2024 Penticton Fire Zone and Fire Department Pre-Season Meeting



## 2023 Wildfire Season Summary



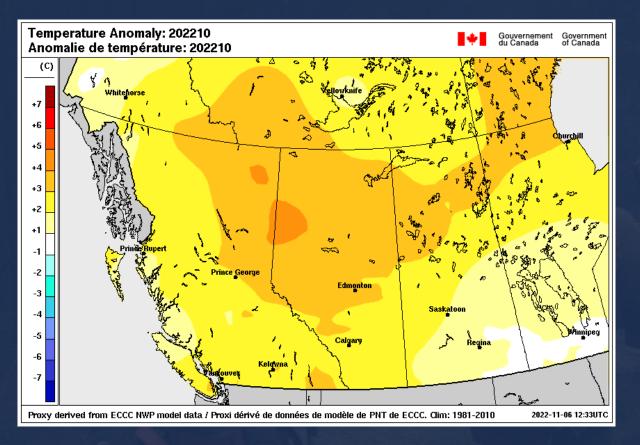
2023 was emotionally challenging and will always be remembered for the tragic loss of six members of B.C.'s wildland firefighting community.

These individuals exhibited remarkable courage, dedication and selflessness, and their memory will continue to be honoured.

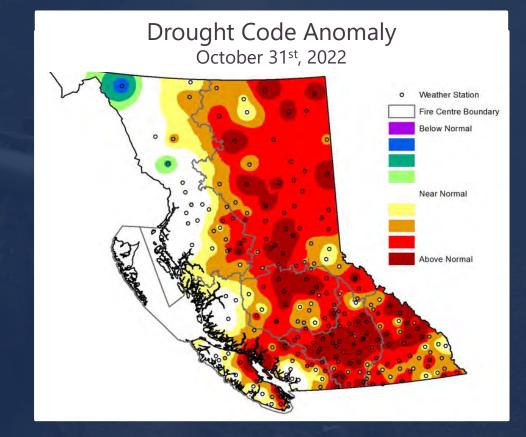
Thank you, Devyn Gale, Zak Muise, Kenneth Patrick, Jaxon Billyboy, Blain Sonnenberg and Damian Dyson, for serving and protecting the lands and people of British Columbia.



### **Pre-2023 Wildfire Season Conditions**

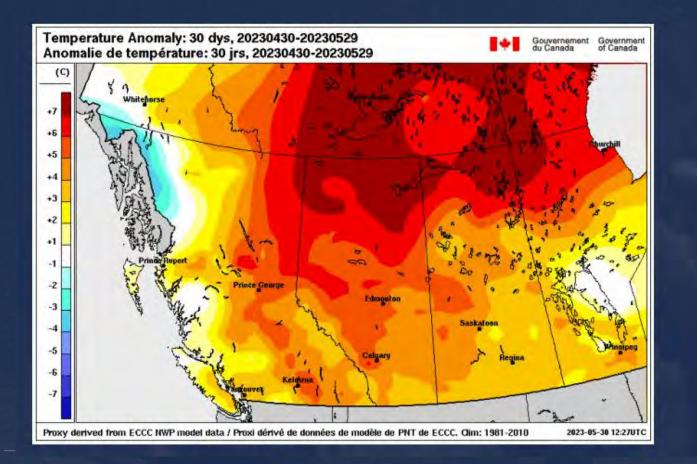


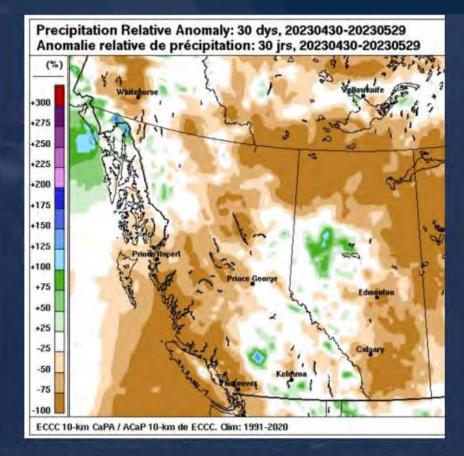
- October 2022 was one of the driest & warmest Octobers on record
- Daytime highs were consistently four to 10 degrees above normal
- B.C. saw very limited precipitation during a typically wet month



- With very limited moisture, drought conditions in our forests were much higher than normal for the late fall
- These elevated drought codes carried over into spring 2023 and set the stage for a potentially active fire season.

