

(

(

## 1 REGIONAL DISTRICT OF BULKLEY-NECHAKO SUPPLEMENTARY AGENDA

# Thursday, September 21, 2017

PAGE NO.	CORRESPONDENCE	ACTION
2-3	Ministry of Forests, Lands, Natural Resource Operations and Rural Development – BC Wildfire Services – Information Bulletin – Burn Prohibitions to	Receive
	Be Lifted in Prince George Fire Centre –September 20,	2017
4	Village of Burns Lake – Regional District of Bulkiey-Nechako Appointment	Receive
	UNION OF BC MUNICIPALITIES	
	Invitations	
5-7	<ul> <li>UBCM Opposition Roundtable Invitation</li> <li>Wildfire Response and Economic Recovery <ul> <li>Thursday, September 28, 2017 3:30-3:15 pm</li> </ul> </li> <li>Small Business, Big Projects and Economic Growth <ul> <li>Thursday, September 28, 2017 3:30-4:05 pm</li> </ul> </li> </ul>	<b>Receive</b> h
8-10	BC Chamber of Commerce – CETA Conference and Business Forum – Wednesday, September 27, 2017 -1:00 pm to 6:00 pm	Receive
11-12	Northern Development Initiative Trust – Local Leaders Create Connected Communities – Wednesday September 27, 2017 – 4:30 pm to 5:30 pm	Receive ,
	Correspondence	
13-14	Harrison Hot Springs Letter of Support for the City of Abbotsford – UBCM Resolution – The Case for Prevention of the Opioid Crisis	Receive
15-16	UBCM Nominations 2017 – Sharon Gaetz for Third Vice President – Union of B.C. Municipalities	Receive
	PROTECTIVE SERVICES CORRESPONDENCE	
17-22	The University of B.C. – Department of Forest & Conservation Sciences – 2017 Megafires in BC - Urgent Need to Adapt and Improve Resilience to Wildfire	Receive
	NEW BUSINESS	
	ADJOURNMENT	



RECEIVED SEP 19 2017

REGION N. D. TTANT

<del>68 - 18</del>

INFORMATION BULLETIN

For Immediate Release 2017FLNR0296-001599 Sept. 19, 2017 Ministry of Forests, Lands, Natural Resource Operations and Rural Development BC Wildfire Service

#### Burn prohibitions to be lifted in Prince George Fire Centre

PRINCE GEORGE – Effective at noon on Wednesday, Sept. 20, 2017, all open burning will once again be allowed throughout the Prince George Fire Centre.

The last remaining campfire ban in the region was lifted on Sept. 6, 2017.

The current prohibition on the use of some fire-related equipment will also be lifted in the Prince George Fire Centre at noon on Sept. 20, 2017:

- burn barrels or burn cages
- sky lanterns
- binary exploding targets
- air curtain burners
- fireworks

A map of the Prince George Fire Centre's boundaries is available online: <u>http://ow.lv/b7Fq30fgLZU</u>

Although fire danger ratings have dropped in this region due to recent rain and cooler temperatures, the public is strongly encouraged to exercise caution with any outdoor burning or campfire use.

Anyone planning to burn a pile larger than two metres high by three metres wide or conduct a grass burn larger than 0.2 hectares (Category 3 fires) must obtain a burn registration number ahead of time by calling 1 888 797-1717.

A poster explaining the different categories of open burning is available online: <u>http://ow.ly/znny309kJv5</u>

If a fire escapes, the person responsible may be fined up to \$100,000 and may be ordered to pay all firefighting and associated costs. It is the responsibility of the individual to ensure that the burn is done in a safe and responsible manner in accordance with open burning regulations. For more information about fire-related fines and penalties, visit: www.gov.bc.ca/wildfirefines

To report a wildfire, unattended campfire or open burning violation, call 1 800 663-5555 tollfree or \*5555 on a cellphone.

For the latest information on current wildfire activity and burning restrictions, visit: <u>http://www.bcwildfire.ca</u>

You can also follow the latest wildfire news on:

- Twitter at <u>http://twitter.com/BCGovFireInfo</u>
- Facebook at <a href="http://facebook.com/BCForestFireInfo">http://facebook.com/BCForestFireInfo</a>

#### **Contact:**

Olivia Pojar Fire Information Officer BC Wildfire Service 250 847-6639

Connect with the Province of B.C. at: www.gov.bc.ca/connect

September 21, 2017

e O

Regional District of Bulkley Nechako 37 Third Avenue Burns Lake BC V0J1E0

Attention: Cheryl Anderson

RECEIVED

# SEP 21 2017 REGIONAL DISTRICT OF BULKLEY NECHAKO

During the September 20, 2017 Regular Meeting of Council for the Village of Burns Lake the following motion was made:

2017-09-20: 324

THAT Mayor C. Beach represent the Village of Burns Lake on the Regional District Board of Directors

AND THAT Staff bring back a list of committee appointments that Councillor J. illes had to the October 11, 2017 meeting.

