



CANADIAN INTERAGENCY FOREST FIRE CENTRE INC.  
CENTRE INTERSERVICES DES FEUX DE FORÊT DU CANADA INC.

The background of the entire page is a photograph of a forest fire. Tall, thin trees are silhouetted against a bright, orange and yellow sky filled with smoke and fire. The fire is intense, with large plumes of smoke rising from the ground.

# CANADA REPORT 2019

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## Preamble

The 2019 Fire Season was characterized by a relatively early start into Alberta (AB), with unprecedented continuous support for that province until August. The season was capped off with a very late ending (well into 2020) with fire management specialists mobilizing to Australia.

## Fire Season

Spring came early to northern AB with significant warm weather in March knocking down the snowpack. By May 20, Alberta was already reporting 3 priority wildfires with the northern half of the province under a very high to extreme fire hazard, with the fire load and fire hazard expected to increase.

Crews from British Columbia (BC) and New Brunswick (NB) arrived in the province of AB as early as May 22 followed by additional crews from Ontario (ON) and Nova Scotia (NS) and Incident Management Teams (IMT) from both ON and BC a day later. CIFFC embedded a representative into AB to help support the mobilizations, a CIFFC representative was onsite until additional crews from ON, Quebec (QC), NB and Prince Edward Island (PE) were dispatched on May 26 along with additional overhead staff from Ontario. CIFFC had quickly climbed from a National Preparedness level 1 to a 3 within a week with AB posting an agency preparedness level of 4 by May 26.

Crews and Overhead resources continued to mobilize to Alberta through the latter days of May. By June 1 CIFFC had climbed to a national preparedness level 4 with Alberta identifying at least 4 priority wildfires, BC working two project fires of their own and ON experiencing escalated activity in the northwest portion of their province. Yukon (YK) also requested support with fire management staff and overhead from Ontario arriving on May 31.

As Alberta's large fires continued to grow so did their demand for resources. As a result, in the first few days of June, equipment from Quebec, multiple crews, overhead staff and an IMT from BC as well as crews from the Northwest Territories (NT) arrived to provide assistance.

By early June CIFFC had recognized that the availability of resources domestically to support Alberta was drawing down. And although Canadian agencies would continue to recycle resources the immediate ability to deliver additional resources was limited. As such CIFFC began reaching out to the international partners for support. The first wave of US firefighters and overhead staff arrived on June 4. Three more deployments of US staff occurred over the ensuing weeks and months for a total of 20 fire crews totalling almost 400 firefighters and another 20 or so overhead staff deployed to Alberta. By June 10 AB reported 4 out of control priority fires that had already burned over 600,000 hectares collectively.

Throughout the month of June, resources continued to pour onto Alberta from all across the country. Agencies including BC, NT, Saskatchewan (SK), Manitoba (MB), ON, QC, NB, NS, Newfoundland and Labrador (NL) and Parks Canada (PC) collectively contributed crews, overhead, incident management teams, equipment or aircraft to the cause. As well, a contingent of 2 South African crews arrived in Alberta in the third week of June and returned home at the end of July after two 14-day field deployments on fires in Alberta.

By June 27<sup>th</sup> CIFFC was able to drop to a national preparedness level 3 after being at a level 4 for 25 consecutive days. Although still requiring significant assistance to meet their objectives, AB's resource requirements slowly began to ease off.

Meanwhile, the fire activity in Yukon, Manitoba and Ontario was ramping up, requiring the mobilization of resources from other Canadian agencies. The YK received support from BC by way of a tanker group in the waning days of June and with crews in the first days of July. YK would continue to receive additional support from BC with crews, overhead an IMT and equipment and from other agencies with single resources throughout the month of July.

In the first days of July MB was supported by crews from both SK and QC to help manage their fire situation. During early July Ontario received airtanker groups from QC and then AB. As July wore on the ON needs grew with crews, overhead staff and IMT personnel arriving from NT, NS, NB, PC, and BC as well as equipment from several agencies to support the additional troops on the ground.

Meanwhile AB was still being supported regularly with crew and overhead staff by member agencies throughout the entire month of July. The last large order of crews from BC arrived in Alberta between July 27-29. By mid-August all out of province staff had been returned home from AB and all other agencies.

