PEACE RIVER REGIONAL DISTRICT STRATEGIC PLAN and PROFILE OF INVASIVE PLANTS MONITORING COMMITTEE MEETING

AGENDA

for the meeting to be held on November 26, 2019 at the Regional District offices, **1981 Alaska Avenue**, **Dawson Creek**, BC commencing at 10:00 am

Conference call: 1-877-385-4099 Participant ID: 8353633#

Committee Chair: Director Hiebert Vice-Chair: Director Goodings

- 1. Call to Order:
- 2. Notice of New Business:
- 3. Adoption of the Agenda:
- 4. Adoption of Minutes:
 - M-1 Strategic Plan and Profile of Invasive Plants Monitoring Committee Meeting Minutes of December 11, 2018
- 5. **Business Arising from the Minutes:**
- 6. **Correspondence:**
- 7. **Reports:**
 - R-1 Verbal 2019 Contractor Report Mike Pangman, Area Controller
 - R-2 Draft 2019 PRRD Invasive Plant Annual Report Kari Bondaroff.
 - R-3 Verbal Roundtable 2019 Agency Program reports:

 Ministry of Forests, Lands, Natural Resource Operations and Rural Development; BC Hydro; Ministry of Transportation and Infrastructure; rancher program; aboriginal groups; oil and gas sector; other agencies.
- 8. **New Business:**
 - NB-1 Strategic Plan and Profile feedback on any suggested changes for 2020
- 9. **Items for Information**:
 - I-1 IPC Monitoring Committee Terms of Reference
- 10. Adjournment:



PEACE RIVER REGIONAL DISTRICT

Strategic Plan and Profile of Invasive Plant Monitoring Committee Meeting Minutes

DATE: December 11, 2018

PLACE: Regional District offices, Dawson Creek, BC

PRESENT: Director Leonard Hiebert, Electoral Area 'D', Committee Chair

Director Karen Goodings, Electoral Area 'B'

Director Brad Sperling, Electoral Area 'C', 10:55 am

Mike Pangman, MGP Contracting

Brian Stratuliak, Peace River Regional Cattlemen's Association

Susan Davies, Twin Sisters Nursery

Marika Cameron, FLNRORD

Dessa Nicholson, Saddle Hills County, Alberta Walter Stokes, District of Tumbler Ridge Ella Head, District of Tumbler Ridge Breanne Newman, Spectrum Resources

Alana Wagner, Conuma Coal Keana Trudel, Conuma Coal Emily Flion, Conuma Coal Aaron Halyk, Conuma Coal

By teleconference

Alexandria Carnevale, Ministry of Transportation and Infrastructure

Denise McLean, Min Forests, Lands, Natural Resource Operations & Rural Dev.

Robin Routledge, BC Hydro - Site C

Jim Chramosta, Shell Canada

<u>Staff</u>

Paulo Eichelberger, General Manager of Environmental Services Kari Bondaroff, Manager of Invasive Plants, Environmental Services

and Field Services Program

Bernie Roters, Environmental Services Coordinator Suzanne Garrett, Corporate Services Coordinator

1) Call to Order: The meeting was called to order at 10:00 a.m.

2) Adoption of the

MOVED by Director Goodings, SECONDED by Ella Head,

Agenda

that the Strategic Plan and Profile of Invasive Plant Monitoring Committee meeting agenda for the December 11, 2017 meeting, including additional items for the

agenda, be adopted as amended:

Notice of New Business: Adoption of the Minutes:

M-1 Strategic Plan and Profile of Invasive Plants Monitoring Committee Meeting

Minutes of April 4, 2018

Business Arising from the Minutes:

2) Adoption of

Agenda (continued)

Correspondence:

April 12, 2018 letter from the Ministry of Forests, Lands, Natural Resource Operations and Rural Development regarding the *Weed Control Act*.

Reports:

- R-1 Verbal 2018 Contractor Report Mike Pangman, Area Controller
- R-2 2018 PRRD Invasive Plant Annual Report Kari Bondaroff
- R-3 Verbal Roundtable 2018 Agency Program reports:

 Ministry of Forests, Lands, Natural Resource Operations and Rural

 Development; BC Hydro; Ministry of Transportation and Infrastructure; rancher program; aboriginal groups; oil and gas sectors; other agencies

New Business:

- NB-1 Strategic Plan and Profile any suggested changes for 2019
- NB-2 Profile of Invasive Plant Species within the PRRD suggested changes 2019
- NB-3 Review of the IPC Monitoring Committee Terms of Reference

Items for Information

Adjournment:

CARRIED.

ADOPTION OF MINUTES:

3) M-1 SPPIPMC Mtg. Min. of Apr 4, 2018 MOVED by Director Goodings, SECONDED by Brian Stratuliak, that the Strategic Plan and Profile of Invasive Plant Monitoring Committee Meeting

minutes of April 4, 2018 be adopted.

CARRIED.

BUSINESS ARISING FROM THE MINUTES:

4) BA-1 #4 re: Bio-control sites The Committee was advised that the Ministry of Forests, Lands, Natural Resource Operations and Rural Development monitored the bio-control sites previously established to target Scentless Chamomile. Some sites are located on private property resulting in no access to the site. Some site descriptions were not complete and therefore could not be located. Other sites were active showing good results.