Please contact me at 250-692-7587 if you require any further information.

Sincerely,

Bulleo

Rebecca Billard Village of Burns Lake - City Clerk



www.burnslake.ca

Phone: 250-692-7587 PO Box 570 Burns Lake, BC V0J 1E0 ,



September 20, 2017

Chair Bill Miller and Directors of the Regional District Bulkley-Nechako inquiries@rdbn.bc.ca

#### Re: 2017 UBCM Roundtable Discussions

To Chair Bill Miller and Directors of the Regional District of Bulkley-Nechako,

British Columbia has experienced an unprecedented fire season this past year. Communities throughout the Interior and Northern regions have been devastated by property loss and the lives of families have been immeasurably disrupted. With the 2017 Union of BC Municipalities (UBCM) conference in Vancouver taking place in just over a week, I invite you to join myself and several of my colleagues in a roundtable discussion titled, *Wildfire Response and Economic Recovery*.

**Details:** Cheakamus Room, Fairmont Waterfront 2:30-3:15pm Thursday, September 28<sup>th</sup> 2017

The roundtable discussion will offer an opportunity for municipal leaders to provide their firsthand accounts of the 2017 fire season as well as any strategic recommendations. Through this conversation, your BC Liberals in the Legislature hope to come away with lessons learned and best practices, so that communities fighting forest fires receive the resources they need from the provincial government in the future. As the Official Opposition, we continue to value the positive working relationships we have with local governments, and intend to strongly advocate for you in Victoria. To RSVP please contact Gul Gulsen at Gul.Gulsen@leg.bc.ca or via phone at 604-660-2630.

Sincerely,

John Rustad, MLA Official Opposition Critic for Forests, Lands and Natural Resource Operations

BC Liberal Official Opposition Parliament Buildings Victoria, BC VSV 1X4 ASSEMBLY OF BRITISH COLUMBIA

British Columbians enjoy the highest job growth and strongest performing economy in the country. Your BC Liberals in the Legislature know that this success is the product of collaborative efforts between provincial leaders, municipal leaders and the private sector. With the 2017 Union of BC Municipalities (UBCM) conference in Vancouver taking place in just over a week, we invite you to join us and several of our colleagues in a roundtable discussion titled, *Small Business, Big Projects and Economic Growth*.

Details: Cheakamus Room, Fairmont Waterfront 3:20- 4:05pm Thursday, September 28<sup>th</sup> 2017

The roundtable discussion will offer an opportunity to build on our successes and learn from our past on how we can best enhance economic growth in communities across British Columbia. As the Official Opposition, we continue to value the positive working relationships we have with local governments, and intend to strongly advocate for you in Victoria. To RSVP please contact Gul Gulsen at Gul.Gulsen@leg.bc.ca or via phone at 604-660-2630.

Sincerely,

Jas Johal, MLA and Greg Kyllo, MLA Official Opposition Critics for Jobs, Trade and Technology

BC Liberal Official Opposition Parliament Buildings Victoria, BC VSV 1X4

# CEGISLATIVE ASSEMBLY

Keeping families and communities safe should be a top priority for your provincial government. Gang violence and criminal activity is on the steady rise in Metro Vancouver and communities across the province. Municipalities are often our first line of defense and it is important that they play an active role in the direction of resources to counter this issue. With the 2017 Union of BC Municipalities (UBCM) conference in Vancouver taking place in just over a week, I invite you to join myself and several of my colleagues in a roundtable discussion titled, *Crime Fighting, From Frontlines to Forensics*.

**Details:** Cheakamus Room, Fairmont Waterfront 4:10-4:55pm Thursday, September 28<sup>th</sup> 2017

The roundtable discussion will offer an opportunity for local municipalities to bring their valuable knowledge and experience to shape the provincial approach to fighting crime. As the Official Opposition, we continue to value the positive working relationships we have with local governments, and intend to strongly advocate for you in Victoria. To RSVP please contact Gul Gulsen at Gul.Gulsen@leg.bc.ca or via phone at 604-660-2630.