### 2023 May Temperature Anomalies





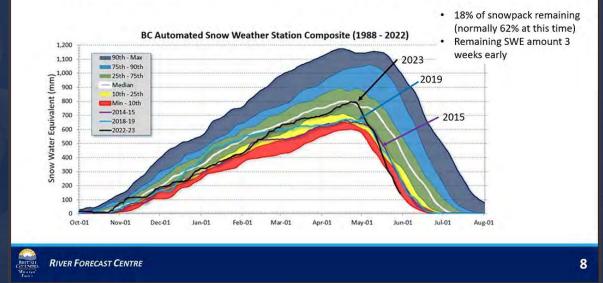
### **May: Record Breaking Heat**

Running Mean of Daily Temperature Departures in Williams Lake, B.C.



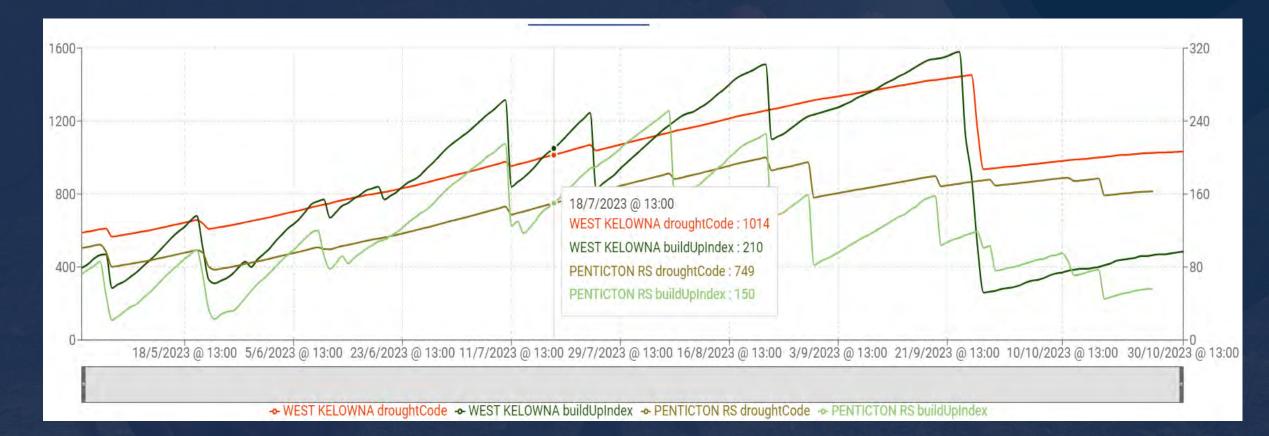
An early season heatwave delivered temperatures six to 10 degrees above normal through much of May.

#### Snow Water Equivalents – Provincial Summary



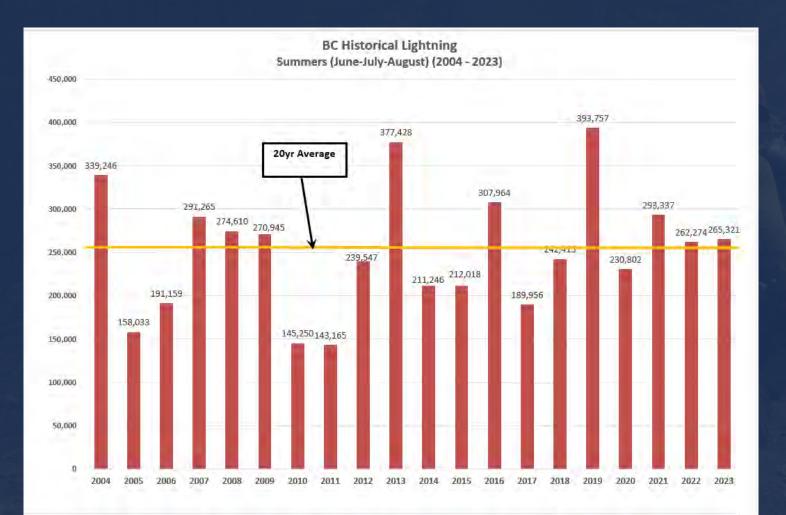
Snow melt was accelerated resulting in highelevation fuels being free of snow and therefore receptive to lightning two to four weeks earlier than normal.

