and infested sites were treated 1-4 times as per requirements.

Treatment Monitoring	
This is the 1st year of the Area Controllers contract, 30% of the PRRD sites will be monitored for treatment in 2020.	37/57 sites were monitored for treatment which is 65% of our sites.
Data Entry	
100% of inventory, survey, or treatment documentation will be entered into IAPP within 3 working days of completing the data collection.	100% of the data entry was completed within 3 working days by the area controller.
Education and Awareness	
Continue to support the Peace River Forage Association's quarterly seminars.	PRRD worked with and designed new carabineer cards to include a card with information on an integrated approach to invasive plant management.
Support a formal or non-formal Pesticide Applicators Course within the PRRD to include both staff and stakeholders.	No Pesticide Applicators courses were held within the PRRD in the 2020 year that required support.
Continue to promote the activities of teaching livestock to eat weeds through research, outreach articles, and knowledge transfer.	Recipe templates were sent to producers wishing to engage in their own training session for their cattle to learn to incorporate Canada thistles into their diets.
Continue to offer Regional support to stakeholders through invasive plant ID, outreach materials, integrated pest management planning, and best management practices.	On-going. As requests come in from organization, materials are prepared to be mailed, or for pick-up. ID booklets, carabineers, and destroy daisy kits were the most popular in 2020.
Attend local events that promote environmental health and sustainability.	Due to the COVID-19, local events were cancelled for the 2020 season.
Continue to engage youth in biodiversity and ecological sustainability activities that focus on the prevention and awareness of invasive plant infestations.	Programming that the IP staff offer is ever changing and adapting to meet the needs of the audience. All activities are hands-on and focused on biodiversity and ecological sustainability with an Invasive Plant focus. One class of grade 2/3 students participated in a zoom call in which students attended

Continue to utilize "Weedy Wednesday" Facebook posts to promote events, highlight invasive plant species, and offer information about integrated pest management techniques.	from their homes with the presenter participating from the field. Weedy Wednesday posts were very successful this season. There were 55 posts with an average of 825 people reached for each post.
Continue to conduct presentations on issues and knowledge obtained within the PRRD with shareholders. These presentations may include but are not exclusive to Facebook posts, physical presentations, seminars, and YouTube videos.	Information, resources, lessons, presentation, and activities are shared upon request.
Educational materials will be replaced upon depletion of resources.	Ongoing.
New educational materials will be purchased as they come available and if they are applicable within the PRRD.	New materials for 2020 include the new carabineer card with information on integrated management for invasive plants.
PRRD staff will continue to attend professional development activities as per their work plans.	For 2020, these activities were conducted remotely through zoom calls and webinars.
PRRD staff will continue to develop new and useful materials to deliver to PRRD residents.	New updated carabineer cards designed and developed for the Peace Region.
Coordination and Partnership Building	
Hold IPCPRRD meetings.	A budget meeting was held in January of 2020 and a planning meeting is scheduled for November 2020.
Engage a minimum of two First Nations Partnerships in activities such as Weed ID, community weed pulls, or treatment of existing infestations.	Signage was purchased for the Tse Keh Dene area in partnership with the NWIPC. Blueberry FN received 100 destroy daisy kits for delivery of a hand-pulling contest.
Continue to support the ISCBC programs.	"Plantwise," "Don't let it loose," "Clean Drain Dry," "PlayCleanGo" are all communicated through the PRRD.

Continue to partner with industry to promote Best Management practices by offering plant identification resources, offering free commercial dumping at the three local landfills, and partnering in outreach events.	Free dumping was offered at the three landfills this season (North Peace, Bessborough, and Chetwynd) for both residential and commercial users. Bessborough received 3579 kg (1829 residential, 1750 commercial), Chetwynd received 240 kg (0 residential, 240 commercial), and North Peace received 7543 kg (0 residential, 7543 commercial).
Continue to promote and support the local Rancher contracts offered by the Ministry of Forests, Lands, and Natural Resource Operations to enable local crown grazing occupants to treat high priority and other regionally listed invasive plant species.	No support requested for 2020.
Continue to work with local governments and municipalities increase residents awareness of invasive plant species through joint inspections and sharing of outreach materials.	Follow-up on treatment activities will occurred in the spring. Many door knockers, invasive plant weed bags, and information packages were handed out within all of the neighbouring municipalities.
Continue to support PlayCleanGo.org in partnership with PRRD parks, BC Parks, and the Ministry of Forests, Lands and Natural Resource operations to expand the education and outreach programs to include users of local parks and trails located in areas that have identified invasive plant infestations.	14 Parks, both Regional and Provincial, were hosts to the PlayCleanGo.org signage and boot stations for the 4 <sup>th</sup> year. BC Parks hosts 4 signs in their own parks to promote the program.
Host an outreach event in partnership with PRRD parks staff.	Due to COVID-19, this event was cancelled for 2020.
Increase awareness of the "Grow Me Instead"/"Plantwise" programs through local nursery visits, delivery of outreach materials.	"Plantwise" and "Grow Me Instead" documentation as well as the PRRD plants document were distributed to Garden centres in Dawson Creek, Fort St. John, Hudson's Hope, Taylor, and Chetwynd.

Provincial EDRR Support	
When requested, invasive plant program staff will support the efforts of the Provincial EDRR staff in verifying reported infestations and coordinating any further actions required.	None requested within the 2020 season.
"Report-A-Weed" Verification	
When requested, invasive plant program staff will support the efforts of the Provincial Invasive Plant Specialist in verifying reported infestations and coordinating any further actions required.	None requested in 2020.
Staff will continue to promote the "Report- A-Weed" app through communications within the PRRD.	The "Report-A-Weed" app is listed within the Strategic plan and profile of the Invasive Plant program, within our deck of cards, and within the destroy daisy commercial.
All invasive plant reports received within the office of the PRRD will receive follow- up within 3 working days of receipt. Any follow-up required will follow the policies and procedures outlined in the C&E manual.	Procedures were followed according to the C&E manual and documentation of communications was made. 91 actionable weed reports were received via phone call, email, and sent in weed report forms. This included 4 "Report-A-Weed" reports.
Reporting and Data Management	
When requested, invasive plant program staff will provide updates to the PRRD Board on operational activities conducted by the program.	As per requests.
An annual report will be conducted for the 2020 year.	Deadline is January 31, 2021.
Any and all reporting requirements as per contract agreements will be met by or before the outlined due dates.	All requirements completed and submitted as per contractual agreements between the PRRD and the Ministry of Forests, Lands and Natural Resource Operations and Rural Development.
7 IAPP data will be handled with utmost care to prevent potential errors.	IAPP data has been double checked and any errors corrected or passed on for correction. At this point, all data is found to be accurate.