5) BA-2 #8 re: jurisdiction

The Regional District has confirmed that it does not have jurisdiction to enforce invasive aquatic species in lakes.

CORRESPONDENCE:

6) C-1 re: Weed Control Act MOVED by Director Goodings, SECONDED by Brian Stratuliak,

that the April 12, 2018 letter from the Ministry of Forests, Lands, Natural Resource Operations and Rural Development regarding the *Weed Control Act* be received.

CARRIED.

REPORTS:

7) R-1 re: 2018 Contractor report

Mr. Pangman, PRRD Area Controller

- Surveyed 55 RD sites parks, solid waste sites, lagoons, recreational sites. 20 sites received chemical treatment; 11 received mechanical treatment
- Education and Awareness Species Curled Dock, Western Goats Board, Hawksbeard, Sow Thistle species, Bull Thistle
- REDRR Species Big Head Knapweed found at HHope Solid Waste Site; Chicory found at the Bessborough and Chetwynd landfill sites.

8) R-2 re: Invasive Plant Program (RD)

Kari Bondaroff, Manager of Invasive Plants

- "Destroy Daisy" campaign increased awareness, jingle, advertisements huge success.
- New carabiner cards well received by the public
- hiring of two seasonal staff May 1 to September 1
- Outreach activities school visits, science fairs, Canfor training and flash-mob weed pull, Peace River Forage Association, Parks Day, local fairs as well as material delivery to landfill and transfer stations, pet stores, hunting stores, garden centres, and tourist information centres.
- Free dumping of bagged invasive plants amount of material received decreased to 21,730 kg (9,940 kg residential, 11,790 kg industrial) from 2017 which resulted in 37,620 kg (14, 920 kg residential, 22,700 industrial) being received.
- Good Neighbour Program and Trade a Weed Programs no public participation in these two programs. Should programs be delivered differently? It appears that people are just not interested. It was suggested that program information be shared with local municipalities, Two Nurseries – take information back to First Nations. Committee agreed there was value in keeping both programs.

9) R-3 Agency Reports

Ministry of Forests, Lands, Natural Resource Operations and Rural Development

- Manages joint contracts with Ministry of Transportation and Infrastructure and Parks to do invasive plant management on Crown Land. The Peace is divided into 3 areas (North, South and Pine Pass) with on contractor in each area.
- Planning starts early in the new year, meeting with range staff, local transportation, parks and agriculture staff to gather information and determine species priorities.
- Containment lines are reviewed to help FLNRORD focus where to target management. There are 3 lines – Agriculture Area Line; Yellow Hawkweed Line and Orange Hawkweed Line.
- 2018 saw an increase in Wild Caraway and Green Foxtail sites in and around agriculture areas. New Hawkweed sites closer to agricultural areas.
- 2018 data for number of sites treated, surveyed etc:

PRRD Area	FLNR	TRAN	PARKS
#sites surveyed	390	837	13
#species managed	23	35	4
#of sites chem treated	235	515	8
#of chem treatments	385	1021	17
#ha chem treated	24.8	35.6	0.26
#of sites mech treated	47	116	0

- the majority of funds were spent on Scentless Chamomile, Yellow Hawkweed,
 Orange Hawkweed and Common Tansy.
- FLNRORD also contracted with the Tsay Keh Dene to manage the high priority invasive plants, including Spotted Knapweed, located in a remote area on the West side of Williston Lake.

9) R-3 Agency Reports (continued)

Ministry of Forests, Lands, Natural Resource Operations and Rural Development

- Successes include a big reduction in the Marsh Plume thistle infestation on the Groundbirch Pasture and the Wild Parsnip site south of Chetwynd is down to 3 rosettes treated this year. As well, biocontrol on Dalmatian Toadflax appears to be getting established and having an effect on the infestation of toadflax.
- For 2019 2 of the contract areas are being reposted; looking for a site to release a new biocontrol for Yellow/Common Toadflax, looking for sites to move the gallforming biocontrol for Scentless Chamomile.

Tsay Keh Dene

• Regional District provided training funds, support for education and awareness.

Saulteau First Nations

- Partnered with West Fraser, used sheep to graze Canada Thistle found in cut blocks
- Elders are advocating no chemical use.

Shell Canada

- Continue to handle complaints, 800 # in use, business as usual.
- Wash program/stations pipeline locations.

Conuma Coal

- Much turnover this year,
- Work done at Willow Creek and Wolverine sites.

It was suggested that treatment areas be entered in the IAPP system – Regional District can assist with the "how to's".

Spectrum Resources

- Finding more Common Tansy
- Most sites reduced, i.e. gravel pits and roads

Tumbler Ridge

• Students – handpicked weeds, next year will be chemically treated.

Saddle Hills

- Scentless Chamomile raised to prohibited noxious
- Issued 82 weed notices
- Education seeing progress with rate payers

Two Sisters Nursery

- Raise awareness, gardeners provide education
- Exchange a plant program is a good idea, will use that concept

9) R-3 Agency Reports (continued)

BC Hydro – Site C

- Inventory / control at dam site location, 526 ha full treatment done on 438 ha.
- Inventory undertaken on 80 km of transmission line
- Inventory and treatment completed on 40 km along highway realignment
- Full results report should be completed in the near future
- Will follow-up with FLNRORD with respect to bio-control.