## **2023 Drought Codes and BUI**



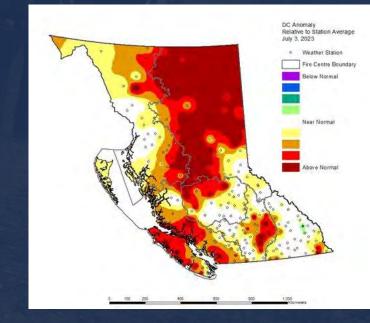


### **2023 Provincial Lightning Statistics**

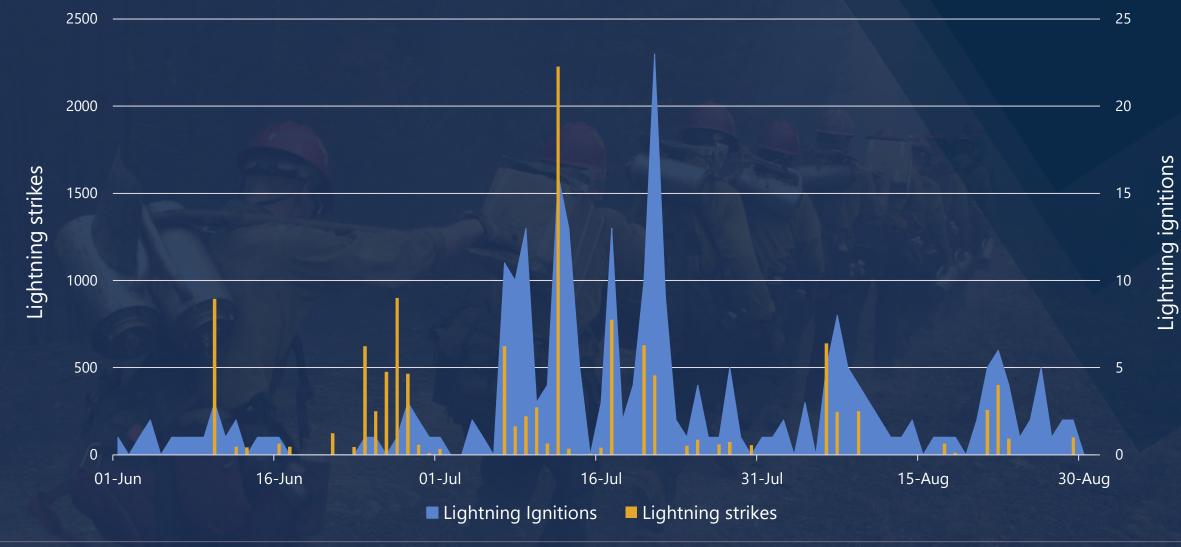


- The number of lightning strikes during the 2023 fire season were just slightly above the 20-year average.
- The true exception was how dry the fuels were and their receptivity to ignition from lightning strikes.

