

Mayor Nathan Pachal  
Langley City Hall  
20399 Douglas Crescent  
Langley, BC, V3A 4B3

May 8, 2024

Dear Mayor Pachal and Councilors:

## **Emergency Response, Urban Wildfire Liability in the City of Langley**

With the recent wildfire situation I notice that there is a potential major liability in the Nicomekl River floodplain area which is largely composed of grassland, scattered tress and invasive blackberry [photographs 1 & 2]. This grass and blackberry can grow to over a metre in height and when dry will rapidly combust and burn [photograph 3]. Cities such as Kelowna and Fort McMurray know all too well when a fire starts how easily it can spread to neighbourhood areas causing devastation. Such fires could be ignited by lightning or humans (cigarettes, campfire by homeless individuals, intentionally set).

I did bring this wildfire situation to council on September 30, 2019 via a presentation. No action has been provided since that time. With visual impacts of the wildfires in BC and NWT, there is a realism when a wildfire of similar magnitude could occur in the lower mainland. Damaging grassfires can strike anytime and anyplace [photograph 3].

There was a recent article (August 22, 2023) in the Globe and Mail on “how cities are protecting their parks from brush fires”. If there is a fire related casualty or accident, the city would be liable for a lawsuit.

I have identified some potential short term and long term problems, solutions and funding which can be improved upon with additional input from interested parties and residents.

### ***PROBLEMS***

**A wildfire in the Nicomekl River floodplain area would lead to the following hazards:**

#### **SMOKE**

Smoke and dust will comprise the air quality which will cause breathing problems, especially for those with breathing congestion and allergy problems.

#### **RESIDENCES**

This can lead to fire damage to the residences that border the floodplain. [photographs 1 & 2].

## INSURANCE

This may impact fire related insurance to residences and health related claims.

## HIKERS

This can lead to entrapment of people walking in the floodplain area, resulting in serious injury or death.

Similar hazards are also present on the various nature trails throughout the floodplain [photograph 2].

## **SOLUTIONS**

### **Fire Suppression Plan**

A Fire Suppression Plan should be implemented to address these concerns. This plan would require the input of the Langley Fire Department, Langley Parks and residents.

This implementation should include the following:

#### SAFETY ZONE

Create a buffer fire zone of 30 metres from buildings by keeping the grassland cut and maintained.

#### ESCAPE ROUTES

Review escapes routes throughout.

#### ACCESS ROUTES

There are no apparent rapid access routes for fire trucks or fire equipment vehicles.

#### SIGNAGE

Erect and maintain fire hazard signs as used by forestry. This will alert people as to the fire danger in the area.

#### REGISTERED PROFESSIONAL FORESTER

A Registered Professional Forester, Registered Forest Technician or Registered Professional Engineer qualified by training or experience in fire protection, should be commissioned to undertake an assessment and determine the fire hazard within the Nicomekl River System and adjoining nature trails.

### **Goat Grazing Project**

Employ goats to control the invasive blackberry plant along the Nickomekl floodplain. Goats would be an environmental benefit for mitigating the grass and blackberry bush problems. There would be no need for herbicides and spraying to control the invasive plants which are not natural to this environment. I am sure it would be of great interest to the First Nations, residents and students of Langley City and

could be introduced as an educational scenario. I have contacted a person who resides in the Langley area and has conducted goat grazing landscaping. From a financial perspective, goat grazing would appear to be cheaper than engaging professional landscapers. I have attached some recent articles concerning the advantages of employing goats. I have actually seen where two goats cleaned up a small backyard farm of invasive bushes. It was amazing what they can do.

## **FUNDING**

The City's 2024 budget indicates funding for emergency planning under "other protective services. Does the latest BC government infrastructure funding to the City improve the necessary disaster preparedness?

Some of the proposed Disaster Preparedness Fee (see letter May 6, 2024) could be used for the urban wildfire solutions.

Let us be innovative and show that Langley City is "The Place To Be".

**It is time to be proactive on safety.**

I look forward to your reply.

Yours truly,

*"Bruce Downing"*

Bruce Downing, MSc, PGeo, FGC, FEC(hon)

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Cc David Pollock, Director of Engineering, Parks and Environment  
Kyle Simpson, Manager, Engineering & Parks Operations  
Scott Kennedy, Fire Chief, Langley City  
Melanie LaPointe, Emergency Management Program Advisor



**Photograph 1 Nicomekl River Floodplain, note townhouses adjoining the grassland and blackberry bushes.**





**Photograph 2 Grassland in floodplain, note residences in fire catchment area.**



**Photograph 3** A potential grassland fire.



# Enbridge hires goats to control invasive plants along pipeline route

The goats were penned in an area north of McLeod Lake to eat up vegetation

By [Hanna Petersen, Prince George Citizen](#) | August 17, 2023, 12:30pm



An Enbridge goat named Tiny. | Enbridge

## Enbridge is employing goats to control invasive plant species along its pipeline system in B.C.

The Goat Grazing Project saw about 30 goats penned in a parcel of land located in the Pine Pass, north of McLeod Lake, about 240 km north of Prince George.

