

'Stunning'

Scientists surprised at Fort McMurray fire's long impact on rivers

BOB WEBER
The Canadian Press

EDMONTON

Four years after its flames guttered out, the record-breaking Fort McMurray wildfire continues to astound — this time with its lasting impact on an extensive river system.

"It's actually stunning that we were able to observe an effect at that large scale," said Uldis Silins, a University of Alberta professor and co-author of a recently published study on how the 2016 blaze affected the Athabasca River.

In May 2016, the fire swept through nearly 6,000 square kilometres of boreal forest in northern Alberta. Fort McMurray lost 2,400 buildings, and 88,000 people were forced from their homes.

With damage estimates of \$10 billion, it was the most expensive natural disaster in Canadian history.

Almost immediately after the city was safely cleared, Silins and his colleagues were flown in as part of an emergency reaction team to assess the threat to Fort McMurray's water supply.

Previous research has looked at how wildfires affect headwater streams in the mountains. But nobody had looked at their impacts on a large, slow, boreal river winding through wetlands.

"The extent to which the fire would impact water was highly uncertain," said Silins.

For seven months, the team sampled and tested the Athabasca and several tributaries upstream of Fort McMurray.



CP PHOTO JEFF MCINTOSH

Wildfires continue burning in and around Fort McMurray, Alta., Wednesday, May 4, 2016. Four years after its flames guttered out, the Fort McMurray wildfire is still affecting the massive river system that flowed through it.

The Athabasca is huge — nearly a kilometre across in many places — and it drains nearly one-quarter of Alberta. It's tea-coloured and turbid, full of organic material.

The scientists were amazed when, every time it rained, they were able to detect significant increases in ash, potassium, nitrogen, calcium and heavy metals such as lead even within the river's normal load.

"It's a very, very large watershed," Silins said. "We really were not expecting to see any impact at that scale."

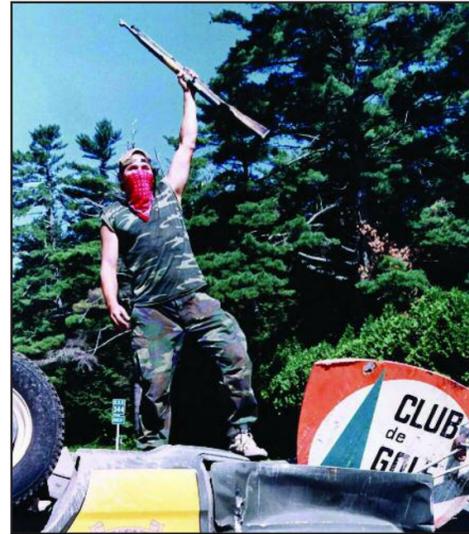
Those impacts are magnified because tributary water doesn't mix evenly with the Athabasca's main flow.

"You've got a river the colour of chocolate milk and these small tributaries during certain events — a good rain, for example — look like hot fudge," said co-author Monica Emelko of the University of Waterloo.

"That hot-fudge sauce doesn't necessarily mix in. That plume that extended for a very long distance, hugging the riverbank, is likely what was making its way into the water treatment plant in Fort McMurray."

The fire residue also makes it harder to manage bacteria in the city's reservoir.

Emelko said the city's water has remained safe — it's just harder and more expensive to make it so. City officials have said treatment costs increased 50 per cent after the fire.



CP PHOTO TOM HANSON

A warrior raises his weapon as he stands on an overturned police vehicle blocking a highway at the Kanesatake reserve near Oka, Que., July 11, 1990 after a police assault to remove Mohawk barriers failed.

30 years after Oka crisis, Kanesatake land claims remain unresolved

MORGAN LOWRIE
The Canadian Press

MONTREAL

Thirty years after the proposed expansion of a golf course sparked a 78-day standoff between Quebec Mohawks and Canadian soldiers, the land claims at the heart of the Oka crisis remain unresolved, Indigenous leaders and elders say.