Sincerely,

Mike Morris, MLA Official Opposition Critic for Public Safety and Solicitor

BC Liberal Official Opposition Parliament Buildings Victoria, BC VSV 1X4

#### geraldine.craven

From:

Sent: To: Subject: BC Chamber of Commerce <bccc=bcchamber.org@mail28.atl91.mcsv.net> on behalf of BC Chamber of Commerce <bccc@bcchamber.org> September 13, 2017 1:46 PM inquiries Reminder - Register for the CETA Conference & Forum

<u>~</u>^

RECEIVED SEP 13 2017 REGIONAL DISTRICT OF BULKLEY NECHAKO

BC Chamber of Commerce

View this email in your browser

YOU ARE INVITED TO

# CETA CONFERENCE & BUSINESS FORUM

A UNIQUE OPPORTUNITY TO MEET EU MEMBER STATES DIPLOMATIC & TRADE REPRESENTATIVES VISITING FROM OTTAWA

WEDNESDAY, SEPTEMBER 27TH FROM 1:00PM TO 6:00PM

EXECUTIVE AIRPORT PLAZA HOTEL 7311 WESTMINSTER HWY RICHMOND, BC

Prepare for new business opportunities with the European Union as the EU-Canada Comprehensive Economic & Trade Agreement (CETA) rules take effect September 21, 2017

באדוריים אמון לעירופי שכאלא היו צייר היוני אומא



## Join us for the CETA Conference & Business Forum on September 27<sup>th</sup> \*this event is nearing SOLD OUT\*

In partnership with the Richmond Chamber of Commerce and The European Union Chamber of Commerce in Canada – the BC Chamber cordially invites you to attend the CETA Conference & Business Forum, on September 27, 2017 at the Executive Airport Plaza Hotel in Richmond.

Speak directly with EU Member State Diplomatic and Trade representatives and learn from a panel of policy makers featuring provincial, federal and European experts. This is an unparalleled opportunity to learn first-hand what opportunities CETA will offer you and your business!

With the EU-Canada Comprehensive and Economic Trade Agreement (CETA) rules taking effect on September 21st, 2017, this conference will answer all your burning questions.

#### WHERE:

Executive Vancouver Airport Hotel & Conference Centre 7311 Westminster Hwy, Richmond BC

#### WHEN:

0

Wednesday, September 27, 2017 Registration Open at 1:00pm Event Concludes by 6:00pm

TICKETS: \$45 + GST

Find full details on the program and registration on the Richmond Chamber of Commerce website here.

# **CLICK HERE TO REGISTER**







BC Chamber of Commerce

Copyright © 2017 BC Chember of Commerce, All rights reserved.

Our mailing address is: 1201 - 750 W. Pender St., Vancouver, BC, V6C 2T8

Want to change how you receive these emails? You can <u>update your preferences</u> or <u>unsubscribe from this list</u>

### **Cheryl Anderson**

Subject:

FW: Connectivity for Local Governments: September 27th | 4:30 - 5:30 | Coast Coal Harbour

From: Northern Development Initiative Trust [mailto:hello=northerndevelopment.bc.ca@mail186.atl101.mcdiv.net] On Behalf Of Northern Development Initiative Trust Sent: September 18, 2017 9:26 AM To: Melany Deweerdt <<u>Melany.Deweerdt@rdbn.bc.ca</u>>

Subject: Connectivity for Local Governments: September 27th | 4:30 - 5:30 | Coast Coal Harbour

Ptease join us during UBCM September 27th 4:30 - 5:30pm	Is this email not displaying correctly? <u>View it in your browser</u> .
	A A
F	
Dear Melany de Weerdt,	
You are invited to attend:	
Local Leaders Cr	eate Connected
Communities	
Wednesday, September 27, 2017 from 4	1:30 PM - 5:30 PM
From education to healthcare, business gr	rowth to local government service delivery, every aspect
of our lives has become reliant on the inte	
This session will articulate the importance	of having a local connectivity strategy to coordinate
investments in order to deliver all the pote	ntial benefits that high-speed Internet access can bring
to a community.	
-	vernments, funding programs, businesses and internet

## You are invited to attend:

# Local Leaders Create Connected Communities

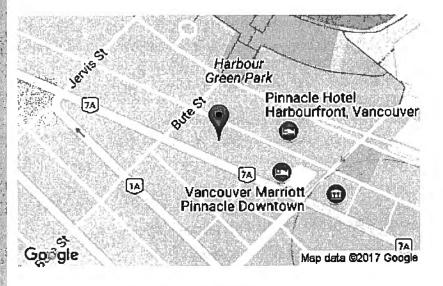
#### Wednesday, September 27, 2017 from 4:30 PM - 5:30 PM

From education to healthcare, business growth to local government service delivery, every aspect of our lives has become reliant on the internet and digital infrastructure.

This session will articulate the importance of having a local connectivity strategy to coordinate investments in order to deliver all the potential benefits that high-speed Internet access can bring to a community.

The speakers will highlight the roles of governments, funding programs, businesses and internet service providers that are helping to build connected communities throughout B.C. to deliver future economic growth and health, education and safety services.

The session will also showcase new tools and resources to assist communities in getting 'connectivity ready.' Success depends on local leaders playing a role in developing a wide range of partnerships.