The goats were given yellow bandanas and tasked with grazing the area for a week in early August.

The company says clearing invasive plants is a critical component of its commitment to integrated vegetation management along the pipeline right-of-way.

The right-of-way needs to have a herb-dominated ecosystem, meaning having only smaller plants like grasses and legumes grow in the area. Having shrubs and trees on the right-of-way reduces Enbridge's ability to access sites for maintenance on its pipeline infrastructure.

The goats were brought in as a biological method to control vegetation rather than chemical application of herbicides or mechanical cutting of shrubs and trees.

“When these goats are penned in an area, they will overgraze on shrubs. The best-case scenario is the goats eat everything. They eat the leaves, they eat the little branches, and they graze it right down to the ground,” said Dan Tisseur, senior environment advisor for operations and maintenance for Enbridge.

Goats or other grazers have already been used as an effective and sustainable way to control vegetation. But more research needs to be done to assess the efficacy of the approach.

Hence Enbridge’s Goat Grazing Project will run for years, with the goats being brought back to the study location every year to repeat the treatment and properly observe the effectiveness of the grazing method.

“This is going to be a multi-year project to assess the efficacy over time. So we’re actually going to bring these goats back to the same location to repeat these treatments to see if over time we’re witnessing a reduction in the shrub biomass and invasive plants on site,” added Tisseur.



# Vermont city employs goats to get rid of poison ivy

Vermont's capital city is trying a natural way to get rid of poison ivy—grazing goats.

On Wednesday, three goats munched on the plants along the small city's bike path behind the high school.

Goat owner Mary Beth Herbert, of Moretown, says the goats graze on the poison ivy, causing stress to the plants so that they retreat. She says it will take years of cyclical grazing to eradicate the poison ivy.

On Wednesday, the goats named Ruth, Bader and Ginsburg, got a start. Herbert brought the 6-month-old Kiko goats in her Subaru, and enclosed them in fencing where they grazed away.

The city says it has tried to eradicate the poison ivy along the bike path but has been unable to do it using organic treatments.

# Goats: unlikely allies in California's fight against wildfires

by Inès Bel Aiba

On a hot July morning, a herd of 80 goats were deployed to a hilly patch of land in Glendale, just outside Los Angeles.

Their mission, should they choose to accept it, is simple: graze.

Goats are an unlikely but increasingly popular weapon in California's fight against the wildfires that rage through the western US state every year.

On a recent hot July morning, a herd of 80 ungulates were deployed to a hilly patch of land in Glendale, just outside Los Angeles.

They had been chomping away for the past 10 days or so, helping to clear away bone-dry vegetation that could go up in flames and threaten the surrounding homes.

Their work comes up a vital time. Last year was the worst in California's modern history for wildfires, with more than four million acres (1.6 million hectares) scorched.

Due to climate change and a brutal drought, officials fear that months of massive infernos are now the norm.

So any help is welcome.

"We started hearing a lot about goats, both from community members, other fire departments, other cities," said Glendale fire marshal Jeffrey Ragusa.

"And the more we looked into it, the more we realized how effective they can be, how environmentally friendly they can be."

Corridor

The goats are just one small part of the strategy for coping with the threat of fires.

The goats' voracious appetite serves two purposes.

Eating easily flammable vegetation helps to restrict the spread of fire, and also creates a convenient corridor in which firefighters can operate to "protect the homes in a safer environment" should the need arise, said Ragusa.

Of course, the animals are just one small part of the strategy for coping with the threat of fires.

But their help can be valuable, lightening the workload for overstretched human contractors who create buffer zones by removing vegetation—often manually, in sweltering heat and difficult terrain—before and during ever-longer fire seasons.

"There's always a threat of injury to personnel," said Ragusa.

"I haven't seen a goat trip yet," he added with a smile.

The goats grazing in Glendale are brought in by Sage Environmental Group, a company that carries out habitat restoration and environmental planning.

Its founder, Alissa Cope, began incorporating goats into her work five years ago, and now owns around 400 of the animals.

Alissa Cope says the cost of employing the goats is comparable to what authorities would pay for human workers—at a lower environmental toll.

'Watch them closely'

The strategy carries an inherent risk—goats, if left to their own devices, will munch anything in their path.

"We watch them closely," she said. "If there's an area that we feel that they're overgrazing—which is essentially the downside of using goats—we will deliberately move them," using electric fences or luring them with hay.

Without revealing how much the goats earn for their labor, Cope says the cost of employing the animals is comparable to what authorities would pay for human workers—at a lower environmental toll.

The company runs similar projects elsewhere in California, including nearby Anaheim and South Pasadena.

The idea to bring in goats to Glendale originated with Rick Stern, a member of the neighborhood homeowners association.

Stern heard of the strategy when his wife found out goats had helped keep the Ronald Reagan Presidential Library—also in southern California—safe from fire in 2019.

Months before the devastating blaze, a trip of goats had been dispatched to create a fire break around the famous complex.

While the goats' presence in Glendale is just a pilot program for now, it will be evaluated with a view to broader use.

"So far, it's been a really good program," said Ragusa. "We've been really happy with the results."