

2018 REPORT



December 7, 2018

Cariboo Regional District Invasive Plant
Management Report

2018 Report

CARIBOO REGIONAL DISTRICT INVASIVE PLANT MANAGEMENT REPORT

MANDATE

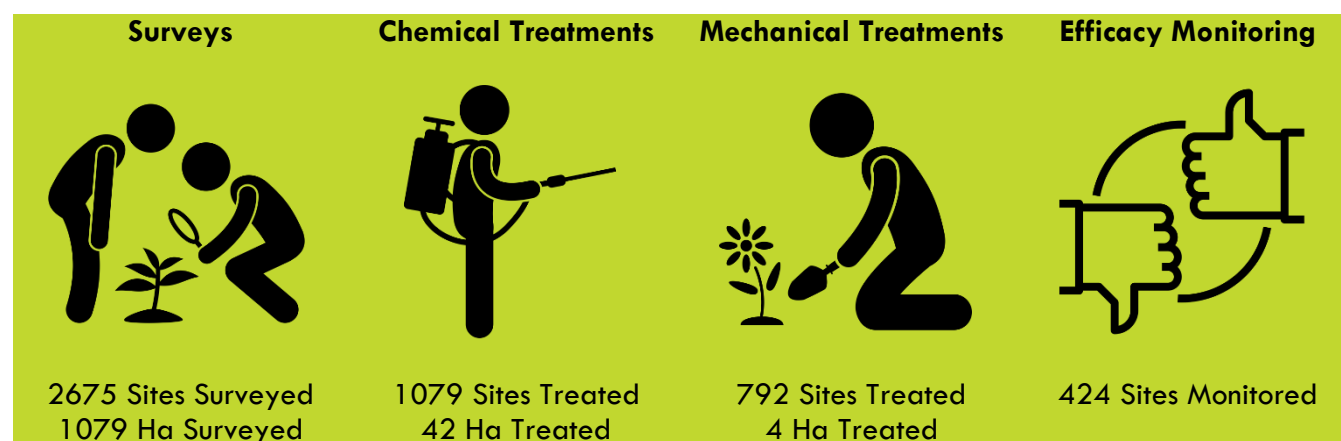
The Cariboo Regional District is strongly committed to operating an invasive plant management program (IPM program) to protect our range and timberlands for the economic and environmental benefit of all British Columbians. The IPM program follows an integrated pest management approach involving public awareness through educational initiatives, chemical control through the application of herbicides, biological control, and inter-agency coordination.

OPERATIONS

The CRD's invasive plant management program follows an integrated pest management approach in controlling invasive plant populations. This approach is a systematic decision-making process that supports a balanced method to managing different areas of interest for the effective, economical, and environmentally sound suppression of invasive plants.

2018 Management Activities Overview

Please find a map depicting the spatial overview of 2018's management activities as a separate attachment to this report.



Surveys

An invasive plant survey consists of a general review of the site scheduled for management. Every site that is treated must have a survey completed first. Each survey includes the collection of detailed information about the invasive plant species present, such as its location and distribution across the landscape. Management staff also observe and record the physical characteristics of the site. Information gathered during the survey will assist staff in determining appropriate treatment method selection. The table below outlines surveys conducted over the 2018 season by jurisdiction within the CRD.

Jurisdiction	# of Sites Surveyed	Area Surveyed (Ha)
<i>BC Hydro</i>	32	15.702
<i>Ministry of Forests</i>	1038	241.792
<i>Ministry of Transportation</i>	1155	583.184
<i>Municipality Owned Land</i>	227	48.5431
<i>Private Land</i>	86	38.876
<i>CRD Owned Land</i>	94	148.7722
<i>Fortis Energy Inc.</i>	10	1.7519

Chemical Treatments

Chemical treatments include strategic spot treatments of invasive plants using herbicides. The herbicides used depend on a number of factors, including the target plant species, as well as site conditions such as soil texture, proximity to aquatic ecosystems, neighboring urban sensitivities, and topography. The Integrated Pest Management Act governs the use of herbicides within BC. This piece of legislation functions to protect human health, non-target species, and the environment. All treatment staff and contractors are certified to use herbicides under this Act. The table below summarizes chemical treatments over the 2018 season within the CRD by jurisdiction.



Jurisdiction	# of Sites Treated	Area Treated (Ha)
<i>BC Hydro</i>	15	0.918
<i>Ministry of Forests</i>	388	23.11
<i>Ministry of Transportation</i>	528	10.1854
<i>Municipality Owner Land</i>	85	2.2237
<i>Private Property</i>	15	1.6307
<i>CRD Owned Land</i>	54	4.3965
<i>Fortis Energy Inc.</i>	1	0.025

Mechanical Treatments

Mechanical treatment of invasive plants include any physical control, such as hand pulling, digging, targeted grazing by livestock, and weed whacking. These techniques negatively affect the plant's life cycle by cutting the plant at its base, destroying roots, preventing seed production, or depleting seed reserves. It is important to complete mechanical control before seed set and is largely ineffective on creeping rooted plants. The table below depicts mechanical treatments completed over 2018 within the CRD by jurisdiction.



Jurisdiction	# of Sites Treated	Area Treated (Ha)
BC Hydro	7	0.2104
Ministry of Forests	173	0.5642
Ministry of Transportation	410	2.5865
Municipality Owned Land	156	0.3851
Private Property	20	0.0512
CRD Owned Land	33	0.022
Fortis Energy Inc.	2	0.0011

Landowner Assistance Program

Invasive plant's grow and spread regardless of invisible borders marking one boundary from the next. To be successful in managing invasive plants on a local or regional scale, everyone who is responsible for land stewardship needs to do their part. Successful management requires knowledge and substantial investments of both time and money. The CRD recognizes that most homeowners are unable to meet these requirements and therefore developed a landowner assistance program to encourage participation and provide support to do so. Services available within the landowner assistance program include spray equipment loans, herbicide dispensing, private property treatments, biological control agent releases, 50/50 cost sharing, heavy-duty disposal bags, and management advice. Only plants listed in the CCCIPC (Cariboo Chilcotin Coast Invasive Plant Committee) Regional Strategic Plan, BC Weed Control Act, or CRD's Invasive Plant Management Regulation Bylaw are eligible for management under this program.

Equipment Loan-Out

Landowner's are welcome to borrow CRD spray equipment from May to October. Truck sprayers, ATV sprayers, and backpack sprayers are available for loan on a first come, first serve basis for a 7-day period.

Equipment continued in 2018 to be available for pick-up at a location within Quesnel, 100 Mile House, and Williams Lake.

Herbicide Dispensing Program

Participating landowner's are eligible to receive a demonstration amount of herbicide to treat invasive plants on their property. Herbicide product and amount dispensed will be dependent on the invasive plant species and site conditions, but will not exceed 2L. Landowners are required to attend a dispensing session to receive the herbicide unless they hold a valid BC Pesticide Applicator Certificate.

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Dispensing sessions occurred in May. There was one session each for north, central and southern area residents. The table below summarizes dispensing totals for each area for 2018.

Area	Number of Participating Landowners
North Cariboo	36
Central Cariboo	53
Chilcotin	4
South Cariboo	27
Total	120



Private Property Treatments

Landowner's are eligible to receive one free treatment on their property up to the lesser of 10 acres or one full workday. This service is on a first come, first serve basis. Treatments occur between the months of May to October.

The table below summarizes the private properties within the CRD that registered and participated in this service for 2018.

Private Properties Treated (#)	Area Treated (Ha)
28	1.6819

Biological Control Agent Releases



Some invasive plant species have natural organisms that reduce their populations. These organisms are usually natural enemies (such as insects, fungus, or pathogens) of the invasive plant in their native environments. Within the CRD, there are populations of biocontrol agents for spotted and diffuse knapweed, Dalmatian toadflax, and thistle species. Staff are able to collect biocontrol agents and release them on private land during the operational season upon request. However, the availability of biocontrol agents is variable each year depending on a number of environmental and biological conditions. Biocontrol agents also require specific site conditions to survive and proliferate. Therefore, this service is dependent upon availability of biocontrol agents and site

suitability.

The IPM program received and fulfilled two requests for biological control agents from landowners over the 2018 season. 933 insects were released in total. 133 insects for a Canada thistle infestation and 800 insects for a knapweed infestation.

50/50 Cost Sharing

Landowner's are eligible to apply for a subsidy to assist them in either purchasing herbicide or hiring an invasive plant management contractor to manage invasive plants on their property. Interested landowners need to apply and receive approval before receiving the rebate. This service is on a first come, first serve basis until budgets are exhausted.

The table below summarizes the results of 2018's 50/50 Cost Share service within the CRD.

Program Year	# of Applicants	# of Approved Applications	# of Acres Treated	Total Cost of Treatment	Cost to the CRD
2014	13	13	401	21,546	9,380
2015	23	17	1315.25	53,817	14,249
2016	33	21	1184.35	92,660	30,284
2017	20	16	705.71	58,347	23,649
2018	26	23	751.56	66,157	25,458

Heavy-duty Disposal Bags

Landowner's may obtain clear, heavy-duty bags for the disposal of invasive plant material. Landowners are able to dispose of bagged invasive plant material in the household waste bins at their local transfer station or in the invasive plant bin at the 100 Mile House, Williams Lake, or Quesnel landfill.

Bags are available for pick-up at CRD office locations and all manned landfill/rural refuse sites.

Management Advice and Property Assessments

Landowners requiring assistance in identifying invasive plant species presence and management recommendations for their property are encouraged to request an assessment by invasive plant management staff. An assessment can especially assist landowners with making a decision as to which assistance service to participate in.

Staff responded to and conducted 33 property assessments throughout the 2018 operational season.

Efficacy Monitoring

Monitoring determines the efficacy of treatment and records any treatment affects, such as injury to non-target species. Monitoring is critical in determining the long-term effectiveness of treatment methods and management programs. Efficacy monitoring outcomes assist in strategizing, planning and implementing program elements for future years. A total of 424 unique sites were monitored for efficacy.