Event location: Coast Coal Harbour Hotel Room Coal Harbour B

1180 West Hastings St Vancouver, BC V6E 4R5



# SEP 19 2017 REGIONAL DISTRICT OF BULKLEY NC: 1

#### geraldine.craven

From:Jaclyn Bhatti <JBhatti@harrisonhotsprings.ca>Sent:September 19, 2017 1:57 PMSubject:Letter of Support for City of Abbotsford UBCM Resolution - The Case for Prevention of<br/>the Opioid CrisisAttachments:2017.09.19 City of Abbotsford UBCM.LTR.PDF

Good afternoon,

Please find attached a letter of support sent to the City of Abbotsford regarding their UBCM Resolution – The Case for Prevention of the Opioid Crisis. This letter was copied to all UBCM Member Municipalities.

Thank you,

- DEFE HARRISON HOT SPRINGS

Noticolly Refreshed

Jaclyn Bhatti Clerk / Receptionist

Municipal Office: P.0. Box 160, 495 Hot Springs Road Harrison Hot Springs, BC V0M 1K0 E <u>ibhatti@harrisonhotsprings.ca</u> P 604 796 2171 F 604 796 2192

www.harrisonhotsprings.ca



Naturally Refreshed

File: 0530-01

neosiveli

September 19, 2017

City of Abbotsford 32315 South Fraser Way Abbotsford, BC V2T 1W7

#### Attention: Mayor Henry Braun

Dear Mayor Braun and Council:

#### Subject: Support for 2017 UBCM Resolution, City of Abbotsford

Thank you for your letter of September 5, 2017 seeking Council's support on the resolutions submitted to UBCM on the issues of the Opioid Crisis in the Province of British Columbia. Your letter was before Council at its Regular meeting on September 18, 2017 for consideration.

I am happy to report that on September 18, 2017 Council endorsed your motions to the Union of British Columbia Municipalities seeking consideration of the resolutions.

Since cle\_ Leo Facio Mayor

cc: Union of British Columbia Municipalities

#### geraldine.craven

From:	Gaetz, Sharon <sharon@chilliwack.com></sharon@chilliwack.com>	<b>ECEIVED</b>
Sent:	September 13, 2017 5:09 PM	SEP 13 2017
To:	inquiries	
Subject:	UBCM Nomination 2017 - Gaetz - Third Vice.pdftE	GIONAL DISTRICT OF
Attachments:	UBCM Nomination 2017 - Gaetz - Third Vice.pdf	BULKLEY NECHAKO

Dear Director Petersen,

Where did summer go? Fall signals a busy season for local government and I'm sure you are finding this year to be no exception. In two weeks many of us will be heading to UBCM for our annual convention and I really hope to see you there.

As you may know, I will be running for the position of Third Vice President of our association. I would be honoured if you considered me for your vote. I have had ten years of experience as a director and look forward to serving you once again with passion and excellence.

I've attached my bio for your information.

Thanks so much, Jerry!

Sharon

# FOR THIRD VICE PRESIDENT - PLEASE ELECT



- Is the Mayor of the City of Chilliwack for a third term
- Served as Councillor for 12 years
- Is married to her high school sweetheart, Jim, and they recently celebrated their 43<sup>rd</sup> wedding anniversary
- Served in many roles on the LMLGA's Executive for five years, including President
- Serves on UBCM's Resolutions Committee and Community Safety Committee
- Former Chair (five years) of Fraser Valley Regional District and current Board Director
- Serves as MFA Trustee



- Was awarded the Queen's Golden Jubilee Medal for community service and the Queen's Diamond Jubilee Medal for contributions made to the community and to all of Canada
- Is a retired Minister and Family Counsellor
- Enjoys paddleboarding, walking, bicycle rides, swimming, hiking, listening to music and catching up on her social media accounts. She also enjoys an annual polar swim and cigar.

"I have enjoyed serving you on the Executive of the UBCM for 10 years and ask for your support to return to the Executive table as Third Vice President and to represent your views to senior levels of government. I am grateful to be part of an organization that has 100% local government membership. We have also welcomed a growing number of First Nations into our association and are an effective lobbying voice for every area of our province. I look forward to the opportunity for UBCM to work with our new provincial government to strengthen our communities. I am proud of the leadership UBCM has shown in local government matters and would like to continue to serve you in this organization. I ask for your consideration in electing me to represent you as Third Vice President!" Sharon

Thank You

UBC

# a place of mind THE UNIVERSITY OF BRITISH COLUMBIA

Department of Forest & Conservation Sciences Faculty of Forestry 2424 Main Mail Vancouver, B.C. Canada V6T 124