NEW BUSINESS:

10) NB-1 Plan The invasive plant program has changed over the years, it is important that the program and Profile remain relevant for all stakeholders. Members reviewed the "strategies" on page 11.

Bullet #1

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.

It was felt that there is a need to streamline the "Report a Weed" process. 80% of calls are passed onto FLNRORD or other agencies to facilitate—public needs to feel that their calls are important, otherwise they will stop calling. Denise noted that she will look into. Of the 82 calls most were related to Canada Thistle, have to drive to the area, speak with caller, monitor site. Residents feel frustrated as they cannot see anything being done. Takes 5 working days to deal with one complaint.

Bullet #4

Prevent the establishment of invasive plants not currently in the region.

It was suggested that the word "prevent" be replaced with "Inhibit/stop".

It was suggested that "currently in the region" be replaced with on PRRD lands and prevent

establishment on other lands.

Revised #5 Inhibit/stop the establishment of invasive plants on PRRD lands and other lands.

Bullet #7

Coordinate the activities and responsibilities of the various agencies and private landowners to meet

the Goals of the PRRD.

It was suggested that the work "coordinate" be replaced with "collaborate".

Revised #7

Collaborate the activities and responsibilities of the various agencies and private landowners to

meet the Goals of the PRRD.

Bullet #8

Facilitate EDRR initiatives at the federal, provincial and regional levels.

It was suggested that the word "facilitate" be replaced with the word "support".

Revised #8

Support EDRR initiatives at the federal, provincial and regional levels.

11) Recess

12) Reconvene

The meeting recessed at 12:00 pm
The meeting reconvened at 12:30 pm

13) NB-1 continued

Workplan – any program ideas that could be incorporated into the plan or any improvements that could be included. It was suggested that different plants be added to the document that are not represented in the carabiners. Take RD plant document and create our own "regional book" - 3 year supply. Emphasize the damage created by invasive plants, include different stage pictures to assist with identification at the 1-2-3 leaf growing stages. Add to carabiners – Mountain Bluet and Night Flowering Catchfly.

13) NB-1 Other suggestions included:

(continued)

Regional Early Detection Rapid Response – REDRR species are a significant threat and are new to the area under construction. The management objective is eradication.

Hawkweeds have changed Scientific names to Heiracium spp.

The strategic plan should talk about the containment lines that have been created in the last 2 years. Agriculture line, Orange hawkweed line, yellow hawkweed line.

Appendix 6, Page 31 Provincial EDRR lists. Need to be updated and have the creation date on them.

14) NB-2 No changes.

Profile of Plant Species

15) NB-3 Review of

ToR

Committee members were asked if the current Terms of Reference were still relevant. For example, is there any value in scheduling two meetings per year – increased participation. Want the Committee to feel they are gaining information, share ideas, suggestions, and can provide updates on their programs.

MOVED by Ella Head, SECONDED by Mike Pangman, That the meeting be adjourned.

CARRIED.

The meeting adjourned at 2:40 pm

Leonard Hiebert	Suzanne Garrett
Chair	Corporate Services Coordinator

Invasive Plant Program Manager – PRRD – 2019 Year at a Glance – Annual Report

For 2019, the Invasive Plant program and PRRD continued to promote the Destroy Daisy campaign. We played the commercial at the local movie theatres, played the radio commercial on our local radio stations, and attended the Canada Day Pouce Coupe Parade with the Destroy Daisy truck.

Not only did we re-hire our two seasonal staff from May 1 to September 1 to complete the efficacy monitoring for the Province, we added a 3-month compliance and enforcement officer dedicated to Invasive Plants. Devre Gibson returned for her third year and Ashley Schweitzer, her second year, Cathy Ashcroft came on board as our Bylaw Officer.

Devre and Ashley handed out information packages to many different businesses and organizations around the PRRD regarding scentless chamomile and oxeye daisy in hopes of gaining voluntary compliance from the companies. As a result, many different companies cleaned up their yards and the volume of complaints from the industrial areas reduced. Cathy handled 117 weed reports, issued 2 warning tickets, 10 financial penalties, and 1 weed notice. 27 files will require follow-up in the spring to ensure spring treatment occurs prior to re-seeding of agriculture crops.

Outreach activities included many school visits, science fairs, Parks Day, local fairs as well has material delivery to landfill and transfer stations, pet stores, hunting stores, garden centres, and tourist information centres. We also created a brand new Peace River Regional District Plant ID book that focusses on our listed plants within each of our categories.

Together ● Prevent ● Report

Kari Bondaroff, P.Ag

Manager of Invasive Plants, Environmental Services, and Field Services Program

The following subsequent table follows the work plan as outlined within the 2019 Strategic Plan and Profile.

