2009 North Strathcona Wildfire
After Action Report

December 2010

Strathcona County
EMERGENCY SERVICES

Acknowledgements

The 2009 North Strathcona Wildfire
After Action Report Project Team

Emergency Services

▸ Darrell Reid, MBA
  Fire Chief and Manager
  (Contributor and Subject Matter Expert)

▸ Vern Elliott, Deputy Fire Chief, Operations
  (Contributor and Subject Matter Expert)

▸ Iain Bushell, Deputy Fire Chief, Finance & Human Resources
  (Contributor and Subject Matter Expert)

▸ Ken Jones, Deputy Fire Chief, Planning & Logistics
  (Contributor and Subject Matter Expert)

▸ Barry Bouwsema, Coordinator,
  Emergency Management Agency
  (Contributor and Subject Matter Expert)

▸ Karen Tomnuk
  Public Education and Marketing Specialist
  (Contributor and Design)

▸ Bev Fowler, MACT, Administrative Assistant
  Emergency Management Agency
  (Research, Development, Project Coordination,
  Contributor, Editor and Design)

Communications

▸ Jocelyn Tennison, Manager (retired)
  (Contributor, Advisor and Subject Matter Expert)

Executive Administration

▸ Leslie Hurst, Accountant, Community Services
  (Contributor and Subject Matter Expert)

Family and Community Services

▸ Lori Prediger, Coordinator Family & Child Resource Services
  (Contributor and Subject Matter Expert)

…with contributions from numerous other County Staff
and External Stakeholders

Table of Contents

Table of Contents

Table of Contents

Table of Contents

Introduction

On the afternoon of May 3, 2009, Strathcona County Emergency Services (SCES) responded to a major fire in north Strathcona. It occurred approximately seven kilometers away from a simultaneous wildfire in a neighboring municipality and rapidly expanded to produce the largest forest and wildland fire the County experienced in over 20 years. It is significant to note that the natural forested area just north west of this location suffered a similar, but smaller wildfire in May of the previous year.

The fire's progression necessitated the Declaration of a State of Local Emergency (SOLE) for Strathcona County on May 5, 2009. Although the declaration was terminated two days later on May 7, SCES crews remained at work in the area until July 3 when the incident was officially declared to be over. Through May and June, their efforts were supported by a number of other resources including the Salvation Army and other community groups, municipal and industrial partners, provincial agencies and County departments. SCES also received assistance from residents (i.e. food provision, water hauling and fire break cultivation, etc.).

Approximately 90 forestry fire fighters from Sustainable Resource Development (SRD) were deployed into the area at the height of the event. They remained in the area approximately three to four weeks after the fire was under control to assist SCES crews dealing with stubborn areas of dead brush, trees and peat.

In total, the fire is estimated to have impacted an area of over 8,500 acres of land; 14 times the size of the fire which occurred in 2008. It briefly crossed the North Saskatchewan River into Sturgeon County, and incurred a total cost to Strathcona County of approximately $4.7 Million. Despite the size and complexity of the event, however, the three major goals set by SCES at the outset were met. No residents were injured, no homes were lost and only two minor firefighter injuries occurred.

1. Approach

This After Action Report (AAR) describes the activities of Strathcona County and its mutual aid partners in response to that portion of the fire affecting the North Strathcona area. It incorporates the views of persons at all levels and includes all available data gathered from participating organizations.

Data was compiled through a series of surveys, debriefings, GIS mapping applications and a review of all fire-related department records. It was analyzed using a qualitative approach and the results broken into six principle sections.

Section A: Strathcona County, Alberta provides a synopsis of Strathcona County governance and emergency management policies in place during the incident. It concludes with an overview of Strathcona County Emergency Services (SCES) history, organization and other issues impacting the department at the time. **Section B: Prevention Measures** looks at policies and measures taken to prevent and/or mitigate the effects of wildfire in Strathcona County, both before and after the incident. **Section C: Field Operations** investigates all aspects of the response effort in the field during the course of the wildfire, including that of Emergency Social Services (ESS) provided to evacuees. **Section D: The Emergency Operations Centre (EOC)** examines the performance of the EOC in support of field operations. **Section E: Public Communications** deals with all aspects of communication with the public, specifically public alerting, updates and media notification. **Section F: Remediation and Cost Recovery** deals with remediation efforts undertaken in the area, as well as subsequent cost recovery measures.

