



Hello, and welcome to the fourth edition of The Understory!

The Ministry of Forests, Lands, Natural Resource Operations and Rural Development is a hard-working and dedicated organization. With many changes afoot, we will stay true to our roots and look ahead with optimism, compassion and courage.

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Read articles about our ministry's rich history in the [Archives](#), and more recent editions on the [Newsletter Homepage](#).

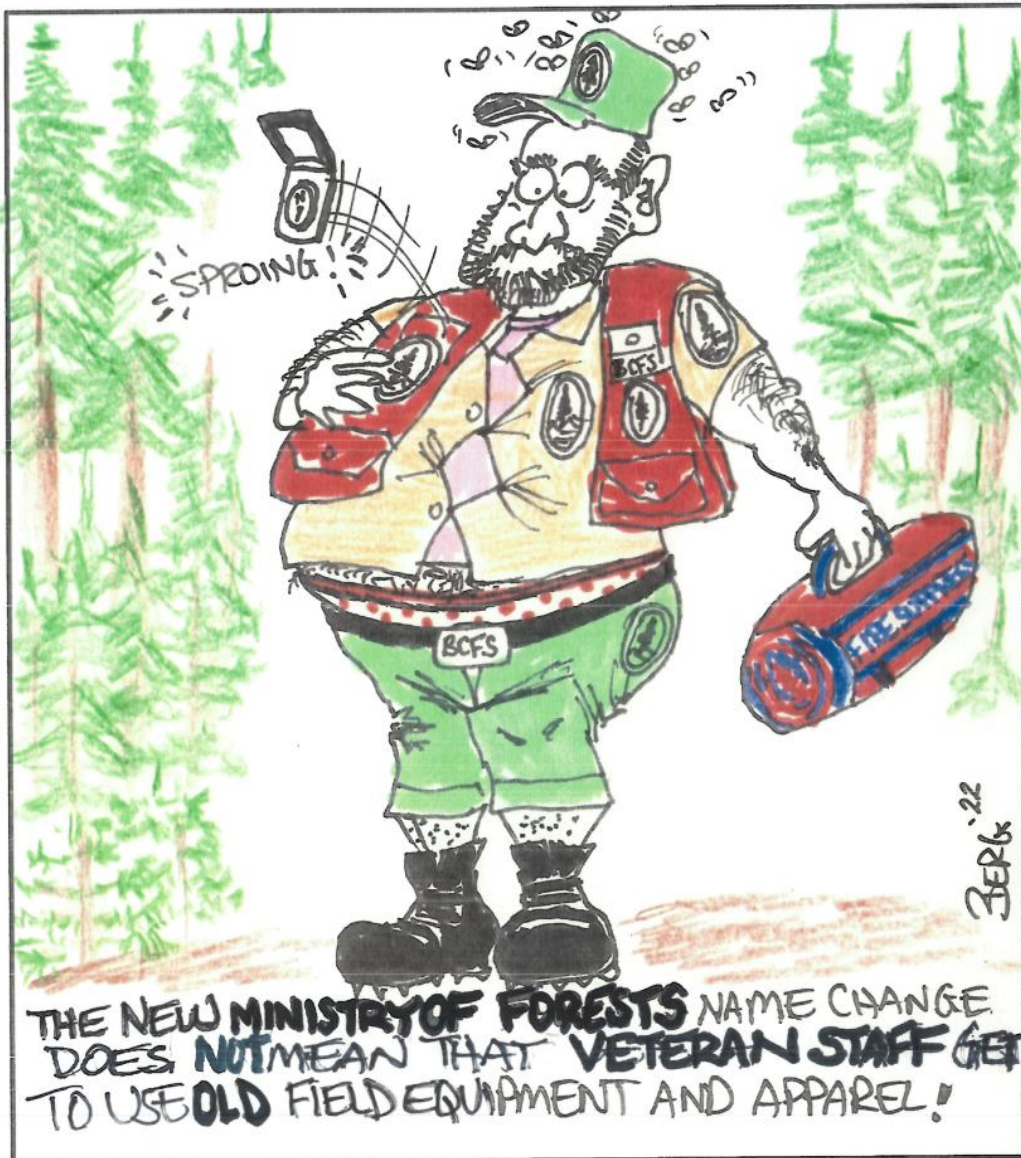
Feedback? Questions? Story ideas? Review the [Article Submission Guidelines](#) and write to [FLNR News](#).

We acknowledge with respect that our ministry operates on the ancestral lands of many Indigenous peoples. The FLNRORD Newsletter Advisory Group recognizes the power of stories in building relationships and in providing a safe space for all voices to be heard and reflected.

A Berg's Eye View

BERG'S EYE VIEW

by Shane Berg



"The new MINISTRY OF FORESTS name change does NOT mean that VETERAN STAFF get to use OLD field equipment and apparel!"





Check Out Notable Checkpoint Performance by NROs

March 30, 2022

**By Cory Shirshac, Senior Correspondence Analyst
Correspondence Services Section, Deputy Minister's Office**

Natural Resource Officers went the extra mile over the holidays, keeping the Coquihalla safe as part of Project Checkpoint and emergency highway repairs.

Highway checkpoints are fairly common during the holiday season. But the ones involving ministry staff along the Coquihalla (Highway 5) over the last week of December and the first half of January weren't your typical roadside stops.



Figure 1: NRO Safety and Enforcement Roadside Stop

FLNRORD Natural Resource Officers (NROs) took part in Project Checkpoint after the historic heavy rains of mid-November 2021 severely damaged the Coquihalla Highway, rendering one of B.C.'s most valuable transportation corridors impassable and in dire need of immediate attention and emergency round-the-clock repairs.

The NROs were called into action after the Ministry of Transportation and Infrastructure (MoTI) approached our Compliance and Enforcement Branch with a request for support and boots on the frozen, snow-packed ground. Their job was to keep non-commercial, non-essential vehicles off the Coquihalla in order to limit traffic to the lightest flow possible while road crews performed their delicate work knitting the highway back together again.

"MoTI's resources were stretched pretty thin. Their people really needed a break," explained Mike Lawrence, South Coast NRO and Project Checkpoint Coordinator. "We worked hand-in-hand with the Commercial Vehicle Safety and Enforcement Inspectors, filling in the gaps where needed. They were very appreciative for the relief we were able to provide under some very tough conditions, including short notice over the Christmas break."

The checkpoints were staffed 24/7 by our NROs, with individual officers on duty for 12-hour shifts over blocks of five to seven days. They were stationed at three separate checkpoints: one located on the Hope side of the Coquihalla, with two others set up on the Merritt side.