The resilience and willingness of the CIFFC member agencies to support each other during the 2019 season was truly remarkable. One note of interest was that with the significant number of incident management teams mobilized, 30% were teams mixed with staff from multiple agencies. This is a direct benefit from ongoing efforts and programs to increase the capacity of staff filling those positions.

As the fall season wore on - an increasing focus was shifted to Australia. The eastern part of the continent was entering their spring season in a long-term drought and a number of fires were already burning in Queensland and New South Wales. On November 15, a CIFFC representative arrived in Melbourne initially to provide advanced identification of needs. An initial order for 21 Fire Management Specialists was received at CIFFC on November 29 with Staff set to depart on December 2. Canadian fire management staff with representation by every agency were deployed over the ensuing 4 months with the last Canadians returning on March 11. It was truly an unprecedented off season for Canadian Fire Management Agencies.



## **Agency Seasonal Summaries**

### **Yukon**

The fire season started early, ended late, and burned more forest than any other year in the past decade. The 2019 fire season also witnessed the most lightning strikes with over 326,684 which were ultimately responsible for 70% of the 2019 fires.

A total of 117 fires burned over 279, 818 hectares of land. By July 15, the average Drought Code had increased to 521; 22 of 36 weather stations measured Drought Codes greater than 500, with some reporting values up to 769.

The fire season took off relatively early on May 25 when the Bear Creek Fire was discovered 10 km from the community of Haines Junction. Significant resources were required and additional resources ordered through CIFFC including an IMT and Unit crews.

In 2019 the Yukon Government contracted its first 20 –person Unit crew from a consortium of First Nations. These contracts were based on a call when needed and ended up being deployed 8 times throughout the season.

Yukon requested assistance through CIFFC to battle the Gold Rush Complex and received Type-1 unit crews and an incident management team from the Government of British Columbia. The Hunker Summit fire was last mapped at 14,431 hectares in size. The Pigue Creek fire was last mapped at 111,180 hectares in size. The Reid Lakes fire was last mapped at 4,399 hectares in size.

The season ended up with numerous Evacuation Alerts being posted throughout the seasons as fires continued to burn aggressively well into September. The final evacuation alert was rescinded on September 18 when the wildfire threat was reduced following favorable weather and firefighting efforts. The North Crooked Creek Fire's final size was recorded at 24, 842 hectares. The 2019 fire season's impact on a number of Yukon communities and infrastructure required an increase in the level of public fire information. Throughout the season, Wildland Fire Management maintained a strong presence in affected communities, on social media and over broadcast radio in an effort to reach as many people as possible with timely and accurate wildfire updates. The 2019 fire season also saw improvements to the government's digital fire map, a GIS-based tool that allows users to see an up-to-date snapshot of wildfire activity across the territory.

In 2019 the Yukon approved 29 FireSmart projects across the territory spending over \$800,000 for fuel treatment programs. In addition to manage forest fuels, WFM is implementing a prescribed burning program and the aspen planting program, which will establish natural fuel breaks and convert forests to trees that are less susceptible to uncontrolled forest fire. Currently, the Government of Yukon is facilitating the development of community wildfire protection plans. These plans will identify fire hazards in all of Yukon's communities from the residential areas out into the landscape, resulting in the development of fire risk analyses and fuel management plans. WFM is currently working to update our fuel management geodatabase to identify all areas that are proposed, tendered and completed FireSmart areas. The database of completed FireSmart areas (as well as years of completion) will be available to the public on the Yukon government website on the live fire map.

In 2019 the Yukon also played a small part in providing overhead resources such as a Planning Unit Leader and a Fire Behavior Specialist through CIFFC to Australia. The combined deployment was for 69 days. Both individuals reported it was an excellent deployment and they learned a lot from their experience and were proud to have participated as part of the Canadian contingent.



## Alberta

The 2019 fire season in Alberta had an average start as most of the over-winter snow melted by mid-April. During the month of May, a continuous upper ridge pattern led to extreme drying conditions across most boreal zones, which resulted in above average fire danger conditions. Three major wildfire complexes ignited during this time period (McMillan-273,045 ha, Battle-55,179 ha & Chuckegg-350,134 ha). These wildfires burned throughout the remainder of the summer with new records set for resource requests and movement. There were 2,777 firefighters and support staff imported from assisting Canadian and international partners. The year ended with 1,005 fire starts well below the 10 year average of 1,527. These wildfires resulted in 883,414 hectares burnt significantly above the 10 year average of 242,660.