Information in the above noted sections is organized in a standard format: *observations* describe what transpired; *findings* present and analyze what was learned from the perspective of the response participants; *recommendations and lessons learned* describe "potential improvements that were naturally derived from the findings" (Titan Systems Corporation, n.d., p.2).

The report concludes with a list of **References** from both academic and field research sources, and a series of **Appendices**, both of which offer supplementary or background information to support the claims and statements made in the preceding sections.

The remainder of this introduction provides a context for the reader through an excerpt from the 2009 North Strathcona Wildfire Investigation Report, and concludes with an executive summary of best practice recommendations for improved performance in future disaster events.

2. Excerpt - 2009 North Strathcona Wildfire Investigative Report

Dale Miller, Fire Marshal
Strathcona County Emergency Services

The following is an excerpt taken from the official fire investigation report of Fire Marshal Dale Miller.[1]

On May 3, 2009 at 14:42 hours, Strathcona County Emergency Services 911 Centre received the first of thirty-four (34) calls reporting brush fires in the Heartland Industrial Region and in the Lamont County area east of Highway (Hwy) 830. This fire initiated at almost the exact same time as another major wild land fire was developing approximately 7 kilometers east of its location in the Lamont County region. At the time that these two fires were reported, it was the recorded hottest time of day (21.2-22.8ºC), with the lowest humidity (15-16%) and the highest winds (24-33 kph). Vegetation ground cover was very dry with little new (spring) growth occurring. The high temperature and low humidity contributed to the creation of what is termed in the industry as a "cross-over", which accelerates fire growth exponentially.

This specific area is frequented by off road vehicle users, equestrian enthusiasts, as well as oil and gas and power line servicemen.

Heartland Hall (Strathcona County Fire Station 4 at Hwy 15 and Hwy 830), Fire Station 5 (Baseline Rd and Cloverbar Rd, Sherwood Park) and Platoon Chief Nixon were simultaneously dispatched at 14:46 hours.

Platoon Chief Nixon reported that while enroute to the fire scene he witnessed two distinctly separate columns of smoke visible on the northern horizon [see Figure 1]. The column to the west was consistent light grey/brown in colour with the occasional charge of dark brown/black and increasing intensity. The smoke to the east (assumed at the time to be east of Hwy 830) was larger in diameter than the west fire but appeared to be less intense with consistently lighter coloured smoke. Based on the size and reading of the smoke conditions, dispatch was directed to respond additional tankers, brush trucks and engine crews from Sherwood Park as well as the outlying stations, page command officers and address the need for mutual aid.

---

[1] The full fire report is available upon written request to the Fire Chief and Manager of Strathcona County Emergency Services.

Figure 1: Smoke columns, May 3, 2009

2.1 Life Assessment

Based on the initial assessment of dispatch information, the potential for fire extension, the fuel load involved and the proximity of residential buildings, it was determined that there was immediate threat to civilian and animal life as a result of the incident.

2.2 Exposure Concerns

Based on consideration of the fuel load, wind, moisture conditions, grade of terrain and fire extension prior to our arrival on scene, it was concluded that there was significant opportunity for extension outward along the eastern and western flanks of the fire. While the leading edge was being directed towards the river, the intensity of the fire and fuel packages in the area presented a significant concern that the river width would fail to completely contain the fire on the north front.