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PRRD invasive plant staff will enter IAPP data for other jurisdictions as per their request.	None requested in 2020.
The Strategic Plan and Profile will be maintained to reflect current operations and will be approved by the IPCPRRD committee.	Suggestions for improvements and updates will be presented at the November 2020 meeting.
All operational plans will be posted on the PRRD website for shareholders to utilize.	Completed in January of 2020.
Other program Activities	
When requested, invasive plant program staff will participate in research trials that have the potential to increase the resources available to PRRD land occupiers in preventing, controlling, suppressing, or eradicating invasive plants.	No new requests for 2020.
Compliance and Enforcement	
Appointed Weed Officers/Weed Inspectors of the PRRD will follow all policies and procedures outlined by Provincial Legislation, Local Legislation, and the C&E policies and procedures manual.	Throughout the 2020 season, Paulo Eichelberger, Kari Bondaroff, and Mike Pangman and Cathy Ashcroft were appointed by the Board as weed officers and inspectors.
Hire one seasonal staff for the field season from June 15 – Sept 15, 2020 to increase compliance and enforcement efforts throughout the summer months.	Cathy Ashcroft returned in July of 2020 and was actively employed for 12 weeks.
Special Projects	
Continue to promote the Destroy Daisy Campaign to increase public awareness of invasive daisies such as scentless chamomile and oxeye daisy.	Newspaper ads were run in the coffee talk, FB posts were plentiful, the destroy daisy commercial was played at the local movie theatre and the audio commercials were played at our local radio stations.

Free invasive plant dumping for all users (residential and commercial) will continue at the three local landfills (Bessborough, Chetwynd, and North Peace).	This 2020 year, 12530 kg of invasive plants were received at the local landfills, a decrease of 13179 kg from 2019.
<ul> <li>Hire two seasonal staff for the field season from May 1 – November 30, 2020 cost shared with Parks.</li> </ul>	William Hamilton and Kyle Dayus were hired to support the Invasive Plant Program. They handed out materials, responded to weed complaints and pulled 710 kg of invasive plants.

# **Thank You Funders**

# Ministry of Forests, Lands and Natural Resource Operations



Ministry of Transportation and Infrastructure



REPORT

To: Invasive Plant Committee

Report Number: ENV-IPC-003

From: Kari Bondaroff, Environmental Services Manager

Date: November 10, 2020

#### Subject: 2020 Strategic Plan and Profile of Invasive Plant Committee Meeting

#### **RECOMMENDATION #1:**

That the Invasive Plant Committee cancel the face-to-face Strategic Plan and Profile of Invasive Plant Monitoring Committee Fall 2020 meeting; further,

That the DRAFT 2021 Strategic Plan and Profile of the Invasive Plant Committee be shared with the Strategic Plan and Profile of Invasive Plant Monitoring Committee members via mail, for members requesting hardcopies of documents, and email, for remaining members; further,

That a partner and stakeholder survey be constructed to accompany the Draft to request feedback from members by no later than December 31, 2020, regarding 2020 invasive plant activities, strategies, newly reported invaders, and successes as well as recommendations for 2021 activities for consideration.

#### **RECOMMENDATION #2:**

That the Invasive Plant Committee authorize that the Strategic Plan and Profile of the Invasive Plant Committee delegation, Invasive Species Council of British Columbia, intended to be a presentation at the fall 2020 meeting, be presented as a pre-recorded video to be shared via the PRRD website, the PRRD Facebook page, and as an email link to be sent to all Strategic Plan and Profile of the Invasive Plant Committee members.

#### **BACKGROUND/RATIONALE:**

On February 20, 2020, the Invasive Plant Committee passed the following resolution:

#### MOVED, SECONDED, and CARRIED

That a Strategic Plan and Profile of Invasive Plant Monitoring Committee meeting be scheduled for the fall, with staff arranging a noteworthy delegation to attend, and provide time on the agenda to allow stakeholders an opportunity to talk about strategies tried and successes; and further, that stakeholders be contacted soliciting ideas for planned activities for the upcoming weed season.

As a result of the high numbers of attendees that participate in the Strategic Plan and Profile of Invasive Plant Monitoring Committee (SPPIPMC) and the current COVID-19 restrictions for meeting sizes a face-to-face meeting is not possible at this time. The following plans are obtainable options for meeting the intentions of the carried resolution:

Dept. Head:

- 1. The Invasive Species Council of BC (ISCBC) is scheduled to be a delegation for this coming 2020 fall meeting. This presentation is focused on the BC Hydro, Fish and Wildlife Compensation Program funding they have received to support First Nation community members as well as agriculture and industry members to access training, resources, and signage to support invasive species management. All of these opportunities are within the COVID-19 restriction guidelines. ISCBC staff are willing to pre-record their presentation to share on our website, Facebook page, and via email of a link to the presentation. This allows us to share the opportunity with a wide range of individuals within the PRRD.
- 2. In order to provide time to allow for increased input towards the Draft 2021 Strategic Plan and Profile, the document would be emailed out to the SPPIPMC membership for comment by December 31, 2020. This would allow time for edits to be made for approval at the Invasive Plant Committee budget meeting in January/February 2021.
- 3. In order to obtain feedback from partners and stakeholders, a survey can be created which solicits information regarding 2020 activities that were conducted by various groups. The survey would include an opportunity for individuals and partnering groups to share any new strategies to managing invasive plants. The survey would also include notifications an opportunity to report any new invader species found within our region and within our surrounding neighbours region. The survey would be requested to be completed by December 31, 2020 with results to be shared with SPPIPMC members following the approval of the 2021 Strategic Plan and Profile.
- 4. Alternatively, the meeting could be attempted to be conducted via Zoom. All documents would need to be printed and mailed prior to the meeting as well as sent out via email. Support would be required from the communications, IT, and administrative departments in order to ensure that the meeting ran smoothly.

#### **ALTERNATIVE OPTIONS:**

- 1. That the Invasive Plant Committee recommend that staff hold the 2020 Strategic Plan and Profile of Invasive Plant Monitoring Committee meeting via Zoom.
- 2. That the Invasive Plant Committee provide further direction.

#### STRATEGIC PLAN RELEVANCE:

- Partnerships
  - Collaboration with Local and First Nations governments
  - Inter-provincial collaboration with Alberta local governments

#### FINANCIAL CONSIDERATION(S):

Should the IPC support the digital platform of sharing information via the website, Facebook, email, and surveys, there would be no financial considerations at this time.

Should the IPC support the compilation of a zoom meeting, additional staff time to prepare the documents for printing and mailing and support for the meeting itself would be required.

#### **COMMUNICATIONS CONSIDERATION(S):**

In order to reach as many of the active SPPIPMC membership as possible, information will have to be shared electronically as well as hard copied. Time will need to be given to allow for valuable feedback to be received.

#### **OTHER CONSIDERATION(S):**

There are no legislated requirements to hold a SPPIPMC meeting. The purpose of the SPPIPMC is to act as a forum to network and provide feedback to the Invasive Plant Committee (IPC) regarding the Strategic Plan and Profile, the effects of noxious plants in the region, offer advice regarding best practices for industries operating within the region, report noxious plant occurrences, give information on matters referred by the IPC, and offer advice and input on any other matters related to noxious plants.

Attachments:

1. 2021 Strategic Plan and Profile Draft



PEACE RIVER REGIONAL DISTRICT

# **Invasive Plant Program**

# **Strategic Plan and Profile**

# 2021



# diverse. vast. abundant.

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### PRRD STRATEGIC FOCUS AREAS

Our Role: The PRRD plays a vital role in providing a variety of regional, sub-regional and local services that are valued by our residents and contribute to a high quality of life. We collaborate with other local governments, First Nations, agencies and volunteer organizations to deliver services and address challenges and needs in the region. As a regional government, we provide leadership and use our influential, collective voice to advocate on behalf of our residents, businesses and industry in support of a prosperous economy, a healthy natural environment and livable communities.