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Deployment began December 24, the day of Christmas Eve, but it wasn't exactly a sugarplum assignment. In the dead of night, temperatures dipped down to an estimated 30°C below in the kind of inky darkness you can only find standing alone on a highway cutting through the middle of a mountain pass. Deployment ended January 18, with the NROs checking and processing hundreds of vehicles over the 25-day stretch.

Travellers wishing to cross the Coquihalla would be read a special order by the NROs. If the purpose of the trip was determined non-essential, the driver was directed to turn around and take an alternate route. Although almost all were compliant, there were a few instances where disobedient motorists ignored orders and sped through without clearance, only to be nabbed a short distance up the road by awaiting RCMP who had been radioed and alerted by the checkpoint.

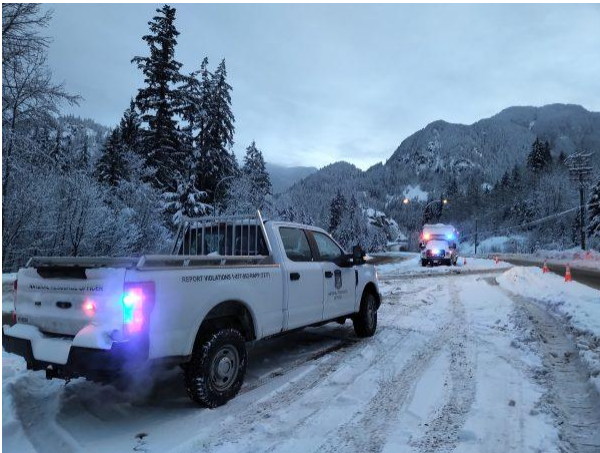


Figure 2: NRO Safety and Enforcement Roadside Stop

MoTI had no trouble finding enough recruits from within our ranks for Project Checkpoint. With little hesitation, an ample number of FLNRORD highway heroes expressed their interest, pulled on their high-visibility vests and stepped to the fore after brief training.

“The number of helping hands that our ministry extended to offer assistance far exceeded the number of shifts we needed to fill, but this is no surprise. FLNRORD is well known for stepping up in times of need, whether it be wildfires or torrential downpours causing landslides and major flooding,” said Matt Austin, Assistant Deputy Minister, Integrated Resource Operations Division.

Checking all the boxes – commitment, professionalism, adaptability, communications, and teamwork – as part of Project Checkpoint were 13 members of the Compliance and Enforcement Branch. Applause and appreciation goes out to Anwen Roberts, Jordan Pertus, John Coles, James Smith, Erin Badgero, Dan Krywonos, Braeden Lattanzi, Clint Zimmerman, Cam Helfrich, Dylan Mackenzie, Kat McNamara, Tyler Faulkner, and Mike Lawrence for their involvement.





FLNRORD Research Program 2021 Survey Highlights

March 30, 2022

By Francesco Cortini, PhD RPF, Research Management Lead
Forest Improvement and Research Management Branch, Office of the Chief Forester

In 2018, a baseline survey was sent to over 300 targeted internal staff and managers in the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) to assess awareness and user satisfaction with the Research Program. In 2021, the Research Program conducted a second survey to monitor the Program's success over time. BC Stats invited a targeted sample of FLNRORD managers, policy makers, operational planners, and foresters (350 in total) to complete the online survey.

Main results of the survey:

- With 43% completed surveys, the overall response was high, especially among respondents that previously completed the 2018 survey.
- 96% of respondents use natural resource research and science information to inform their work.
- 95% of respondents were either *aware* or *somewhat aware* of the Research Program prior to the survey, compared to 89% in 2018.
- 89% of respondents had accessed natural resource research and science information produced by the Research Program, compared to 82% in 2018.
- Ecosystem Stewardship, Timber Supply, and Species and Habitat research were the topics that respondents were most likely to indicate having informed their work.

Aspects of the Research Program with the highest scores, included:

- Program credibility, and
- Value of internal publications.

The information produced by the Research Program tends to be accessed:

- Directly (by asking Research Program staff),
- Via presentations by Research Program scientists or staff, and
- Through website searches.

Opportunities for sharing research and science information rated as the most important to respondents were:

- Regional workshops or presentations by Research Program scientists or staff, and
- Conferences with the scientific community (led by the Research Program).

When Research Program users were asked to rate the importance of various information sharing opportunities to raise awareness of the Research Program, the highest scores included:

- Collaboration with operational staff,
- Collaboration with decision-makers, and
- Collaboration with policy makers.

FLNRORD Research Program 2021 Survey Report

Prepared for the FLNRORD Research
Program, Ministry of Forests, Lands, Natural
Resource Operations & Rural Development
By BC Stats – January 2022

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This survey provided a sound measure of the Research Program's success over time. Comments from responders indicated that general awareness and overall success of the program can be increased by:

- Increasing sharing of and access to research, and
- Increasing time/support for research or developing a different approach to research.

The Research Program extends their gratitude to all survey participants and is excited to share more of its research with the ministry.



The Wildlife Stewardship Launch and Website Restructure Project

March 30, 2022

By Gaganjot Lidhran, Communications Officer
Strategic Priorities Group, Deputy Minister's Office



Figure 1: Pacific tree frog (*Hyla regilla*)

The [Wildlife Stewardship website](#) re-development project has been several years in the making. Funding support was provided by [Together for Wildlife](#), to assist with the implementation of [Goal 1 – Action 3](#): Increase opportunities for engagement and involvement (because “All British Columbians have a voice in wildlife stewardship”). The project required cross-ministerial and branch evaluation, discussions, and planning meetings.

The overall objective was to:

- Strengthen existing content related to wildlife management,
- Ease navigation for the public, and
- Re-structure species-related content into the wildlife stewardship framework.

The new webpages, which launched on the [FLNRORD public website](#) on March 2, 2022, highlight the importance of responsible care for wildlife and their habitats. The webpages give an overview of various species in B.C., such as:

- [Birds](#),
- [Bats](#), and
- [Wild Sheep and Mountain Goats](#).

Furthermore, the wildlife health pages offer the public and wildlife experts information on managing and mitigating diseases in wildlife, especially when it comes to hunting season. These pages include diseases such as:

- [Chronic Wasting Disease in cervids](#),
- [Bovine Tuberculosis in mammals](#),
- [White-Nose Syndrome in bats](#), and
- [Pneumonia in wild sheep](#).

The newly launched “[How to report sick or dead animals](#)” webpage also helps to tie in the importance of reporting sick or dead wildlife to authorities.