Drought Code (DC) Anomaly – July 3, 2023



## **KFC Lightning Ignitions and Strikes**







Wildfires

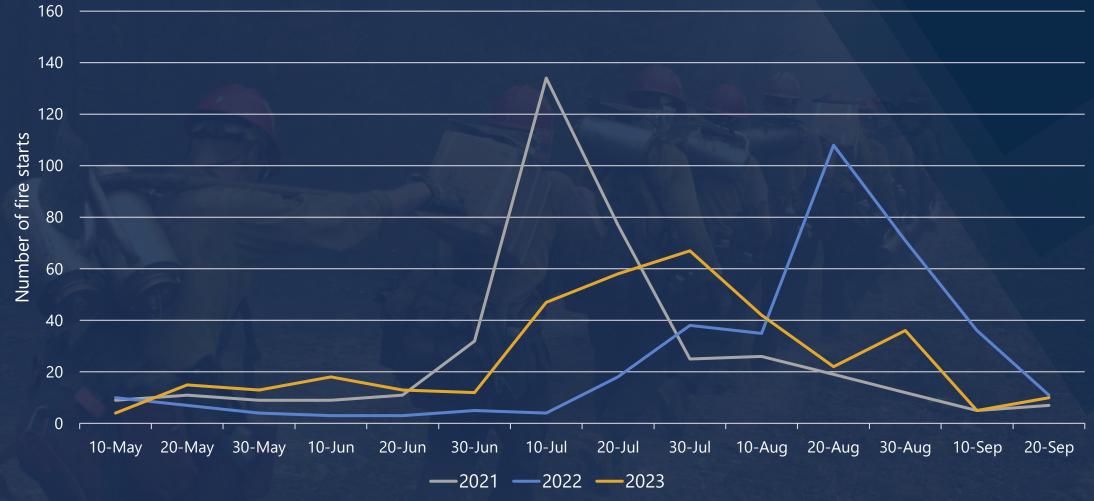
# 2,840,545

**Hectares Burned** 

From April 1 – Oct. 31, 2023



### Number of fire starts during core season, 2021-





### How does 2023 compare to other significant wildfire seasons?

Hectares burned this year is **double** the last record of 1.35 million in 2018.

This amount is **10 times** the **20-year average** annual area burned (284,001 hectares) and is what would historically be expected over a **decade**.

	2018 2021		2023	
Total wildfires	2,080	1,625	2,245	
Hectares burned	1,355,271	869,270	2,840,420	
Wildfires of Note	111	67	57	
Evacuation orders	66	181	208	
Evacuation alerts	124	304	386	
Suppression costs	~ \$615 million	~ \$718 million	~\$817 million	
Total days on provincial state of emergency	<b>24</b> (Aug. 15 to Sept. 7)	<b>56</b> (July 21 to Sept. 14)	<b>28</b> (Aug 18 to Sep 14)	

# This fire season, the predominant cause of wildfire was lightning.\*





2% undetermined

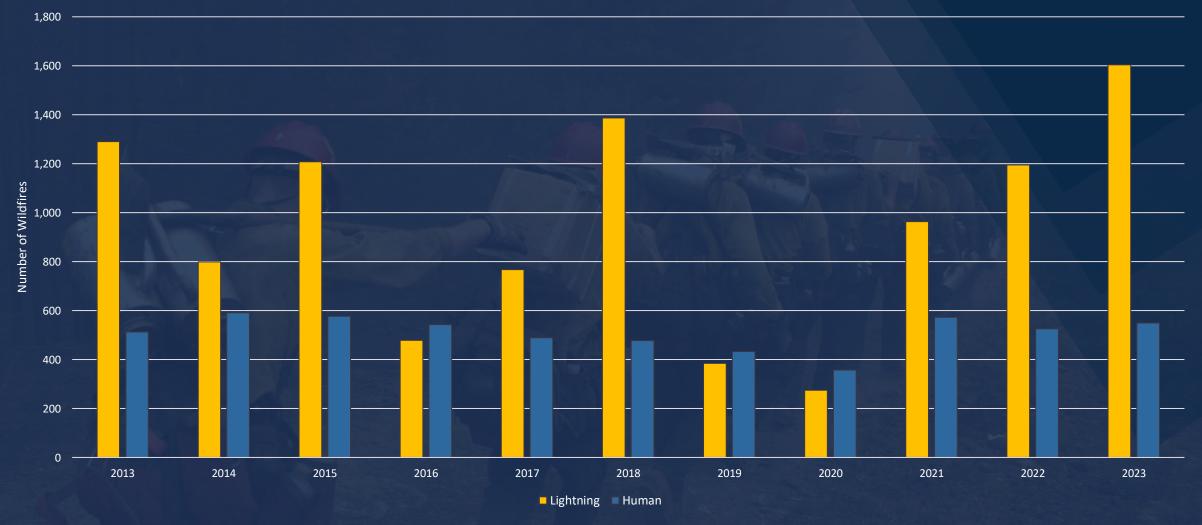
73% suspected lightning

25% suspected human



\*From April 1 to Jan 16, 2024.