September 8, 2017

Honourable John Horgan The Premier of British Columbia

Honourable Doug Donaldson BC Minister of Forests, Lands, Natural Resource Operations & Rural Development

Dear Premier Horgan and Minister Donaldson,

#### RE: 2017 Megafires in BC - Urgent Need to Adapt and Improve Resilience to Wildfire

The extreme wildfire season of 2017 is not an isolated event. It represents the new normal and is part of a global trend of increasing megafires with tremendous social, ecological and economic costs. In BC, wildfire seasons have started earlier and last longer, and have been influenced by more pronounced droughts due to climate change and excessive fuels as the result of fire suppression, widespread forest health problems, and forest management practices. Inadequate funding and numerous policy conflicts perpetuate hazardous conditions leaving communities vulnerable to wildfire.

As 2017 -- the pinnacle of exceptional fire years -- has proven, *forests and communities in BC are not resilient to* wildfire and adaptation is urgently needed. The status quo approach of addressing wildfire threat in BC is not working. The 2017 wildfires have overwhelmed suppression capabilities and costs have exceeded \$700 million: \$500M for suppression and \$200M emergency support for evacuees. In the last decade (2006-2015), the cost of *direct* fire suppression in BC was \$1.82B, with *indirect* costs on human heath, ecosystem services, environment, and biodiversity estimated to be 2 to 32 times that amount. Over the same period, only \$183M was allocated to pro-active, preventative wildfire management (\$78M to Strategic Wildfire Prevention Initiative (SWPI), \$85M to Forest Enhancement Society of BC (FESBC), ~\$20M to Ecological Restoration (ER)). In contrast, over the same period, \$17B was allocated to seismic upgrades by the Province to mitigate *potential* consequences of an earthquake. Research has shown that the cost of reducing wildfire extent and severity through pro-active fuel management is far lower than the cost of fighting extensive wildfires. Climate change will continue to exacerbate the situation through drought conditions and will increase tree mortality and through longer and dryer fire seasons. A meaningful financial commitment is long overdue to address the *ongoing* consequences of wildfires in the interior of BC.

The 2004 Filmon Report was commissioned in response to the catastrophic interface wildfires of 2003 and provided a road-map for addressing the wildfire risk to communities throughout BC. On the operational side, in areas of emergency response coordination and communications, there has been substantial improvement. However, in the area of fuels and forest practices, which is the largest component necessary to reduce wildfire severity and threats to communities, there has been little action. What we have seen is an inadequate implementation of the Filmon Report recommendations and resistance from provincial-level public and private-sector agencies that have left BC citizens and communities vulnerable to wildfire. A holistic, landscape view of this problem and transformative changes to wildfire and forest management is urgently needed to achieve forest and community resilience to contemporary and future wildfires.

- 2



In this white paper, we propose a four-pronged approach and provide specific recommendations to improve forest and community resilience in BC. Our recommendations reiterate several from the 2004 Filmon Report that need to be fully implemented and provide new recommendations to address problems that have become apparent in the past 13 years. Below, we summarize the four approaches. In the appendix, each approach is discussed in detail by identifying urgent needs, providing constructive criticism of current actions, and recommending ways that change can be effectively implemented.

#### 1. Initial Attack and Emergency Fuel Reduction Treatments (14 Recommendations)

BC needs improved short-term wildfire response and immediate fuel reduction treatments. To do so requires significant increases in human resources for all facets of wildland fire management, including wildfire suppression, managed wildfire, and prescribed fire. Science-based fire management needs to be used as a landscape-level tactic and strategy to achieve forest resilience and long-term sustainable forest management.

#### 2. Integrate Wildland-Urban Interface Zoning and Pro-Active Landscape Planning (13 Recommendations)

BC needs to develop a new relationship with its rural communities, including First Nations, when it comes to reducing the threat of wildfire. Long-term maintenance of a low fire hazard condition in the forests and on rangelands in the vicinity of rural communities needs to be the *primary* land management objective. Existing policies that run counter to community resilience must be amended, if not abolished.

#### 3. Forest Restoration and Adaptive Forest Management (10 Recommendations)

BC needs to adopt a more enlightened approach to forest management and restoration to increase ecosystem resilience and enable recovery following wildfire. Given the many values at stake in BCs forests, adaptation must include transformative, science-based restoration and management to counter unintended consequences of the past and increase ecosystem resilience in the future.

#### 4. Research to Inform Adaptive Wildfire Management (8 Recommendations)

Given climate change, we are entering a new era in land management and risk reduction planning, so there must be investment in new research. BC must incorporate current knowledge of fire regimes and ecosystem function into wildfire management. Effective transformation of wildfire management must be evidence-based to overcome current limitations.