2.3 Investigative Findings:

We hypothesize that due to human activity and/or machinery or vehicle failure, a fire initiated on the tinder dry vegetative ground debris and developed to where the fire spread rapidly, with the assistance of the wind…on the ground surface along the power line service road. The fire flanked into the adjacent tree stands where a greater fuel matrix is available. The fire back burned from the Point of Origin along the west aspect of the pipeline right-of-way (ROW) but did not cross east of the ROW due to a lack of fuels available (sand base trails and road) and low intensity fire (back burning along fine ground fuels). The back burning fire flanked into the west adjacent tree stand, and with an assistance of the predominate meteorological winds, enhanced the advancing northbound fire. These fire forces intensified the heat and travel speed even further which contributed to the development of the wildfire.

Relying upon deductive reasoning this hypothesis led to the following conclusion.

2.4 Investigative Conclusion:

This fire is deemed **Accidental** in nature.

Due to the absence of evidence, we are not able to completely rule out incendiarism, however, having two fires initiating at the same time of day several kilometers apart and confirming that both areas had heavy recreational activity occurring, the balance of probabilities weights on the fire being accident in nature and caused by human activity and/or machinery or vehicle failure.

FIRE ORIGIN:
On ground litter debris located:
Her Majesty – Alberta Energy
SE 22–56–21-W4

Northing 5969117.700, **Easting** 63912300
(NAD 83 3TM Central Meridian 114 Degrees West)
West aspect of pipeline ROW south of TWP 562, west of Range Rd 212
Strathcona County, Alberta

[Please see Appendix 1 for an aerial map of the area of origin. For further details on the size of the fire as it appeared on May 3, please see Appendix 2 for a map of its perimeter.]

FIRE CAUSE:

The **Cause** of the fire is **Undetermined**… At this time we are not able to test a hypothesis without a reliable ignition source. The balance of probabilities weights on the fire being caused by human activity and/or machinery or vehicle failure.

End of excerpt as cited from Miller (2010).

3. Executive Summary

In view of the size and complexity of the event, that no residents were injured, no homes were lost and no serious firefighter injuries occurred is a major accomplishment for Strathcona County Emergency Services (SCES). In fact, SRD forestry workers commented, "all our staff were very impressed by the county's commitment to evacuations and structural protection. Thought it was top notch all the way…The fire departments did an excellent job at providing… protection on this …incident" (as cited in Reid, June, 2009).

This could not have been achieved without assistance and support from SCES Mutual Aid and Industrial partners, some of whom were engaged in dealing with their own emergencies. Sturgeon and Lamont Counties, for example, were fighting simultaneous wildfires in their respective jurisdictions. Fortunately, SRD resources were available to respond and their assistance and expertise greatly enhanced the response effort.

SCES also gratefully acknowledges assistance and support received from residents. This ranged from tasks such as water hauling, food provision, livestock evacuation and tilling of fields for firebreaks, to cooperation with evacuations and area restrictions.

All County Departments made ongoing, invaluable contributions to the effort in both response and recovery phases. In fact, this was a major learning derived from the incident; all departments play a role in disaster response.

Other lessons learned involved best practices in public communication and notification, utilizing community resources and

provision of support for affected residents[2]. Additional learnings highlighted the advantages of public education, ongoing training for SCES and other County staff, and a "proactive approach towards 'all-hazards' emergency preparedness" (Reid, June, 2009).

The incident proved challenging in many respects and generated several recommendations for improvement. Some of these recommendations have already been addressed and/or implemented, including:

- refinement of prevention, preparedness and emergency notification policies and procedures in Strathcona County, including a Strathcona County Emergency Management Agency (SCEMA) pilot project

- creation of a wider public awareness of such policies, procedures and measures

- full adoption and training in Incident Command System (ICS) concepts across all Strathcona County departments for all employees involved in the response to major emergencies

- continued wildland fire training for SCES members

- continued training and practice in emergency social service (ESS), public information and emergency operations centre (EOC) roles for County employees and potential volunteers

- refinement of remediation and cost tracking practices for optimum recovery

---

[2] Emergency Social Services (ESS)

Section A: Strathcona County, Alberta

To provide further context for this After Action Report, Section A presents a synopsis of Strathcona County governance and emergency management policies in place during the incident. It concludes with an overview of Strathcona County Emergency Services (SCES) history, organization and other issues impacting the department at the time.