While more work and development remain ongoing in the wildlife stewardship webpages (particularly, on developing content in relation to First Nations and Wildlife), the work done thus far is a showcase of the passion and care that the Wildlife and Habitat Branch and Programs have for their responsibility in managing wildlife in B.C. It also ensures that communication in relation to wildlife is accurate, up-to-date and relevant, so that wildlife and their habitats thrive, are resilient, and continue to support and enrich the lives of all British Columbians.



Figure 2: Grizzly bear (*Ursus arctos*)

Special Thanks:

- Jessie Fanucchi, Wildlife Data Coordinator (Project Lead)
- Gaganjot Lidhran, Communications Officer (Project Support)

Wildlife Health Program:

- Cait Nelson
Wildlife Health Biologist
- Maeve Winchester
Wildlife Health Biologist
- Caeley Thacker
Wildlife Veterinarian

Cross-Ministry Support:

- Grace Kelly
Ministry of Environment
- Leigh-Anne Isaac
Ministry of Environment



Photo by Gabrielle Mustapich on Unsplash



FLNRORD Research Program – Brief Summary of Achievements – Coast Area

March 30, 2022

**By Heather Klassen, Research Ecologist, West Coast Natural Resource Region, and
Tracy Michalski, Research Fish Biologist, West Coast Natural Resource Region**

The Coast Area Research Program is represented by 9 research scientists that conducted 25 collaborative research projects during the past fiscal year (2020/21). These projects fell within the Research Program's portfolios as follows:

- Species and Habitat – 11 projects
- Ecosystem Stewardship – 6 projects
- Water – 6 projects
- Timber – 3 projects
- Ecosystem and Disturbance – 1 project

The research scientists from the Coast Area also worked on 4 additional research projects funded outside the program.

Research on the Coast is an area-based service; staff work with Regional Management Teams and other research clients and collaborators across both West Coast and South Coast Regions to assess research needs and implement projects. The team works on projects spanning the coast geographically and ecologically, including West Coast, South Coast, and coastal portions of the Skeena Region, the latter associated with responsibilities for coastal Biogeoclimatic Ecosystem Classification (BEC) and Ecosystem-based Management in the Great Bear Rainforest (GBR). Additionally, staff within the Terrestrial and Fish and Aquatic Wildlife Resources teams and the Resource Authorizations team of the South Coast Regional office have been implementing FLNRORD-funded research projects within their region.

Research in the Coast Area over the past year [2021] has spanned topics as varied as:

- foraging and habitat requirements of species at risk;
- old forest attributes post wildfire;
- shifting hydrological regimes with climate change, comparative landslide risk;
- drought-induced habitat changes;
- sediment dynamics and channel stability;
- nutrient constraints on forest productivity; and,
- relationships of riparian management and climate change to fish populations.

Two current projects are profiled below.

Comparison of Diet and Condition of Adfluvial Coastal Cutthroat Trout in Lakes Surrounded by Old and Second Growth Riparian Zones

Riparian ecosystems provide an intricate linkage between aquatic and terrestrial habitats. As transitional zones between the lake shore (and streams) and adjacent upland forest, their importance as unique habitat elements, sites of biodiversity concentration, and zones of complex hydrological and nutrient cycling exceeds the proportion of the landscape they occupy within a watershed. The objective of our study is to compare the consumption of terrestrial vs. aquatic macroinvertebrates and examine the condition of Cutthroat Trout (*Oncorhynchus clarkii clarkii*) in lakes with riparian zones exhibiting a range of harvest over the past 70 years.

We initiated field work at six small (<5 hectares to ~40 hectares), shallow (<10 metres) lakes between 200 to 500 metre elevation on Central Vancouver Island in the Sayward Forest in 2016. We collected and analysed the species composition and biomass of stomach contents of Cutthroat Trout (Figure 1). We also measured length and weight and took scale samples of each fish before releasing the fish. We determined percent cover by species of vegetation along transects beginning in the littoral zone of the lake and extending into the riparian forest (Figure 2).



Figure 1: Sampling Cutthroat Trout at Nola Lake



Figure 2: Vegetation sampling in the littoral zone

Cutthroat in the lake surrounded by old forest (Nola Lake) had a different diet composition than Cutthroat at the lakes (Lost, Jessie, Spirit, Cedar and Mud Lakes) with some harvest history in their riparian zones. Fish of all sizes at Nola Lake had substantially higher intakes of terrestrial insects than fish of similar sizes in other lakes, where diets were comprised of largely aquatic prey (Figure 3).

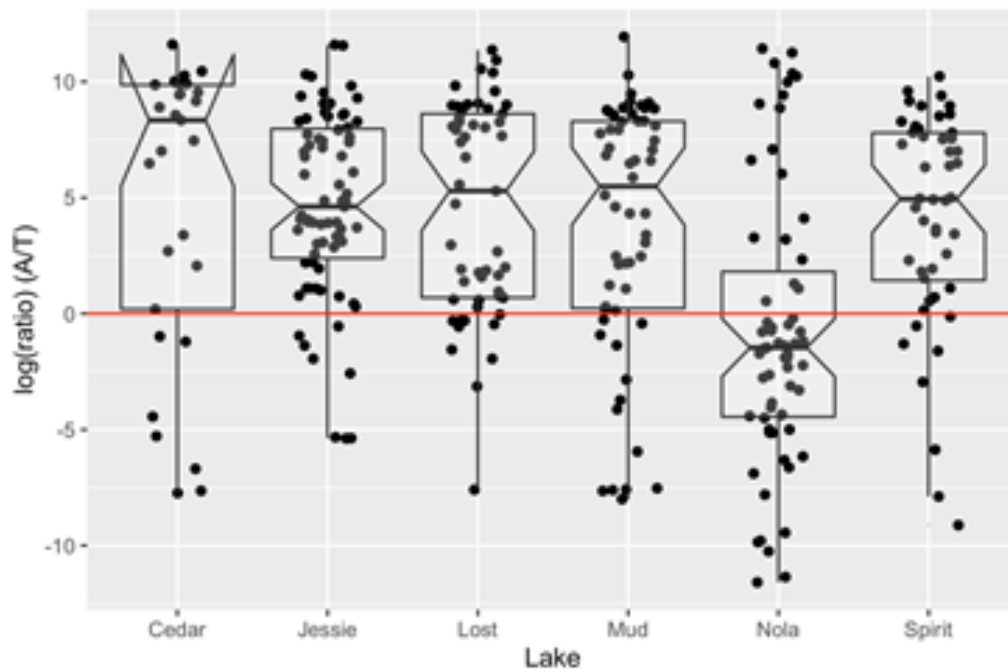


Figure 3: Proportion of aquatic vs terrestrial invertebrate consumption by lake. Points above the zero line indicate fish with more aquatic prey; points below are fish that consumed more terrestrial than aquatic insects.