## Prince Edward Island

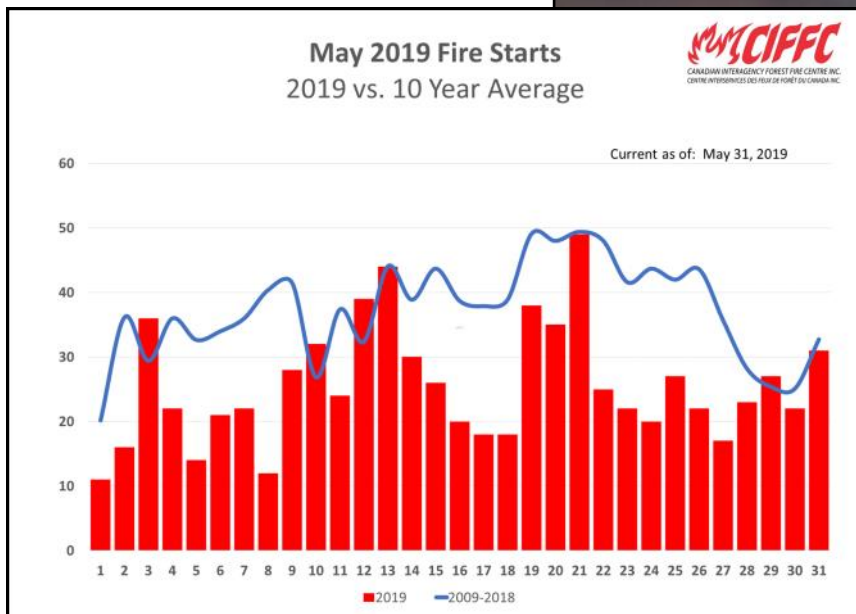
The Province of Prince Edward Island experienced a slow fire season in 2019 responding to four fires burning a total area of 15.3 hectares. Two of these fires occurred later in the season than normally expected with one on November 19<sup>th</sup> and the other on December 18<sup>th</sup>. Additionally, PEI exported several Overhead and Crew Members to Alberta as well as sending a single Overhead resource to Ontario.