1.   The Municipality

Ranked among Alberta's five largest municipalities (Alberta Municipal Affairs, 2010), Strathcona County is a unique blend of rural, urban and industrial development located in the capital region on the eastern boundary of the City of Edmonton. Occupying an area of 1,265 square kilometers with a population of 87,998 (as of the 2009 Census), the County consists of the "urban area of Sherwood Park and an extensive rural area… which includes eight rural hamlets, Antler Lake, Ardrossan, Collingwood Cove, Half Moon Lake, Hastings Lake, Josephburg, North Cooking Lake and South Cooking Lake."

To provide for "the unique needs of a municipality that includes both a large urban centre and a significant rural territory and population", the County was classified as a specialized municipality in 1996, one of only five in the province. This means that the "Sherwood Park Urban Service Area is recognized as the equivalent to a city by the Government of Alberta, and the Rural Service Area (meaning the territory of Strathcona County excluding the Sherwood Park Urban Service Area) for the purposes of enactments, is treated as a municipal district" (Strathcona County, 2007).

1.1   Governance and Emergency Management Policies

This specialized municipality is governed by a nine-member Council led by a Mayor (elected at large), and one Councillor for each of the eight political wards, all serving rotating three-year terms. In the calendar year 2009, Cathy Olesen served as Mayor and Jacquie Fenske served as Councillor for Ward 5, the area most impacted by the fire. The remaining Council was composed of Vic Bidzinski (Ward 1), Roxanne Carr (Ward 2), Peter Wlodarczak (Ward 4), Alan Dunn (Ward 6), Glen Lawrence (Ward 7) and Jason Gariepy (Ward 8).

Strathcona County Council (2009)
Top row: Councillors P. Wlodarczak, J. Gariepy and G. Lawrence
Middle row: Councillors J. Fenske, V. Bidzinski and A. Dunn
Bottom row: Councillors L. Osinchuk and R. Carr, and Mayor Cathy Olesen

County Administration is led by a Chief Administrative Officer (CAO), who is known as the Chief Commissioner, appointed by Council according to Section 205 of the Municipal Governance Act (Strathcona County, 2005). In Strathcona, the Chief Commissioner leads an Executive Team which includes four Associate Commissioners, each responsible for one of the County's four administrative divisions: Capital Region Initiatives[3], Corporate Services, Community Services and Infrastructure and Planning Services. Together, they oversee almost 2,000 full time, part time and seasonal Strathcona County employees, to provide a wide range of services to County residents, business and industry (please see Appendix 3 for the 2009 Strathcona County Divisional Organization chart).

In 2009, Robyn Singleton served as Chief Commissioner of Strathcona County. Denise Exton was Associate Commissioner, Community Services, the division which includes the Emergency Services department.   Remaining members of the Executive Team were David Turner (Capital Region Initiatives), George Huybregts (Corporate Services) and Peter Vana (Infrastructure & Planning Services).

Strathcona County Executive Team (2009)
Left to Right: P. Vana, D. Exton, R. Singleton, G. Huybregts and D. Turner

---

[3] This Administrative Division was discontinued in 2010.

In addition to his administrative duties, the Chief Commissioner (or his delegate) also acts as the County's Director of Emergency Management. He is supported in this role by the Fire Chief, who acts as Deputy Director, Emergency Management. The County's Emergency Management Plan is composed of an overarching "Coordinating Plan" (which outlines in general terms each Department's area of responsibility) and individual Department plans. The overall plan is administered and maintained by SCES, however, each department is responsible for the composition and maintenance of their portion of the document. The plan is deemed confidential due to the amount of personal information contained therein, and access to the whole is limited to Executive Team, County Managers and Coordinators.

The following overview of the history and organization of Strathcona County Emergency Services (SCES), which includes other issues impacting the department at the time, provides an additional framework for the observations and findings contained in the remainder of this After Action Report.