In addition to the differences in diet type, the fish at Nola Lake had consistently different feeding rates and consumption measures from fish in the other study lakes. Riparian vegetation stratification also differed between Nola and the other lakes. Initial analyses suggest there may be relationships between the daily prey consumption and both the amount of vegetation submerged along the shore and the amount of vegetation overhanging and bordering the lake; Cutthroat from Nola Lake had the highest daily consumption measures of all fish sampled (Figure 4).

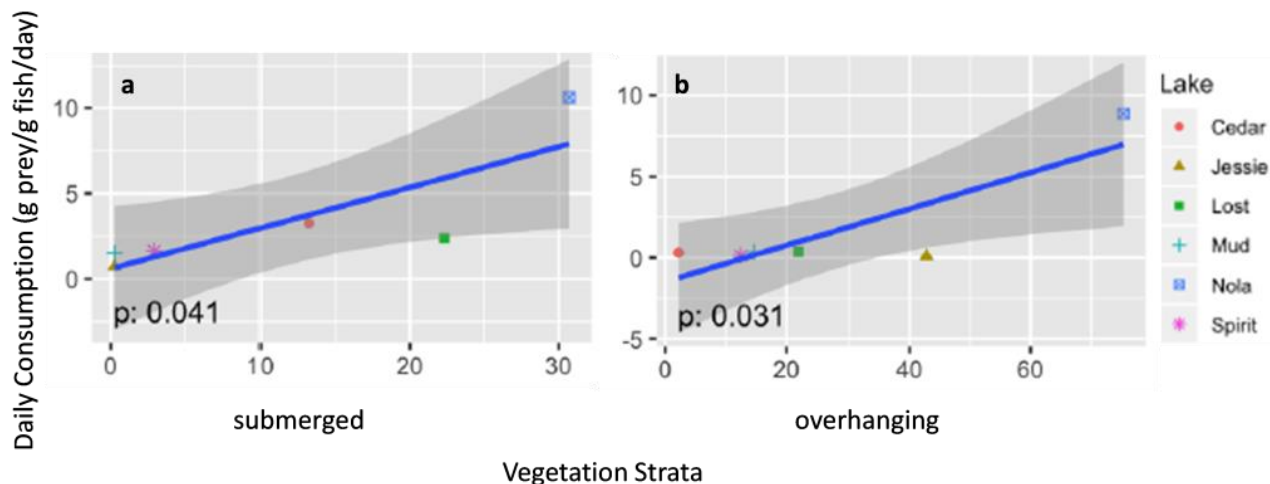


Figure 4: Relationships of daily consumption of invertebrate prey to percent cover of (a) submerged and (b) overhanging vegetation at study lakes.

Although limited by the number of study sites, our work contributes to the growing body of evidence recognizing the linkages between terrestrial resources and adfluvial fish stocks. Future work should focus on determining the appropriate width and composition of lake side riparian forests to ensure the maintenance of ecological connections between terrestrial and aquatic species.

Refinements to the Biogeoclimatic Ecosystem Classification (BEC) for the Coast Area

Refinements to the Biogeoclimatic Ecosystem Classification (BEC) for the Coast Area and related mapping continue, with the expected release of the new Coastal Guide to BEC in 2023. Coast Area Research Ecologists lead this project, working with other provincial and regional FLNRORD ecology team members and external classification experts. Over the past decade, the Coast Research Ecology team has heard that the coast-interior transition is a challenging area for operations, particularly in the Coastal Western Hemlock southern moist submarine (CWHms1) biogeoclimatic unit. This is in part a result of the complex coast-interior climatic transition, but also may be an indicator that the biogeoclimatic unit requires classification and/or mapping refinement.

Since the publication of “the red guide” (LMH 28, [A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region](#)) in 1994, more ecological plot data have been collected. Additional climate data from an expanding network of weather stations and modelled climatic surfaces are also available to support ecosystem classification analyses. Relationships among climate, site, and vegetation data are statistically assessed during the classification revision; modifications to mapping (variant) linework are simultaneously considered to develop cohesive scientific and operational units.

Based on feedback from operational users, a submarine-subcontinental split was investigated (Figure 5) based on the increased presence of Interior species such as subalpine fir, hybrid spruce, saskatoon berry, black huckleberry, and falsebox in the east (subcontinental).