Top 5 Invasive Plants of Concern within the CRD

Based on survey and treatment summaries for 2018 the following table highlights the top five problematic invasive plant species within the CRD. These species continue to increase in number of sites, size of infestations, or impacts to residents. Their collective management consumes a considerable quantity of available resources.

Invasive Plant	# of Sites	Total HA Found	# of New Occurrences	Total HA New	# of Treatments
<i>Common Tansy</i>	1089	153.7	9	14.6	276
<i>Field Scabious</i>	277	100.8	2	0.022	79
<i>Hoary Alyssum</i>	166	27.8	5	0.007	88
<i>Spotted Knapweed</i>	2199	1779.7	19	11.9	676
<i>Yellow Hawkweed</i>	1582	716.3	30	18.1	168

Common Tansy

PLANT PROFILE

- Introduced to North America from Europe as a garden herb.
- A perennial plant that can grow up to 1.5 m in height with creeping roots and clusters of bright yellow button-like flowers.
- Common tansy is unpalatable to most livestock and may be mildly toxic in some cases.
- It is especially prone to infesting riparian areas where it can reduce native vegetation, affect stream bank stability and reduce forage quantity and quality for livestock and wildlife.



THE PROBLEM

There are over a thousand sites of Common Tansy within the CRD. The sheer number of sites makes it difficult from a financial and time perspective to manage Common Tansy effectively. The other aspect that makes Common Tansy a management challenge is the location of infestations. Many infestations near riparian areas are problematic because control options are limited. Many other infestations are located on private land that may or may not be receiving management. Infestations in riparian areas and on private land are providing sources for further spread. Therefore, this species is very widespread within the CRD in alleys, waste areas, vacant lots, roadsides, and industrial and riparian areas.

Field Scabious

PLANT PROFILE

- Introduced to North America from Europe as an ornamental garden plant.
- A large, erect plant with a creeping root system and a single main stem.
- The main stem branches into multiple flower stalks that produce purple flowers.
- Infestations of field scabious can reduce the yield and quality of forage in pastures and displace native vegetation.



THE PROBLEM

This species is scattered throughout the CRD. The heaviest infestations are in the north Cariboo within the Cottonwood area along highway 26 and along the Quesnel Hydraulic Rd. A containment area exists around the infestation in the Cottonwood area because of its severity. Within the containment area, only localized treatment will occur. Outside the area, all infestations will receive treatment as budgets allow. Unmanaged infestations on private land have contributed to its continued spread. Infestations along riparian areas have also played a significant contributing factor to its spread.

Hoary Alyssum

PLANT PROFILE

- Introduced to North America from Eurasia in contaminated seed.
- Hoary Alyssum has a slender taproot and small white flowers in short spike inflorescences.
- Hoary alyssum can be a serious problem for horse owners as ingestion of sufficient quantities can cause a number of diseases in horses.
- This species displaces native vegetation and pollinators, and reduces forage production for wildlife and livestock.



THE PROBLEM

Hoary Alyssum is a prolific seed producer because it produces seed from first flower in late spring right up until frost. The seeds also spread by wind, water, and livestock feed, which make this plant tremendously difficult to treat. Additionally, plants appear in random (sometimes very remote) locations far removed from known sites and are very hardy and quick to sprout. Effective control of hoary alyssum sites require 3 to 4 treatments per season. Consequently, this plant is costly to control. Private landowners further exacerbate control efficacy and costs because some are not actively participating in controlling their infestations.

Spotted Knapweed

PLANT PROFILE

- Introduced to North America from central Europe and Eastern Russia in the 19th century as a seed and ballast contaminant.
- Spotted Knapweed may grow up to 1.2 m in height and usually has darker red-purple flowers that are thistle-like.
- Its roots exude chemicals that inhibit the growth of other plants.
- It can form near monocultures that degrade desirable plant communities due to its prolific seed production and seed banking abilities.



THE PROBLEM

There are significant infestations of Spotted Knapweed throughout the region, especially on road rights-of-way, gravel pits, utility corridors, and on public and private land. There are also large infestations within the Thompson Nicola Regional District. Its ability to produce vast numbers of seeds per plant annually (up to 140,000 seeds/m²) and the number of years the seeds remain viable (up to 20) make managing knapweed difficult and costly. Private landowners' lack of management and provincial agencies lack of adequate management funding is also contributing to spread and proliferating the difficulty and cost of management.

Tall Hawkweed

PLANT PROFILE

- Introduced to North America from Europe.
- There are 12 different invasive yellow hawkweed species in BC, Tall Hawkweed is the most dominant species in the Cariboo.
- Tall Hawkweed stems can grow up to one meter in height with clusters of yellow flowers.
- Tall Hawkweed rapidly forms monocultures that displace livestock forage and native vegetation and wildlife.

THE PROBLEM

Tall Hawkweed is very widespread within the region. The biology of Tall Hawkweed is similar to that of Orange Hawkweed except this species prefers drier sites. Tall Hawkweed, like orange hawkweed, is able to spread very rapidly into areas of disturbance. The disturbed soil at the edge of roads and ditch lines are particular pathways of spread. Once established, this species is able to colonize undisturbed sites. A containment area exists for this species, which covers the entire northeastern portion of the CRD. Aggressive treatment outside of the containment area will occur. Inside the containment area, only localized treatment on private land will occur. Inquiries regarding hawkweed account for the bulk of calls received each year because of the extent it has invaded. The IPM program will continue to assist landowners inside and outside of the containment area through the landowner assistance program.



An invasive plant is any non-native plant that has the potential to pose undesirable or detrimental impacts on the environment, economy, and society. Each of the five invasive plant species outlined above possess inherent biological traits that make eliminating or controlling them very difficult. Couple these biological traits with other factors that contribute to their spread and it becomes even more problematic. One of those factors is a lack of proactive management on private properties. Another factor is a lack of sufficient provincial government funding and utility company participation. It is impossible to eliminate infestations if one still exists on the other side of the fence. Increasing landowner participation will require increased education, management assistance,

and, unfortunately, most likely enforcement. Increasing government funding and utility company participation will require continued dialogue to elevate concerns. All of these require dedicated resources to support. Adequate resources to manage these species and those not residing on the top five list are lacking. 46% of high priority sites were not managed due to budgetary or time constraints.

PARTNERSHIPS, OUTREACH, AND AWARENESS

The successful management of invasive plants across large areas requires a cooperative approach. This can be difficult to achieve with the mosaic of land jurisdictions that exist. Among the jurisdictions, there are differing levels of awareness and financial ability for invasive



plant management and differing perceptions of priorities and urgency. To remedy this, the CRD's invasive plant management program is strongly committed to fostering working relationships with fellow management agencies to facilitate coordination and collaboration. Opportunities to strengthen and improve established relationships as well as forge new ones lie with the IPM program's active participation as a member on the Cariboo Chilcotin Coast Invasive Plant Committee (CCCIPC) board of directors. Therefore, the CRD strongly supports the CCCIPC and adopts the invasive plant priorities laid out in the Invasive Plant Regional Strategic Plan (refer to Appendix I for an Executive Summary of 2018's Regional Strategic Plan including a current list of invasive plant priorities). In addition, inter-agency coordination and collaboration has resulted in fee-based invasive plant management services on behalf of the Ministry of Transportation and Infrastructure, Ministry of Forests, Lands, and Natural Resource Operations and Rural Development, BC Hydro, Fortis BC Energy Inc., and the City of Quesnel. Furthermore, increased coordination has resulted in partnerships as well with the 108 Greenbelt Commission, Thompson Rivers University, residents of Lac La Hache, landowners, community groups, Aboriginals, invasive plant contractors in the area, the North West Invasive Plant Council, and the Invasive Species Council of British Columbia (ISCBC). Below are some of the highlights of partnerships that contributed to 2018's successes.

An extremely dedicated member of the 108 Greenbelt Commission assisted the IPM program once again in managing invasive plants on 108 Greenbelt lands. This person has been instrumental in controlling invasive plants on the Greenbelt for over 11 years on a volunteer basis. Landowners' and ecosystems in the area.

The IPM program has worked with Dr. Catharine Tarasoff for a number of years, assisting with her research trials on innovative techniques for the control of yellow flag iris. Installation of research plots occurred in 2015 on a few known infestations of yellow flag iris on Lac La Hache. Assisting in the trials have demonstrated to the IPM program that this is an effective management tool and we are eager to apply this technology more widely on the infestations in Lac La Hache and elsewhere in the region. Dr. Tarasoff has submitted a funding application for funds to implement the treatment method stemming from her research on all of the yellow flag iris sites in Lac La Hache. The IPM program has provided a letter of support for the funding proposal outlining our interest in assisting with this project over 2019.

The ISCBC received funding for the fourth year with the Job Creation Partnership (JCP) Project, Invasive Species Skills Development Program, funded by the Province of BC. Participants of the program gained valuable employment experience while increasing on-the-ground management of high priority invasive plants in the Cariboo region. The CRD's invasive plant management program was an active partner in this program, participating in planning, implementing, and reporting activities. Work the JCP Project completed complimented the work of CRD treatment crews and contractors. As a result, additional management efforts were devoted to controlling invasive plants in our region and reducing their impacts. The training and experience program participants receive also increases the amount of people available in the region with employable invasive plant management skills and knowledge as an added future benefit to the CRD's IPM program.

The ISCBC received funding from the Ministry of Transportation and Infrastructure to survey, treat, and develop management plans for high priority gravel pits within our region. The CRD's IPM program has participated in joint planning sessions annually and communicates with ISCBC throughout the operational season to avoid duplications. Therefore, all dollars the CRD's IPM program receives annually from MOTI are for use on roadsides only.

The CRD has entered into a 3-year contractual relationship with the Invasive Species Council of BC for the delivery of an invasive species community outreach and education program on our behalf. Initiatives will focus on preventing the introduction and spread of invasive species within the region. It will also complement current outreach programs in place locally and provincially. In addition to providing educational and awareness initiatives, the program will provide aspects directed at increasing community engagement that lead to partnership opportunities and active participation in invasive species management. The community outreach program targets a number of different audiences, such as members of the public, community groups and organizations, industry sectors, Aboriginal communities, and youth groups and organizations. Please see Appendix II for an annual report submitted by ISCBC outlining their activities for 2018 in fulfilling this contract.