2019 Invasive Plant Program Work Plan Priorities and Results

Priorities	Results
Planning	
Prioritize the 101 PRRD owned/occupied properties using the IAPP data for reported invasive plant species infestations.	62 sites were surveyed, 57 sites were treated.
Create a schedule of treatment months to ensure proper timing of treatment.	Treatments occurred from June-September 2019 by MGP Contracting.
Evaluate the PRRD IAPP data for invasive species infestations and outline sensitive areas that need to be visited in 2018.	Planning sessions occurred between the PRRD and the Province on February 20, 2019 to outline areas in need of high priority treatments.
Inventory current outreach materials and update/purchase as required.	New carabiner cards were printed, 4 new species (mountain bluet, common toadflax, meadow goat's beard, wild parsnip). PRRD Plant ID booklets were re-designed and 10,000 copies are on order.
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 42 were monitored for efficacy by PRRD staff.
Survey of historical Regional EDRR sites.	The following plants were surveyed in the 2019 season: 1- Diffuse Knapweed 26- Marsh Plume Thistle 12- chicory 1- Blueweed 2- Himalayan Balsam 1- Field Scabious 38- Mountain Bluet 3- Cypress Spurge 1- Bighead Knapweed 1- Wild Parsnip 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 3nd year of the Area Controllers contract, 30% of the PRRD sites will be monitored for treatment in 2019.	42/57 sites were monitored for treatment which is 74% of our sites.
The PRRD will conduct treatment efficacy monitoring for the Ministry of Transportation and Infrastructure and the Ministry of Forests, Lands, and Natural Resource Operations and Rural Development. All monitoring will be completed as per the contract agreement.	115 sites were monitored for treatment efficacy as per the contract. These sites were spread within the boundaries of the PRRD. All required documentation has been submitted to the Ministry of Transportation and Infrastructure as per the contract. This was an annual contract of \$25,000.
Data Entry	
100% of inventory, survey, or treatment documentation will be entered into IAPP within 3 working days of completing the data collection.	IP staff were very diligent in data entry this season. 100% of the data entry was completed within 3 working days of data collection.
Education and Awareness	
Continue to support the Peace River Forage Association's quarterly seminars.	PRRD supplied information for a Forage Fact in November 2019.
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 2019 year that required support.
Continue to promote the activities of teaching livestock to eat weeds through research, outreach articles, and knowledge transfer.	Saulteau FN embarked in a sheep flock training session in June 2019. 30 yearlings were successfully trained to eat Canadian thistles.
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 including regional fall fairs, 4-H events,	Staff attended regional fall fairs, science fairs, garden centers, forage tours, parks day, and parades.
local garden tours, career fair days, and science fairs.	Drogramming that the ID staff offer is over
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.
Continue to utilize "Weedy Wednesday" Facebook posts to promote events, highlight invasive plant species, and offer information about integrated pest management techniques.	Weedy Wednesday posts were very successful this season. There were posts with an average of people being reached within each post. (To be updated after Dec 31, 2019, there was at least 1 post per week, if not more some weeks).
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 2019 include 4 new carabineer cards to add to the existing cards and a new PRRD Plant ID book.
PRRD staff will continue to attend professional development activities as per their work plans.	ISCBC directors meetings, asset management.
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 as well as the PRRD Plant ID booklet.
Coordination and Partnership Building	
Hold two IPCPRRD and SPPIPMC meetings.	Meeting held November 26, 2019. There were no additions to the agenda for the Spring 2019 meeting and as such updates were emailed to members as they were received from partnering organizations.

	1
Engage a minimum of two First Nations Partnerships in activities such as Weed ID, community weed pulls, or treatment of existing infestations.	Saulteau FN engaged in surveying of their lands as well as sheep training in 2019 for livestock and weeds. West Moberly FN is interested in a partnership educational day or weed pull in 2020.
Continue to support the ISCBC programs.	"Plantwise," "Don't let it loose," "Clean Drain Dry," "PlayCleanGo" are all communicated through the PRRD.
Attend the 2019 ISCBC AGM and Forum in February.	Due to unforeseen circumstances, the forum was unable to be attended.
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 13824 kg (1864 residential, 11960 commercial), Chetwynd received 3060 kg (460 residential, 2600 commercial), and North Peace received 8825 kg (8735 residential, 90 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.	One rancher contract was again held between FLNRO and Sunset Community Pasture.
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 third year. BC Parks placed 4 more signs in their own parks to promote the program for 2019 moving forward.
Host an outreach event in partnership with PRRD parks staff.	This event was held July 27 at Sundance Park. Summer staff attended the event.

*	"Plantwise" and "Grow Me Instead"
/ Increase awareness of the "Grow Me	documentation as well as the PRRD plants
Instead"/"Plantwise" programs through	document were distributed to Garden
local nursery visits, delivery of outreach	centres in Dawson Creek, Fort St. John,
materials.	Hudson's Hope, Taylor, and Chetwynd.
*	This is the 3 rd year of this program and it was
Increase awareness and promotion of the	offered to all residents that were issued
Good Neighbour Cost share program	either an information package or a warning
which allows non-commercial residents to	ticket for an infestation found on their
access between 50-75% of costs, up to	property. As well, it was offered to residents
\$500-\$750 of treatment or chemical costs	that called wanting information on treatment
on a one-time, pre-approved, basis.	options. However, there was no up-take for
	the 2019 season. It is recommended that we
	cancel this program for 2020 and try a
	different approach.
*	For 2019, all REDRR plants were made
Increase awareness and promotion of the	available for trade-a-weed through the entire
Trade-A-Weed program for gardeners that	month of May through FB posts and
allows participants to document removal	information delivered to garden centres
and disposal of an invasive plant from	across the region. There was no up-take for
their flower garden in exchange for the	this program.
purchase of a "plantwise" perennial.	
Leveraging Additional Resources	1 12 22
Additional financial resources will be	A \$25,000 contract was negotiated between
received from the Ministry of	the PRRD and MoTI for efficacy monitoring of
Transportation. This will cover the cost of	IP treatments within the Pine Pass, South
monitoring treatments conducted by	Peace, and North Peace invasive plant
MoTI and FLNRO contractors within the	management areas.
three PRRD Invasive Plant Management	
Areas.	
Provincial EDRR Support	
*	None requested within the 2019 season.
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	