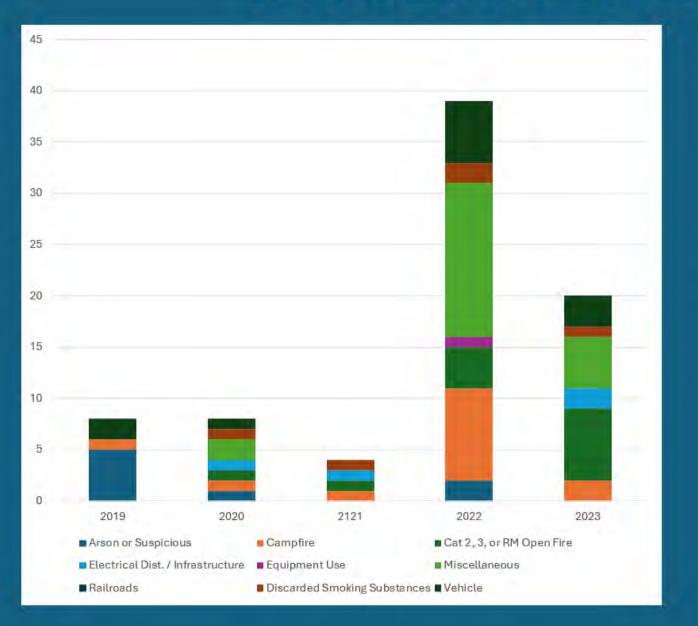
### **10-Year Comparison of General Fire Causes**



From April 1 – Oct. 31, 2023



### 5-Year Zone Fire Cause Data- K5



### 2023 Three Top Human Causes

- 1. Cat 2, 3, or RM Open Fire
- 2. Miscellaneous
- 3. Vehicle

### **Activity by Fire Centre**



Prince George Fire Centre 672 wildfires 2,276,938 hectares burned

Coastal Fire Centre 365 wildfires 89,750 hectares burned

Cariboo Fire Centre 247 wildfires 53,648 hectares burned

Kamloops Fire Centre 388 wildfires 201,385 hectares burned

Southeast Fire Centre 296 wildfires 44,027 hectares burned

From April 1 – Oct. 31, 2023





Wildfires\*



Hectares burned\*

### Provincially

# 2,256 2,840,776 392 201,385

### **Kamloops Fire Centre**



\*From April 1 to Jan 16. 2024

**295** of the wildfires within KFC were extinguished at one hectare or smaller.

Roughly 75.5% of the total number of fires.



## **Statistics by Fire Zone**

Fire Zone	Number of Wildfires	Hectares Burned
Kamloops Zone	117	94,325
Vernon Zone	118	550
Penticton Zone	62	71,971
Merritt Zone	59	231
Lillooet Zone	36	34,306



\*From April 1 to Jan 14, 2024

## **Kamloops Fire Centre Fire Bans and Restrictions**



May 18 to October 13 Category 3 open burning prohibition



May 18 to October 6 Category 2 open burning prohibition



June 8 to September 28\* Category 1 campfire prohibition



\*The Category 1 campfire prohibition was briefly lifted from June 16 to July 7, 2023.

## Wildfires of Note: Kamloops Fire Centre

Fire name	Fire number	Hectares burned	Date of discovery	Cause
Knox Mountain	K51040	6.3	July 1	Human
Casper Creek	K71535	11,284	July 11	Natural
Lower East Adams Lake	K21620	Merged with K21633	July 12	Natural
Bush Creek East	K21633	45,613	July 12	Natural
Stein Mountain	K71634	4,734.3	July 12	Natural
Downton Lake	K71649	9,565	July 13	Natural
Rossmoore Lake	K22024	11,382	July 21	Natural
Crater Creek	K52125	46,504.2	July 22	Natural
Eagle Bluff	K52318	7,060.6	July 29	Undetermined
McDougall Creek	K52767	13,970.4	August 15	Undetermined
Upper Park Rill Creek	K52813	2,043.8	August 18	Human
Glen Lake	K53294	1,116.2	September 16	Human







## Wildfire Complexes: Kamloops Fire Centre

#### **Crater Complex**

- Crater Creek (K52125)
- Upper Park Rill Creek (K52813)







- McDougall Creek (K52767)
- Glen Lake (K53294)
- Two other wildfires

### The estimated cost of wildfire suppression from April 1 – October 31 is

# \$817 million

This does not account for future cost recoveries.