SUCSESSES AND CHALLENGES

Management staff and contractors were able to complete an incredible amount of work within the CRD this year. This was due to the retention of valued staff members and contractors, which was instrumental in stretching budgets and reaching as many sites as possible. Their knowledge and experience of the area, the sites, and the people made a tremendous difference in the work we were able to complete. Continued work within the CRD on key invasive plant species, has been successful in limiting their spread, reducing their impacts, and protecting high value areas.

Assisting landowners through the Landowner Assistance Program incentivizes landowners to participate in invasive plant management. Invasive plant management can be a costly and challenging endeavor for most landowners. The services through the Landowner Assistance Program overcome some of those barriers and increase the amount of treatment on private land. The IPM program has been working to diversify services within the Landowner Assistance Program over the last number of years to try to have a multitude of options available to fit the needs of landowners. Consequently, there have been increases in the number of landowners participating each year.

Building and maintaining local partnerships has complimented and augmented the CRD's IPM program. Partnerships with the ISCBC and 108 Greenbelt Commission increased the amount of invasive plant sites managed in 2018. In addition, our partnership with the ISCBC in the delivery of outreach and awareness activities within the Cariboo increased efficiencies and exposure. The ISCBC was also able to leverage additional funding to augment the budget and increase the scale of outreach and awareness programming within the region.

While regarded as a success, outreach and awareness programming remains a challenge as well. A continued need exists to improve and increase outreach and awareness regarding invasive plant concerns. It is also difficult to reach audiences that span a broad spectrum. Characteristics of invasive plants make them occur on a diverse range of landscapes maintained and utilized by an equally diverse range of stakeholders. Therefore, awareness messaging and dissemination methods for each stakeholder group will vary. Furthermore, shifting threats to new species may require modifications in awareness focus.

Unmanaged infestations on private land is an ongoing challenge that is increasing the spread of invasive plants and the demand on resources. Despite having access to the Landowner Assistance Program, the reality remains that the vast majority of landowners are not participating. This is evident in the number and size of infestations on private land in many areas of the District. The program recognizes the complexity of this issue and continues to investigate, develop, and implement initiatives that will increase participation.

Funding is already insufficient without the added pressure of unmanaged private land, especially in urban centres and on transportation and utility corridors. Despite our funding requests, we are continually receiving about half of the amount we require to manage priority one and two species on transportation and utility corridors. Consequently, the program is only managing about half of the sites on a yearly basis.

Prioritization strategies are necessary to respond to the resource shortages. However, prioritizing sites and plants to reflect the environmental, social, and financial concerns of stakeholders while also successfully meeting management objectives will continue to be challenging.

The fires of 2017 have left a potentially large invasive plant problem. The burned landscape, staging areas, and fireguards are now highly suitable for invasion by invasive plants. Fire recovery operations, like salvage logging, are also increasing disturbance and invasion suitability. Over the next few years, it will be critical to monitor and eliminate any incursions immediately to prevent establishment and further spread. Limiting invasive plant establishment and spread in the burned areas will be challenging because of the vast amount of area affected. It will also be challenging because of the number of agencies and initiatives involved in the recovery process. Success will undoubtedly require involvement from many stakeholders and a multi-year commitment of resources to support efforts. To date, there has been limited information from the Ministry of Forests, Lands, Natural Resource Operations, and Rural Development on how it plans to move forward with an invasive plant management strategy for the areas affected by fire.

PROPOSED PROGRAM 2019

Operations

Proposed activities for 2019 invasive plant management on lands governed by those within the invasive plant management function and those procuring our services on a contractual basis:

- Prepare an annual work-plan outlining operational management activities, if required, meet with stakeholder representative(s) to present and discuss the work-plan, complete any edits to the work-plan, and provide the finalized work-plan to the stakeholder if requested.
- Survey all priority one-plant sites and conduct a first-pass treatment (if plants are present).
- Monitor all priority one-plant sites post-treatment and conduct a second-pass treatment (if plants are present).
- Manage as many priority two-sites as the budget allows after priority one treatments.
- Manage lesser priority species as budgets allow and/or as requested by adjacent landowners depending on the reasonableness of the request and budget constraints.
- Manage any provincial or regional EDRR (Early Detection, Rapid Response) plant species that occur during the operational season and provide treatment on consenting adjacent landowners if they are unable to provide funding to conduct management activities themselves.
- Monitor at least 10% of managed sites for treatment efficacy to ensure compliance.
- Follow an integrated pest management approach.
- Upload all management data into IAPP and maintain data integrity.
- Provide annual reports to funding agencies and the CRD Board.
- Continue to offer services within the Landowner Assistance Program to residents within the IPM function and City of Quesnel.

Partnerships, Outreach, and Awareness

The IPM program will continue to foster and develop partnerships with other organizations that provide opportunities to prevent the establishment and spread of invasive plants:

- The invasive plant management program will continue working on outreach and awareness activities.
- Consult with the Communications department within the CRD to determine outreach and awareness activities and receive assistance in development and implementation.
- Continue to engage and maintain partners within the region including:
 - Ministry of Transportation and Infrastructure
 - Ministry of Forests, Lands, Natural Resource Operations, and Rural Development
 - Ministry of Environment
 - Invasive Species Agencies
 - BC Hydro
 - Fortis BC
 - Enbridge
 - City of Quesnel
 - City of Williams Lake
 - District of Wells
- Continue to attend and participate in Cariboo Chilcotin Coast Invasive Plant Committee activities.

REGIONAL STRATEGIC PLAN

EXECUTIVE SUMMARY

and educational document

The **CCCIPC** is a multi-stakeholder non-profit society dedicated to minimizing the spread and impacts of invasive plants. It is an inclusive organization composed of all levels of government, various economic sectors, First Nations, and other interests in the Cariboo, Chilcotin and Central Coast. The CCCIPC has prepared a **Regional Strategic Plan** to coordinate the efforts of all government agencies and industry sectors in managing current infestations and preventing new ones.



Cariboo Chilcotin Coast
Invasive Plant Committee

New Priority Species



Wild Parsnip (*Pastinaca sativa*)

Location: Highway 97 North near the Australian rest area and along the road in Alkali Lake.

Type: Biennial or short-lived perennial

Method of Spread: Seed

Treatment: LOCAL LEVEL – Dig out and control regrowth mechanically, large infestations could be managed by mowing or through the use of chemicals.

LANDSCAPE LEVEL – dig out and control regrowth mechanically

Invasive Plant Species Profiles

The recommended treatments have been used as effective means of control in our region. Other options do exist should jurisdictions prefer alternative treatments. Please check with your local government to confirm the correct treatment for the plant and area of concern.



Baby's Breath (*Gypsophila paniculata*)

Location: Lac La Hache, Sugarcan, City of Williams Lake and Lee's Corner

Type: perennial

Method of Spread: seed spread by wind or by plant tumbling

Treatment: LOCAL LEVEL – hand-pulling

LANDSCAPE LEVEL – herbicide



Black Henbane (*Hyoscyamus niger*)

Location: Limited distribution around Alexis Creek and Williams Lake

Type: annual or biennial

Method of Spread: exclusively by seed

Treatment: LOCAL LEVEL – hand-pulling

LANDSCAPE LEVEL – herbicide



Blueweed (*Echium vulgare*)

Location: Hanson gravel pit near Quesnel, with scattered sites in City of Quesnel and along Hwy 97 between Quesnel and Alexandria; isolated sites at Chum Creek, Dog Creek, Riske Creek and Gustafson Lake

Type: biennial

Method of Spread: exclusively by seed sticking to hair, clothing or feathers

Treatment: LOCAL LEVEL – hand-pulling

LANDSCAPE LEVEL – herbicide



Burdock (*Arctium* spp)

Location: Widespread throughout the Cariboo and Chilcotin

Type: biennial

Method of Spread: Exclusively by seed: hooked spines on the seeds readily catch on fur, feathers or clothing and potentially transporting them a considerable distance

Treatment: LOCAL LEVEL – repeated cutting or herbicide.

LANDSCAPE LEVEL – monitor and treat local infestations in conjunction with other species



Canada Thistle (*Cirsium arvense*)

Location: Widespread throughout the Cariboo; scattered throughout the Chilcotin

Type: perennial

Method of Spread: seeds spread by wind and water, and in crop seed, hay or livestock manure. Roots

Treatment: LOCAL LEVEL – herbicide or repeated mowing

LANDSCAPE LEVEL – herbicide and biological control (once established)



Common Tansy (*Tanacetum vulgare*)

Location: Widespread throughout the Cariboo; scattered throughout the Chilcotin

Type: perennial

Method of Spread: seed or creeping roots

Treatment: LOCAL LEVEL – repeated mowing, hand-pulling or herbicide

LANDSCAPE LEVEL – herbicide



Dalmatian Toadflax (*Unaria dalmatica*)

Location: Scattered throughout the Cariboo and Chilcotin and under containment in Tatlayoko Valley

Type: perennial

Method of Spread: seed or creeping root

Treatment: LOCAL LEVEL – hand-pulling or cutting

LANDSCAPE LEVEL – biological control (once established) or herbicide



Diffuse Knapweed (*Centaurea diffusa*)

Location: Along Hwy 97, Green Lake, Konni Lake Chum Creek, Riske Creek, Dog Creek and Tatlayoko Valley

Type: biennial or short-lived perennial

Method of Spread: exclusively by seed

Treatment: LOCAL LEVEL – hand-pulling

LANDSCAPE LEVEL – herbicide or biological control



Field Scabious (*Knautia arvensis*)

Location: Sites around the City of Quesnel and along Quesnel River, Cottonwood River, Gaspard/Big Creek, Alexis Creek. Under containment in Cottonwood area.

Type: perennial

Method of Spread: exclusively by seed

Treatment: LOCAL LEVEL – mowing, digging or hand-pulling

LANDSCAPE LEVEL – herbicide



Flowering Rush (*Butomus umbellatus*)

Location: Site at Bouchie Lake.