Serge Simon, the current Grand Chief of Kanesatake, vividly remembers the events of July 11, 1990, when Quebec provincial police moved in on a barricade erected by Mohawks who were protesting the planned development of what they claim as ancestral land in Oka, about 50 kilometres northwest of Montreal.

"I saw the tactical squad come out of their vehicles and start following this cube van up the hill and I thought, 'Oh no, they're going to kill everybody,'" Simon recalled in an interview this week.

He remembers confusion, seeing community members fleeing tear gas and later, an exchange of gunfire.

"All of a sudden you just heard a popping sound and it just went crazy," he said. "You just heard automatic gunfire coming from both sides, that was the beginning."

Cpl. Marcel Lemay died in the gunfire, felled by a bullet whose source was never determined.

The army sent in some 800 soldiers, encircling the community with barbed wire and sparking months of negotiations that culminated in a deal: the barricades of dirt and mangled police vehicles were to come down in return for the cancellation of the golf course expansion.

The conflict inspired Indigenous movements across the country and led to the Royal Commission of Aboriginal Peoples, which helped usher in a greater awareness of the need to settle land claims.

But three decades later, the underlying land disputes at the heart of the crisis remain unresolved, and the Kanesatake community is deeply divided on how to move forward.

"It's gotten worse since 1990, 30 years ago," said Walter David, an elder in the community. He says Kanesatake has continued to lose land to developers who have cut down trees and started housing projects on disputed territory.

"There's been a lot of secrecy about what's been going on, lots of money thrown at band council for these negotiations from the federal government, and just no results back to the people."

David says the events of 1990 are "blotchy" in his mind, likely due to the post-traumatic stress he's suffered. But he says the event remains an example of police violence, and the extent to which governments will go to refuse talking about land.

"We wanted to disrupt the expansion of the golf, and do it peacefully, and it was peaceful," he maintained. "Up until we got assaulted twice," he said, referring to police raids and alleged attacks by non-Indigenous citizens.

David says the aggressive law enforcement response to Indigenous pipeline protests in North Dakota and British Columbia bring back painful memories, and show that police attitudes have yet to change.

Watching conflicts between Black Lives Matters demonstrators and police triggered by the death of George Floyd at the hands of Minneapolis police has once again "set off little triggers" inside him, he said.

"They're still using the same tactics," he said.

David and Simon were on the same side of the Oka events, and both express similar concerns over issues in the community and a desire to reclaim disputed land. But they stand at opposite sides of a divide that has pitted elected band councils against Mohawk traditionalists and the Longhouse, who are fiercely critical of the process underway and of Simon's leadership.

David says Simon has carried out land negotiations with the federal government behind closed doors and has not been transparent with the community on this or many other matters.

"Band councils are funded by the federal government, so there's kind of a conflict of interest for them to be funded for their own negotiations," he said.

Recently, members of the community sent a 16-page document of questions to Simon, demanding answers to everything from the status of negotiations to band council expenditures.

Simon, on the other hand, says that while he is bound by non-disclosure agreements when it comes to land negotiations, he has tried to keep the community informed.

He also fiercely resents being branded a "sellout" or an arm of the federal government for trying to negotiate a peaceful repatriation of the land.

"All I want is peace," he said.

PUBLIC NOTICES



8AM - 4PM SPECIAL SERVICES

Electric Outages.....	403.529.8260
Gas Emergency	403.529.8191
Water & Sewer Emergency	403.502.8042
After Hours Special Services.....	403.526.2828