**Our Approach:** As we fulfill our obligations and responsibilities as a regional government, the PRRD will:

- COMMUNICATE AND ENGAGE with our constituents to understand their interests as well as foster a better understanding of the Regional District's role and services.
- COLLABORATE AND COOPERATE with our partners to enhance the effectiveness of our efforts and resources.
- Be CONSISTENT in the application of our policies and decisions.

**Goal:** The Invasive Plant Program's goal is to protect our economy, environment and social values from invasive plants and to ensure that existing infestations are managed using an integrated pest management approach.

# Sociocultural

#### Why Care About Invasive Plants?

A *weed* is defined as a plant growing where it isn't wanted. In British Columbia, *invasive plants* have been defined as non-native (alien) plants whose introduction into BC cause, or are likely to cause, economic or environmental damage, or harm to human health (IMISWG 2011). They are plants that originated elsewhere and are often introduced unintentionally to our area, arriving without the natural predators that kept them in check in their native homelands. Once here, they have the ability to establish easily, expand exponentially and can quickly colonize an area.

Once established, invasive plants can:

- Endanger public health & safety by increasing allergies & by having toxic properties harming humans, pets, livestock, & wildlife.
- Outcompete native vegetation & destroy natural habitats.
- Reduce agriculture forage yields & hay quality.
- Increase wildfire hazards & interfere with regeneration of forests.
- Decrease land values & impact recreation areas.
- Accelerate soil erosion & cause stream sedimentation with negative impacts to water quality.

*Noxious weeds* are invasive plants referred to in the *Provincial Weed Control Act*. Noxious weeds are also referred to in local government bylaws. Legislation requires that all occupiers of lands manage infestations of invasive plants, as they negatively affect our economic, environmental and social values. The provincial invasive plant list can be found in Appendix 6.

All invasive plants that are currently a concern for the PRRD are listed in the four categories outlined in the Plant Species Invasiveness within the PRRD section starting on page 18. The lists also contain native plants that may plague the agriculture sector. To ensure proper identification and management strategies are used by those who discover them, detailed information about each plant can be found in the **PRRD Invasive Plant List and Descriptions** document located on the PRRD website.

# Legislation, Compliance & Enforcement

#### **Legislation Involved**

Invasive plant management is enforced by federal and provincial legislation, as well as through local bylaw. In the PRRD, there are two main pieces of legislation used to enforce invasive plants: the PRRD Invasive Plants Bylaw No. 2121, 2014, and the *Weed Control Act* and its regulations. It is the responsibility of the owner or occupier to control any invasive plants growing on their property.

#### The Weed Control Act, section 2 states:

"An Occupier must control noxious weeds growing or located on land and premises and on any other property located on land and premises, occupied by that person."

Bylaw No. 2121, section 3 states:

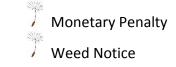
"No person who is an Owner or Occupier of Real Property shall allow any Invasive Plant or Noxious Weed to grow on that Real Property"

The General Manager of Environmental Services, the Environmental Services Manager, the Invasive Plant Bylaw Officer, and the Area Controller are all designated as Weed Inspectors / Weed Control Officers, and are responsible for enforcing these two pieces of legislation.

#### Compliance and Enforcement Regime

The Invasive Plant Program strives to ensure their compliance & enforcement (C&E) model is fair, objective, & transparent. The progressive model consists of 4 steps:

Outreach and Education
 Warning Notice



C&E decisions rely on weed reports from stakeholders, Invasive Alien Plant Program (IAPP) data, and physical evidence collected through the inspection process. In order to remain objective in decision making, the C&E manual with detailed policies and procedures is utilized. For additional information on the programs C&E policies and procedures, refer to the supplemental C&E Manual located on the PRRD website at: http://prrd.bc.ca/wp-content/uploads/page/plans-reports-invasive-plants/CE-Manual-Post-Version.pdf.

## **Invasive Plant Committees of the Peace River Regional District**

#### Structure

The Invasive Plant Program is a division of the PRRD's Environmental Services Department. The program has two separate committees that provide advice and direction to operational aspects, the Strategic Plan and Profile of Invasive Plants Monitoring Committee (SPPIPMC), and the Invasive Plant Committee of the Peace River Regional District (IPCPRRD), respectfully.

The SPPIPMC is comprised of stakeholders and individuals, interested in invasive plant management within the Regional District. The terms of reference for this committee can be found in Appendix 1.

The IPCPRRD is a Regional Board Advisory Committee with three directors appointed by the Chair of the Regional Board. The General Manager of Environmental Services and the Manager of Invasive Plants support the IPCPRRD, and together consider issues which affect the constituents within the Regional District and provide operational direction for the invasive plant program. The terms of reference for this committee can be found in Appendix 2.

#### Area of Operations

The Strategic Plan's area of operation covers BC east of the Rocky Mountains to the Alberta border, and north from Kakwa Provincial Park to the 58<sup>th</sup> parallel, just south of Fort Nelson. The area covers both private and Crown Land, and is divided into 3 Invasive Plant Management Areas (IPMA): North Peace, South Peace, and Pine Pass. The provincial government agencies which have jurisdiction over the Crown land portion include:

- Ministry of Forest Lands and Natural Resource Operations (Northeast Region / Peace District)
- Ministry of Environment / BC Parks (*Peace Region*)
- Oil and Gas Commission

- Ministry of Transportation and Infrastructure (*Peace Region*)
- Ministry of Energy and Mines

#### Membership

Membership in the Strategic Plan and Profile of Invasive Plants Monitoring Committee (SPPIPMC) is open to all and there is no membership fee. To become a member, send an email to: <u>prrd.dc@prrd.bc.ca</u>. This group represents all perspectives and land-related vantage points including, but not limited to:

Concerned citizens
All levels of government (federal, provincial, interprovincial, & local)
Environmental & ecological organizations
Local & aboriginal communities in the Region
Industrial & resource sector (forestry, mining, & oil & gas)
Youth groups & educational organizations
Horticulture / gardening clubs & organizations
Guide outfitters, trappers, tourism, clubs & organizations
Agriculture produces, Agri-business, & support companies
Utilities & Transportation
BC's Regional Invasive Organization

## **Invasive Plant Management Strategies**

#### Management Strategy Overview

The invasive plant strategy has the following five components:

Prevention
 Eradication / Suppression
 Containment / Rehabilitation
 Rehabilitation / Surveying
 Compliance & Enforcement.

The most effective and efficient management of invasive plants is to **prevent** them from arriving. After invasive plants have arrived, the most efficient and effective management strategy is to **eradicate** them before they become well established through early detection and rapid response. If establishment occurs and the invasive plant population expands, the population should be contained until eradication strategies

can be initiated. A long term goal of decreasing the infestation annually important. Containment involves aggressive management of high vectors of spread within the defined infestation as well as any satellite infestations outside of the containment area. Infestations should be managed with an integrated pest management approach which may include mechanical, chemical or biological techniques. For species that have established at the landscape level, the focus is on **surveying** to determine which sites have the highest likelihood and value for **rehabilitation** and which species and sites are suitable for biocontrol release.

There are many invasive plant species that are, or could establish themselves in the Region. It would not be feasible, given the resources available, to eliminate all occurrences of each of these species. Therefore, a system has been developed to guide and prioritize management efforts. The system involves a decision-making grid or matrix of three plant **invasiveness categories** and a range of four **site conditions** as described in Table 1. Plants are placed in categories by reviewing literature on the habitat range and aggressiveness of invasive plants, technical advice and, incorporating substantial expertise and experience of the membership.