Type: perennial

Method of Spread: seed, root buds and root fragments

Treatment: LOCAL LEVEL – hand-pulling or manual dredging

LANDSCAPE LEVEL – hand-pulling or manual dredging



Himalayan Balsam (*Impatiens glandulifera*)

Location: Dragon Lake, Quesnel, Williams Lake, Horsefly; mostly within gardens and garden waste dumps.

Type: annual

Method of Spread: seed

Treatment: LOCAL LEVEL – hand-pulling

LANDSCAPE LEVEL – hand-pulling



Hoary Alyssum (*Berteroa incana*)

Location: Alexis Creek, Tatlayoko, Bull Canyon, Quesnel, Dragon Lake, Quesnel Hydraulic Road, Lac La Hache, 100 Mile House, Green Lake, Haggen's Point Road, Wiffle Lake Road, and 103 Mile house.

Type: biennial or short-lived perennial

Method of Spread: exclusively by seed

Treatment: LOCAL LEVEL – hand-pulling and herbicide

LANDSCAPE LEVEL – herbicide



Hoary Cress (*Cardaria draba*)

Location: Frizzi and Hodgson roads in Williams Lake, Begbie Summit, knife Creek and 103 Mile

Type: perennial

Method of Spread: spreading roots, seed

Treatment: LOCAL LEVEL – frequent mowing

LANDSCAPE LEVEL – herbicide



Hound's Tongue (*Cynoglossum officinale*)

Location: Chum Creek, Dog Creek, Stormy Road 70 Mile House, Bridge Lake, Alexis Creek and south of 100 Mile

Type: biennial to short-lived perennial

Method of Spread: exclusively by seeds encapsulated in burs

Treatment: LOCAL LEVEL – cutting small accessible infestations, or herbicide

LANDSCAPE LEVEL – biological control, or herbicide



Knotweeds including Himalayan Knotweed (*Polygonum polystachyum*), Japanese Knotweed (*Fallopia japonicus*), Giant Knotweed (*F. sachalinense*), and Bohemian Knotweed (*F. x bohemica*)

Location: 150 Mile House and Quesnel

Type: perennial

Method of Spread: seeds and vegetative through rhizomes and root fragments

Treatment: LOCAL LEVEL – repeated cutting, shading or herbicide

LANDSCAPE LEVEL – herbicide



Leafy Spurge (*Euphorbia esula*)

Location: Dog Creek, Gaspard Creek, Empire Valley Road, Narcosli Creek, West Fraser Road, Alexis Creek, Canoe Creek.

Type: perennial

Method of Spread: seed or lateral roots

Treatment: LOCAL LEVEL – herbicide

LANDSCAPE LEVEL – biological control or herbicide



Marsh Plume Thistle (*Cirsium palustre*)

Location: Blackwater Road, forested areas north of Quesnel, and Dunkley. Containment in Prince George area, and in northeast part of CCCIP area.

Type: biennial

Method of Spread: exclusively by seed

Treatment: LOCAL LEVEL – hand-pulling

LANDSCAPE LEVEL – hand-pulling or herbicide



Meadow Knapweed (*Centaurea pratensis*,

Centaurea debaudii, *Centaurea x monctonii*)

Location: Loch Lomond, and near 100 Mile House

Type: perennial

Method of Spread: primarily by seed, but also from root and crown fragments

Treatment: LOCAL LEVEL – frequent mowing or hand-pulling

LANDSCAPE LEVEL – herbicide or biological control



Mountain Bluet (*Centaurea montana*)

Location: Dragon Lake, Blackwater Road, Williams Lake, Canim Lake, 100 Mile House, Barkerville.

Type: annual

Method of Spread: primarily by seed, but also from rhizomatous roots

Treatment: LOCAL LEVEL – hand-pulling or herbicide

LANDSCAPE LEVEL – herbicide



Nodding Thistle (*Carduus nutans* L.)

Location: Alexis Creek, Hanceville, Taseko Lake Road, Vert Lake, Chimney Creek and Ahbau Road

Type: biennial

Method of Spread: primarily by seed

Treatment: LOCAL LEVEL – frequent mowing or hand-pulling

LANDSCAPE LEVEL – herbicide or biological control releases



Orange Hawkweed (*Hieracium aurantiacum*)

Location: Widespread and abundant in the eastern portions of the region and along Hwy 97; containment area for both orange and yellow invasive hawkweeds includes the Cariboo

Type: perennial

Method of Spread: creeping roots and seed

Treatment: LOCAL LEVEL – hand-pulling, herbicide or fertilization

LANDSCAPE LEVEL – herbicide



Oxeye Daisy (*Leucanthemum vulgare*)

Location: Widespread in the Cariboo and Chilcotin.

Type: perennial

Method of Spread: spreads by seed or by underground rhizomes

Treatment: LOCAL LEVEL – tilling, sulphur soil

amendments, cutting, mowing or herbicide

LANDSCAPE LEVEL – herbicide where important values are threatened



Perennial Pepperweed (*Lepidium latifolium*)

Location: single site along Hwy 97 at 91 Mile

Type: perennial

Method of Spread: seed or root fragments

Treatment: LOCAL LEVEL – hand-pulling, cutting, herbicide

LANDSCAPE LEVEL – herbicide



Plumeless Thistle (*Carduus acanthoides*)

Location: Williams Lake River Valley Trail, Horsefly, Likely, and Chilcotin.

Type: biennial

Method of Spread: primarily by seed

Treatment: LOCAL LEVEL – frequent hand-pulling and/or mowing

LANDSCAPE LEVEL – herbicide



Purple Loosestrife (*Lythrum salicaria*)

Location: Bouchie Lake area, Dragon Lake, Nazko Road, Alexandria, Lac La Hache.

Type: perennial

Method of Spread: plant parts and seed spread by water and wind

Treatment: LOCAL LEVEL – hand-pull and cut seed heads

LANDSCAPE LEVEL – cut seed heads, herbicide or biocontrol



Russian Knapweed (*Acroptilon repens*)

Location: Lone Butte, South Cariboo; prevalent in Southern BC.

Type: perennial

Method of Spread: primarily through seed; however, it can re-grow from root and crown fragments

Treatment: LOCAL LEVEL – frequently mowing and hand-pulling small infestations

LANDSCAPE LEVEL – herbicide and possible biological control for larger infestations



Scentless Chamomile (*Matricaria perforata*)

Location: Hwy 20 from Bella Coola to Williams Lake, Horsefly Road, 108 Mile, Quesnel Refuse Site

Type: annual or weak perennial

Method of Spread: exclusively by seed

Treatment: LOCAL LEVEL – hand-pulling

LANDSCAPE LEVEL – biological control and herbicide



Spotted Knapweed (*Centaurea stoebe*)

Location: Widespread throughout Cariboo, especially along main Hwy corridors and utility rights of way; scattered sites in the Chilcotin

Type: biennial to short-lived perennial

Method of Spread: exclusively by seed

Treatment: LOCAL LEVEL – hand-pulling small infestations or herbicide

LANDSCAPE LEVEL – herbicide, biological control and hand pulling



St. John's Wort (*Hypericum perforatum* L.)

Location: Few infestations in Quesnel area and Hawks Creek Forest Service Road.

Type: perennial

Method of Spread: seed and roots

Treatment: LOCAL LEVEL – herbicide or tillage for agricultural sites

LANDSCAPE LEVEL – biological control



Sulphur Cinquefoil (*Potentilla recta*)

Location: Throughout the Central and South Cariboo, containment line east of Hwy 97; Lac La Hache, Tatlayoko, Quesnel, 1100 Road, Sulphurous Lake, 83 Mile Road, Big Lake, Sugarcane, San Jose River, Exeter Road, Beecher Prairie.

Type: perennial

Method of Spread: seed and roots

Treatment: LOCAL LEVEL – hand-pulling small infestations, herbicide

LANDSCAPE LEVEL – herbicide



Yellow Flag Iris (*Iris pseudacorus*)

Location: Scout Island in Williams Lake, Lac La Hache, Alexis Lake, Bridge Lake.

Type: perennial

Method of Spread: seed and roots

Treatment: LOCAL LEVEL – frequent hand-pulling and/or digging

LANDSCAPE LEVEL – herbicide where possible and hand-pulling



Invasive Yellow Hawkweeds (*Hieracium pilosella*,

H. caespitosum, *H. praecox*, *H. flagellare*)

Location: Widespread throughout the north east portion of the Cariboo, with a slight preference for drier conditions; prevalent in the Nazko area and scattered in the west Chilcotin. Containment area for both orange & yellow invasive hawkweeds includes the Cariboo.

Type: perennial

Method of Spread: seeds and creeping roots

Treatment: LOCAL LEVEL – hand-pulling new and small infestations, and herbicide

LANDSCAPE LEVEL – herbicide



Wild Chervil

(*Anthriscus sylvestris*)

Location: North Cariboo

Type: Annual, biennial or perennial

Method of Spread: seed and roots

Treatment: LOCAL LEVEL – hand-pulling and/or digging out deep taproots

LANDSCAPE LEVEL – herbicide

Priority Invasive Alien Plants by Plan Sub-Region in the Cariboo Chilcotin

Priority Ranking	Description
1 New Invaders	Newly established species, current limited distribution, or at our borders. Expected to flourish if they become established, or if not managed. Management objective is elimination.
2 Containment	Well established species in our region, but have not yet infested all potential habitats. New sites will be managed to contain them and prevent further spread.
3 Established	Common and widespread species that occupy most or all potential habitats. Widespread control of these species is not currently possible.
4 Biological Control	Well established species in our region, for which effective biocontrol agents exist.

Species ranks that are in WHITE indicate the species is **NOT known to exist** in that sub-region. If Black, the species is present.

Footnotes:

¹ Provincial EDRR species.

² Biocontrol agent is present on dry sites, but not yet effective, it is effective in the TNRD near Canoe Creek

³ Biocontrol agent is the primary means of control

⁴ Biocontrol agent is present, but not yet effective

⁵ In the Canoe/Dog/Churn Creek areas, species is mainly controlled by biocontrol agents.

⁶ Biocontrol appears to be affected by a parasite.