Changes to BCWS and the Penticton Fire Zone



## Fire Response Structure

The PWCO (Provincial Wildfire Coordination Officer) prioritizes and manages the movement of resources between Fire Centres.

The RWCO (Regional Wildfire Coordination Officer) sets wildfire control priorities within the Fire Centre and controls the deployment of resources to Fire Zones.

Local Zone/Incident

Provincial

**PWCC** 

Regional

RWCC

The ZWCO (Zone Wildfire Coordination Officer) is responsible for resource and incident management at a local Fire Zone level under the direction of the RWCC.



### **BC Wildfire Service**

### **Initial Attack Crews**

- Approx 130 crews in the province
  - Helitack
  - Parattack
  - Rapattack
- 3 or 4 person crews

### **Unit Crews**

- 30 crews stationed around the province
- 20 pack of expanded attack firefighters



# BCWS Changes

- IA crews uplifted to 4 person crews (completed 2023)
- Unit Crews transitioning to 22 people (2023)
- ► IA and UC Supervisors now year round
- Currently undergoing province wide evaluation on further transitions to year round work and additional positions throughout the organization



# Penticton Fire Zone Changes

- 8 initial attack crews 4 packs
  2 new initial attack crew leaders
  8 new recruits to initial attack crews
  - 3 transfers and 5 new hires



### Penticton Fire Zone 2024



BRITISH Columbia Service

## **Penticton Fire Zone Prevention**

# The 7 FireSmart Disciplines

- Education
- Emergency Planning
- Vegetation Management
- Legislation
- Development
- Interagency Cooperation
- Cross Training



### Education



- Staff participated in several activities with a focus on public education and awareness including:
  - Ember stomp in Penticton
  - 9 Elementary school visits
  - Penticton Safety Village



Emergency Planning

- Participation or coordination of tabletop exercises
  - Penticton Airport
- Establish lines of communication with Regional, Municipal and First Nations first response partners, participating in face-toface meetings before the start of fire season.



## Vegetation Management

Prescribed burn implementation

- Support regional and partner WRR projects
  - Pile burning at Apex
  - Arawana chainsaw training site



## Legislation

 Particpate in policy and legislative reviews
 Community Widfire Resilience Plan Roundtable with City of Penticton



### Development

Prevention team engages with Regional Districts, First Nations and Municipalities in 2023 to discuss FireSmart development practices within their jurisdictional boundaries and provide recommendations as required as part of Community Resiliency Investment (CRI).



### Interagency Cooperation

- Penticton staff participate in advisory and and working groups:
  - South Okanagan Wildfire Adivisory Group
- Participate in AAR's and response agency roundtables
- Support partners with engagement initiatives
   Kelowna FD open house



### Penticton Fire Zone Prevention 2023 Recap

Cross Training

- Interagency wildfire response training.
  - Summerland FD
  - SOSFCA interagency scenario
- Prescribed burn prep and delivery
  - Assisting LSIB on Crater and MPB burns
  - Assisting PIB on Carmi and Garnet project sites.



#### Penticton Fire Zone Prevention 2023 Summary

<u>TOTALS</u>	%	K5 Zone - 2023 Outcomes:			
140		Forecasted Prevention Activities / Initiatives / Projects			
72	51%	Activities and/or Projects COMPLETED			
42	30%	Activities and/or Projects IN-PROGRESS			
14	<b>10</b> %	Activities and/or Projects DEFERRED			
4,221		<b>REGULAR HOURS dedicated to Prevention Activities</b>			



#### Penticton Fire Zone Prevention 2024 Opportunities

Always open to discuss prevention initiatives! Please reach out:

#### Beau.Michaud@gov.bc.ca

- Education
- Emergency Planning
- Vegetation Management
- Legislation
- Development
- Interagency Cooperation
- Cross Training