The categories and Invasive Plant Profile are regularly reviewed and changed as new information and observations indicate a need to add a plant to any of the five categories, or to move a species up or down the categories. In addition, the BC Provincial Prohibited Weeds list can be found in Appendix 6 for additional invasive plant species of concern.

#### Site Prioritization

As well as species, the strategy considers site conditions. There are numerous factors to consider for sites. This strategy focuses on:

- Susceptibility of sites and areas for invasion;
- Loss or risks if invasion occurs; and,
- Feasibility and costs of managing the species on the site.

Site conditions are divided into four groups in decreasing expected potential for control, see Table 1 in Appendix 5. Site conditions ranked #1 have the highest opportunity for control being effective. A site ranked as #4 has a much lower potential or opportunity for eradication or control. Costs are also part of this ranking where #4 has the highest cost/benefit ratio.

#### **IPCPRRD Treatment Matrix and Thresholds**

Tables 2 and 3 in Appendix 5 utilize the site priority categorization laid out in Table 1 with the invasive

plant categorization to determine treatment thresholds for regional infestations.

### **Implementing Invasive Plant Management Strategies**

The following actions are undertaken to implement the IPCPRRD Strategies:

- Encourage the public to report invasive plant sightings and to further engage them by replying in a timely manner and provide information regarding economic, social and environmental threats, integrated pest management and compliance and enforcement.
- Inform the public about invasive plant programs and incorporate comments into the continuous improvement loop.
- ¥
- Assess problems and threats that various invasive plants present to the economic, social and environmental values within the area.
- Prevent the establishment of invasive plants not currently in the region.
- Prevent or minimize the spread of the invasive plants present in the region
- Conduct invasive plant programs in the region based on Integrated Pest Management principles.
- Collaborate with the various agencies and private landowners to meet the Goals of the PRRD.
- Support EDRR initiatives at the federal, provincial and regional levels.

#### Prevention

Prevention of invasive plant problems requires an aggressive outreach and education program focused on all segments of the population. Managing susceptible sites and taking actions that prevent movement of invasive plant seeds and propagules is complimentary to education. Some of the actions IPCPRRD supports and encourages are:

- Farming and grazing practices that prevent invasive plant establishment.
- Seeding all disturbances as quickly as possible using native and agronomic seed choices on a site by site basis using the Peace Forage Seeding Tool. <u>http://www.peaceforagetool.ca/</u>
- Use of local clean or weed free seed, reference to the Certificate of Seed Analysis and adherence to the *Seed Act*.
- Inter-ministry Invasive Species Working Group Early Detection Rapid Response Plan found here: <u>https://www.for.gov.bc.ca/hra/invasive-species/Publications/Prov\_EDRR\_IS\_Plan.pdf</u>

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- Best practices based on various industries within the region, such as cleaning equipment between sites, tarping or covering grain, hay and other agriculture loads when transporting and harvesting hay before weed seeds are viable.
- Using locally grown weed free forage when taking livestock into the wilderness.
- Using locally grown weed free straw for rehabilitation and rehab of erosion areas.
- Controlling invasive plants at chronic sources of seed and spread vectors.

#### **Reporting Invasive Plants**

In order to ensure that appropriate and timely action is taken regarding invasive plants, it is important to understand what you can do. Take note of any changes in the plant composition in areas that you frequent. Changes often indicate the presence of an invasive plant. It is imperative that these sightings be reported to the appropriate jurisdiction for treatment. Be aware that native and rare plants, like some invasive plants, may appear on the landscape sporadically. Some of these may be listed as "Species at Risk". For more information on Species at Risk: <a href="https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/species-ecosystems-at-risk">https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/species-ecosystems-at-risk</a>

There are many ways to report invasive plants. To ensure correct identification collect the plant, roots and press it in a book. Bagged samples wilt quickly and are difficult to identify. Photographs are excellent; please take time to ensure the plant is on a plain background such as the hood of a truck and to note the size and location of the infestation.

- Email the scan of the plant, pictures and location to prrd.dc@prrd.bc.ca
- Bring a sample to the Regional District Office
- Call the PRRD office at 250-784-3200 or toll-free at 1-800-670-7773
- Write a letter to the Invasive Plant Program, Box 810, Dawson Creek BC, V1G 4H8
- Use your phone, go to maps and record the location, then email it to <u>prrd.dc@prrd.bc.ca</u> along with a description of the plant / infestation

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m /\prime}$  Download the free app: www.reportaweedbc.ca \_  $^{
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#### Eradication, Containment, Rehabilitation and Inventory

- 1) Canada's invasive species strategy: <u>https://www.canada.ca/en/environment-climate-change/services/biodiversity/invasive-alien-</u> <u>species-strategy.html</u>
- 2) The Invasive Species Council of BC's strategy: https://bcinvasives.ca/documents/Invasive Species Strategy 2017 2022 171019 WEB.pdf
- 3) The Provincial Inter-Ministry Invasive Species Working Group strategy: https://www.for.gov.bc.ca/hra/invasive-species/Publications/Prov\_IS\_Strategy.pdf

Federal, provincial and regional EDRR strategies must be activated in a timely manner. The plant must be correctly identified and samples collected, prepared and submitted to the Royal BC Museum. GPS location, photographs, sketches and notes on density and distribution of the plant must be collected. Following initial containment and eradication steps, a management strategy with the land occupier must be prepared and followed annually.

Efficient and effective management of invasive plants requires integration of awareness to prevent unintentional introduction, planning, inventory and integrated pest management treatments. Public and stakeholder support is needed to locate invasive alien plant sites, particularly remote sites started from activities like backcountry recreation, transport of industrial equipment and distribution wildlife, livestock and weather. The public is encouraged to contact the invasive plant program to report any newly arriving aggressive invasive plant.



Ministry of Transportation and Infrastructure

Ministry of Forests, Lands and Natural Resource Operations

We gratefully acknowledge the financial support of the Province of British Columbia.

# 2021 Invasive Plant Program Work Plan

\*\*Some activities may be unable to be conducted as a result of the COVID-19 pandemic.

#### Planning

- Update the list of PRRD owned/occupied properties and cross-reference the properties for historical invasive plant infestation using the IAPP data.
- Create a schedule of treatment months to ensure proper timing of treatment.
- Evaluate the PRRD IAPP data for Regional Early Detection Rapid Response invasive species infestations and outline sensitive areas that need to be surveyed in 2021.
- Inventory current outreach materials and update/purchase as required.

#### Inventory and Surveys

- Site visits required for 1/3 of PRRD owned/occupied lands.
- Survey of historical Regional EDRR sites for 10% of sites entered into IAPP.

#### Treatment

Treat all invasive species surveyed/inventoried on PRRD owned/occupied lands using the designated three pass system.

#### **Treatment Monitoring**

This will be the 2<sup>nd</sup> year of the new Area Controllers contract, 30% of the PRRD sites will be

monitored for treatment in 2021.

#### Data Entry

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- 100% of inventory, survey, or treatment documentation will be entered into IAPP within 3 working days of completing the data collection.