2. Strathcona County Emergency Services (SCES)

Strathcona County volunteer fire fighters circa 1959.

SCES was first established as a volunteer fire brigade in November 1956, operating out of a member's private garage with a donated half-ton truck and some fire fighting equipment. At the time, incidents were reported by a telephone operator who would individually phone each volunteer with muster instructions. If the call came during the day when the men were at work, their wives would respond in their place (Harrington, 1983).

Much has changed since then. Today, SCES is a combination of full time (career) and part time (on call) fire fighters working in a fully integrated municipal fire / rescue / emergency medical services (EMS) department. SCES career members are Fire Fighter/Paramedics or Fire Fighter/Emergency Medical Technicians (EMTs), fully trained in both disciplines. Fire, rescue and EMS all operate out of three full time fire stations, providing a complete range of emergency services to Strathcona County. In addition to the full time stations,

SCES also operates two rural part time stations, manned by on-call first responders. In November 2006, the department celebrated fifty years of exemplary community service and in May 2009, had a complement of over 200 full and part time staff responding out of five stations located throughout the County. Its professed mission:

> With integrity and courage, through focus and commitment, Strathcona County Emergency Services (SCES) will:
>
> - Protect the health and safety of our fire fighters, emergency responders and the public
>
> - Lessen pain and suffering and preserve quality of life
>
> - Protect the environment
>
> - Protect property
>
> - Deliver superior emergency situation management
>
> - Promote safety awareness through public education
>
> - Maintain public confidence
>
> (Strathcona County Emergency Services, 2010)

The department's professed vision is to be the innovative leader in the provision of Fire, Rescue and Emergency Medical Services. This reflects the department's learning ideology; while it operates as a paramilitary organization with strict command hierarchy, it also incorporates a seamless team environment (i.e. all members are fully cross trained within each Division to sustain an efficient flow of operations). Knowledge sharing is strongly encouraged, as is the continuing educational and professional development of each and every employee. Historical analysis proves this has always been a vital key to the department's growth, as evidenced in the following excerpt from a local compilation, *Sherwood Park, the First Twenty-five Years*:

> The credibility of the department has always been high. The early emphasis on training and fire prevention, as well as on fighting fires, may well have contributed significantly to the high level of citizen and local government support enjoyed by the department (Harrington, 1983, p. 67).

In 1995, SCES followed its goal of innovative leadership by piloting a provincial 911 project through Telus and subsequently becoming the first official provincial Public Safety Answering Point (PSAP). It was also the first Emergency Communications Centre in Canada to be registered with the International

Standards Organization (ISO)[4]. SCES has subsequently added EMS, Rescue and fire to its ISO 9001 certification. In 2009, in addition to Strathcona County, SCES was providing 911 call answer and/or dispatch services to over 100 neighboring municipalities (equating to a population of approximately 500,000 Alberta residents) and fielded in excess of 60,000 E911 calls that year.

As a response to increased expectations and calls for service from several stakeholders, including the Royal Canadian Mounted Police (RCMP), large industrial organizations such as oil refineries and upgraders and municipal mutual aid partners, SCES has in recent years also developed several specialty teams. These include a Technical Rescue Team (TRT), Water/Ice Rescue Team and Airport Rescue and Fire Fighting (ARFF) services.

For further details on SCES organization as it appeared in 2009, please see Appendix 4.

2.1   The SCES Management Team

Darrell Reid, Manager/Fire Chief
Strathcona County Emergency Services
Deputy Director, Emergency Management

Due to recent retirements, the entire management team (Chief and Deputy Chiefs) of SCES has been replaced over the previous four years. At the time of the first retirement in 2005, the management team had an average of approximately eighteen years of Chief Officer or Senior Manager experience, with an average age of approximately 54. In 2009, the Management Team had an average of less than three years of Chief Officer or Senior Manager experience and an average age of 39. While the incumbent Fire Chief had a total tenure of seventeen years with SCES, none of the Deputy Chiefs had longer than eight years of service with the department, with one of the Deputies having a military background, one having a mixed municipal and industrial fire background, and one having a mixed industrial emergency, disaster management and law enforcement background.