The 2017 wildfire season cannot be just another "wake up call" – it has revealed the tremendous vulnerability of our forests and communities and short-comings of past mitigation efforts. Without immediate action, large and intense wildfires will undoubtedly burn, escalating economic, social, and ecological costs. As signatories to this letter, we urge the Province to amplify current efforts to mitigate wildfire hazards and implement the above-detailed recommendations to transform policies and practices to improve resilience to wildfire.

Sincerely,

Dr. Lori D. Daniels Professor, Forest and Conservation Sciences, Faculty of Forestry U. of British Columbia, Vancouver

+ Invited Signatories

Robert W. Gray Fire Ecologist R.W. Gray Consulting Ltd.

Dr. Philip J. Burton Professor, Ecosystem Science & Management Program U. Northern British Columbia

#### Appendix – Recommendations for Adaptation and Improved Resilience to Wildfire

Each of the four approaches to adapt and improve forest and community resilience to wildfire is discussed in detail by identifying urgent needs, providing constructive criticism of current actions, and recommending ways that change can be effectively implemented. These recommendations reiterate several from the 2004 Filmon Report that need to be fully implemented and provide new recommendations to address problems that have become apparent in the past 13 years.

#### 1. Initial Attack and Emergency Fuel Reduction Treatments

BC needs significant increases in human resources for all facets of wildland fire management, including wildfire suppression, managed wildfire, and prescribed fire. Additional seasonal staff serving on initial attack and unit crews are needed. Additionally, BC has a large pool of very experienced seasonal staff that should see advancement to fulltime positions doing landscape fire planning as well as prescribed fire planning and implementation. Managed wildfire needs to be used more as a landscape-level tactic and long-term resource management strategy. However, its use must be guided by ecology and not simply economics. Prescribed fire needs to be used extensively to reduce hazardous fuel accumulations in the WUI as well as the larger landscape around communities. When applied correctly, it is a highly effective fuel treatment that can reduce fuel continuity over large areas and establish a safe work environment for wildland fire fighters. Researchers have determined that prescribed fire, in combination with manual/mechanical thinning, is the most effective fuel treatment available when compared to thinning or burning as stand-alone treatments. Where prior thinning is not available, prescribed burning is the best option. Prescribed fire also has substantial ecological and cultural benefits for many of BC's terrestrial ecosystems. BC faces a significant deficit in qualified, experienced prescribed fire practitioners capable of delivering the scale of burn program necessary. In order to build this capacity and address concerns over liability, we encourage the Province to adopt the following recommendations.

#### 14 Recommendations:

Wildland fire resources:

- Increase the number of full and part-time BC Wildfire Service (BCWS) staff in order to increase capacity for
  prescribed fire planning and operations, and landscape wildfire management planning.
- Train and certify a number of contract crews to the provincial Type 1 crew standard.
- Hire additional unit crews during prescribed burning and wildfire seasons.

Resourcing fuel reduction treatments (including thinning and prescribed burning):

- Provide prescribed fire training and extend the Provincial certification to non-agency personnel. This training
  and certification must not be limited to just burn bosses; it must include all support positions.
- Add fire effects and burn planning courses to the required Provincial Burn Boss Certification curriculum (e.g., adopt the Parks Canada course for burn planning and the US RX-310 Fire Effects course).
- Province must certify and track certification currency for all prescribed fire personnel regardless of their employer.
- Province must review and approve all burn plans on Crown land. Individuals reviewing and approving burn
  plans must be certified burn bosses with certification equal to or exceeding the level of the burns they are
  reviewing
- Province must develop regional multi-party prescribed fire modules in order to address the current short-fall in qualified practitioners.
- Province must provide adequate funding to BCWS crews for prescribed burning.
- Province must provide timely funding for early spring prescribed burns to ensure that the timing for prescribed fire is not missed in any given year.
- Province must address smoke constraints to prescribed burning. Either change the Ventilation Index approach to an approach focused on actual airshed pollution capacity (under PM2.5 criteria) or provide greater flexibility in Ventilation Index (e.g., allow burns under "fair" conditions).

3

- 20
- Province must set limits on liability. For approved burn plans conducted by trained and certified personnel, there should be less liability. The Province self-insures so it can set limits on liability.
- Province must implement a burn monitoring process based on burn objectives and scale of operations. Fire
  effects predicted in burn plans must be measured during burns to determine if/how desired fire behaviour is
  being achieved. Ecological and forest effects of prescribed burns must be measured before and after burns to
  determine if management objectives are being met.
- Province must implement a process of open and transparent after-action reviews of plans, operations and efficacy of all prescribed burns. This is needed to build the knowledge base, expertise, and capacity.