#### **Education and Awareness**

- Ste
- Continue to support the Peace River Forage Association's work with invasive plants as requested.
- Support a formal or non-formal Pesticide Applicators Course within the PRRD to include both staff and stakeholders.
- Conti
- Continue to promote the activities of teaching livestock to eat weeds through research, outreach articles, and knowledge transfer.

- Continue to offer Regional support to stakeholders through invasive plant ID, outreach materials, integrated pest management planning, and best management practices.
  - Attend local events that promote environmental health and sustainability.
  - Continue to engage youth in biodiversity and ecological sustainability activities that focus on the prevention and awareness of invasive plant infestations.
- Continue to utilize "Weedy Wednesday" Facebook posts to promote events, highlight invasive plant species, and offer information about integrated pest management techniques.
- Continue to conduct presentations on issues and knowledge obtained within the PRRD with shareholders. These presentations may include but are not exclusive to Facebook posts, physical presentations, seminars, and YouTube videos.
- Educational materials will be replaced upon depletion of resources.
- New educational materials will be purchased as they come available and if they are applicable within the PRRD.
- PRRD staff will continue to attend professional development activities as per their work plans.
- PRRD staff will continue to develop new and useful materials to deliver to PRRD residents.

#### Coordination and Partnership Building



- Hold IPCPRRD meetings.
- Engage a minimum of two First Nations Partnerships in activities such as Weed ID, community weed pulls, or treatment of existing infestations.



- Continue to support the ISCBC programs.
- Participate in provincial coordination meetings and interprovincial meetings as requested and applicable.
- Continue to partner with industry to promote Best Management practices by offering plant identification resources, offering free commercial dumping at the three local landfills, and collaborating in outreach events.
- Continue to support the local Rancher contracts offered by the Ministry of Forests, Lands, and Natural Resource Operations to enable local crown grazing occupants to treat high priority and other regionally listed invasive plant species.
  - Continue to work with governments and municipalities increase residents awareness of invasive plant species through joint inspections and sharing of outreach materials.

- Continue to support PlayCleanGo.org in partnership with PRRD parks, BC Parks, and the Ministry of Forests, Lands and Natural Resource operations to expand the education and outreach programs to include users of local parks and trails located in areas that have identified invasive plant infestations.
  - Host an outreach event in partnership with PRRD staff.
- Increase awareness of the "Grow Me Instead/Plantwise Program" through local nursery visits, delivery of outreach materials.

#### **Provincial EDRR Support**

When requested, invasive plant program staff will support the efforts of the Provincial EDRR staff in verifying reported infestations and coordinating any further actions required.

#### **Report-A-Weed Verification**

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  - When requested, invasive plant program staff will support the efforts of the Provincial Invasive Plant Specialist in verifying reported infestations and coordinating any further actions required.
  - Staff will continue to promote the Report-A-Weed app through communications within the PRRD.
- All invasive plant reports received within the office of the PRRD will receive follow-up within 5 working days of receipt. Any follow-up required will follow the policies and procedures outlined in the C&E manual.

#### **Reporting and Data Management**

- X
- When requested, invasive plant program staff will provide updates to the PRRD Board on operational activities conducted by the program.
- ¥
- Write a 2021 annual report.
- Any and all reporting requirements as per contract agreements will be met by or before the outlined due dates.
- 1
- IAPP data will be handled with utmost care to prevent potential errors.
- PRRD invasive plant staff will enter IAPP data for other jurisdictions as per their request.
- The Strategic Plan and Profile will be maintained to reflect current operations and will be approved by the IPCPRRD committee.
- All operational plans will be posted on the PRRD website for shareholders to utilize.

#### Other program Activities

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  - When requested, invasive plant program staff will participate in research trials that have the potential to increase the resources available to PRRD land occupiers in preventing, controlling, suppressing, or eradicating invasive plants.

#### **Compliance and Enforcement**

- Appointed Weed Officers/Weed Inspectors of the PRRD will follow all policies and procedures outlined by Provincial Legislation, Local Legislation, and the C&E policies and procedures manual.
- Hire one seasonal staff for the field season from June 15 September 30, 2021 to increase compliance and enforcement efforts throughout the summer months.

#### Special Projects

Continue to promote the Destroy Daisy Campaign to increase public awareness of invasive daisies such as scentless chamomile and oxeye daisy.



- Hire two seasonal staff for the field season from May 1 Nov 30, 2021 cost shared with Parks.
- Free invasive plant dumping for all users (residential and commercial) will continue at the three local landfills (Bessborough, Chetwynd, and North Peace).
- Officially launch the Eye on Hawkweeds campaign. Will include new materials, resources, and ID comparisons between different invasive and native plants that look similar.

## **Plant Species Invasiveness within the Peace River Regional District**

#### Regional Early Detection Rapid Response (REDRR)

Regional EDRR species are a significant threat and are new to the area. The achievable management objective is eradication. This list includes brand new incursions and high risk invasive plant species that are extremely limited in extent (i.e. have less than 10 very small sites) in the area under consideration. Some of these species may not be present within the PRRD but are found in adjacent areas and are at risk of being introduced. See Table 4.

#### **Category A**

These invasive plants are highly competitive, have the ability to spread rapidly and pose a significant threat. They have been aggressively managed over time and their populations are minimal at the landscape level. These plants require continued persistent treatment over time in order to achieve eradication. See Table 5.

#### Category B

These plants have established themselves at the landscape level and are still aggressively treated by the agriculture sector to protect crop yields and production of other agriculture products. These plants are expected to be managed where they threaten environmental, social or economic values. See Table 6.

#### Education and Awareness List

These plants plague the agriculture industry, this list includes native plants that are poisonous, difficult to control or cause harm to livestock. See Table 7.

Common Name	Latin Name
Baby's breath	Gypsophila paniculata
Big Head knapweed	Centaurea macrocephala
Black Henbane	Hyoscyamus niger
Blueweed	Echium vulgare
Bohemian knotweed	Fallopia x bohemica
Brown knapweed	Centaurea jacea
Cheat grass	Bromus tectorum
Chicory	Cichorium intybus
Creeping bell flower	Campunaula rapunculiodes
Cypress spurge	Euphorbia cyparissias
Diffuse knapweed	Centaurea diffusa
Field Scabious /Blue button	Knautia arvensis
Giant knotweed	Polygonum sachalinense
Himalayan balsam/Policeman's Helmet	Impatiens glandulifera
Himalayan knotweed	Polygonum polystachyum/Persicaria wallichii
Hoary alyssum	Bereroa incana
Hoary cress	Cardaria draba
Hound's tongue	Cynoglossum <u>officinale</u>
Japanese knotweed	Fallopia japonica
Leafy spurge	Euphorbia esula
Marsh plume thistle	Cirsium palustre
Mountain bluet	Centaurea Montana
Nodding thistle	Carduss nutans
Plumeless thistle	Carduus acanthoides
Purple loosestrife	Lythrum spp.
Queen Anne's lace	Daucus carota
Rush skeletonweed	Chondrilla juncea
St. John's Wort	Hypericum perforatum
Sulphur cinquefoil	Potentilla recta
Tansy ragwort	Senecio jacobeae
Tartary buckwheat	Fagopyrum tataricum
Wild Chervil	Anthriscus sylvestris (L.)
Wild parsnip	Pastinaca sativa
Wormwood/Absinthium	Artemisia absinthium
Yellow archangel	Lamiastrum galeobdolon