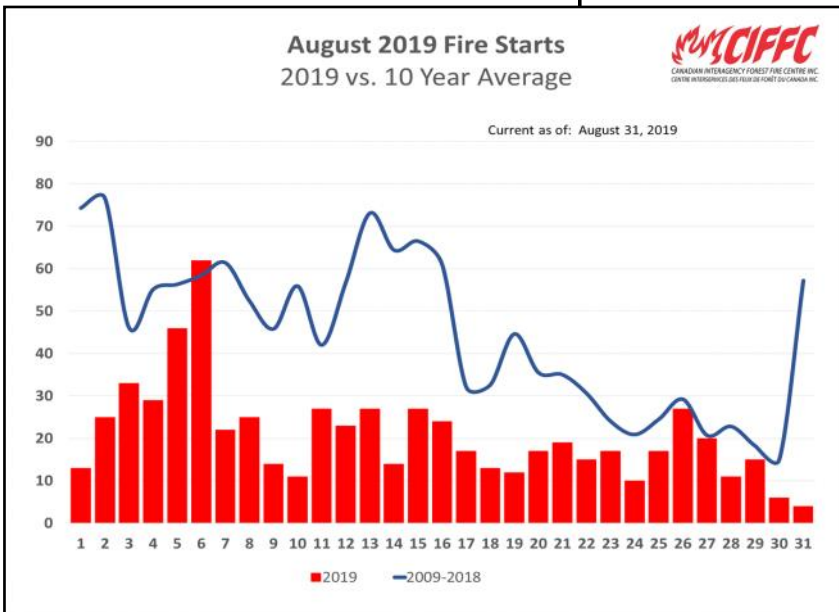
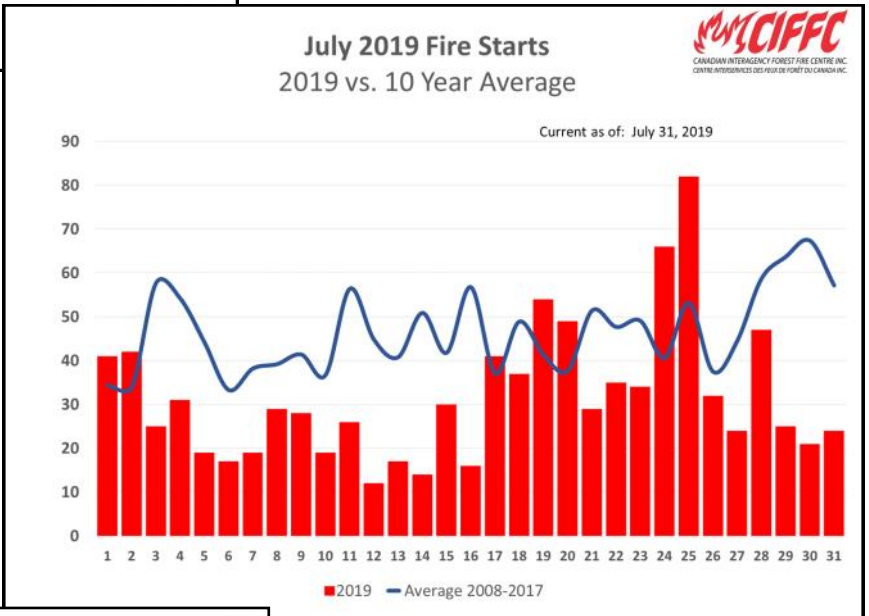
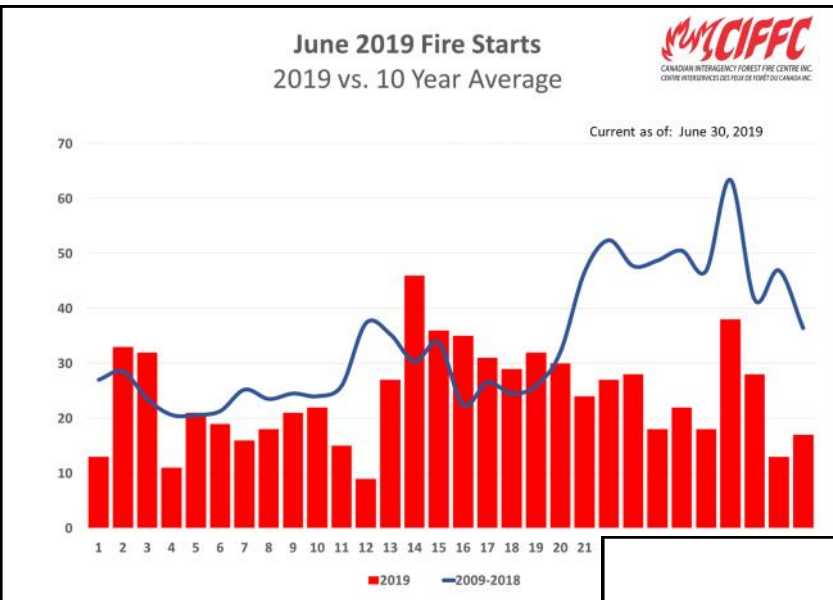
The Department of Environment, Water and Climate Change implemented a couple of changes to PEI's fire standby system with the province wide elimination of pagers and movement to the iamResponding (IaR) smart phone app. The coverage areas of standby teams were also reorganized and reduced from three zones to two for better alignment with the Field Services two district structure.

There was internal focus on fire prevention this past season with the development of a four minute video, "Creating Effective Wildfire Buffers on PEI".

## Parks Canada

Parks Canada was fairly quiet across the country. Exceptionally wet year in the mountains following a hot, dry spring. The main incidents were in Wood Buffalo National Park (AB/NT) with deployment of incident management teams for Lynx Lake and Sass Lake fires. With a below average year overall, PCA was able to provide support from across the country to three CIFFC partner agencies. Incident Management Team, Overhead and Fire Crew resources to Alberta (41p/698pd), Ontario (27p/467pd) and Northwest Territories(1p/8pd). Fire personnel also provided support to response for Hurricane Dorian in PEI and Kejimikujik National Parks in late August.