#### 2. Integrate Wildland-Urban Interface Zoning and Pro-Active Landscape Planning

BC needs to develop a new relationship with its rural communities, including First Nations, when it comes to reducing the threat of wildfire. There have been many positive outcomes from the Filmon Report and the subsequent Strategic Wildfire Prevention Initiative (SWPI) and First Nations Emergency Services Society, such as increased awareness of wildfire threat and the need for proper community planning. On the other hand, several aspects of the Province's approach to solving the problem have been detrimental to relations between the three levels of government. Local government was expected to lead in the planning and operational treatment of wildfire hazard across the wildland-urban interface (WUI) including hazards on Crown land. They are severely hampered by existing forest and wildlife management policies that were not intended to mitigate wildfire hazard as a priority land management objective (e.g., as guided by existing Commission on Resource and Environment (CORE) plans and Land and Resource Management Plans (LRMPs)). We recommend the Province set the long-term maintenance of a low fire hazard condition in the forests and on rangelands in the vicinity (in areas as far out as 15 km) of rural communities as the *primary* land management objective. Additionally, we have a number of specific recommendations for addressing existing policy that run counter to community resilience.

#### 13 Recommendations:

- Province must work with local governments and First Nations to adjust spatial limits on the WUI buffer based on local forest, fuels, topography and values-at-risk, as is the practice in other jurisdictions. Communities/First Nations/FLNRORD must work together to determine the best way to ensure that the work is done in a way that maximises actual fire risk reduction and increased resilience, and protects and enhances community values and benefits.
- Province must make all municipal lands in need of treatment eligible for funding regardless of where it is in the WUI (e.g., currently municipal land beyond 2 km buffer is ineligible for funding from both SWPI and FESBC – even if they received prior operational treatment with funding from SWPI).
- All Crown land outside the municipal boundary is to be directly managed by the Ministry of Forests, Lands,
- Natural Resource Operations, & Rural Development (FLNRORD).
- Province must take all Crown land in the WUI out of the Timber Harvesting Land Base (THLB). However, this
  does not preclude future fiber recovery from these lands.
- Province must abolish restocking requirements in the WUI. Upper limits of stocking standards on other Crown land must be lowered to those that reflect reduced risk of high severity wildfire. Thus, forest companies would be required to thin overstocked stands, with the exception of deciduous species.
- Province must auction off the wood from fuel treatments on Crown land in the WUI and steer the profits back into WUI treatment and maintenance with the treatment maintenance fund managed by the community and local Resource District.
- Where necessary, the Province must subsidize the removal of low-value wood and make it available under auction to local bioenergy facilities or other users.
- Province must provide funding to assess fuel hazards on private land in the WUL
- Province must provide funding programs for fuels treatment on private land and home renovations to increase resistance to wildfire in accordance with FireSmart recommendations.

- Province must provide carbon-offset opportunities for land treated to reduce fuels in the WUI (e.g., lands on which fuels mitigation requires canopy cover less than the critical criterion used in the Zero Net Deforestation Act) or exempt the WUI from the Zero Net Deforestation Act.
- Province must remove or modify barriers to fuel treatment and wildfire hazard reduction in the WUI (e.g., mule deer winter range constraints, old-growth management areas, etc.).
- The Province, in conjunction with the research community (academia), must take advantage of opportunities where wildfires have impacted treated areas to learn what elements of the prescription and its implementation have or have not worked. These treatment effectiveness monitoring opportunities should be published and provided as a resource to practising foresters.
- The Province must open up existing land use plans with the requirement that WUI special management zones and other updates be added.

#### 3. Forest Restoration and Adaptive Forest Management

Compromised resilience of many of BC's grasslands and forests makes them vulnerable to severe wildfires, as witnessed in 2017. Ecological restoration aims to increase resilience by focusing on key processes (not stable states) to assist the recovery of degraded ecosystems. Understanding the causes and consequences of the altered forest composition, structure and ecological processes is essential to guide effective solutions. In BC, wildfire is a primary driver of forest dynamics, with historical frequency, size and magnitude varying among forest types. Disruption of fire regimes since the late 19<sup>th</sup> century was due to colonial actions to eliminate indigenous traditional fire use, land use change, increasingly effective suppression, and forest management focused on optimizing stand-level timber production. Reduced fire occurrence and extensive timber harvesting with little attention to landscape-level impacts has decreased forest diversity yielding uniform forest structures, contributed to widespread forest health problems (e.g., mountain pine beetle and Douglas-fir bark beetle outbreaks), and increased fuel loads across landscapes and elevational gradients. Other consequences include, but are not limited to, loss of habitat for 30% of BC's species at risk, increased fuel hazards surrounding many communities, and reduced carbon sequestration and storage in dense, overstocked forests. Given the many values at stake in our forests, adaptation must include transformative, science-based restoration and management to counter unintended consequences of the past and increase ecosystem resilience in the future.

