



FORT NELSON FIRST NATION

Community FireSmart home ignition
zone assessment training

By Leila Darwish

Source: First Nations Emergency Services Society

THE SCIENCE

Across Canada, wildfires burn an average 20 000 km² of forest each year, with the risk of wildfire increasing as climate change brings higher temperatures, milder winters, and drier summers to some parts of the country.

Wildfire continues to be one of the most pressing issues facing many communities in British Columbia. Fort Nelson First Nation and The North Rockies Regional Municipality share a common boundary and are situated in Northeast British Columbia. Both are surrounded by a continuous wildland forest and are at risk from wildfire. In 2015, the Northern Rockies Regional Municipality experienced over 100 wildfires, with many and in around the community of Fort Nelson and the Fort Nelson First Nation.

Research by the Institute for Catastrophic Loss Reduction has proven that FireSmart mitigation strategies can significantly reduce wildfire risk to properties and their surroundings. The importance of making structures FireSmart through the use of proper building materials and landscaping has been highlighted by the 2016 Fort McMurray fire. The structures that survived the blaze in otherwise decimated areas were structures that aligned with FireSmart recommendations, either by default or by conscious design.

THE TRIGGER

In the winter of 2015, the First Nations Emergency Services Society (FNESS) facilitated regional workshops on fire prevention initiatives with First Nations communities across British Columbia. Through those workshops, FNESS connected with Partners in Protection Association, the organization behind the FireSmart program. Representatives from both organizations discussed the Home Ignition Zone Assessment initiatives coming out of the United States, as well as training that had taken place in Slave Lake, Alberta. In some wildfire-prone states in the United States, homeowners cannot get home insurance for wildfires unless they have their home assessed and then complete the recommended actions for reducing fire risk to their property. Once completed, they are given a certificate that allows them to get fire insurance. To date, within British Columbia there has been no requirement or ability to collect individual FireSmart structure and site hazard statistics in a format that can be centrally stored, tracked, and accessed, nor has there been a comprehensive program focused on providing professional advice to address the specific and unique vulnerabilities of individual structures.

Previous work done by FNESS with the Fort Nelson First Nation highlighted a lack of information about fire risk to structures that existed on the reserve. The Fort Nelson First Nation's updating of their Community Wildfire Protection Plan presented an ideal opportunity for the community to take their wildfire mitigation work to the next level. From this, the FireSmart Home Ignition Zone Wildfire Mitigation and UAV Pilot Project was born.



Figure 10: The pilot program was launched in February 2017 with a four-day training on wildfire behaviour, wildfire mitigation tools and methods, and structure and site assessments for fire risk. (Source: First Nations Emergency Services Society)

THE APPROACH

The FireSmart Home Ignition Zone Wildfire Mitigation and UAV Pilot Project is a partnership effort between Fort Nelson First Nation, the North Rockies Regional Municipality, FNESS, BC Wildfire Service, Partners in Protection, and six private funders. The pilot project is taking place on the main reserve of the Fort Nelson First Nation.

The project provides the Fort Nelson First Nation members and North Rockies Regional Municipality with the necessary skills, knowledge, certification, and equipment for the implementation of key FireSmart wildfire prevention methods for residential property within the wildland urban interface. The project also trains participants in the use of drones for taking aerial imagery to identify high risk areas.

The data collected will be used to develop and implement FireSmart mitigation activities on individual properties, to provide residential and critical infrastructure statistics required for community wildfire protection planning, for all hazards emergency management planning, for fuel management treatments, and more.

THE OUTCOME

The pilot program was launched in February 2017 with a four-day training on wildfire behaviour, wildfire mitigation tools and methods, and structure and site assessments for fire risk. It was paired with field days for practicing assessments on structures, and the submission of the assessments through a mobile application device to a database

managed by Partners in Protection. Twenty people were trained, with ten community members and two consultants from the Fort Nelson First Nation, five members from North Rockies Regional Municipality, and two members from BC Wildfire Service. This was the first time such training had been offered to a First Nations community and only the second time the training had been delivered in Canada.

The Assessment training was followed up in May 2017 with Commercial Drone training. In July, training participants from the Fort Nelson First Nation began assessments for the 170 structures on the main reserve.

The project has applied to expand its scope beyond the 170 structures on Fort Nelson First Nation's main reserve to include potential high-risk structures in the municipality. The pilot project has also attracted interest from other First Nations communities and municipalities across the province.

A WORD FROM FORT NELSON FIRST NATION

According to Larry Price, the project coordinator and a Forest Management Specialist with the First Nations Emergency Services Society, "The big thing is to make sure that the people living out in areas of high risk to wildfire not only understand the risk, but that they also understand that there are people out there who can work with them to build the capacity to go in and do these assessments on the reserves and adjacent areas, and to implement activities to make their communities more FireSmart."

In order to access the funds needed to run the training program and finance future wildfire mitigation activities, Mr Price emphasizes that teamwork is essential. "You work together to identify the risks and then work as a team to apply for funding. In particular with Fort Nelson First Nation, they share a common boundary with the neighbouring municipality and were able to work jointly with them and leverage funding."

Training communities in the wildland urban interface to do fire assessments may not be a requirement now, but Mr Price is looking ahead to the future. "In Canada, the assessments aren't required, but they gather information that is critical to supporting emergency response operations, community planning and mitigation efforts, and building skills and awareness locally."