# **Table 5 - Category A - High Priority for Eradication and Containment**

Common Name	Latin Name
Burdock	Arctium spp.
Comfrey	Symphytum spp
Common tansy	Tanacetum vulgar
Dalmatian toadflax	Linaria dalmatica
Green foxtail	Sertaria viridis
Meadow goat's-beard or salsifly	Tragopogon pratensis
Orange hawkweed	Heiracium aurantiacum
Russian thistle	Salsola kali
Spotted knapweed	Centaurea stoebe L.
Invasive yellow hawkweeds	Pilosella spp.
Wild caraway	Carum carvi

# Table 6 - Category B - Medium Priority for Eradication and Containment

Common Name	Latin Name
Annual bluegrass	Poa Annua
Common toadflax	Linaria vulgaris
Creeping (Canada) thistle	Cirsium arvense
Kochia	Kochia scoparia
Night-flowering catchfly	Silene noctiflora
Oxeye daisy	Chrysanthemum leucanthemum
Scentless chamomile	Matricaria perforata
Tall/Meadow buttercup	Ranunculus acris

# Table 7 - Education and Awareness List

Common Name	Latin Name	
American dragonhead	Dracocephalum parviflorum	
Arrow Grass	Triglochin maritime	
Bladder campion	Silene cucubalus	
Bluebur western	Lappula spp	
Buckwheat, wild	Polygonum convolvulus	
Bull thistle	Cirsium vulgare	
Chickweed, mouse eared	Cerastium spp.	
Cleavers	Galium aparine	
Corn spurry	Spergula arvensis	
Curled dock	Rumex crispus	
Dame's rocket	Hesperis matronalis	
Flixweed	Descurainia sophia	
Flowering rush (aquatic)	Butomus umbellatus	
Foxtail barley (native)	Hordeum jubatum	
Groundsel, common	Senecio vulgaris	
Hawksbeard, narrowleaf	Crepis tectorum	
Hemp nettle	Galeopsis tetrahit	
Lamb's quarters	Chenopodium album	
Mallow	Malva neglecta	
Mullein	Verbascum thapsus	
Mustard, dog	Eruscastrum gallicum	
Mustards	Sisymbrium spp.	
Pineapple weed	Matricaria matricarioides	
Prickly lettuce	Lactuca serriola	
Quackgrass	Agropyron repens	
Sea Buckthorn	Hippophae rhamniodes	
Shasta daisy	Leucanthenum x superbum	
Sheep sorrel	Rumex acetosella	
Smartweed	Polygonum spp.	
Sow thistles	Sonchus spp.	
Stinking mayweed, dog		
Stinkweed or pennycress	Thlaspi arvense	
Stork's bill	Erodium spp.	
Tarweed (native)	Madia glomerata	
Western water hemlock (native)	Cicuta douglasii	
White cockle	Lychnis alba	
Wild mustard	Sinapsis arvensis	
Wild oats	Avena fatua	
Yellow clematis	Clematis tangutica	
Yellow floating heart (aquatic)	Nymphoides pelata	

# **APPENDIX 1:**

#### Terms of Reference for the Strategic Plan and Profile of Invasive Plants Monitoring Committee

Chair: Director Leonard Hiebert, Appointed by the Committee in 2020.

Strategic Plan and Profile of Invasive Plants Monitoring Committee of the Peace River Regional District Terms of Reference March 2014.

#### Goal

To complement the **Mission**, **Vision and Goals** of the Regional District by: "protecting our economy, environment and social values from invasive plants and ensuring that existing infestations are managed with integrated pest management."

#### Purpose

1

To act as a forum to network and provide feedback to the Invasive Plant Committee of the Peace River Regional District (IPCPRRD) regarding:

- a) the Strategic Plan and Profile of Invasive Plants
- b) the effects of noxious/invasive plants in the region
- c) advice regarding best practices for industries operating within the Region
- d) noxious/invasive plant occurrences
- e) information on matters referred by the IPCPRRD
- f) any other matters related to noxious/invasive plants

#### Accountability

- a) Roberts Rules of Order apply
- b) Recommendations will be made to the IPCPRRD as required

#### **Committee Organization**

- a) A Chair and Vice Chair will be appointed by the IPCPRRD
- b) Secretarial services will be provided by the PRRD
- c) Members may be chosen to form an Advisory Committee and provide technical advice

#### Membership

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- Membership is open to all who are interested in noxious/invasive plant management.
- Membership will be continuous.

## **APPENDIX 2:**

#### Terms of Reference for the Invasive Plant Committee

#### Goal

To complement the **Mission**, **Vision and Goals** of the Regional District by: "protecting our economy, environment and social values from invasive plants and ensuring that existing infestations are managed with integrated pest management."

#### Purpose

- - The general purpose of the Invasive Plant Committee of the Peace River Regional District (IPCPRRD) will include, but not be limited to the following:
    - To act as the conduit between the Strategic Plan and Profile of Invasive Plants Monitoring Committee (SPIP) and the Peace River Regional District Board regarding matters relating to noxious/invasive plants in the region

#### Accountability and Committee Organization

- The committee will be comprised of:
  - a) A minimum of three directors appointed by the Chair of the Regional Board
  - b) The General Manager of Environmental Services
  - c) The Manager of Invasive Plants

X

Provisions for a Standing Committee are provided for in the PRRD Board Procedure Bylaw as amended from time to time. These provisions can be found here: <u>https://prrd.bc.ca/wpcontent/uploads/bylaws/board-procedure-bylaw/BL 2200 Brd-Procedure consolidated-Dec-2019.pdf</u>

#### Roles and Responsibilities

To ensure regulatory provisions are appropriate to program delivery and recommend amendments to the Board and staff.

- a) Strategic Plan and Profile of Invasive Plants
- b) Program delivery
- c) Compliance and Enforcement Policy
- d) Budget

#### The above are intended to be reviewed annually.

# **APPENDIX 3:**

#### History of Weed Control in the Peace River Regional District

Invasive plants were first introduced to the northeast corner of BC with the arrival of fur traders, homesteaders, and agriculture. Fur traders were expected to live off the land and developed gardens and livestock pastures around their posts. Along with the garden and forage plants, invasive alien plants were introduced. As settlement and development of agriculture, resources, transportation and utilities continued, introduction and spread of invasive alien plants occurred. Invasive alien plants or weeds have long been recognized as indicated by the *Thistle Prevention Act* of 1877 followed by the *Noxious Weed Act* of 1888.

In 1973, the *Noxious Weed Act* was replaced by the *Weed Control Act* which imposes "a duty on all land occupiers to control designated noxious plants." It also provides for regional districts and government agencies to appoint weed inspectors; this led to the formation of the Peace River Regional District Weed Control Committee in 1973.

#### 1977-1997 – PRRD's Weed Control Program Summary:

Delivered according to the *B.C. Weed Control Act* and Regulations

Varied from one or two inspectors and up to fourteen inspectors working in three different regions
 –North Peace, South Peace and West Peace

In the latter years, summer employees were hired to inspect within designated areas throughout the Peace, with weed notices being issued to the land occupier to control and subsequent enforcement, if there was no compliance.

- The Ministry of Agriculture was a key player in the program, whereby the Field Crop Agrologist was required to provide the technical advice for the means of control on agriculture properties.
- A Weed Control Committee, made up of five members, designated according to the *Weed Control Act* with various representatives from regional agriculture associations, municipalities, railways, Crown lands, and the resource sector (forestry, oil and gas) developed recommendations that guided the program.