⁷ Classified as a New Invader (1) in the Western Nazko

⁸ Grassland are at highest threat.

⁹ Outside the established containment area.

Sub-Region Name	North Cariboo	Central Cariboo	South Cariboo	Nazko	Chilcotin
Regional District Electoral Areas	A, B, C	D, F	E, G, H, L	I	J, K
Baby's-Breath	1	1	1	1	1
Black Henbane ¹	1	1	1	1	1
Blueweed	1	1	1	1	1
Burdock	3	3	3	3	2
Canada Thistle	3	3	3	3	3
Common Tansy	2	2	2	2	1
Dalmatian Toadflax	4	4	4	1	2 ¹
Diffuse Knapweed	2	2	2	1	2
Field Scabious	2	1	1	1	1
Flowering Rush ¹	1	1	1	1	1
Himalayan Balsam	1	1	1	1	1
Hoary Alyssum	1	1	1	1	1
Hoary Cress	1	1	1	1	1
Hound's-Tongue	1	1	4 ¹	1	1
Knotweed Spp.	1	1	1	1	1
Leafy Spurge ²	2	1	1	2 ¹	1
Marsh Plume Thistle	1 ³	1	1	1	1
Meadow Knapweed	1	1	1	1	1
Mountain Bluet	1	1	1	1	1
Nodding Thistle	4	4	4	4	4
Orange Hawkweed	3	3	3	3	1
Oxeye Daisy	3	3	3	3	3
Perennial Pepperweed ¹	1	1	1	1	1
Plumeless Thistle	1	1	1	1	1
Purple Loosestrife	1 ⁴	1	1 ⁴	1	1
Russian Knapweed	1	1	1	1	1
Scentless Chamomile	2	3	3	2	3 ¹
Spotted Knapweed	2	2 ⁴	2	1	2 ¹
St. John's Wort ⁶	2	2	2	1	1
Sulphur Cinquefoil	1	2	2	1	1
Tansy Ragwort	N/A	N/A	N/A	N/A	1
Yellow Flag Iris	1	1	1	1	1
Yellow Hawkweeds, Invasive	3	3	3	3	2
Wild Chervil	1	1	1	1	1
Wild Parsnip	1	1	1	1	1

Sub-Regions within the CCCIPC Regional Strategic Plan



We gratefully acknowledge



Cariboo Regional District Education & Outreach Program

Final Report
December 2018



HEALTHY LANDSCAPES AND
COMMUNITIES FREE OF INVASIVE SPECIES

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Overview

The Invasive Species Council of British Columbia (ISCBC) has partnered with the Cariboo Regional District to deliver a 3 year education and outreach program throughout the Cariboo. The focus areas for the program include 100 Mile House, Williams Lake and Quesnel, however additional partnerships and requests will be considered outside of these areas. This program targets community groups, youth, schools, industry and First Nations. As such, the community outreach program is divided into the three program areas, listed below, that integrate upon delivery:

1. Youth Education and Outreach
2. Community and Industry Partners
3. Aboriginal Outreach and Building Capacity

This program has been designed to roll out in 4 phases (listed below), which have been defined by specific timelines and deliverables:

1. Pre- Planning Phase (July 1- August 31, 2016)- complete
2. Phase 1 (September 31-December 31, 2016)- complete
3. Phase 2 (January 1 - December 31, 2017)- complete
4. Phase 3 (January 1- December 31, 2018)- complete

The content of this report refers to accomplishments made during phase 3 (January to December 31, 2018) Below are the accomplishments and results, related to the agreed upon phase 3 work plan.

Detailed tracking against the program deliverables is available in Appendixes.

Milestones

STAFFING

The ISCBC has hired 2 summer students, based out of our Williams Lake office to support on the delivery of the CRD education and outreach program, amongst other council actions. The summer students joined the Council in early July with one until August and the other term running to September.

Two Jobs Creation Partnership (JCP) teams have been based in the CRD, in 100 Mile House and Williams Lake. JCP treated areas within the CRD for the first part of the year and then had a strong involvement with community outreach and youth education later in the year.



Summer students at one of their first outreach events, the Williams Lake Farmers Market

INVASIVE SPECIES ACTION MONTH (ISAM)

May is Invasive Species Action Month (ISAM) in BC. To celebrate ISAM, the ISCBC participated in a total of 13 activities in the month of May reaching ~1500 people. A list of ISAM events are provided in Appendix 2, Table 5. Weekly Listserv updates were distributed to align with the 5 ISCBC Community Based Social Marketing programs. A Lake City Secondary teach came in second place for an ISAM photo contest, winning \$250 for a class trip.

MEDIA

The ISCBC had a total of 21 media features in 2019, ranging from radio interviews, video features, news articles and newsletters. Additionally, invasive species initiatives in the CRD have been promoted via ISCBC social media platforms at every opportunity. The media features from July 1st to December 31st, 2018 include:

- » Radio interview and online article about the HCTF invasive mussel monitoring <https://www.mycariboonow.com/39394/7-high-risk-cariboo-lakes-monitored-for-invasive-mussels/>
- » Featured in the Quesnel Observer, 100 Mile Free Press and Williams Lake Tribune for the HCTF invasive mussel monitoring https://www.wltribune.com/news/cariboo-lakes-confirmed-clear-of-invasive-mussels-after-testing/?fbclid=IwAR1RpTtHnAZIXERDiRshRxJbCRP_IYuSpJmg8NHoGAzpfoXF3dSTiJ6WCB0
- » BC Lake Stewardship Society newsletter for installing Clean Drain Dry signs
- » Habitat Conservation Trust Foundation (HCTF) media release sharing CRD's invasive mussel sampling results



- » Two articles detailing the specific results for lakes under stewardship of community groups were provided to the Friends of Bridge Lake and Green Lake Ratepayers Association

RELIABLE EVENT PRESENCE

The Council has become known to attend regularly occurring farmers markets over the summer. Staff found that they would be sought out at the events with questions and concerns about invasive species- with community members bringing plant samples in to show. Approximately 7 plant samples were provided over the summer.

Education and Outreach

The Council was able to build on previous youth partnerships and grow the Education and Outreach program in the CRD even further this year. Overall, ISCBC was able to:

- » Coordinate 44 events targeted at youth (Appendix 2, Table 1)
- » Partner with 21 youth organizations and schools
- » Reach ~ 1929 youth with invasive species messaging
- » Deliver ~68 presentations
- » Coordinate 12 youth weed pulls
- » Have 941 youth committing to “protect our land and water by educating their friends and family about invasive species and their effect on land, lakes, rivers and streams.”

HIGHLIGHTS

Invasive-wise Youth Challenge

The ISCBC has confirmed partnership with 16 schools and 5 youth groups on the Invasive-wise Youth Challenge. To date, 9 schools have successfully completed the challenge.

- » Tatla Lake Elementary- *challenge completed*
- » Bouchie Lake Elementary- *challenge completed*
- » 100 Mile House Elementary- *challenge completed*
- » Lake City Secondary (Grade 7 class)- *challenge completed*
- » Williams Lake Boys and Girls Club- *challenge completed*
- » Barlow Creek Elementary- *challenge completed*
- » Lac La Hache Elementary- *challenge completed*
- » Little Chiefs Preschool (Williams Lake Indian Band)- *challenge completed*
- » Headstart (Xat'sull)- *challenge completed*



1 Summer students leading their first youth activity with the Williams Lake Boys & Girls Club

Alien Invader Program

The ISCBC has partnered with the Williams Lake Girl Guides on the Alien Invader Program. This group has completed all the steps to receive their Alien Invader badge.

- » 3rd Williams Lake Guide Unit- *challenge completed*



Williams Lake Girl Guides received their Alien Invader badges after pulling together at Scout

Earth Challenge

The Earth Challenge involves all Grade 7s in Lake City Secondary School. The Council educated students about Invasive Plants, one of the 5 Earth Challenge themes, reaching approximately 180 students with invasive plant messaging. Additionally, the Council has rewritten the Invasive Species section to include all invasive species and added another page of information for the new edition to be implemented in 2019.

National Forestry Week

National Forestry Week (NFW) was held from September 23-29 this year, and had events hosted at Gavin Lake Forest Education Centre and Centennial Park. The Council led field tours featuring invasive species and were able to engage unique youth groups such as the GROW homeschoolers.

Community and Industry Partners

The ISCBC has been actively delivering invasive species presentations, workshops and weed pulls to a variety of community and industry groups. The Council was able to:

- » Attend over 40 community events (Appendix 2, Table 2)
- » Coordinate 2 weed pulls
- » reach ~3698 people with invasive species messaging and best management practices
- » Collect 367 Clean Drain Dry commitments
- » Collect 381 Plantwise commitments



A busy booth at the South Cariboo Garlic Festival. Over 750 people were reached over the weekend.

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HIGHLIGHTS

BC Parks and Trails- Cariboo Chilcotin Coast Guide Update

The ISCBC partnered with the Cariboo Conservation Society and the Cariboo Chilcotin Coast Invasive Species Committee to update the Wildflower section of this guide to reflect priority invasive species in the Cariboo and how to report them.

HCTF Invasive Mussel Sampling

The ISCBC obtained funding through the Habitat Conservation Trust Foundation (HCTF) and BCMOECSS to create a mussel monitoring program for the CRD. Monitoring was conducted at the following lakes July to October: Bridge Lake, Sheridan Lake, Green Lake, Lac la Hache, Williams Lake, Chimney Lake and Dragon Lake. Locations were identified through collaboration with local aquatic stewardship groups.

A total of 26 samples were collected over the season, and there were no detections of invasive mussels in the CRD. Final results were released to several media outlets, and specific updates for each lake were provided to involved stewardship groups.



JCP Crew learning how to extract a substrate monitor for sampling at Bridge Lake

CDD Signage

The Council has placed 9 Clean Drain Dry signs at boat launches in the CRD. ISCBC partnered with The Timothy Lake Road Association when installing a sign at their public boat launch and gifted 3 additional signs that the association will install at private resorts.

Both mussel monitoring and increased CDD signage support actions outlined in the 2017 Aquatic Invasive Species Action Plan that was developed for the region through the RBC Blue Water Project.