---

[4] "ISO certification is the basis of performance measurement throughout Europe and most other industrialized countries" and "applies to both the design and provision" of services so registered (SCES, 2009a).

Although the previous administration had a greater depth of emergency services training and experience, comparison of the past and present management team yielded some differences in education levels. Five years ago, no Chief Officers at SCES had a university degree of any kind; in 2009, the Fire Chief and one Deputy Fire Chief have graduate degrees in business administration, a second Deputy Chief has an applied degree in business and the third Deputy Chief is certified as a Canadian Emergency Manager (CEM) and business continuity professional. The Fire Chief and two Deputy Chiefs are also registered paramedics, equaling three years of post-secondary education in Alberta. Many organizational and human resource outcomes were potentially affected by the changes to the leadership of SCES, including morale, staff perception of leadership within the organization, staff perception of working conditions and environment, attraction and retention of staff, job security, succession planning, service delivery quality, and reputation of SCES (Reid, 2009, p.10-12).

2.2   Other Considerations

On April 1, 2009, in conjunction with the Alberta Government's transition of EMS funding and governance, SCES entered into contract with Alberta Health Services (AHS) to continue to provide EMS service to Strathcona County and the region. In addition to provision of ambulance services, SCES expanded its Emergency Communications Centre in 2009 and entered into an agreement with AHS to assist with the transition of EMS dispatch into late 2010.

Under the terms of the AHS agreement, SCES is required to ensure four ambulances are always available for borderless regional coverage. Balancing incident resource requirements with contractual obligations during the height of the wildfire proved challenging to all involved. In addition, SCES was also obligated to respond to other incidents occurring within the municipality simultaneous to the 2009 North Strathcona Fire. There was one occurrence in particular where SCES was required to mitigate a second wildland fire in the southern area of the County during this same time frame.

Section B: Prevention Measures

This section looks at prevention measures and policies encouraged or enforced in Strathcona in an effort to prevent and/or mitigate the effects of wildfire on County lands and populations.

1. FireSmart

Wildfires are a constituent of nature in forest, grassland, or even wetlands. The issue some communities currently face is that human activity has increased near and in natural areas over the last century, producing the Wildland/Urban Interface (WUI). The fuel load found in these areas can burn at incredible rates and temperatures, causing inconceivable damage. In some areas where a fire has not burned for many years, this fuel load can be ignited by the smallest of sources. This increases the risk of fires starting due to human activity and the risk of structures being lost to fire damage. According to Partners in Protection (2010)[5]:

> In the interface, successful fire protection cannot rely solely on maintaining good fire control capability. To be successful, interface stakeholders must implement a combination of appropriate activities to raise awareness, reduce hazards, and plan for fire occurrences (p.5).

To address this need, Partners in Protection has developed the FireSmart Program, which provides valuable information to homeowners on ways to reduce the impact of wildfire. By taking several preventative steps, residents can help minimize potential damage to their property.

1.1   Observations

Although Strathcona County Emergency Services (SCES) did promote the FireSmart program before the 2009 North Strathcona Fire, such promotions were limited. FireSmart brochures were offered to each Strathcona County resident who applied for a fire permit, pamphlets were handed out at public events and information on the program was made available through the County website.

---

[5] Partners in Protection is an Alberta-based coalition of multi-disciplinary professionals committed to raising awareness [and] providing information… and practical tools for building FireSmart communities (http://www.partnersinprotection.ab.ca).

1.2   Findings

The potential value of the FireSmart program became sharply evident during the 2009 fire, when fire fighters faced the challenge of protecting "non-FireSmart" homes. In 2010, in addition to handing out the FireSmart brochures and providing information on the web, SCES held three community information sessions. These sessions took place in April, 2010 in the communities of Ardrossan, Josephburg and South Cooking Lake.