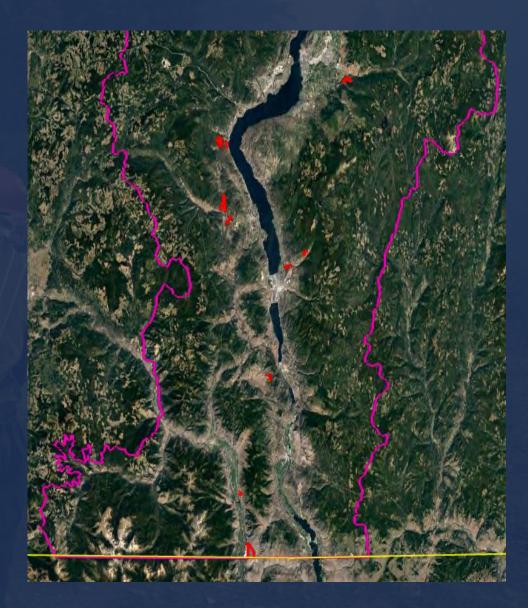


### 2024 Planned Cultural and Prescribed Fire Projects



### Penticton Fire Zone

12 projects actively being worked on at various stages of completion.

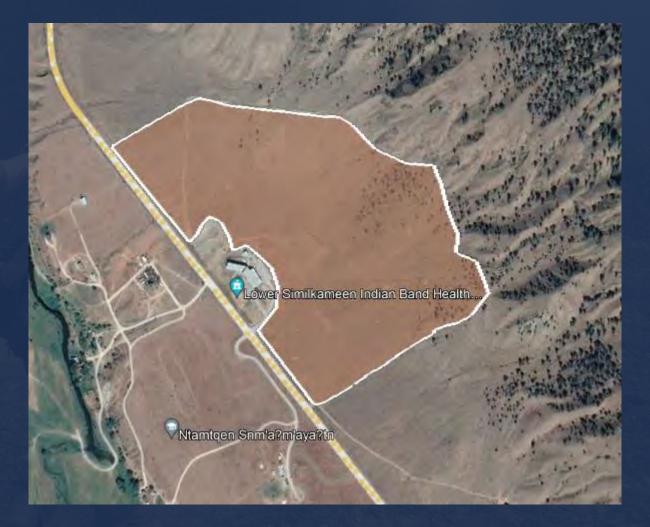


### Spring 2024 Cultural & Prescribed Fire

K5 Prescribed for Outlook									
	Project 6 % Ready for burn		Comments						
1	LSIB IR Band Office	IB IR Band Office 0% Approval documents and plan still needs to be drafted and approved							
2	Little Chopaka	aka 0% Approval documents and plan still needs to be drafted and approved							
3	Meadow Valley	80%	Burn Plan, Comms plan and flume prep still required along with pre-burn equimpent install. Eg, pumps, hose						
4	Medicine Creek	90%	LOU, Waiver and Burn plan need to be revised and approved. Comms plan released						
5	Penticton Creek	95%	Comms bulletin release. Jay S to advise on equipment required for burn day						

### LSIB MPB Risk Reduction Burn

Rough location in relation to a reference West of Osoyoos Size 32+ha Partners BCWS, LSIB Objectives Risk Reduction/Ecosystem Restoration



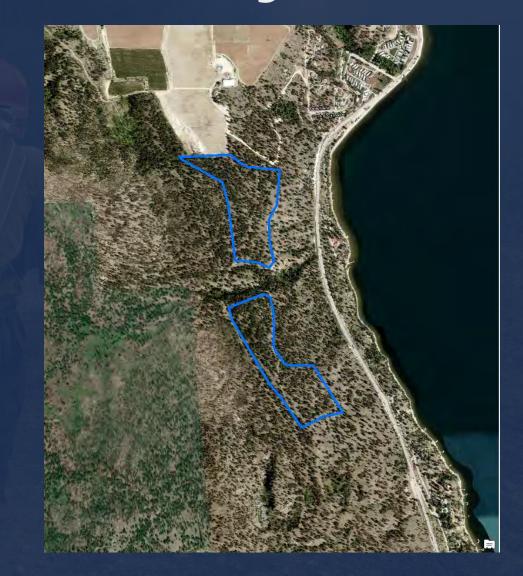
# Little Chopaka

Rough location in relation to a reference West of Osoyoos Size 370ha Partners BCWS, Parks, LSIB Objectives Risk Reduction/Ecosystem Restoration Timeline: Ongoing over multiple years