Timothy Lake Road Association members beside their newly installed CDD sign

Play Clean Go Signage

The Council was able to design and print Play Clean Go signs to be placed at trail heads within the CRD through funding for 100in1Day. They will be accompanied with a doubleheader brush and pick for recreationalists will use. 1 sign has been placed at the River Valley Trail, with 5 additional signs to be installed through the Williams Lake Community Forest Grant in 2019.

Webinars

The ISCBC has hosted 6 webinars with direct applications to the CRD, and 1 additional webinar specific to the CRD. The webinar featured Tatla Lake Elementary, the first school in BC to complete the Invasive-wise Youth Challenge. Presented by the Principal, several students joined the webinar to talk about how they became invasive-wise.



Using the attached brush of the Play Clean Go sign at the River Valley Trail

Wildfire Recovery and Restoration

The ISCBC participated in 4 events that were related to wildfires and community recovery, including the Wildfire Information Expo. It was a well-attended highlight in Williams Lake that addressed the questions and concerns from the devastating 2017 season and impending season of 2018.

The ISCBC has provided consistent messaging in line with effective behavior change programs and best management practices to educate the public in reducing the spread of invasive species to areas disturbed by wildfire and wildfire mitigation.

Industry Partner Workshops

The ISCBC was involved with 5 workshops within the CRD. The Council obtained funding for a Communications Workshop held in Williams Lake that was available to partners. Two workshops have been dedicated to creating an invasive species program for the Cariboo Climate Adaptation Strategy. The Council has also participated in CCCIPC workshops and AGMs and provided updates to partners.



Emily Sonntag explaining the life cycle and distribution of weevils preying on Spotted Knapweed at the CCCIPC AGM & Field Tour

Indigenous Outreach and Building Capacity

The ISCBC has been working diligently at reaching out to Indigenous groups in the Cariboo Region to engage them in invasive species management and to seek information on what their needs are in terms of invasive species education, outreach, resources and training.

INDIGENOUS INVASIVE SPECIES NETWORK

The primary purpose of the Indigenous Invasive Species Network is to provide a forum for exchanging information on available resources, identifying needs and sharing lessons learned for invasive species management, programs and projects related to Indigenous interests. The Indigenous Invasive Species Network currently has ~ 220 member from Indigenous Communities across BC, with ~30% of the members residing in the Cariboo. The Council has held 4 conference calls where folks from the IISN were invited to participate in providing guidance on several topics:

- Revising the “Aboriginal Community Toolkit for Invasive Plant Management”,
- Potential indigenous topics and speakers for the ISCBC annual forum,
- Identifying key invasive species issues for indigenous communities.

PARTNERSHIPS

The ISCBC has explored partnerships with the following First Nations groups:

1) Tsilhqot'in

The ISCBC is working towards securing a partnership with the Tsilhqot'in National Government (TNG) enabling the Council to connect with communities and key community members in invasive species issues. The ISCBC has reached out to the TNG stewardship department and has had discussion on future workshops and participation at the ISCBC's annual forum in February 2018. The ISCBC attended a job fair in Ulkatcho and spoke to the group about our programs, services and opportunities.



ISCBC booth at Ulkatcho Job Fair

2) Secwepemc (Shuswap)

The ISCBC has started exploring partnership with the Northern Shuswap Tribal Council (NSTC) as well as Esketemc First Nation which has no Tribal Council affiliation. The Council has invited members from these groups to participate in invasive species training opportunities (pesticide applicators certification). The Council has also attended open houses/information sessions held by these groups to further engage them in discussion on invasive species management needs for their communities. All northern Secwepemc communities within the CRD have been engaged and are participating in the project in some capacity.

In addition to the outreach efforts described above, the ISCBC has worked to share invasive species information through presentations and field tours to a number of groups: Xats'ull, Williams Lake Indian Band, Eliza Archie Memorial School, Sxoxomic Elementary School, Dog Creek Elementary School and Esk'et Elementary. Of these, Eliza Archie, Dog Creek and Esk'et have partnered on the Invasive Wise Youth Challenge.

The Council has engaged in discussion with the Canim Valley 4H club and plans are underway to develop a project the youth can complete for 4H credit.



Youth Presentation at Eliza Archie Memorial School- 100 Mile House

3) Dakehl (Carrier)

Some of these communities belong to the Carrier Chilcotin Tribal Council (CCTC) but operate autonomously from the council. The CCTC is supportive of invasive species opportunities, such

as training, workshops and presentation and will assist with advertising for these initiatives by sharing information with their networks.

4) Department of Indigenous Services Canada

ISCBC has completed a project with the Department of Indigenous Services Canada (DISC) to coordinate education and outreach to First Nations in BC, including those within the Cariboo region. According to DISC, First Nations groups have identified invasive species as an area of interest, especially for several groups within the CRD. The ISCBC has shared some of its education and outreach resources with DISC, who will work to share this information with the groups they are directly working with. In addition, the ISCBC has partnered with DISC to deliver on several deliverables related to Indigenous communities across BC, including within the CRD, which tie in nicely with the Aboriginal Outreach and Building Capacity component of this program:

- » Updating the Aboriginal Community Toolkit for Invasive Plant Management
- » Making presentations in the communities to create awareness of invasive species
- » Connecting Indigenous communities in the CRD to other Indigenous communities and organizations across the province, in order to share experiences and best practices.

5) Rural Dividend Fund

The ISCBC has successfully submitted a proposal to the Rural Dividend Fund. The “*Building Community Capacity to Manage Invasive Species on Indigenous Land*” project was designed to build community engagement and capacity through the creation of Invasive Plant Management Plans and operational treatment of six priority invasive species sites on Indigenous lands. The project was delivered by the Invasive Species Council of BC (ISCBC) in partnership with five Indigenous communities in 2018, three of which are in the Cariboo Regional District.

This project has delivered:

- » Five presentations on the updated Indigenous Community Toolkit for Managing Invasive Species
- » Development of an Invasive Plant Management Plan for each of the Indigenous communities partnering on this project (five total).
- » Completion of one priority project identified in the Invasive Plant Management Plan for each community, with mentorship and support from the JCP teams. (five projects in total)
- » Engagement of Indigenous youth through volunteer opportunities that offer experience and training in invasive plant management through the execution of the Invasive Plant Management Plan project.
- » Increased local capacity to manage invasive plants on Indigenous lands.

EDUCATION/OUTREACH

Overall, through our education and outreach efforts with Indigenous communities within the CRD, the council has:

- » Reached 7 Indigenous communities



- » Reached 135 Indigenous people through direct education and outreach efforts (not including communications out to the IISN).
- » Delivered 7 invasive species education events/presentations to youth
- » Partnered with 3 schools on the Invasive Wise Youth Program
- » Hosted 3 training events (3 pesticide applicators certification), 1 workshop (Invasive Species 101 with the Williams Lake Indian Band) and 2 Weed Pulls (Williams Lake Indian Band and Xat'sull First Nation)
- » Attended 2 Tribal Council Meetings to share information on invasive species management.
- »

Published 2 invasive species articles in Northern Shuswap Tribal Council Newsletter (Jan/Feb 2018 & Mar/Apr 2018)

Weed Pull with the Williams Lake Indian Band- Williams Lake

Growing Our Success

As a result of the CRD Education and Outreach Program, the ISCBC has been successful at leveraging funds from the CRD to obtain additional financial support for invasive species management in the Cariboo. A summary of the additional funding support obtained for the region in 2018 is below:

Funding Organization	Program Description	Funding Allocation
EverGreen	100in1Day Williams Lake	\$8,000.00
EcoCanada	Extension Coordinator	\$15,000.00
Habitat Conservation Trust Foundation	Invasive Mussel Monitoring	\$10,835.00
Ministry of Forests Lands and Natural Resource Operations- Rural Dividend Fund	Building Community Capacity to Manage Invasive Species on Indigenous Land	\$60,000.00
Project Learning Tree	Summer Students	\$7,000.00
Jobs Creation Partnership	JCP teams in the CRD	\$166,000.00
Total		\$266,835.00

Moving Forward

The Council has confirmed funding for a Cariboo Adaptation Strategies agricultural project with the BC Agriculture & Food Climate Action Initiative. Scheduled to roll out in 2019, “Agricultural Pest Identification and Management Tools for the Cariboo” should increase the capacity for agriculturalists within the Cariboo for identification, monitoring, management and reporting of invasive species.

ISCBC has been approved for the Williams Lake Community Forest Grant. The project will include increased youth education about invasive species and their effects on forestry, and placing additional trail head Play Clean Go signs in proximity of the Williams Lake Community Forest.

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Appendix 1: Detailed Reporting Against the Work Plan (Year 3)

Table 1. The following table summarizes the deliverables outlined for Year 3 and the status for each. January 1st to June 30th, 2018 are in white boxes, while the second term July 1st-December 31st, 2018 are in grey.