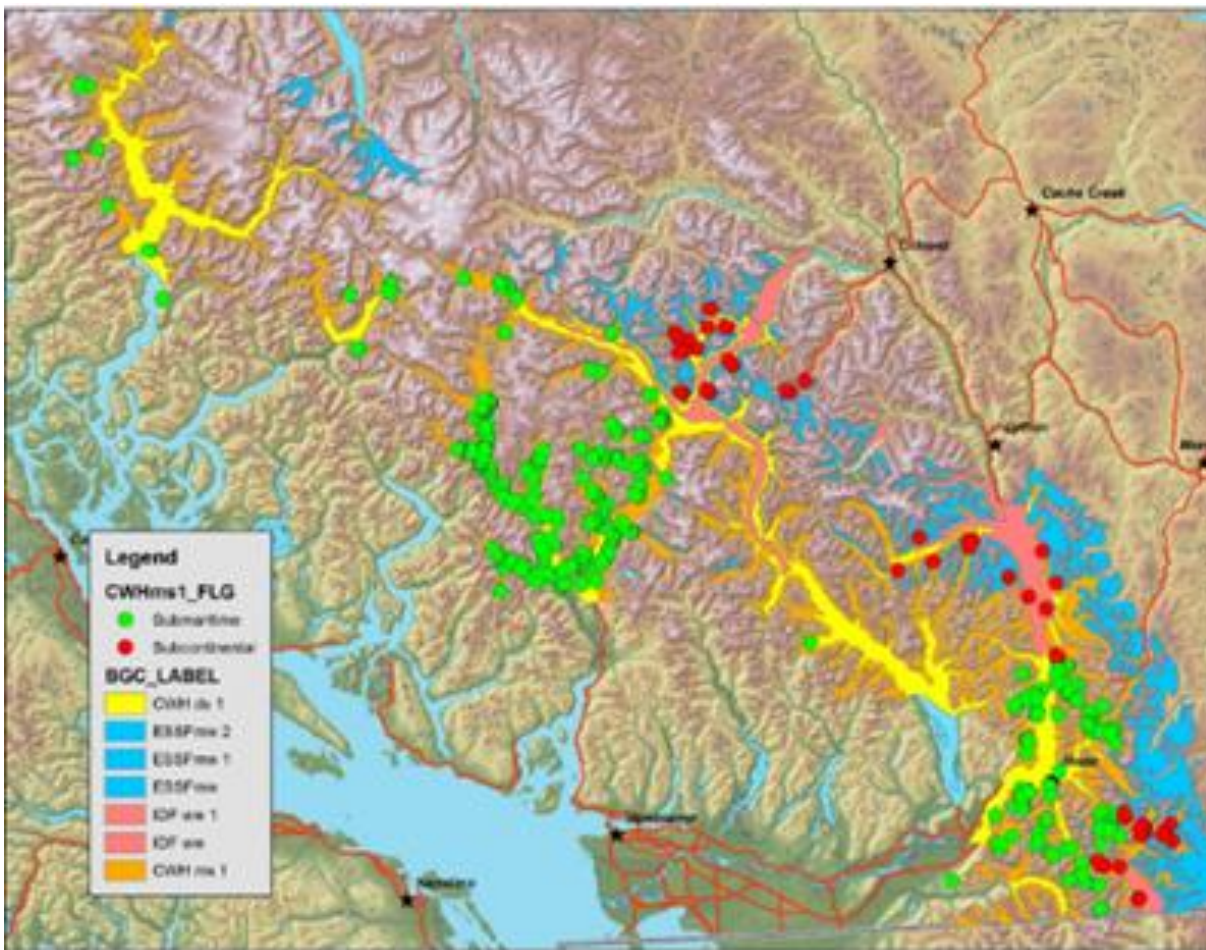


Figure 5: Distribution of CWHms1 plots and assignment to submarine (green point) or subcontinental (red point) biogeoclimatic unit.

Further analyses suggest the CWHms1 – subarctic could be split into a submontane and montane biogeoclimatic unit based on the increased presence of amabilis fir and queen’s cup, but also the decreased presence of Douglas-fir, western redcedar, red huckleberry, and feathermosses in zonal sites of the montane unit compared to the submontane unit (Table 1).

BGC	CWHms south subarctic submontane	CWHms south subarctic montane	CWHms south subcontinental	
<i>Abies amabilis</i>	■■■■■	■■■■■	■■■■■	amabilis fir
<i>Abies lasiocarpa</i>			***	subalpine fir
<i>Picea</i> spp.			**	spruces
<i>Tsuga heterophylla</i>	■■■■■	■■■■■	■■■■■	western hemlock
<i>Pseudotsuga menziesii</i>	■■■■■		■■■■■	Douglas-fir
<i>Thuja plicata</i>	■■■■■	***	■■■■■	western redcedar
<i>Amelanchier alnifolia</i>			*	saskatoon
<i>Clintonia uniflora</i>	■■■	■■■	■■■	queen’s cup
<i>Paxistima myrsinites</i>	*		■■■	falsebox
<i>Vaccinium alaskaense</i>	■■■■■	■■■■■		Alaskan blueberry
<i>Vaccinium parvifolium</i>	■■■		*	red huckleberry
<i>Vaccinium membranaceum</i>		■■■	■■■	black huckleberry
<i>Hylocomium splendens</i>	■■■■■		■■■■■	step moss
<i>Pleurozium schreberi</i>	***		■■■■■	red-stemmed feathermoss

Table symbology denotes plant species constancy and percent cover as follows:

Constancy: ■■■■■ >70% ■■■■ 50-70% * 25-50%
Mean cover: ■■■■■ >25% ■■■■ >10-25% ■■■ >3-10% ■■ >1-3% ■ <1%

Table 1: Prominence of vegetation species differentiating zonal (“01”) site series for three potential new CWHms south biogeoclimatic units: CWHms south subarctic submontane, CWHms south subarctic montane, and CWHms south subcontinental.

Other areas of focal analysis include:

- assessment of possible north-south divisions of both submontane and montane CWH very wet maritime variants; and,
- assessment of degree of differentiation between dry southern units, such as the CWH dry maritime and CWH very dry maritime, in some areas.

Upon completion of drafts of all units, these will be correlated with each other and adjacent or similar units from other areas of the province within the provincial vegetation hierarchy, resulting in final subzone, variant, and site series classifications. Operational review will also be sought at this time.





Ukraine Forestry

March 30, 2022

By Robert Taylor, Seed Orchard Technician

Skimikin Seed Orchard, Forest Improvement and Research Management Branch

Ukraine is a major global producer of wheat, and one of the biggest oil producers – sunflower oil, that is! Furthermore, they have an important forest industry, based on the same European model as ours. Forestry in B.C. was built on the knowledge and work of Hungarian and Czechoslovakian foresters who escaped their homelands in the face of Soviet aggression in 1956 and 1968, respectively.

The [State Forest Resources Agency of Ukraine](#) manages 73% of the nation's forests. This includes timber production, hunting, reforestation, and afforestation of old agricultural lands.

Ukrainian forests have over 30 tree species, but are mainly made up of pine, oak, beech, spruce, birch, alder, ash, hornbeam, and true fir. These forests are used for many purposes: 38% for producing wood products; 33% for reserves; 15% for recreational use; and, 14% for scientific, historic and cultural purposes. The forests are primarily in the western mountainous region.



Figure 1: Forest ratio by administrative regions, %

The State Forest Resources Agency of Ukraine website includes a [short history of forestry in Ukraine](#) and news of their forest practices, such as the establishment of seed orchards and nurseries with the help of the Swedes and Lithuanians. Perhaps there is an opportunity for the BC Ministry of Forests to be an international partner as well.





Celebrating the 110th Anniversary of the BC Forest Service

March 30, 2022

**By Angela Bello, Communications Officer
Strategic Priorities Group, Deputy Minister's Office**

The 110th Anniversary of the BC Forest Service (February 27, 2022) marked an auspicious moment in our ability to reflect and adapt the way in which we manage provincial forests. As we undergo name changes, reorganization and new relationships, we continue the hard work of responsible stewardship.

Our legacy reaches across the 103,502,000 hectares of the total land base and marine area under provincial jurisdiction. There are complex procedures and partnerships at play with every project and decision of varying scope and scale. By following the BC Public Service core values, we expertly navigate the challenges and work together to create new policies that reflect higher goals of environmental resiliency, economic recovery, and respectful relationships to the land, water and each other.