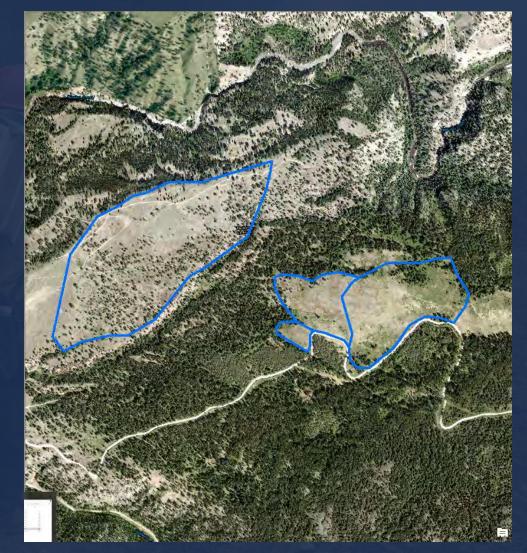
# **Meadow Valley**

Rough location in relation to a reference South of Peachland Size 20ha Partners BCWS, DOS, PIB Objectives Maintenance burn, community risk reduction



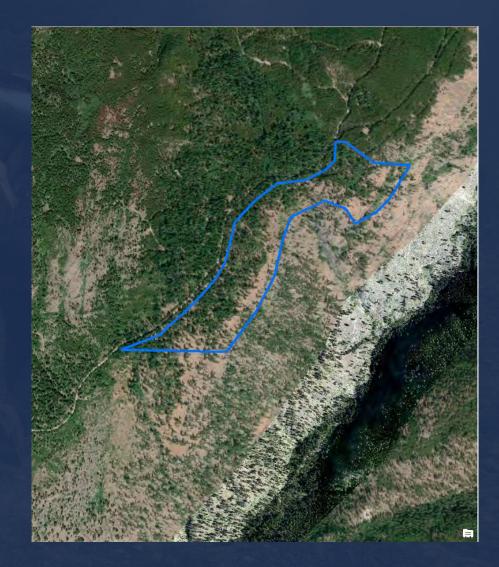
## **Medicine Creek**

McCulloch Road Size: 300+ha Partners: BCWS, WFN Objectives: Risk Reduction/Ecosystem Restoration Timeline: Ongoing project over multiple years



## **Penticton Creek**

Location 4km East of Penticton Size 37ha Partners BCWS, DOS, PIB Objectives Risk Reduction/Ecosystem Restoration



#### **Summary**

Fire is a tool that has been used extensively throughout time. Land managers are starting to learn again, through science and First Nations knowledge to reintroduce fire to the boarder landscape in a controlled manner to reduce risk and enhance ecosystems.

2018-21: 730ha 2022: 100ha 2023: 60ha 2024: 350ha 2025: 200ha +



### 2023 Fire Warden Summary

2023 TOTALS:	PATROL HOURS	KMs COVERED	ABANDONED/ UNATTENDED CAMPFIRE	FIRE USE - NON- COMPLIANT	FIRE USE - IN COMPLIANCE	PERSONS TALKED TO	*Day Use* / Boat Ramp Vehicles	Total # of *Overnight* vehicles
KAMLOOPS ZONE / K2	126.5	3740	0	1	0	243	65	260
VERNON ZONE / K4	1231.25	45865	2	2	60	1830	3006	4313.5
PENTICTON ZONE / K5	1584.5	51113	3	7	240	2783	1802	3924
MERRITT ZONE / K6	1661	54354.5	1	2	32	2408	2600	8278
LILLOOET ZONE / K7	781.17	22013	1	2	25	2464	580	2275
KFC total stats - YTD	5384.4	177085.5	7	14	357	9728	8053	19050.5

### **BCWS Structure Protection Specialists**



- All inquiries about structure protection deployments, training, SPU's etc can be sent to <u>SPCO@gov.bc.ca</u>
- Courses Offered:
  - WFF1 Train the Trainer
  - WSPP115
  - Engine Boss
  - Task Force Leader/Strike Team Leader



### THANK YOU. Questions?