Task	Status Update
MILESTONES	
Complete a work planning session with the CRD	Complete: Attended CCCIPC regional work plan strategy meeting on March 28 th , 2018 with the regional update from the CRD and high level priorities. The ISCBC also attended the CCCIPC AGM & Field Tour to update the CCCIPC and CRD staff on ISCBC current programs and activities.
Hire at least one summer student to support on the CRD education and outreach program	Complete: Camille Roberts was hired; start date was February 26 th . Kyla Roorda and Adriane Kennedy have been hired for July to August, with Adriane staying for an extension 15until October.
Coordinate an Invasive Species Action Month plan for the Cariboo that includes activities in at least 2 different communities and media information	Complete
Manage and grow Cariboo list serv and contribute a monthly update to the group	Ongoing: Ongoing- monthly updates sent to list serv for February, March, April, and June, with weekly updates during May for ISAM
Provide an interim report for the CRD that includes report against the program deliverables	Complete: A final interim report is complete and will be delivered to Emily
Host 1 webinar on a priority invasive species topic for the Cariboo	Complete: CRD webinar focusing on youth taking action against invasive species with Tatla Lake Elementary and their first completion of the Invasive-wise Youth Challenge. Archived for future viewing.
Develop at least 3 invasive species factsheets for priority invasive species in the Cariboo.	Complete: Common Tansy is complete, Wild Chervil, Hoary Cress and Wild Parsnip content are complete and being formatted.
Provide a final report for the CRD that reports against program deliverables	Complete
Youth Education & Outreach	
Continue supporting existing IWYC program partners until the program is completed. Partner with 1 additional youth group on the IWYC in each	Ongoing: The ISCBC has continued to support interested youth groups with the Invasive Wise Youth Challenge. 766 youth commitments were collected including commitments gathered from partnering schools.

of the 3 communities. Secure at least 250 youth commitments.	<p>•100 Mile House: 100 Mile Girl Guides • Williams Lake: Springhouse 4-H Club, Horsefly 4-H Club, Williams Lake Boys and Girls Club, Williams Lake Unit 3 Girl Guides</p> <p>•Quesnel: Quesnel did not have a new youth organisation partner, but a new school was added to the IWYC and the Bouchie Lake Country Kids Club has had continued support.</p>
Continue to support schools currently using ISCBC resources and recruit at least 3 more schools (one in each community) to incorporate invasive species resources into their lesson planning. <i>Focus on encouraging teachers to use the Aquatics Educators Guide the Sue is currently developing.</i>	<p>Complete: contracted Mary Forbes to carry educational presentations at 11 schools within the CRD. Camille followed up with schools to see if they would like to continue on/partner on the IWYC. 4 Schools completed the IWYC, 100 Mile Elementary, Lake City Secondary, Bouchie Lake Elementary and Tatla Lake Elementary</p> <p>New School Partners in the 3 Communities</p> <p>•100 Mile House: Horse Lake Elementary, • Williams Lake: Alexis Creek Elementary, Tatla Lake Elementary, Dog Creek Elementary, Ulkatcho Day School, Anahim Lake Elementary, Yueset'in Elementary, Nemiah Elementary, Horsefly 4-H Club, Springhouse 4-H Club •Quesnel: Nazko Elementary</p>
Host a workshop with Bouchie Lake Country Kids Club in Quesnel	Complete: the Bouchie Lake Country Kids Club has dissolved and is now a community club run by the Friends of Bouchie-Milburn. ISCBC offered support over the summer and attended Billy Bouchie Days, Bouchie Lake Farmers Market and partook in the Bouchie Lake Culture Days
Continue supporting existing IWYC program partners until the program is completed. Secure at least 250 youth commitments.	Incomplete: Support has been offered to current partners Only 175 youth commitments were secured this term, however over 766 were secured earlier in the year.
Host 1 Community invasive species pulls with youth organizations in each of the 3 key communities	Complete: Quesnel: Barlow Creek Elementary Williams Lake: WL Boys and Girls Club 100 Mile House: Lac la Hache Elementary
Extra activities	<p>National Forestry Week: conducted field tours for grade 6's in SD27 about invasive species at Gavin Lake (Williams Lake) and Centennial Park (100 Mile House)</p> <p>Educational Display: mentored Rose Lake Miocene 4-H group in constructing a competitive education display on invasive species</p> <p>Earth Challenge Booklet: Rewrote the Invasive Species Section of the Earth Challenge to compliment the new Grade 7 curriculum. Will reach all Grade 7 classes of Lake City Secondary School</p>
Community & Industry Partners	
Meet with CCCIPC (once/year), during their planning session, to coordinate education and outreach activities within the CRD.	Complete: staff participated in the CCCIPC's planning meeting held on March 28, 2018. The ISCBC also attended

	the CCCPIC AGM & Field Tour at the Williams Lake Indian Band in June 26, 2018.
Invasive species updated content for the Cariboo Chilcotin Coast BC Parks and Trails Sites of Interest.	Complete: An updated invasive species article was developed for the Cariboo Chilcotin Coast BC Parks and Trails Sites of Interest. Supporting photos were sources. This has been submitted to Vanessa Moberg at the Cariboo Conservation Society for inclusion in the guide. The content has also been reviewed by Harry Jennings with CCCIPC.
Deliver on at least 1 key action stemming from the Adopt A Watershed workshops and share with at least one community group in each of the 3 communities (i.e. Increased invasive species signage at key water bodies).	Ongoing: Camille is developing a list of priority lakes/boat launches that will tie closely with priority lakes selected for testing. There are approximately 20 signs to be placed within the CRD. Additionally, aquatic invasive species monitoring (focusing on invasive mussels) has been coordinated, with samples to be collected from July to September.
Coordinate up to 6 Communities Pulling Together Events	Complete: Camille to update Community Pulling Together website info (online for requesting event), advertise funding,. Bouchie Lake Elementary, Lake City Secondary School, 100 Mile elementary, Springhouse 4-H Club, Horsefly 4-H Club, to receive honorarium. Tatla Lake Elementary completed the weed pull 100 Mile House: 100 Mile House Elementary Williams Lake: Tatla Lake Elementary, Lake City Secondary, Horsefly 4-H Club, Springhouse 4-H Club Quesnel: Bouchie Lake Elementary
Coordinate substrate mussel sampling at 7 priority lakes in the Cariboo.	Complete: conducted 26 Invasive Mussel monitoring samples in 7 lakes in the Cariboo (Bridge Lake, Sheridan Lake, Green Lake, Lac La Hache, Chimney Lake, Williams Lake, Dragon Lake) Released media via newspapers, radio interview, community caretaker papers, provincial e-bulletin and social media.
Host ISAM activities in each of the 3 communities and share weekly media information for the month of May.	Complete: School presentations in each of the 3 communities (Bouchie, 100 Mile Elementary, LCSS) Weed pulls for LCSS, tatla elementary, Bouchie Elementary ; list serv updates weekly; article to GLARA newsletter; Tatla Lake Elementary Weed Pull Article, WIMBY photo contest Quesnel: Billy Bouchie Days, Bouchie Lake Elementary Presentation, Bouchie Lake Elementary Weed Pull 100 Mile House: 100 Mile Elementary Presentations Williams Lake: Seedy Saturday, Girl Guides Weed Pull, Lake City Secondary School, Tatla Lake Elementary Weed Pull, Wildfire Information Expo
Host 8 community workshops and ideation sessions for 100in1Day	Complete: 10 workshops, ranging from formal workshops to 'pop-up' workshops for input for 100in1Day were held for Williams Lake. These included: 100in1Day Williams Lake Workshop, 100in1Day Event Generation, 100in1Day

	Planning Finale, CCCIPC Regional Strategy Planning workshop, Potato House Garden Party, Lilac Festival, Girl Guides Pulling Together, 2018 Bike Festival, Earth Challenge and Williams Lake District 4-H Presentation
Coordinate 100in1 Day event	Complete: 12 positive actions with invasive species themes were conducted throughout the community of Williams Lake on June 2 nd , in celebration of 11 other cities taking part in 100in1Day across Canada
Host at least one webinar on a priority invasive species topic for the Cariboo.	Complete: Invasive Mussels webinar on May 15 th to tie in with HCTF monitoring. Ally is trying to secure Goldfish webinar with Brian Heise focusing on his work in Dragon Lake. Another topic may be wildfires and impacts or the Aboriginal Toolkit with case studies in the CRD
Attend at least 5 key outreach events (at least 1 in each community) and secure at least 250 Clean Drain Dry commitments and at least 250 PlantWise Commitments.	Ongoing: Quesnel: Billy Bouchie Day Williams Lake: Xat'sull Soda Creek Presentation, 100in1Day Williams Lake Workshop, Potato House Garden Party, Lilac Festival, Seedy Saturday, 100in1Day Event Generation, Wildfire Information Expo, 2018 Bike Festival, 100 Mile House: no community outreach events were attended due to a high focus on youth presentations, the most presentations in the district were delivered to 100 Mile Elementary with the largest school turnout for the Weed Pull
Host 1 Realtor and Invasive Species Workshop	Incomplete: scheduled and advertised in advance for Williams Lake but only one person registered
Attend at least 10 outreach events (at least 2 in each community) and secure at least 250 Clean Drain Dry commitments and at least 250 PlantWise Commitments.	Complete: Quesnel: Quesnel Rodeo, Quesnel Farmers Market, Bouchie Lake Farmers Market, Quesnel Tourism Centre, Barkerville, Bouchie Lake Culture Day Williams Lake: Horsefly Salmon Festival, Williams Lake Farmers Market, Potato House Garden Gig, Performances in the Park, Beaver Valley Feeds, Williams Lake Tourism Centre, United Way Movie Night, Walmart (3 times) Regional Library (4 times) 100 Mile House: Green Lake Provincial Park, Lac la Hache Provincial Park, 108 Mile Farmers Market, 100 Mile Tourism Centre, South Cariboo Garlic Festival, United Way Movie Night, Regional Library (4 times), 108 Heritage Christmas Market CDD commitments: 367 PlantWise Commitments: 381
Extra Activities	Presentations: 100 Mile House: Friends of Bridge Lake Aquatics presentation Community Weed Pulls: 100 Mile House: Hall Lake Williams Lake: Chimney Valley CDD Signage: 100 Mile House: Howard Lake, Green Lake, Timothy Lake, Sheridan Lake Williams Lake: Forest Lake, Tyee Lake, Felker Lake, Dugan Lake Quesnel: Tzenzaicut Lake Workshops: Communications Workshop, Climate Adaptation Strategy Workshop

Aboriginal Outreach & Building Capacity	
Finalize and deliver Aboriginal toolkit to all partners to use within their communities	Complete: Revised “Indigenous Community Toolkit for Invasive Species Management” has been printed in hardcopy and made available on our website.
Complete an invasive species ½ day training program for indigenous communities.	Ongoing: Half Day Workshop is substantially complete.
Pilot ½ day training program for indigenous communities with at least one indigenous community and make any required updates to the training material, based on feedback from the group receiving the training.	Ongoing: Several communities are ready for training.
Hold 1 workshop/event for Aboriginal youth	Complete: Youth presentation made at Xat’sull on March 23, 2018. Also, had booth/made presentation to Ulkatcho job fair participants who were mainly youth jobseekers on March 14, 2018.
Partner with 1 indigenous organization on the Indigenous Toolkit and assist in facilitating the development of an invasive species management plan for that community.	Complete: Three CRD Indigenous communities have received training on the Indigenous Toolkit and received a custom Invasive Plant Management plan.
Implement 1 youth invasive plant weed pull in each of the 3 key communities	Incomplete: Williams Lake: Little Chiefs Preschool, Headstart (Xat’sull)
Implement 1 invasive plant treatment with Aboriginal groups in 100 Mile House and Quesnel (WL was completed in 2017).	Three CRD Indigenous communities received invasive plant treatment in the community (Xat’sull, Williams Lake Band and Esketemc).
Implement 1 training session with field tour component in each of the 3 key communities	Three CRD Indigenous communities received a training session and field tour of their lands in the community (Xat’sull, Williams Lake Band and Esketemc).