Program files are archived by the Peace River Regional District (PRRD).

The Weed Control Program was discontinued in 1997 by the PRRD due to a lack of provincial funding.

#### 1998-2008 - Invader Weed Control Program and Weed Warrior Program

The Ministry of Agriculture, in conjunction with the PRRD, initiated the "*New Invader Weed Control Program*" to ensure that known sites of new invasive weed species, such as knapweeds and hawkweeds, would be controlled. It not only involved the control of invasive plants, but included

the release of biological agents for scentless chamomile, identification of weeds, displays at the local fairs, and coordinating a Weed Warrior Program.

The main objectives of the program were accomplished through contracts to appoint spray contractors and a coordinator.

#### 2003-2011 – Formation of the Northeast Invasive Plant Committee (NEIPC)

Development of a shared regional strategic plan between the Fort Nelson and Regional district boundaries resulted in the formation of NEIPC

Interst "pooled resource delivery model," established for the Pine Pass, brought together key stakeholders to integrate funding, awareness, reporting of sites, inventory work and treatments based on a common strategic approach across land jurisdictions.

This model involves the various stakeholders contributing to a funding pool that is used to integrate awareness, reporting of sites, inventories and treatments based on a strategic approach across land jurisdictions, previously managed by environmental departments within each jurisdiction.

Leveraging the success of the Pine Pass project model, the Fort Nelson Invasive Plant Management Area Steering Committee was developed to address the susceptible habitats and expansion of resource industry activities in the area.

NEIPC continued developing the pooled resource delivery model and as of 2011 there were four IPMAs: Fort Nelson, North Peace, South Peace and Pine Pass.

#### 2011-2013 - Peace River Regional District: Invasive Plant Program Manager Position

- In May 2011, the PRRD created a full-time position to manage the Invasive Plant Program, under its Environmental Services function.
- In the spring of 2012 an invasive plant disposal pilot was established. Disposal bins were set up at the Chetwynd, Bessborough and North Peace landfills and tipping fees were waived for private land owners. In the fall of 2013, this was made a regular service for the public.
- In the fall of 2011, the Fort Nelson area was encouraged to become independent and the NEIPC was dismantled. The PRRD delivers an independent weed management program within their boundaries while continuing to collaborate with the Fort Nelson group.
- / In the fall of 2012, the NEIPC made a recommendation to the board of the PRRD to re-name the advisory committee to the Invasive Plant Committee of the Peace River Regional District (IPCPRRD). The recommendation was adopted.

# 2014- The Peace River Regional District explores a Progressive Compliance and Enforcement Regime

ightarrow In 2013, the Regional District's Agriculture Advisory Committee expressed concern over invasive plants and noxious weeds on agriculture settings in 2013.

The pooled delivery model was reviewed by the PRRD staff to ensure broad objectives of the program were being accomplished.

A bylaw was proposed using powers from the *Local Government Act* which will allow issuance of a warning ticket and a monetary penalty to be available as enforcement tools prior to engaging the authority of the *Weed Control Act*.

Education and Outreach will remain the focus of the program in order to achieve prevention through increased awareness.

The structure of the committee was altered to create a Standing Committee (IPCPRRD) to guide operational delivery of the program. Member representing stakeholders within the Region remain an integral part of the program and will continue to monitor the landscape for new species, share knowledge and have input regarding the strategic plan, the broad group is the Peace River Regional District Strategic Plan and Profile of Invasive Plants Monitoring Committee (Monitoring Committee).

Municipalities are supported and encouraged to partner with the Regional District for assistance in identifying invasive plants, determining appropriate treatments and to employ regulatory powers to create invasive plant bylaw.

Dissolution of the pooled delivery model occurred in May, 2014.

#### 2016-2019 – Efficacy Monitoring for the Province (FLNRORD and MoTI)

The PRRD hired 2 seasonal Invasive Plant Assistants to monitor treatments on Crown land. \$25,000 was annually paid to the PRRD to monitor 10% of treatments within the 3 IPMA's on FLNRORD and MoTI jurisdiction.

X

In 2019, a Bylaw Officer designated to Invasive Plants was hired for 3 months.

#### 2020 – Field Services Assistants

For the 2020 season, two seasonal field services assistants were hired from June until November. Their main roles were to support the compliance and enforcement officer in hand-pulling invasive plants in areas of concern, such as riparian areas and on private land where residents were struggling to manage on their own and requested support. These roles were shared amongst the parks maintenance responsibilities. The employees picked a bag of invasive plants per day in their travels around the region.

# Appendix 4:

# Site Prioritization, Treatment Matrix and Thresholds

Table 1. Site Prioritization				
Priority/Opportunity for Control	Site condition / management intent or goal			
1 Extremely High	<ul> <li>A relatively small infestation (up to 0.25 ha or 0.5 acre) likely to spread to large highly susceptible areas or high value crops.</li> <li>Intent is to prevent establishment or spread and to eradicate the infestation quickly and efficiently.</li> <li>Effective treatment (eradication or containment) is critical.</li> </ul>			
2 High	<ul> <li>Moderate sized infested area (0.25-0.50 ha or 1.25 ac) in susceptible areas and an expectation that control will be effective.</li> <li>Goal is to quickly reduce the population of the invasive plant, contain the infested area and reduce impacts on agriculture and susceptible habitats and ecosystems.</li> </ul>			
3 Moderate	<ul> <li>Larger infested area (greater than 0.50 he or 1.25 ac), not adjacent to agriculture or delicate habitats and ecosystems that need to be protected.</li> <li>Expectation that control will be effective.</li> <li>Goal is to contain the infestation.</li> </ul>			
4 Low Opportunity for Control	<ul> <li>Infested areas larger than 5 hectares or 12 acres where control would require high investment of resources.</li> <li>Areas are not adjacent to agriculture or susceptible high value habitats and ecosystems that need to be protected.</li> <li>Goal is to reduce the damage from the infested area, record changes to the size and ensure that all vectors of spread are treated.</li> </ul>			

Table 2. IPCPRRD Treatment Matrix				
Plant Species Invasiveness Category				
Site Priority	А	В		
1				
2				
3				
4				