*	None requested in 2019.
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.	The WD and A Mandy and a latest with a the
Staff will continue to promote the "Report-	The "Report-A-Weed" app is listed within the Strategic plan and profile of the Invasive Plant
A-Weed" app through communications	program, within our deck of cards, and within
within the PRRD.	the destroy daisy commercial.
*	Procedures were followed according to the
	C&E manual and documentation of
the office of the PRRD will receive follow-	communications was made. 117 weed
up within 3 working days of receipt. Any	reports were received via phone call, email,
follow-up required will follow the policies	and sent in weed report forms. This included
and procedures outlined in the C&E	5 "Report-A-Weed" reports.
manual.	
Reporting and Data Management	As per requests.
When requested, invasive plant program staff will provide updates to the PRRD Board	As per requests.
on operational activities conducted by the	
program.	
*	Deadline is January 31, 2020.
An annual report will be conducted for the	
2019 year.	
Any and all reporting requirements as per	All requirements completed and submitted as
contract agreements will be met by or	per contractual agreements between the PRRD and MoTI.
before the outlined due dates.	FRAD and Mori.
IAPP data will be handled with utmost	IAPP data has been double checked and any
care to prevent potential errors.	errors corrected or passed on for correction.
wa	At this point, all data is found to be accurate.
PRRD invasive plant staff will enter IAPP	None requested in 2019.
data for other jurisdictions as per their	
request.	
The Strategic Plan and Profile will be	Suggestions for improvements and updates
The Strategic Plan and Profile will be maintained to reflect current operations	will be requested at the November 26, 2019
and will be approved by the IPCPRRD	meeting. Any changes will be made prior to
committee following the spring meeting.	the spring 2019 meeting.
*	Completed.
All manuals, policies and procedures, and	
operational plans will be posted on the PRRD website for shareholders to utilize.	
Other program Activities	No new requests for 2019.
When requested, invasive plant program	THO NEW TEQUESTS TOT 2015.
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.	Throughout the 2019 season, Paulo Eichelberger, Kari Bondaroff, and Mike Pangman were appointed by the Board as weed officers and inspectors. Cathy Ashcroft was appointed by the Board as a weed officer.
Hire one seasonal staff for the field season from June – August 31, 2019 to increase compliance and enforcement efforts throughout the summer months.	Cathy Ashcroft was hired in June of 2019.
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 2019 year, 25,709 kg of invasive plants were received at the local landfills, an increase of over 4,000kg from 2018.
Hire two seasonal staff for the field season from May 1 – August 31, 2018.	Devre Gibson and Ashley Schweitzer successfully worked in areas such as outreach, monitoring, planning and data entry.

Thank You Funders

Ministry of Forests, Lands and Natural Resource Operations









Invasive Plant Program Strategic Plan and Profile 2019



diverse. vast. abundant.

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PRRD Vision, Mission, Values & Goals



Vision: A strong, diverse and sustainable Peace River Region inspired by innovative leadership that promotes livable and safe communities and a healthy natural environment.



Mission: To work together to enhance the spirit, traditions and diversity of the Peace River

Region and to support a high quality of life for its residents.



Values:

Accountability - Taking ownership and accepting responsibility for making decisions and following up with implementation of those decisions.

Cooperation - Willing to work together and support one another.

Credibility - Ensuring the business of the Region is transparent and believable.

Fairness - Acting in an unbiased way, with a sense of fair play.

Honesty - Practicing sincerity, genuineness and frankness when making decisions.

Integrity - Making decisions for and acting in the best interests of the Region.

Leadership - Making sound decisions today and demonstrating vision while focusing on the future.

Respect - Showing consideration for people, lands and governing bodies.

Trust - Ensuring confidence in one another.



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:

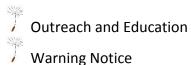


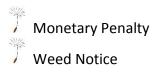
"No person who is an Owner or Occupier of Real Property shall allow any Invasive Plant or Noxious Weed to grow on that Real Property"

The General Manager of Environmental Services, the Invasive Plant Manager, the Invasive Plant Coordinator, 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:





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, listed in Appendix 1, interested in invasive plant management within the Regional District. The terms of reference for this committee can be found in Appendix 2.

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 3.

Both committee's hold meetings in the spring and fall. In the fall, members report their activities and bring forward any new invaders found in the Region. The annual report, circulated early in the New Year, lists the plants and provides information for further discussion. During the spring meeting, the proposed changes are reviewed, changes to the strategic plan are made, and the updated strategic plan is presented to the Board for adoption. The early history of the program and strategies are available in Appendix 4.

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 58th 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)

Ministry of Transportation and Infrastructure (Peace Region)

Oil and Gas Commission

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: prrd.dc@prrd.bc.ca. This group represents all perspectives and land-related vantage points including, but not limited to:

All levels of government (federal, provincial, & 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

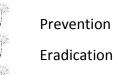
Utilities & Transportation

BC's Regional Invasive Organization

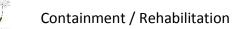
Invasive Plant Management Strategies

Management Strategy Overview

The invasive plant strategy has the following five components:



Eradication / Suppression



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.