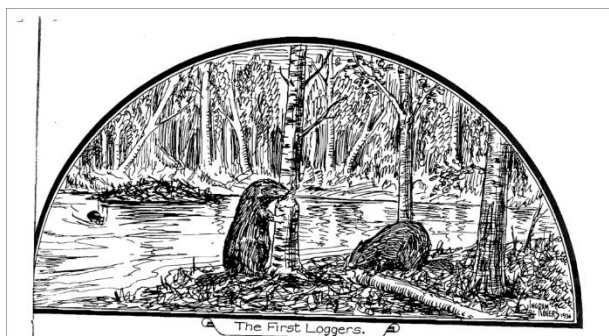


Figure 1: The First Loggers (excerpt from our own [Forest Branch News Letter April 1938 edition](#))

We continue to evolve. From our roots of research and wildfires to working with Indigenous Peoples on sustainable land management and bioeconomics, we support our ministry's considerable objectives. And, although it might look and sound a little different in the near future, we will always be the BC Forest Service.

I am excited to forge ahead.

Name Changes of the BC Departments and Ministries	(which have contained the Forest Service, 1912 -)
Department of Lands, Forest Branch	February 1912 - April 5, 1945
Department of Lands and Forests, Forest Service	April 5, 1945 - March 30, 1962
Department of Lands, Forests and Water Resources, Forest Service	March 30, 1962 - December 11, 1975
Ministry of Forests, Forest Service	December 11, 1975 - November 6, 1986
Ministry of Forests and Lands, Forest Service	November 6, 1986 - July 6, 1988
Ministry of Forests, Forest Service	July 6, 1988 - June 16, 2005
Ministry of Forests and Range, Forest Service	June 16, 2005 - October 25, 2010
Ministry of Forests, Mines and Lands	October 25, 2010 - March 14, 2011
Ministry of Forests, Lands and Natural Resource Operations	March 14, 2011 - July 2017
Ministry of Forests, Lands, Natural Resource Operations and Rural Development	July 2017 - March 31, 2022
Ministry of Forests	April 1, 2022 -

And, in case you missed it, the BC Wildfire Service published a fascinating article on February 24, 2022, about the 110th Anniversary of the BC Wildfire Service. Read the [Snapshot Article](#).

They also created this [historical photo slideshow](#) for your viewing pleasure, as well as [“A look at the BC Wildfire Service” video](#). Enjoy!



Integrated Forestry Project streamlines processes and modernizes forestry practices

March 30, 2022

**By Rob Mangelsdorf, Communications and Engagement Specialist
Information, Innovation and Technology Division**



Figure 1: IFP Trees

The Ministry of Forests, Lands, Natural Resource Operations and Rural Development's (FLNRORD) Forest Tenures Branch (FTB) and the Information, Innovation and Technology (IIT) Division have worked together to help streamline and modernize forestry practices in B.C.

Currently, FLNRORD maintains more than 60 interconnected corporate forestry applications, many of which are legacy, end-of-life systems. Due to the complex and interdependent nature, coupled with the advanced age of many of these systems, upgrading and responding to mandatory business changes has become increasingly more challenging.

The Integrated Forestry Project (IFP) was launched by FLNRORD in 2017, with support from IIT, to tackle this issue by improving and streamlining the Forest Tenures Administration (FTA) system and the management of the systems used in these processes.

B.C.'s forest industry contributes close to \$13 billion annually to the province's economy, employing 100,000 British Columbians. IFP's work to ensure FLNRORD's corporate systems are current, accurate, and reliable is critical to the province's economic vibrancy.

Part of this effort involved breaking down the FTA system into smaller, more manageable modules, and removing the roads components and the status and clearance functions, creating two new dedicated systems, namely the Resource Roads System (RRS) and Status and Clearance Service Component (SNCSC).

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“The Integrated Forestry Project was the largest modernization project for the Forest Tenures Branch in terms of overall size of scope and business change,” says Lindsay Scott, FTB’s Business Applications Manager. “Business users had to learn two entirely new systems (RRS and SNCSC) in February [2021], followed by another learning curve in November with the introduction of Road Use Permitting transitioning from manual processes to digital workflows. This change also had a large impact to the licensees who are now required to use the NROS Portal. The enormity of this transformation cannot be understated.”

The Integrated Forestry Project (IFP) designed, built and delivered web-based systems that provide better customer service, simplified application processes, integrated decision-making, and improved access to information for end users. The main purpose is to ensure that clients, staff and decision-makers have the ability to make accurate, durable decisions on the land base while assisting forestry professionals to meet their commitments.

Some of the products that IFP has launched include:

Resource Roads System

The Resource Roads System (RRS) is a new corporate application that manages and administers resource roads and road use permits (RUP) across the province. The RUP component of the RRS will improve safety on B.C.’s resource roads by standardizing road use rules across FLNRORD.

Forest Tenure Administration 5.0

A new version of the Forest Tenure Administration (FTA) system was created with the removal of roads administration business from the current version of FTA. FTA is a core forestry corporate application used to manage and administer forestry and range tenure administration business across the province.

Status and Clearance Service Component

SNCSC is the single source for processing applications on the provincial land base within the forestry programs. This tool has been developed to enable the adoption of other business areas sector wide in the future.

Natural Resource Online Services – Cutting Permit Project

The Cutting Permit Project transforms how cutting permits are applied for, issued, managed, and enforced, supporting effective long-term resource management and a vibrant forest economy in B.C. The project launched online smartforms enabling submission for all non-spatial cutting permit amendment applications, as well as the submission of road use permit applications and amendments.

IFP released its first suite of products in January 2021, which included the launch of FTA 5.0, RRS, and SNCSC. IFP’s second phase, which launched last November, includes the [Natural Resource Online Services](#) (NROS) Portal, a web portal that allows licensees to submit certain applications over the internet using dynamic smartforms. This release also incorporates Road Use Permits (RUP) into the Resource Roads System (RRS).

More information on the [Forest Tenure Administration page](#) or on the [Integrated Forestry Project page](#).





The Natural Resource Sector Culture Shift

March 30, 2022

**By Alice Pinheiro, Internal Communications and Online Content Co-op Student
Strategic Priorities Group, Deputy Minister's Office**

When I entered into the provincial government's natural resource sector on my first co-op workterm, I wondered what the workplace culture would entail. After seven months within the BC Public Service, I have witnessed a significant positive culture shift within the natural resource sector. This culture shift strives to promote Indigenous co-management, opportunities for recent graduates, greater accessibility and inclusion, as well as fostering a healthy work environment and strengthening sustainable resource stewardship. Now more than ever, this culture shift is essential as we create a better future for natural resource management and all British Columbians.