Fires by Month	May	June	July	August
	791	729	985	642

## Statistics

As of December 31, 2019 Canadian Fire Management Agencies recorded 3933 fires with an area consumed of 1,787,792 hectares.

Agency	Fires as of December 31, 2019						
	Full		Modified		Total		Total
	Ltg	Human	Ltg	Human	Ltg	Human	
BC	N/A	N/A	N/A	N/A	362	430	792
YT	33	26	49	9	82	35	117
AB	291	713	N/A	N/A	291	713	1004
NT	44	11	88	6	132	17	149
SK	7	101	65	70	72	171	243
MB	93	144	16	1	109	145	254
ON	221	275	34	7	255	282	537
QC	58	266	23	10	81	276	357
NL	9	76	2	12	11	88	99
NB	14	168	0	0	14	168	182
NS	1	142	0	0	1	142	143
PE	0	4	0	0	0	4	4
PC	13	25	4	10	17	35	52
Tot.	784	1951	281	125	1427	2506	3933

Agency	Hectares as of December 31, 2019		
	Full	Modified	Total
BC	N/A	N/A	20966.0
YT	1332.16	278486.4	279818.6
AB	883414.0	N/A	883414.0
NT	4933.0	106175.0	111108.0
SK	683.4	47054.3	47737.7
MB	19647.2	44506.1	64153.3
ON	91323.6	178310.9	269634.5
QC	5162.6	4441.4	9604.0
NL	259.9	56.1	316.0
NB	227.7	0.0	227.7
NS	154.9	0.0	154.5
PE	15.3	0	15.3
PC	39.1	100603.3	100642.4
Tot.	1007192.9	759633.5	1787792.0

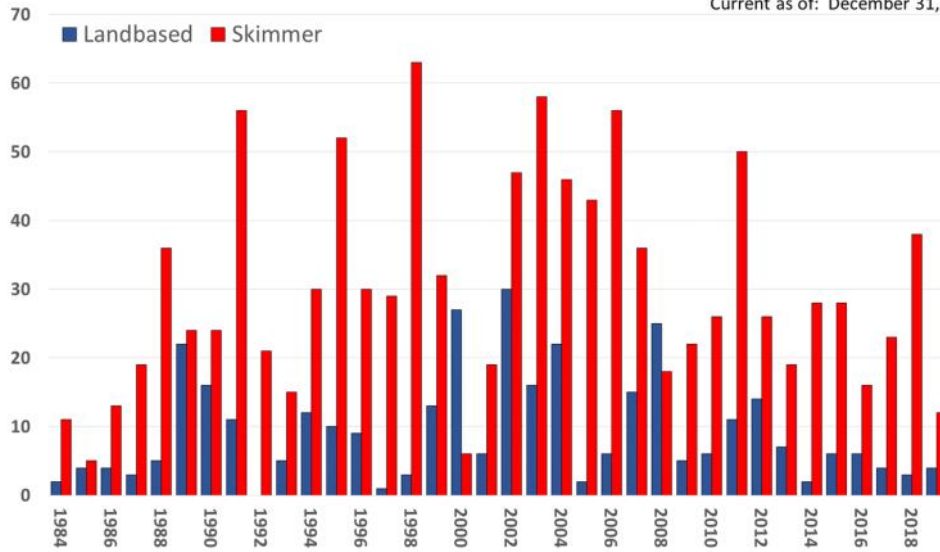
Prescribed Fires as of December 31, 2019		
Agency	Fires	Ha
BC	15	2300
YT	N/A	N/A
AB	20	1,443
NT	0	0
SK	N/A	N/A
MB	0	0
ON	5	138.5
QC	0	0
NL	N/A	N/A
NB	N/A	N/A
NS	N/A	N/A
PE	0	0
PC	13	348.15
Tot.	53	4229.65

NATIONAL PREPAREDNESS LEVEL DAYS MAY 1– AUG 31					
Levels	1	2	3	4	5
No. of days	43	13	32	36	0