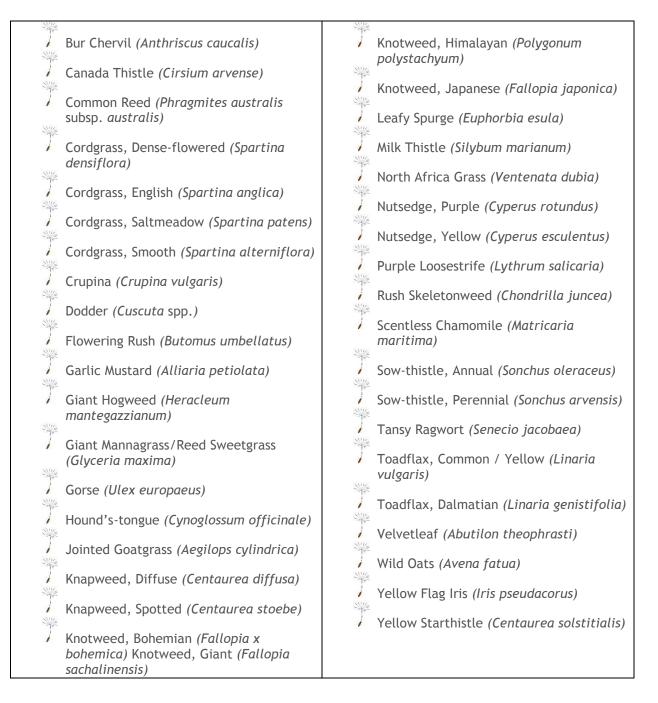
Table 3. Program Thresholds			
Invasive Plant Category	Site Priority	Program Level	Control Objective or Requirement
A/R-EDRR	1	REDRR • Regional Early Detection Rapid Response	Immediate Regional or local eradication: Identify and eradicate the local population, prevent new invaders, see the Provincial EDRR process at http://www.for.gov.bc.ca/hra/invasive-species/edrr.htm See the regionally specific list on page 12. Stop the spread of recently established invaders
		Γ	
А	1		Treatment or some form of management is mandatory:
А	2	ERADICATION	Immediate requirement to prevent newly arriving
А	3	and	invasive plants, or those with low population, from
В	1	CONTAINMENT	establishing or spreading. Mid and long term goal is to eliminate the population from within the region.
	1		
A	4	CONTAINMENT	Treatments are mandatory for sites outside of containment lines or where values are threatened:
В	2		Within containment areas, treatments occur when protection or rehabilitation of social, environmental or
В	3	and REHABILITATION	economic areas is required; or, A need is indicated and approved by funders or, Land owner or occupier has other reasons for containment or rehabilitation.
В	4	REHABILITATION and SURVEYING	Control and rehabilitation will be attempted when biological control agents are available and effective: Specific issues and requests are made, whereby an analysis of risks and/or cost-benefit indicates control is required to protect or rehabilitate agriculture areas or critical habitats.

# **APPENDIX 5:**

## List of Regulated Invasive Plants in BC (12/12/2018)

See below for a list of the provincially and regionally specific regulated noxious plants, and additional unregulated invasive plants of concern in BC.

#### **REGULATION: PROVINCIALLY NOXIOUS**



Peace River Regional District | Invasive Plant Program

#### **REGULATION: REGIONALLY SPECIFIC NOXIOUS (Peace River)**

- Burdock (Arctium spp.)
  Cleavers (Galium aparine)
  Green Foxtail (Setaria viridis)
  Kochia (Kochia scoparia)
  Night-Flowering Catchfly (Silene noctiflora)
- Oxeye Daisy (Chrysanthemum leucanthemum)
- Quackgrass (Agropyron repens)
- Thistle, Russian (Salsola kali)
- Wild Mustard (Sinapsis arvensis)

#### ADDITIONAL UNREGULATED INVASIVE PLANTS OF CONCERN IN BC



Peace River Regional District | Invasive Plant Program

# **APPENDIX 6:**

## Provincial Priority Invasive List (December 16, 2019)

PREVENT	PROVINCIAL EDRR
🕅 African rue ( <i>Peganum harmala</i> )	Black henbane ( <i>Hyoscyamus niger</i> )
Camelthorn (Alhagi maurorum)	Brazilian Elodea/Waterweed (Egeria densa)
Clary sage (Salvia sclarea)	Invasive cordgrasses (Spartina spp.)
Common crupina ( <i>Crupina vulgaris</i> )	European common reed ( <i>Phragmites australis</i> )
Dyer's woad (Isatis tinctoria)	Flowering rush ( <i>Butomus umbellatus</i> )
Eggleaf spurge ( <i>Euphorbia oblongata</i> )	Maltese starthistle ( <i>Centaurea melitensis</i> )
Goatsrue (Galega officinalis)	Mouse-ear hawkweed ( <i>Hieracium pilosella</i> )
Halogeton/Saltlover (Halogeton glomeratus)	North African grass (Ventenata dubia)
🕺 Hydrilla (Hydrilla verticillata)	Perennial pepperweed ) <i>Lepidium latifolium</i>
Iberian starthistle ( <i>Centaurea iberica</i> )	Giant reed (Arundo donax)
Italian thistle (Carduus pycnocphalus)	Shiny geranium (Geranium lucidum)
Johnsongrass (Sorghum halepense)	Slender false brome (Brachypodium
	sylvaticum subsp. Sylvaticum)
Jointed goatgrass (Aegilops cylindrical)	Yellow floating heart (Nymphoides pelata)
🕺 Kudzu (Pueraria montana var. lobate)	
Meadow clary (Salvia pratensis)	
Mediterranean sage (Salvia aethiopsis)	
Medusahead ( <i>Taeniatherum caput-medusae</i> )	
Purple nutsedge ( <i>Cyperus rotundus</i> )	
Purple starthistle ( <i>Centaurea calcitrapa</i> )	
Red bartsia (Odontites serotine)	
Silverleaf nightshade (Solanum	
elaegnifolilum)	
Slenderflower thistle ( <i>Carduus tenuiflorus</i> )	
Slender/Meadow foxtail (Alopecurus myosuroides)	
Spring milletgrass (Milium vernale)	
Spurge flax (Thymelaea passerine)	
Squarrose knapweed ( <i>Centaurea virgate spp.</i>	
Squarrose)	
Syrian bean-caper ( <i>Zygophyllum fabago</i> )	
Texas blueweed (Helianthus ciliaris)	
Water hyacinth ( <i>Eichhornia crassipes</i> )	
Water lettuce (Pistia stratiotes)	
Water soldier ( <i>Stratiotes aloides</i> )	
Yellow starthistle ( <i>Centaurea solstitialis</i> )	

# APPENDIX 7:

#### Noxious Weeds in Alberta

The following plants are designated as Noxious in Alberta. Control of these plants is required. (All plants listed in **Bold** have been found within the County of Grande Prairie).





### Invasive Plant Committee of the Peace River Regional District Terms of Reference

#### 1. Goal

1.1 To complement the **Mission, Vision, and Goals** of the Regional District by: "protecting our economy, environment and social values from invasive plants and ensuring that existing infestations are managed with integrated pest management."

#### 2. Purpose/Scope

- 2.1 The general purpose of the Invasive Plant Committee of the Peace River Regional District (IPCPRRD) will include, but not be limited to the following:
  - a. To act as the conduit between the Strategic Plan and Profile of Invasive Plants Monitoring Committee (SPIP) the Peace River Regional District Board regarding matters relating to noxious/invasive plants in the region.

#### 3. Accountability and Committee Organization

- 3.1 The Committee will be comprised of:
  - a. A minimum of three Directors appointed by the Chair of the Regional Board.
  - b. The General Manager of Environmental Services.
  - c. The Manager of Invasive Plants.

Provisions for a Standing Committee are provided for in Board Procedure Bylaw No. 2200, 2015.

#### 4. Committee Organization

- 4.1 To ensure regulatory provisions are appropriate to program delivery and recommend amendments to the Board and staff:
  - a. Strategic Plan and Profile of Invasive Plants
  - b. Program delivery
  - c. Compliance and Enforcement Policy
  - d. Budget

The above are intended to be reviewed annually.

Date Committee Established	February 13, 2014	Board Resolution #	RD/14/02/31
Date TOR Approved by Board	February 27, 2014	Board Resolution #	RD/14/02/20 (27)
Amendment Date		Board Resolution #	
Amendment Date		Board Resolution #	
Amendment Date		Board Resolution #	

# diverse. vast. abundant