Continuous Indigenous Co-management and Consultation

As the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) is restructured into two ministries, there is a growing focus on the importance of Indigenous co-management and consultation with Indigenous Peoples. In the past, Indigenous Peoples were, unfortunately, one of the last groups to receive information and decision-making influence on natural resource-based projects. Now Indigenous Peoples are one of the first groups to be consulted and to have their ideas and perspectives intertwined throughout natural resource projects. The provincial government has also set out to embolden Indigenous Truth and Reconciliation and to provide BC Public Service employees with resources and eLearning opportunities, thus strengthening inclusion of Indigenous Peoples throughout British Columbia.

Getting University Students and Recent Graduates Involved

The provincial government and natural resource sector have a growing interest in hiring co-op students. Creating co-op opportunities within a workplace allows co-op students to return to the public sector after graduation, and it develops a range of employees with different levels of experience and skills. It also fosters a diverse age group among employees. There is a culture of support and encouragement for co-op students to explore their interests and to network. For example, students can attend co-op events such as the "Competencies Club" to learn more about communicating behavioral and technical competencies throughout the application and interview processes. During my co-op work terms, I also had the privilege of joining the Co-op Advisory Board, which has allowed me to give feedback about various workshops in order to improve co-op events and networking opportunities within the BC Public Service.

Improving Inclusivity and Accessibility

The natural resource ministries strive to improve accessibility throughout their workforce. As the Internal Communications and Online Content Co-op Student for FLNRORD, a significant component of my job is to create content for staff messaging and webpage design inclusive of all ministry staff members. It is important to consider page layout, language, and graphics to ensure that web content is accessible for various users. When creating web content and resources specifically within the natural resource sector, it is essential to display information in a way that everyone can access and utilize, from individuals working in remote environments on wildfire prevention and control, to the public looking for wildfire updates in their area. Furthermore, it is important that individuals who use speech-to-text tools for their work, for example, can also find what they need easily.

Fostering an Inclusive Environment

The British Columbian natural resource sector was initially characterized as a male-dominated work sector, however, women now make up almost half of the workforce in FLNRORD (47%, 2021 statistics provided by CSNR Strategic HR). With the goal of creating an inclusive and diverse work environment, BC Public Servants routinely participate in learning modules, workshops and meetings to learn about diversity and inclusion. The BC Public Service was announced also one of [Canada's Best Diversity Employers for 2022](#).

One of my projects as a co-op student was to create a "Spotlight Calendar" feature on the [FLNRORD intranet homepage](#). Spotlight is a small content box that highlights various events and dates of acknowledgement throughout the year and connects FLNRORD staff members to resources to learn more about diversity and inclusion initiatives. Such events included International Women's Day, Pink Shirt Day, and Pride Month.



Mental Health Support and Resources

The natural resource sector has shifted to create an emphasis on work-life balance and the importance of mental health. The government supports employees with various resources, such as [Employee and Family Assistance Services](#), free counselling, and resources for stress and anxiety management. As a co-op student, I have attended multiple workshops on great health and well-being topics, such as active living and setting boundaries with technology.

The Importance of Natural Resource Stewardship

Historically, the natural resource sector was focused mainly on the economic value of British Columbia's resources, leading to the exploitation of the environment and of Indigenous Peoples and their lands. The focus on natural resource management has shifted to a more sustainable approach. The new ministries emerging from FLNRORD strive to improve land-use policies and planning incentives, to protect British Columbia's rich biodiversity, and to preserve ecosystem health by bridging scientific knowledge and data with regional operations.

Conclusion

Through my experience as a co-op student, I have witnessed the continuous improvement of the culture within the BC Government's natural resource workforce. This culture shift will be enhanced and implemented throughout British Columbia to encourage Indigenous co-management initiatives, as well as opportunities for recent graduates, accessibility, inclusion, maintaining a healthy work environment, and the strengthening of natural resource stewardship. By implementing these ideas, natural resource sector workers can help create a better British Columbia for everyone.



Photo by Gabrielle Mustapich on Unsplash



Introducing the new cultural burning and prescribed fire microsite

March 30, 2022

By Nicole Bonnett, Wildfire Technician
BCWS Kamloops Fire Centre



The BC FireSmart™ Committee (BCFSC) works collaboratively to support wildfire resiliency in BC, ensuring alignment with the seven FireSmart disciplines. The BCFSC facilitates interagency co-operation to support wildfire preparedness, prevention, and mitigation necessary to reduce the risk that wildfires pose to populated areas.

Appropriately managing wildfire requires balancing its natural role with the protection of human life, property, and economic values. This equilibrium demands comprehensive risk management approaches, including an appropriate mix of mitigation, preparation, response, and recovery.

Cultural burning and prescribed fire are land management tools that can help maintain the health and safety of our forests, communities, and wildlife. Prescribed fire is the planned and controlled application of fire to a specific land area and is one of the most ecologically appropriate and relatively efficient means for achieving a variety of land management objectives, including wildfire risk reduction for protection of communities and critical infrastructure.

The prescribed fire microsite is designed to educate audiences about the many benefits of prescribed fire and cultural burning and to promote the use of prescribed fire as a land management tool.

The microsite is governed by the [Provincial Cultural and Prescribed Fire Steering Committee](#) (an interministry committee) and the [BC FireSmart Committee](#).

Watch the [Why Prescribed Fire? – Cultural Burning & Prescribed Fire video](#).





BC Wildfire celebrating Wildfire Community Preparedness Day

March 30, 2022

By Amanda Reynolds, FireSmart Education Officer
Integrated Resource Operations Division



Figure 1: Wildfire Community Preparedness Day Cup

Wildfire Community Preparedness Day (WCPD) was started by FireSmart™ Canada in 2015. This year WCPD is **May 7, 2022**. Neighbourhoods and communities from all over Canada apply for a \$500 grant. Applicants must explain how they are going to utilize the grant to increase wildfire resiliency in their community through FireSmart. For the past three years, BC communities have received the most grants in Canada – last year we had 70!

As an organization that leads and supports wildfire prevention and the FireSmart framework, it's important that we celebrate! To help create some buzz and excitement, Prevention HQ has created a WCPD competition where Zones and/or Fire Centres can engage in a prevention related projects off a pre-determined list in hopes of receiving the coveted WCPD Cup! All projects will be submitted with a photo and summary of the event to the Prevention Specialist in each Fire Centre who will nominate one Zone project to represent the Fire Centre in competition for the Cup. The winning Zone/Fire Centre will receive the sought-after WCPD trophy, FireSmart BC T-shirts, and promotional items, and will be highlighted on the FireSmart BC website and the BCWS Internal Snapshot.