## Airtankers Mobilized 1982-2019



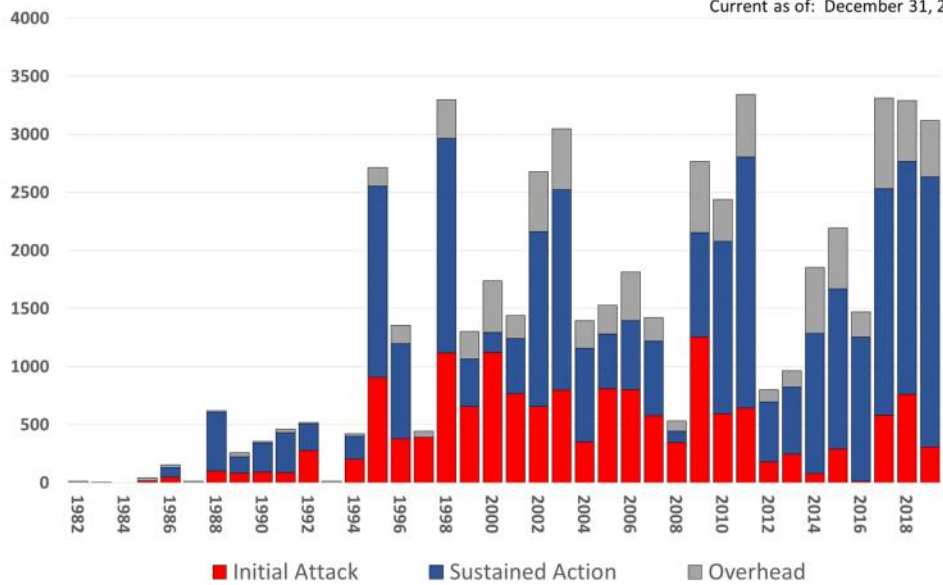
Current as of: December 31, 2019



## Personnel Mobilized 1982-2019



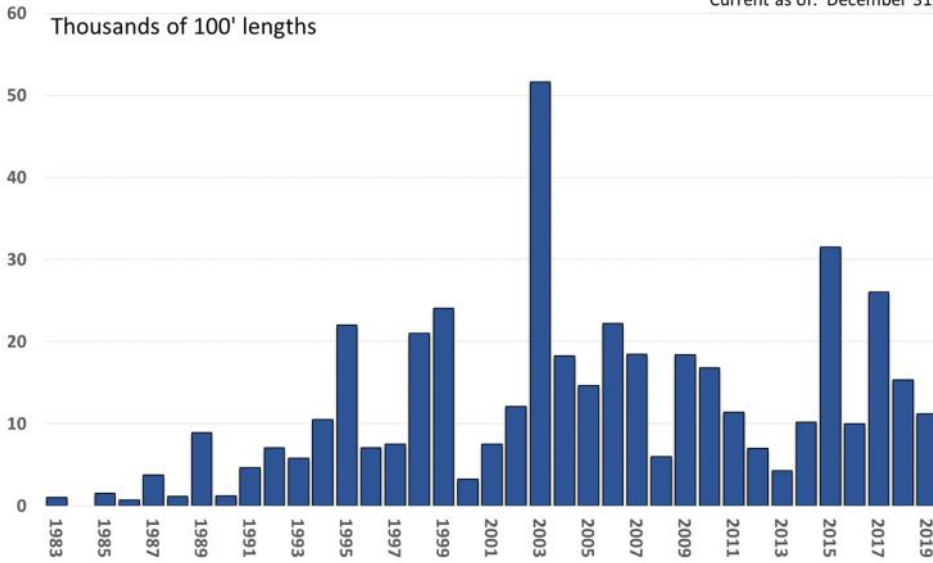
Current as of: December 31, 2019



## Hose Mobilized 1982-2019



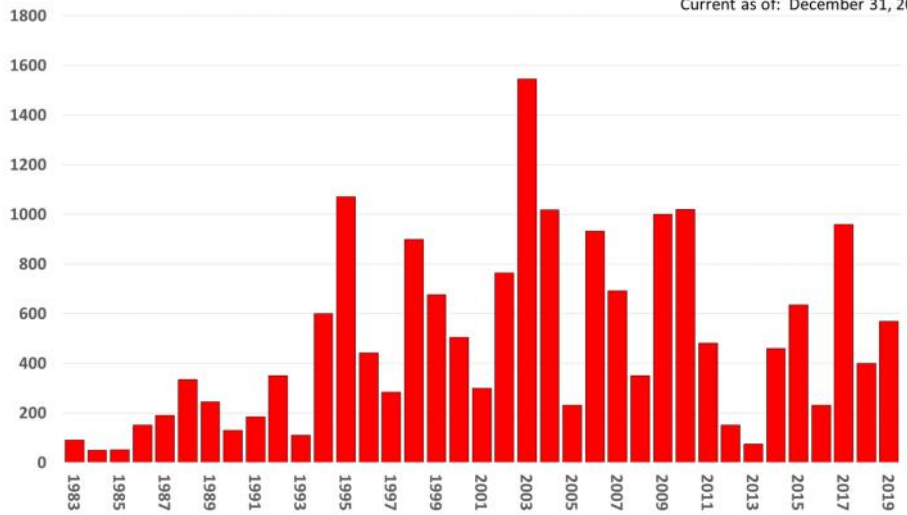