#### 10 Recommendations:

Pro-action to increase resilience to wildfire:

- Reintegrate BCWS and FLNRORD to address the institutional barriers that artificially disconnect and disregard fundamental relations and feedbacks between fire and forests.
- Prioritize and fund ecological restoration of grasslands and open forest habitats for species-at-risk.
- Adjust landscape planning priorities. Allocate land to be managed for wildfire resilience rather than relying on the current "protection" approach.
- Retain and promote more land cover in deciduous species that form natural firebreaks.
- The Provinces' landscape management must conform to natural firesheds. Under the current approach, managed wildfire is only permissible on parts of the landscape free from administrative constraints or resource allocations.

Reaction to enable ecosystem recovery following wildfire:

- Following wildfire, the Province must monitor for potential negative impacts on natural regeneration of trees and native plant species (e.g., invasive species and noxious weeds) resulting from reseeding burned areas with non-native plants and salvage logging that disrupts soils and seedbanks.
- Develop and apply innovative post-fire management strategies for ecosytems in the driest climates (e.g., Ponderosa Pine and Interior Douglas-fir biogeoclimatic zones) where contemporary and future climate, combined with fire damage to soils, may render sites unable to support conifer trees.

5

- Develop and apply post-fire replanting strategies for dry forests that enhance resilience rather than optimize timber projection (e.g., adjust preferred species and reduce stocking standards). Apply silvicultural treatments such as juvenile spacing, thinning and pruning to the monocultures of dense lodgepole pine that are legacies of past forest practices and form hazardous fuels over long periods.
- Province must consider not replanting sites that have been burned repeatedly in recent years (i.e., reburns). Research shows reburns can function as dedicated landscape fuel breaks.
- Province must perform restoration on burned sites leaving large trees and snags (i.e., biological legacies valuable for wildlife) while removing all small-diameter trees (even if it must be subsidized). This practice will reduce the likelihood of substantial burn severity should the site burn again.

#### 4. Research to Inform Adaptive Wildfire Management

BC must incorporate current knowledge of fire regimes and ecosystem function into wildfire management. In the absence of empirical fire ecology evidence, policy and practices developed in the 1980s and 1990s were based on expert knowledge and observational science that did not acknowledge fire suppression impacts, and antiquated ecological concepts such as linear, directional succession and stable, climax forests. Constrained by inadequate funding for research, wildfire management in BC largely remains an exercise of emergency command-and-control, independent of new scientific knowledge. Given rapidly changing climate, the Intergovernmental Panel on Climate Change advocates adaptation to increase resilience of ecosystems and communities to extreme events such as wildfire. It is globally recognized that wildfire policies and practices must shift from control of ecosystems wrongly assumed to be stable, towards strategies to manage the capacity of ecosystems to function and adapt to cumulative environmental changes that are exacerbated by a warming climate. Effective transformation of wildfire management must be evidence-based to overcome current limitations. Fortunately, BC has outstanding universities capable of helping to lead ecosystem-specific research efforts and help guide management through these tumultuous times. Below we provide a framework (rather than recommending topics) to facilitate research to guide effective adaptation.

#### 8 Recommendations:

, `

- Increase and sustain funding for wildland fire research in the fields of ecology, fire science, social science and economics to provide up-to-date science as the basis for adaptive management.
- Foster collaborations with First Nations to integrate traditional ecological knowledge with western science as a key component of successful adaptation.
- Identify priority topics based on the Blueprint for Wildland Fire Science in Canada (2018-19 2028-29) that is being developed by experts from across Canada, including several representatives from BC.
- Develop an unbiased framework for adjudicating proposals and allocating funds that is independent of the forest industry, which is already represented on boards such as that of FESBC (e.g., adopt frameworks used by the National Science and Engineering Research Council (NSERC) or the US Joint Fire Science Program).
- Make funding available primarily to academia. Incentivize or require collaboration with academia when allocating funds to agencies such as FPInnovations.
- Incentivize collaborative research with academia to assess efficacy of WUI and landscape-level fuel mitigation supported by SWPI and FESBC (e.g., expand the US Fire Surrogate Study to BCs forest ecosystems).
- Funding must be administered in a form that is eligible for federal matching funds under programs such as Mitacs (which more than doubles funding to graduate students and post-doctoral researchers) and NSERC-Collaborative Research and Development (which doubles operational funds) programs, thereby benefiting the research community, collaborating agencies, and the province
- Allocate resources within government (e.g., funding, in-kind support and staff time) to enable applied
  research and training opportunities for post-secondary students who are developing expertise in wildfire
  science and management (e.g., support outreach and dissemination of results; fund mutually-beneficial
  internships; partner on proposals to NSERC-Collaborative Research Experience and Training program).