Due to COVID-19, the list is limited in scope and separated into internal and external projects for 2022. Hopefully next year there will be more opportunities to engage both internally and externally. Please respect all public health guidelines and follow proper COVID-19 protocols regardless of which projects you engage in.

BCWS WCPD Event Timeline

- Present – May 31: BCWS staff engage in **one** of the WCPD activities listed below.
- June 1 – June 15: Submissions from the Zone and/or Fire Centre are to be sent to your FC Prevention Specialist. Applications must include photos. Work with your FC Communication and Engagement Specialist.
- June 15 – June 30: Prevention Specialists submit **one** nomination each to the FireSmart Community of Practice.
- July 15: The winner of the WCPD Cup will be announced!!!!

INTERNAL/VIRTUAL WCPD Activities

1. Assessment walk-through: A Local FireSmart Representative (LFR) in the Zone would do an assessment of the Zone and/or Fire Centre building with staff, educating them of the potential risks and proposed solutions that would make the structure more resilient towards wildfire. They would also educate staff on how to use the [FireSmart Assessment Score Card](#) on their home property. Staff at a Zone and/or Fire Centre could then do a self-assessment of their home and provide before and after pictures.
2. Organize a virtual “Train the Trainer” with teachers at a local school and show them how to utilize the FireSmart BC Education Kit. Education material developed at the Zone level related to FireSmart can be used as well.
3. Create a live recording on how to have a safe campfire, i.e. a campfire demonstration to a high school or elementary school to talk about the risks and the fines associated. Share that video with a school and offer to do a Campfire Zoom Q&A.
4. Fire Centre/Zone Work Bee: BCWS who have LFR training can do an assessment and organize a work bee to complete identified work in the Non-combustible, Zone 1, or Zone 2. The work would be guided by the [FireSmart: Begins at Home Manual](#) and the [New Interactive Home Manual](#).
5. PowerPoint Presentation by a qualified LFR in the Zone to a stakeholder group: Use the FireSmart Awareness Workshop (FSAW) and/or the FireSmart Program Information Presentation (FPIP). Other prevention related PPTs can also be used.
6. Reach out to a local radio station or TV to highlight the importance of FireSmart and wildfire prevention (include your communications staff). Complete a Zoom interview for TV.
7. Organize a colouring contest with a local school/organization utilizing the new Ember the FireSmart Fox colouring book. Check out [Ember's website](#) to find the colouring book and her video story to learn more.
8. Celebrate Wildfire Community Preparedness Day and support a crew member's competency development. Mentor a crew member while they take the lead on one of these projects for your Zone or help them get educated on the basics of FireSmart so they can deliver a presentation to their crew.

Do you have an idea that is not on this list but would celebrate wildfire prevention? Connect with your Fire Centre Prevention Specialist.



Figure 2: Ember

EXTERNAL WCPD Activities

1. Support a community in BC that has received the \$500 grant during their WCPD event. Ask the Fire Centre Prevention Specialist to see the list of winners in BC.
2. Deliver a FireSmart Education Kit Presentation outside in the fresh air to a group of students or to a community/neighbourhood interested in FireSmart.
3. Set up a booth at your local Farmers Market.
4. Help support the FireSmart Plant Program at a nursery or garden centre contact landscaping@firesmartbc.ca for a list of locations) or support the launch of the FireSmart BC Landscaping Guide at a local gardening/landscaping location.
5. Organize an outdoor “Train the Trainer” with teachers at a local school and show them how to utilize the FireSmart BC Education Kit. Education material developed at the Zone level related to FireSmart can be used as well.

Do you have an idea that is not on this list but would celebrate wildfire prevention? Reach out to your local Fire Centre Prevention Specialist

Last years winners: The Invermere Zone. They celebrated by designing and printing a Wildfire Preparedness Day sign and teaming up with the local Invermere Front Counter Offices to decorate the building entrance signs to raise awareness and show government support of the day.
Way to go Invermere!



Figure 3: FireSmart, Intelli-feu and other associated Marks are trademarks of the Canadian Interagency Forest Fire Centre.



How to be a Real TEAMS Player

March 30, 2022

By Cory Shirshac, Senior Correspondence Analyst
Correspondence Services Section, Deputy Minister's Office

We often see images in the news of wildfire firefighters working furiously away with a pulaski or hauling a pump and hose up a hillside. Just as important as the physical duties of the trained professionals on the frontlines are the organizational actions of the small army of W-TEAMS members supporting them in the background. W-TEAMS is seeking individuals who wish to fill roles in logistics, finance and administration, communications, and operations. If you have the drive and the desire, there are several good reasons why you should give serious consideration for getting involved and becoming a W-TEAMS member and asset. By adding your skills and abilities to the W-TEAMS roster, you also help British Columbia increase its wildfire response capacity. The more people available for deployment, the more rotational relief during critical times of need, which keeps the troops fresh and helps to prevent burnout. A total of 466 W-TEAMS members were deployed last summer, temporarily setting aside their regular duties to perform pivotal roles in the protection of our natural resources, communities and infrastructure, and public safety.



Figure 1: BC Wildfire Fighter with a line-digging tool

The fast-paced environment and immersion in an emergency operation also makes it a valuable learning opportunity that promotes personal growth. Many ministry staff have returned from a deployment with a new outlook and perspective. In addition to building character, the type of experience you earn on W-TEAMS looks great on your resume.

Furthermore, W-TEAMS may present a temporary change in scenery. For those who don't already spend a great deal of time in the field, W-TEAMS is a great way to get out from behind your regular workstation by deploying to one of the Regional Fire Centres, the Provincial Wildfire Coordination Centre, or Incident Management Teams throughout the province.

So how exactly does one get involved? You'll need to seek supervisor approval, fill out a few forms, interview to express your areas of interest and what you would bring to a W-TEAMS roster, complete training, and be ready when the call comes.

In times of climate change and extreme wildfire events, it's incredibly challenging to be 100 percent prepared for wildfire season. But it sure helps knowing the province has a deep pool of talented, highly skilled W-TEAMS members available for when conditions start to heat up again. If you're looking to expand or sharpen your skillset while directly making a difference in the lives of British Columbians, then W-TEAMS is for you. Visit the [Wildfire TEAMS intranet site](#) for more information.





FLNRORD Photo Gallery

March 30, 2022

Thank you to this edition's featured photographer:

**Sam Bellion, Senior Project Management Analyst
Strategic Priorities Group, Deputy Minister's Office**









West Coast Life by Sam Bellion

