Chapter 32
Environment—Detecting Wildfires

1.0 MAIN POINTS

By July 2019, the Ministry of Environment improved its processes to detect wildfires in Saskatchewan's wildfire management areas.

The Ministry worked with other government agencies (e.g., SaskPower, SaskTel) to update its information on values-at-risk (e.g., human life, communities, significant public and industrial infrastructure, commercial timber, remaining structures, natural resources and commercial/industrial operations) from wildfires. By July 2019, the Ministry collected information on 3,627 values-at-risk in its database, an increase of 359 values-at-risk since our original audit.

The Ministry increased the number of wildfire prevention and preparedness plans it received from operators, but only received 46 out of a potential 238 plans. Operators can submit plans via email or drop plans off at firebases. When the Ministry does not centrally receive plans, the risk of misplacing plans increases.

Having incomplete information for operators' temporary values-at-risk increases the risk of the Ministry not prioritizing its wildfire detection activities appropriately, and not developing suitable, related suppression strategies.

2.0 INTRODUCTION

2.1 Background

Under *The Wildfire Act*, the Ministry of Environment is responsible for the prevention, detection, control, suppression, and investigation of wildfires within the province's wildfire management areas, including provincial forests.

Provincial wildfire management areas include provincial forests, parkland, vacant Crown land, and every quarter section of land lying wholly or partly within 4.5 kilometres of the boundaries of a provincial forest.[1,2]

The Wildfire Management Branch within the Ministry manages wildfires. The Branch employs about 127 full-time equivalent employees excluding front-line staff (e.g., fire fighters). The Wildfire Management Branch has three fire centres located in La Ronge, Buffalo Narrows, and Prince Albert. These centres oversee 12 forest protection areas.[3]

---

[1] *The Wildfire Act*, s. 2(gg).
[2] According to *The Wildfire Act*, the Ministry is not responsible for detection on land within any city, town, village, hamlet, northern village, northern hamlet, northern settlement, regional park, and resort village or resort subdivision.
[3] The Wildlife Management Branch divided the province into 12 forest protection areas.

The 2018 season experienced 416 wildfires; the number of wildfires and area burned was below the 10-year average. The majority of these wildfires occurred within wildland-urban interface areas.[4]

In 2018–19, the Ministry spent $67.7 million on forest fire operations.[5]

2.2   Focus of Follow-Up Audit

This chapter describes the results of our first follow-up on the actions of the Ministry on the two recommendations made in our 2017 audit.

Our *2017 Report – Volume 2*, Chapter 23, concluded that, for the 12-month period ending March 31, 2017, the Ministry had, other than the areas of our two recommendations, effective processes to detect wildfires in Saskatchewan's wildfire management areas.[6]

To conduct this audit engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook—Assurance* (CSAE 3001). To evaluate the Ministry's progress toward meeting our recommendations, we used the relevant criteria from the original audit. The Ministry's management agreed with the criteria in the original audit.

Our audit approach primarily included examining information in the Ministry's computer systems pertaining to values-at-risk and fire preparedness plans submitted by operators, and discussions with management responsible for wildfire detection.

3.0   STATUS OF RECOMMENDATIONS

This section sets out each recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendation, the status of the recommendation at July 31, 2019, and the Ministry's actions up to that date.

3.1   Central Method to Receive Plans Needed

> *We recommended the Ministry of Environment actively seek wildfire prevention and preparedness information from industrial and commercial operators that they are required by law to submit.* (*2017 Report – Volume 2*, p. 149, Recommendation 1; Public Accounts Committee agreement June 13, 2018)

> **Status**—Partially Implemented

The Ministry improved operator awareness on the need to submit wildfire prevention and preparedness plans.

The Wildfire Act (s.20) requires operators to submit wildfire prevention and preparedness plans annually. These plans include the location, number of people, structures, and

---

[4] *Ministry of Environment, Annual Report for 2018–19*, p. 5.
[5] Ibid, p. 15.
[6] Find the original report regarding these recommendations at www.auditor.sk.ca/publications/public-reports. We reported the original audit work in *2017 Report – Volume 2*, Chapter 23, pp. 143–158.

equipment at the operation and their contact information. The Ministry allows operators to submit plans to firebases or via email. By allowing operators to submit plans to several locations increases the risk of received plans not saved on the Ministry's network.

The Ministry held meetings with stakeholders to inform them of the requirement to submit these plans. At the time of our original audit in 2017, the Ministry only received 13 plans. By 2019, this number increased to 46 plans (out of a potential 238 operators in the area).

Wildfire prevention and preparedness plans of temporary industrial and commercial operators are especially important as the plans contain information to help the Ministry assess the risk of wildfires and to notify the operators in the event of wildfire threats.

Having incomplete information about temporary values-at-risk increases the risk of the Ministry not prioritizing its wildfire detection activities appropriately, and not developing suitable, related suppression strategies.

3.2   Information on Permanent Values-at-Risk Obtained

> ***We recommended the Ministry of Environment actively work with other government sources to obtain information on values-at-risk from wildfires.*** (*2017 Report – Volume 2*, p. 150, Recommendation 2; Public Accounts Committee agreement June 13, 2018)

Status—Implemented

The Ministry worked with other government agencies (e.g., SaskPower, SaskTel, Ministry of Agriculture) to obtain information on values-at-risk from wildfires. Values-at-risk include human life, communities, significant public and industrial infrastructure, commercial timber, remaining structures, natural resources and commercial/industrial operations, and wildlife habitat.

The Ministry records key information about values-at-risk in its Wildfire Management database. Capturing this information makes it available for making decisions about managing fires. For example, the Ministry creates interactive maps from this database.[7] These maps include pertinent information for both detecting and managing fires such as the location and specifications of values-at-risk, contact information of owners, etc.

The Ministry requires a values-at-risk approach to prioritizing wildfire activities. Under this approach, knowing the nature and location of values-at-risk is the first step to protecting them.

Since our 2017 audit, the Ministry signed agreements with SaskTel and SaskPower to provide the Ministry with access to information on locations of values-at-risk for these agencies. Prior to this, the Ministry relied on its staff to update information on values-at-risk during inspections performed during slow fire seasons. This only occurred every two to four years.

---

[7] Interactive maps are live online maps the Ministry can use to view, query, and print Geographic Information System (GIS) maps, databases, and images using an internet browser. The interactive design makes it easy to pinpoint a given location. The Ministry overlays wildfires on the map so staff can see what is potentially threatened.

At July 2019, the Ministry collected information on 3,627 values-at-risk in its database, an increase of 359 values-at-risk since March 2017.

Having current information or an accurate understanding of the types of values-at-risk from wildfires decreases the risk of the Ministry not developing appropriate daily plans (including detection) and suppression strategies, and helps prioritizing wildfire detection activities appropriately. In addition, excluding destroyed properties as values-at-risk helps ensure the Ministry does not expend activities and resources for non-existent values-at-risk.