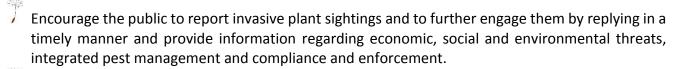
Site conditions are divided into four groups in decreasing expected potential for control, see Table 1 in Appendix 5. Site conditions ranked #1 have the highest opportunity for control being effective. A site ranked as #4 has a much lower potential or opportunity for eradication or control. Costs are 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:



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

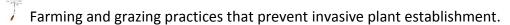
Conduct invasive plant programs in the region based on Integrated Pest Management principles.

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:



Seeding all disturbances as quickly as per the Peace-Liard Re-Vegetation Manual found here: http://prrd.bc.ca/wp-content/uploads/2014/12/NEIPC Reveg manual PeaceLiard April2010 002.pdf

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: https://www.for.gov.bc.ca/hra/invasive-species/Publications/Prov EDRR IS Plan.pdf

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. 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: https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/species-ecosystems-at-risk

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, but care should be taken to ensure the plant is on a plain background such as the hood of a truck. Be sure 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



Fill out a form at the front counter of 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 prrd.dc@prrd.bc.ca along with a description of the plant / infestation



Download the free app: www.reportaweedbc.ca



Eradication, Containment, Rehabilitation and Inventory

1) Canada's invasive species strategy:
https://www.canada.ca/en/environment-climate-change/services/biodiversity/invasive-alien-species-strategy.html

- 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.





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

2019 Invasive Plant Program Work Plan

Planning



Prioritize the 101 PRRD owned/occupied properties using the IAPP data for reported invasive plant species infestations.



Create a schedule of treatment months to ensure proper timing of treatment.



Evaluate the PRRD IAPP data for invasive species infestations and outline sensitive areas that need to be visited in 2019.



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.

Treatment



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

Treatment Monitoring



This is the 2nd year of the Area Controllers contract, 30% of the PRRD sites will be monitored for treatment in 2019.



The PRRD will conduct treatment efficacy monitoring for the Ministry of Transportation and Infrastructure and the Ministry of Forests, Lands, and Natural Resource Operations and Rural Development under the conditions of a new contract.

Data Entry



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

Education and Awareness



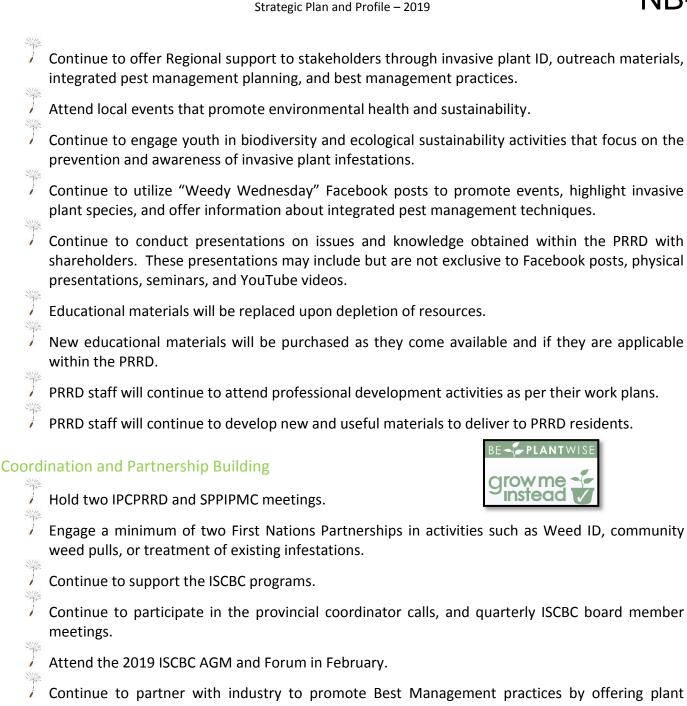
Continue to support the Peace River Forage Association's quarterly seminars.



Support a formal or non-formal Pesticide Applicators Course within the PRRD to include both staff and stakeholders.



Continue to promote the activities of teaching livestock to eat weeds through research, outreach articles, and knowledge transfer.



identification resources, offering free commercial dumping at the three local landfills, and partnering in outreach events.

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.

Continue to work with local 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 parks staff.



Increase awareness of the "Grow Me Instead/Plantwise Program" through local nursery visits, delivery of outreach materials.



Promote the Good Neighbour Cost share program which allows non-commercial residents to access between 50-75% of costs, up to \$500-\$750 of treatment or chemical costs on a one-time, pre-approved, basis.



Promote the Trade-A-Weed program for gardeners that allows participants to document removal and disposal of an invasive plant from their flower garden in exchange for the purchase of a "plantwise" perennial.

Leveraging Additional Resources



Continue to work with the MoTI and FLNRORD on efficacy monitoring and contract monitoring.

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



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



When requested, invasive plant program staff will provide updates to the PRRD Board on operational activities conducted by the program.



An annual report will be conducted for the 2019 year.



Any and all reporting requirements as per contract agreements will be met by or before the outlined due dates.