Current as of: December 31, 2019



## Pumps Mobilized 1982-2019



Current as of: December 31, 2019



### WILDFIRE RELATED FATALITIES

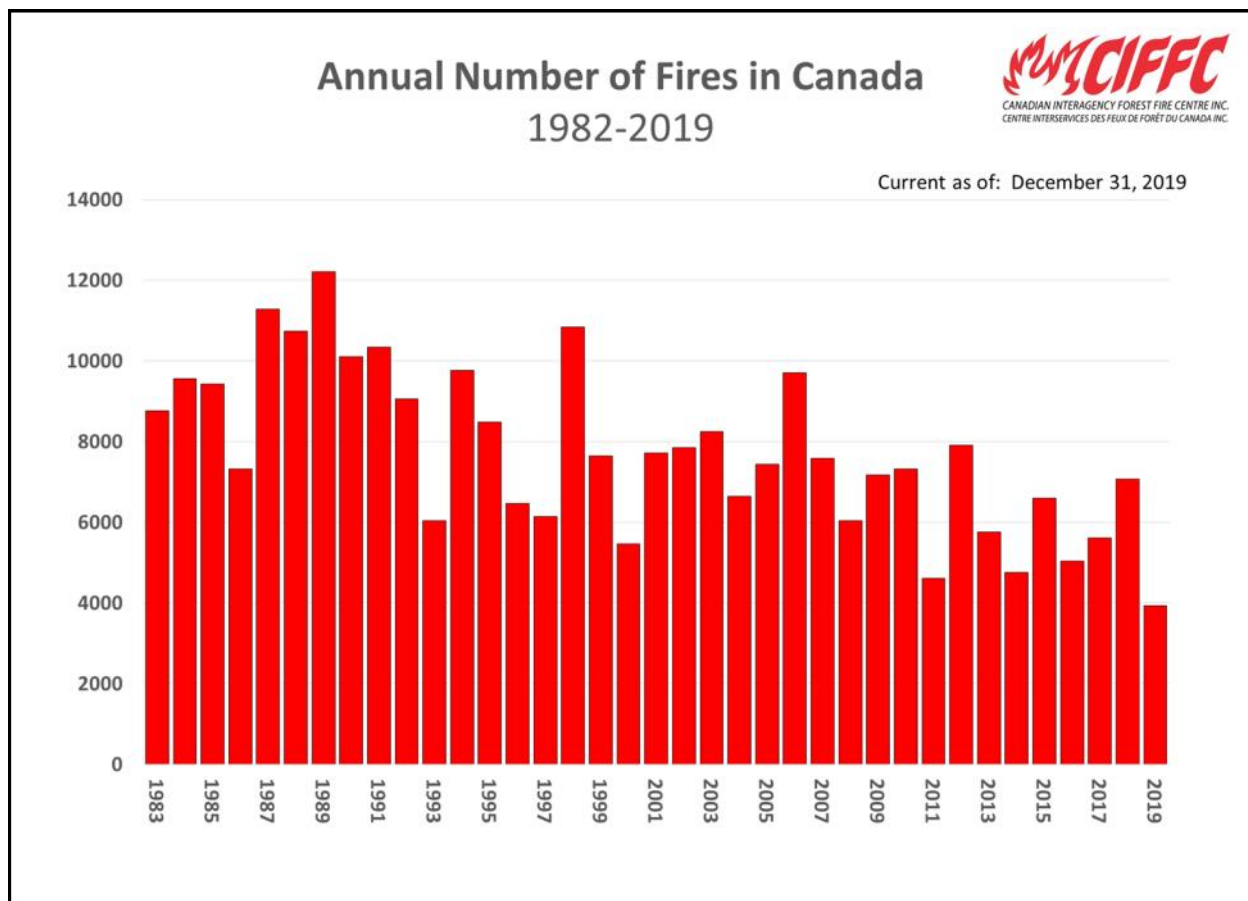
Year	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02
Fatalities	6	3	3	0	3	4	2	0	2	4	0	0	0	0	0	2	0