DEVELOPMENT PERMITS APPROVED JULY 2 TO JULY 8, 2020 PLANNING & DEVELOPMENT SERVICES

RESIDENTIAL

1602 21 STREET SE	(Lot 39/40, Block 21, Plan 3915AR) PLDP20200908. Single Detached House (Addition).
20 TERRACE CIRCLE NE	(Lot 40, Block 8, Plan 0513294) PLDP20200015464. Garage (Gazebo).
296 FLEET STREET SW	(Lot 2, Block 3, Plan 8010927) PLDP20200929. Single Detached House (Enclosed Deck).
215 HAMPTONS CRES SE	(Lot 32, Block 9, Plan 1712252) PLDP20200939. Single Detached House.
116 8 STREET NW	(Lot 15, Block 11, Plan 703HE) PLDP20200015408. Garage.
677 VISTA DRIVE SE	(Lot 20, Block 5, Plan 1111036) PLDP20200015380. Single Detached House.
261 SOMERSET WAY SE	(Lot 44, Block 5, Plan 0612243) PLDP20200015465. Garage.
442 8 STREET SW	(Lot 15, Block 5, Plan 4349GS) PLDP20200986. Single Detached House (Secondary Suite).



PROPOSED DIRECT CONTROL DEVELOPMENT APPLICATION 1102 SHALE STREET SE

TAKE NOTICE that the Medicine Hat City Council will be considering a Direct Control Development Application for a Change of Use to Industrial Support Services at 1102 Shale Street SE. The Applicant is an Engineering Firm that engages in Non-Destructive Examinations which includes industrial radiography. The company wishes to relocate its existing office to the subject site. For further information, or to view copy of proposed Development Application and related documents, please contact Planning & Development Services at 403.529.8374.

A Non-Statutory Public Hearing will be held on **Monday, July 20, 2020** at approximately **6:30 p.m.** at the regularly scheduled City Council meeting being held at the **Esplanade Studio Theatre** (401 First Street SE). This meeting will be open to the public with adjustments in place to ensure alignment with current Alberta Health requirements related to COVID-19. Seating for the public will be limited.

At the Hearing, any person may make representation to City Council and discuss, support, object to or ask questions about the proposed development. Oral submissions are normally restricted to a maximum of five (5) minutes.

Anyone wishing to have a written submission concerning this proposed bylaw placed before the City Council must submit it to:

City Clerk Department, 580 First Street SE, Medicine Hat, Alberta T1A 8E6 by 12:00 noon, Wednesday, July 15, 2020.

All submissions are treated as public documents.

Members of the public can view City Council meetings online at the City's YouTube account at: <https://www.youtube.com/user/CityMedicineHat>.

Dated at the City of Medicine Hat, in the Province of Alberta, this 4th day of July, 2020.

Angela Cruickshank, City Clerk
Phone: 403.529.8234
Fax: 403.529.8324
E-mail: clerk@medicinehat.ca

COMMERCIAL

1400 STRACHAN ROAD SE	(Lot 9, Block 1, Plan 0411256) PLDP20200015466. One Fascia Sign.
511 4 AVENUE NE	(Lot 1, Block 13, Plan 0012283) PLDP20200015450. Restaurant (Starbucks)/ Retail & Consumer Services.

HOME OCCUPATION

A person claiming to be affected by a decision of the Development Officer or the Municipal Planning Commission may appeal to the Medicine Hat Subdivision and Development Appeal Board by completing and submitting to the City Clerk Department, the required Notice of Appeal form within twenty-one (21) days of this publication. Notice of Appeal forms are available from the City Clerk Department, Third Floor, City Hall or on the City's website at www.medicinehat.ca

All Development Permits listed are subject to conditions. Further information on any Development Permit may be obtained from the Planning & Development Services Department, Second Floor, City Hall during normal business hours (Telephone 403.529.8374).

WATER MAIN FLUSHING & FIRE HYDRANT INSPECTIONS

Environmental Utilities performs regular, routine maintenance to uphold the water quality and system infrastructure by annually flushing water mains and inspecting fire hydrants.

During these operations, there may be some discoloration in the water which is not harmful to consume and will disappear when flushing is complete. Please note that discoloured water should not be used for laundry and that fluctuating water pressure may also be noticed.

Should discoloration persist beyond three hours, turn on your cold water tap or an outside sprinkler and let the water run for several minutes until the water runs clear.

For additional information or to confirm whether crews are working in your zone, refer to the Water Flushing Programs page on the City's website at www.medicinehat.ca/ew or contact Environmental Utilities at 403.529.8176.

www.medicinehat.ca