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 following the spring meeting.



All manuals, policies and procedures, and operational plans will be posted on the PRRD website for shareholders to utilize.

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.

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 – August 31, 2019 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 – August 31, 2019.



Free invasive plant dumping for all users (residential and commercial) will continue at the three local landfills (Bessborough, Chetwynd, and North Peace).

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.

Table 4 – Regional Early Detection Rapid Response (REDRR)

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	Anthemis cotula			
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			

NB-1

APPENDIX 1:

Stakeholders and Members of the Strategic Plan and Profile of the Invasive Plants Monitoring Committee

Chair: Director Leonard Hiebert, Appointed by the Committee in 2018.

Agriculture Producer Groups

BC Grain Producer's Association

Peace River Organic Producers
Association

Peace River Regional Cattlemen's
Association

Peace River Forage Association

North Peace Cattlemen's Association

North Peace Farmers Institute

South Peace Stockmen's Association

Agriculture - Other Jurisdictions

Clear Hills County

Leduc County

Municipal of District Greenview

Saddle Hills County

Communities

City of Fort St. John

City of Dawson Creek

District of Chetwynd

District of Tumbler Ridge

District of Hudson's Hope

District of Taylor

Village of Pouce Coupe

City of Grande Prairie (Alberta

Contractors - Invasive Plants

K.A.M. Ventures

Spectrum Resource Group Inc.

Sunrise Environmental Inc.

MGP Contracting Vegetation Management

Federation of BC Naturalists

Timberline Trail and Nature Club

First Nations

Prophet River First Nations

Saulteau First Nations

Treaty 8 Tribal Associations

West Moberly First Nations

Tsay Keh Dene Band

Doig River First Nations

Government Partners

Agriculture and Agri-Food Canada

BC Hydro

BC Oil & Gas Commission

BC Transmission Corporation

Ministry of Agriculture

Ministry of Environment (BC Parks)

Government Partners continued

Ministry of Forests, Lands and Natural Resource Operations and Rural Development

Ministry of Transportation and Infrastructure

National Energy Board

Northwest Invasive Plant Council

Invasive Species Council of BC

Northern Rockies Invasive Plant Management Area

School District No. 59 and 60

Transportation

Caribou Road Services Ltd

Yellowhead Road and Bridge

Oil & Gas, Forestry, Mining Industry & Related Partners

Ace Vegetation Control Service Ltd.

Anglo American plc.

DOW Chemical

Chetwynd Mechanical Pulp

Encana Corporation

EWD Consulting Corp.

Ghostpine Environmental Services Itd.

Hemmera (Bear Mountain Wind Park Project)

Heritage North Consulting Ltd.

Louisiana Pacific Canada Ltd.

Painted Pony Petroleum Ltd.

Pathfinder Endeavours Ltd.

Peace River Coal Inc.

Pembina

Progress Energy

SemCAMS | Red Willow ULC

Shell Canada Limited

Enbridge Inc.

Stantec Consulting Ltd.

CH2M Energy

Tourmaline Oil Corp

Trend Mine | Northern Energy & Mining Inc.

Conuma Coal

APPENDIX 2:

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

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



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



Membership is open to all who are interested in noxious/invasive plant management.



Membership will be continuous.

APPENDIX 3:

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



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: https://prrd.bc.ca/wpcontent/uploads/bylaws/board-procedure-bylaw/BL 2200 Board-Procedure consolidated Jan-14-2017.pdf

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 4:

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

The first "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

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

Appendix 5:

Site Prioritization, Treatment Matrix and Thresholds

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

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

Table 3. Progra	m Thresho	lds	
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
	T.		Treatment or come form of management is mandatory
Α	1		Treatment or some form of management is mandatory:
Α	2	ERADICATION	Immediate requirement to prevent newly arriving
Α	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.
А	4		Treatments are mandatory for sites outside of containment lines or where values are threatened:
В	2	CONTAINMENT	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 6:

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

NW.	N/W
Bur Chervil (Anthriscus caucalis)	Knotweed, Himalayan (Polygonum polystachyum)
Canada Thistle (Cirsium arvense)	Knotweed, Japanese (Fallopia japonica)
Common Reed (Phragmites australis subsp. australis)	Leafy Spurge (Euphorbia esula)
Cordgrass, Dense-flowered (Spartina	Milk Thistle (Silybum marianum)
densiflora)	North Africa Grass (Ventenata dubia)
Cordgrass, English (Spartina anglica)	Nutsedge, Purple (Cyperus rotundus)
Cordgrass, Saltmeadow (Spartina patens)	Nutsedge, Yellow (Cyperus esculentus)
Cordgrass, Smooth (Spartina alterniflora)	
Crupina (Crupina vulgaris)	Purple Loosestrife (Lythrum salicaria)
Dodder (Cuscuta spp.)	Rush Skeletonweed (Chondrilla juncea)
Flowering Rush (Butomus umbellatus)	Scentless Chamomile (Matricaria maritima)
Garlic Mustard (Alliaria petiolata)	Sow-thistle, Annual (Sonchus oleraceus)
Giant Hogweed (Heracleum mantegazzianum)	Sow-thistle, Perennial (Sonchus arvensis)
Giant Mannagrass/Reed Sweetgrass	Tansy Ragwort (Senecio jacobaea)
(Glyceria maxima)	Toadflax, Common / Yellow (Linaria vulgaris)
Gorse (Ulex europaeus)	Toadflax, Dalmatian (Linaria genistifolia)
Hound's-tongue (Cynoglossum officinale)	Velvetleaf (Abutilon theophrasti)
Jointed Goatgrass (Aegilops cylindrica)	Wild Oats (Avena fatua)
Knapweed, Diffuse (Centaurea diffusa)	Yellow Flag Iris (Iris pseudacorus)
Knapweed, Spotted (Centaurea stoebe)	Yellow Starthistle (Centaurea solstitialis)
Knotweed, Bohemian (Fallopia x bohemica) Knotweed, Giant (Fallopia sachalinensis)	, Tellow Startifistie (Centuureu soistitialis)