Year	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
Fatalities	3	2	0	3	3	2	1	5	4	0	1	0	2	1	0	1	0



**WILDLAND FIRE STARTS  
TOTAL NUMBERS OF FIRES (LIGHTNING AND HUMAN CAUSED)**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Avg.	2019
<b>BC</b>	3,084	1,678	646	1,642	1,854	1,455	1,836	1,049	1,352	2,087	1,668	792
<b>YT</b>	118	88	56	126	177	34	184	53	115	67	102	117
<b>AB</b>	1,655	1,837	1,097	1,565	1,214	1,451	1,850	1,366	1,217	1,288	1,454	1,004
<b>NT</b>	42	224	207	279	248	385	245	189	262	59	214	149
<b>SK</b>	511	571	303	409	429	403	723	364	353	416	448	243
<b>MB</b>	184	583	315	497	494	245	454	202	545	477	400	254
<b>ON</b>	385	931	1,334	1,615	582	303	668	648	776	1,327	857	537
<b>QC</b>	483	737	329	795	515	292	384	602	319	593	505	357
<b>NL</b>	176	61	53	198	101	124	128	91	80	132	114	99
<b>NB</b>	192	179	81	344	356	178	222	285	245	282	236	182
<b>NS</b>	193	313	116	352	171	171	247	274	175	190	220	143
<b>PE</b>	8	4	4	8	9	4	5	7	4	10	6	4
<b>PC</b>	136	113	67	87	96	81	122	43	168	140	105	52
<b>TOTAL</b>	7,167	7,319	4,608	7,907	6,246	5,126	7,068	5,173	5,611	7,068	6,330	3,933



**WILDLAND FIRE HECTARES  
TOTAL AREA CONSUMED (HECTARES)**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Avg.	2019
BC	229,566	331,508	12,357	102,042	17,990	368,785	280,445	100,336	1,215,851	1,353,861	401,274	20966
YT	227,057	146,957	39,091	58,280	179,510	3,160	169,841	21,543	399,280	85,624	133,034	279819
AB	66,826	83,643	940,596	337,000	21,890	23,120	492,536	741,550	49,118	59,809	281,609	883414
NT	2,057	333,435	406,693	297,618	537,912	3,416,291	646,955	254,980	861,030	15,736	677,271	111108
SK	37,559	1,734,799	343,720	227,512	312,194	343,430	1,758,376	241,607	399,562	118,984	551,774	47738
MB	2,872	187,494	126,844	216,888	1,115,412	40,333	47,358	38,408	176,677	234,334	218,662	64153
ON	20,656	14,824	635,373	151,564	43,422	5,386	39,311	83,113	112,337	265,587	137,157	269635
QC	93,972	314,884	12,726	70,086	1,872,842	63,721	5,380	33,371	38,392	62,529	256,790	9604
NL	35,267	1,020	594	225,524	43,076	16,816	3,958	10,953	700	396	33,830	316
NB	249	156	45	362	886	112	262	265	568	304	321	228
NS	892	463	136	817	301	564	517	755	728	253	543	155
PE	3	5	6	12	55	4	2	20	7	12	13	15
PC	38,429	5,912	85,653	273,037	58,377	282,125	458,336	5,539	117,575	74,840	139,982	100642
<b>TOTAL</b>	<b>755,405</b>	<b>3,155,100</b>	<b>2,603,874</b>	<b>1,960,742</b>	<b>4,203,867</b>	<b>4,563,847</b>	<b>3,903,277</b>	<b>1,532,440</b>	<b>3,371,825</b>	<b>2,272,269</b>	<b>2,832,261</b>	<b>1,787,564</b>

**Annual Number of Hectares Burned  
in Canada  
1982-2019**



Current as of: December 31, 2019