Appendix 2: Youth Education and Outreach Events

YOUTH EDUCATION & OUTREACH

Table 1. Youth Education Events that the ISCBC attended within the CRD from January 1, 2018-June 30, 2018.

	Host Group	Location	Event Summary
1	100 Mile House Girl Guides	100 Mile House	Presentation
2	Horse Lake Elementary	100 Mile House	Presentation
3	100 Mile House Elementary School	100 Mile house	1 st round of Presentations
4	100 Mile House Elementary School	100 Mile House	2 nd round of Presentations
5	100 Mile House Elementary School	100 Mile House	3 rd round of Presentations
6	100 Mile House Elementary School	100 Mile House	Weed Pull
7	Earth Challenge- all SD27 Grade 7's	Williams Lake	Interactive Activity
8	Williams Lake Girl Guides	Williams Lake	Presentation
9	Williams Lake Girl Guides	Williams Lake	Weed Pull
10	Lake City Secondary School-Grade 7 Class	Williams Lake	Presentation
11	Lake City Secondary School- Grade 7 Class	Williams Lake	Weed Pull
12	Williams Lake District 4-H	Williams Lake	Presentation
13	Nesika Elementary School French Immersion Week	Williams Lake	Interactive Activity

14	Springhouse 4-H Club	Williams Lake	Weed Pull
15	Horsefly 4-H Club	Williams Lake	Weed Pull
16	Alexis Creek Elementary School	Williams Lake (Chilcotin)	Presentation
17	Yueset'in Elementary School	Williams Lake (Chilcotin)	Presentation
18	Dog Creek Elementary-Junior Secondary School	Williams Lake (Chilcotin)	Presentation
19	Ulkatcho Day School	Williams Lake (Chilcotin)	Presentation
20	Nemiah Elementary School	Williams Lake (Chilcotin)	Presentation
21	Anahim Lake Elementary-Junior Secondary School	Williams Lake (Chilcotin)	Presentation
22	Tatla Lake Elementary School	Williams Lake (Chilcotin)	Presentation
23	Tatla Lake Elementary School	Williams Lake (Chilcotin)	Weed Pull
24	Nazko Elementary School	Quesnel	Presentation
25	Bouchie Lake Elementary School	Quesnel	Presentation
26	Bouchie Lake Elementary School	Quesnel	Review Presentation
27	Bouchie Lake Elementary School	Quesnel	Weed Pull
28	Williams Lake Boys and Girls Club	Williams Lake	Presentation
29	Williams Lake Boys and Girls Club	Williams Lake	Weed Pull
30	4-H Educational Display	Williams Lake	Booth
31	Chilcotin Road Elementary- National Forestry Week	Williams Lake	Field Tour
32	GROW Homeschoolers- National Forestry Week	Williams Lake	Field Tour

33	Big Lake Elementary- National Forestry Week	Williams Lake	Field Tour
34	Sxoxomic Community School	Williams Lake	Field Tour
35	100 Mile House Elementary- National Forestry Week	100 Mile House	Field Tour
36	Little Chiefs Preschool	Williams Lake	Presentation
37	Little Chiefs Preschool	Williams Lake	Weed Pull
38	Headstart Learning Xat'sull	Williams Lake	Presentation
39	Headstart Learning Xat'sull	Williams Lake	Weed Pull
40	Barlow Creek Elementary	Quesnel	Presentation
41	Barlow Creek Elementary	Quesnel	Weed Pull
42	Lac La Hache Elementary- National Forestry Week	Williams Lake	Field Tour
43	Lac La Hache Elementary	100 Mile House	Presentation
44	Lac La Hache Elementary	100 Mile House	Weed Pull

COMMUNITY AND INDUSTRY PARTNERS

Table 2. Community and industry events that the ISCBC attended during 2018. Events in white occurred during January 1st-June 30th, while events in grey occurred during the second term from July 1st- December 31st.

	Event	Location	Event Summary
1	CCCIPC Regional Planning Strategy Meeting	CRD	Board Meeting Update
2	Cariboo Adaptation Strategies Update	CRD	Workshop
3	Media Training	Williams Lake	Workshop

4	100in1Day Williams Lake Workshop	Williams Lake	Workshop
5	Potato House Garden Party	Williams Lake	Booth
6	Lilac Festival	Williams Lake	Booth
7	Williams Lake Seedy Saturday	Williams Lake	Booth
8	100in1Day Event Generation	Williams Lake	Workshop
9	Wildfire Information Expo	Williams Lake	Booth
10	2018 Bike Festival	Williams Lake	Booth
11	100in1Day	Williams Lake	Community Festival, Booth, Weed Pull, GMI Planting
12	100in1Day Planning Finale	Williams Lake	Workshop
13	Clinton Seedy Saturday	Clinton	Booth
14	Friends of Bridge Lake	100 Mile House	Presentation
15	Green Lake Provincial Park	100 Mile House	Booth
16	Lac La Hache Provincial Campsite	100 Mile House	Booth
17	108 Mile Farmers Market	100 Mile House	Booth
18	Hall Lake Community	100 Mile House	Weed Pull
19	100 Mile Tourism Centre	100 Mile House	Booth
20	Quesnel Tourism Centre	100 Mile House	Booth
21	South Cariboo Garlic Festival	100 Mile House	Booth
22	Lac La Hache Provincial Campsite	100 Mile House	Booth

23	United Way Movie Night	100 Mile House	Booth
24	108 Heritage Christmas Market	100 Mile House	Booth
25	Regional Library	100 Mile House	Booth
26	Williams Lake Farmers Market	Williams Lake	Booth
27	Potato House AGM	Williams Lake	Booth
28	Performances in the Park	Williams Lake	Booth
29	Beaver Valley Feeds	Williams Lake	Booth
30	Williams Lake Farmers Market	Williams Lake	Booth
31	Chimney Valley Community	Williams Lake	Weed Pull
32	Horsefly Salmon Festival	Williams Lake	Booth
33	Williams Lake Tourism Centre	Williams Lake	Booth
34	United Way Movie Night	Williams Lake	Booth
35	Regional Library	Williams Lake	Booth
36	Botanio Mall	Williams Lake	Booth
37	Walmart	Williams Lake	Booth
38	Quesnel Rodeo	Quesnel	Booth
39	Quesnel Farmers Market	Quesnel	Booth
40	Bouchie Lake Farmers Market	Quesnel	Booth
41	Quesnel Tourism Centre	Quesnel	Booth

42	Barkerville	Quesnel	Booth
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ABORIGINAL OUTREACH & BUILDING CAPACITY

Table 4. Aboriginal outreach and capacity building events attended during Phase 3, January 1st – June 30th. New project rolling out to build capacity in Indigenous communities under a grant from the Rural Dividend fund, this project will involve three communities from the CRD.

Event	Location	Event Summary
Xat'sull Soda Creek	Williams Lake	Presentation
Ulkatcho Job Fair	Williams Lake (Chilcotin)	Booth
Northern Secwepemc te Qelmucw Community meeting	Williams Lake	Networking
CCCIPC AGM & Field Tour	Williams Lake (WLIB)	Presentation
Billie Bouchie Days	Quesnel	Booth- this event was promoted as a Metis event.
Indigenous Workshop	Richmond	Approx 30 Indigenous communities represented, many from the Cariboo Regional District
Northern Secwepemc te Qelmucw Citizens Assembly	Williams Lake	Networking
Bettering Environmental Stewardship and Technology conference	Whistler	Presented in the "Indigenous stream" afternoon, set up booth
Bouchie Lake Culture Days	Quesnel	Booth
Xat'sull First Nation	Williams Lake	Training/Treatment
Esketemc First Nation	Williams Lake	Training/Treatment
Williams Lake Indian Band	Williams Lake	Training/Treatment

Xat'sull First Nation	Williams Lake	Youth Weed Pull
Williams Lake Indian Band	Williams Lake	Youth Weed Pull

INVASIVE SPECIES ACTION MONTH EVENTS

Table 5. Indicates the events that were held in occurrence with Invasive Species Action Month. The community events are already listed in their specific tables (pertaining to youth, and community partners), but the provincial event is unique to this table.

ISAM Events	Location	Event Summary
WIMBY- What's in My Backyard Photo Contest	Provincial	Photo Contest
Tatla Lake Elementary	Williams Lake (Chilcotin)	Weed Pull
Williams Lake Seedy Saturday	Williams Lake	Booth
Girl Guides	Williams Lake	Weed Pull
Lake City Secondary- Grade 7 Ms. Watkinson Class	Williams Lake	Presentation
Lake City Secondary- Grade 7 Ms. Watkinson Class	Williams Lake	Weed Pull
Potato House Open House	Williams Lake	Booth
2018 Mountain Biking Festival	Williams Lake	Booth
Lilac Festival	Williams Lake	Booth
Wildfire Information Expo	Williams Lake	Booth
100 Mile House Elementary School	100 Mile house	1 st round of Presentations
100 Mile House Elementary School	100 Mile House	2 nd round of Presentations
100 Mile House Elementary School	100 Mile House	3 rd round of Presentations

Billie Bouchie Days	Quesnel	Booth
Bouchie Lake Elementary	Quesnel	Presentations
Bouchie Lake Elementary	Quesnel	Weed Pull