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

N1/2	
Baby's Breath (Gypsophila paniculata)	Field Bindweed (Convolvulus arvensis)
Bachelor's Button (Centaurea cyanus)	Foxtail Barley (Hordeum jubatum)
Bladder Campion (Silene cucubalus)	Goatsbeard - Western (Tragopogon dublus)
Bull Thistle (Cirsium vulgare)	Himalayan Blackberry (Rubus discolor)
Butterfly Bush (Buddleja davidii)	Himalayan Balsam (Impatiens glandulifera)
Chicory (Cichorium intybus)	Knapweed, Brown (Centaurea jacea)
Cluster Tarweed (Madia glomerata)	Mountain Bluet (Centaurea montana)
Common Mallow (Malva neglecta)	Nightshade (Solanum spp.)
Common Periwinkle (Vinca minor)	Nodding Thistle (Carduus nutans)
Creeping Buttercup (Ranunculus repens)	Russian Olive (Elaeagnus angustifolia)
Curled Dock (Rumex crispus)	Scotch Broom (Cytisus scoparius)
Daphne (Daphne laureola)	St. John's-Wort (Hypericum perforatum)
Didymo (Didymosphenia geminate)	Tamarisk (Tamarix chinensis, T. ramosissima)
English Holly (Ilex aquifolium)	Teasel_(Dipsacus fullonum)
English Ivy (Hedera helix)	Water Hemlock (Cicuta douglasii)
Eurasian Watermilfoil (Myriophyllum spicatum)	Yellow Archangel (Lamium galeobdolon)

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).

31/6	Bellflower, creeping
Baby's Breath, common	Blueweed
Bindweed, field	Brome, Japanese
Brome, downy	Burdock, great
Burdock, common (lesser)	Buttercup, tall (Ranunculus
Burdock, woolly (Arctium tomentosum)	acris)
Chamomile, scentless (<i>Tripleurospermum inodorum</i>)	Clematis, yellow (Clematis tangutica)
Daisy, oxeye	Cockle, white (Silene latifolia)
Henbane, black	Dame's Rocket
Hoary Cress	Hound's-tongue
Pepper-grass, broad-leaved	Mullein, common
Sow thistle, perennial	Scabious, field
Tansy, common	Spurge, leafy (Euphorbia esala)
Toadflax, Dalmatian	Thistle, Canada
	Toadflax, yellow



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

1. 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."

2. Purpose

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

3. Accountability

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

4. Committee Organization

- a. A Chair and Vice Chair will be appointed by the IPC PRRD
- b. Secretarial services will be provided by the Peace River Regional District
- c. Members may be chosen to form an Advisory Committee and provide technical advice

5. Membership

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

Adopted by the Regional Board: February 27, 2014



PEACE RIVER REGIONAL DISTRICT

Expense StatementRegional District Board approved (volunteer) Committee

Name:					
Committee N	lame: <u>Strategic P</u>	lan and Profile of Invas	ive Plant	Monitoring	g Committee
Mailing addre	ess:				
Telephone:					
Date	Destination	Reason	Km	Office Use Only	Expenses (attach receipts)
		Sub-total			
		Total km			
		Total Mileage			
		Subtrac	t Travel	Advance	()
		Subtra	ct Other		()
		NET	AMOUN	Т	
		ent of costs incurred by River Regional District		e attending	a
Committee I	Member Signature:	Departmen	nt Manag	er Signatu	re:
Date:		Date:			
Board approved Janua	m, 20 2000	·		-	

DISTANCE CHART

(Kilometres)

	Chetwynd	Dawson Creek	Fort Nelson	Fort St. John	Hudson's Hope	Pouce Coupe	Taylor	Tumbler Ridge
Chetwynd		102	566	154	65	110	163	90
Dawson Creek	102		485	75	167	16	61	120
Fort Nelson	566	485		412	501	495	421	656
Fort St. John	154	75	412		89	81	14	195
Hudson's Hope	65	167	501	89		175	98	155
Pouce Coupe	110	8	495	81	175		72	128
Taylor	163	61	421	14	98	72		184
Tumbler Ridge	90	120	656	195	155	128	184	
Prince George	310	412	876	464	375	420	478	400
Prince Rupert	1,031	1,133	1,597	1,185	1,096	1,141	1,194	1,121
Vancouver	1,099	1,201	1,665	1,253	1,164	1,209	1,262	1,189
Grande Prairie	264	132	617	205	299	124	196	145
Edmonton	688	586	1,071	659	753	578	650	599
Calgary	985	883	1,369	956	1,050	875	947	896