1.3   Recommendations and Lessons Learned:

- FireSmart homes are more easily protected, thus reducing both property and fire fighting costs.

- Petroleum sites were at risk, but proper clearing using techniques similar to FireSmart (i.e. set back requirements and industry practices for environmental protection, emergency evacuation and flaring) minimized damage to these facilities. All natural and utility resource corporations are commended on their quick actions in isolating gas and oil sources within the burn areas, which greatly minimized the hazard

- Stronger promotion of programs such as FireSmart in the various Strathcona County communities has the potential to exponentially reduce the impact of wildfire.

2. Fire Bans and Outdoor Burning Controls

Signs purchased by SCES to assist in timely communication efforts with residents and visitors.

Outdoor burning in Strathcona County is governed by the Emergency Services Bylaw 68-2000, which "establishes and provides for the efficient operation of a fire and ambulance service in Strathcona County". It also regulates the "issuance of fire permits, reporting of property damaged by fire, control of fire hazards, open fires, incinerator fires, pit fires,

smudge fires and types of materials burned" (Strathcona County, 2010). Fire permits, which are required for any open or incinerator fires, can be obtained for use on rural properties only, and are valid from date of approval to the end of each calendar year. Prior to lighting any fire for which a permit is needed, the permit-holder is required to call Emergency Service's 24-hour automated burning information line as well as the wind speed line (as noted and provided on the permit) to confirm that conditions allow for safe burning.

2.1   Observations

Prior to 2009, there was no formal standard established to determine conditions under which fire hazards are assessed, evaluated and controlled in Strathcona County. Burning conditions were assessed and evaluated through an estimated "best guess" of three different factors: wind speed, dryness and availability of fire fighting resources. Control consisted of a recording on the automated line that advised that burning either was or was not allowed at that particular point in time. Enforcement of controls was heavily dependent on a "neighborhood watch" system; residents were urged to report any "improper" burning to 911. Furthermore, although Bylaw 68-2000 authorized the issuance of fines for contravention of permit regulations, SCES personnel preferred to view any response to reports of improper burning as educational opportunities. In fact, prior to 2008, the few fines that were issued were nominal and given out only at the Fire Marshal's discretion. The past two years, however, have seen a gradual increase in both the number of fines issued and the amount assessed (which can be as much as $1,000), sending a clear message to residents of a decreased tolerance for permit infractions.

The authority to issue a full Fire Ban or suspend burning privileges is derived through the *Forest and Prairie Protection Act* (RSA 2000, Chapter F-19, Articles 4(3), 6(d), 7(1), 21 and 27). Beyond specifying how often and by what means fire bans must be communicated to the public, however, the Act provides little to no guidance on when, if, or how such authority should be invoked. Due to the labour intensive and costly protocols involved in instituting and/or revoking a full fire ban[6], SCES officials have been reluctant in the past to go to such lengths, relying instead on the burning information line to inform residents of high fire risk periods. In fact, prior to the summer of 2008, the last full fire ban for Strathcona County had been issued in the summer of 2002 despite the increasing fire risk caused by the intervening six years of near-drought conditions.

---

[6] i.e. obtaining, setting up and taking down of numerous portable highway signs; preparing and issuing approved media releases and public announcements; changing pre-recorded messages; etc.

Since the initial north Strathcona fire occurred in May of 2008, SCES has been far less reluctant to institute burning restrictions. In sharp contrast to past practice, a total of four full fire bans were issued for Strathcona County in the one year period between May 2009 and 2010.

2.2   Findings:

Although research into standardized protocols for the issuance of fire bans had been conducted prior to 2008, factors such as managerial and staff turnover, coupled with drastic department growth and other considerations (i.e. the provincial ambulance transfer) caused this research to be overlooked and relegated the implementation of such standards to a lesser priority.

In 2009, however, new research into standardized protocols was undertaken. This research, combined with a review of issues encountered in issuing and revoking the fire ban the previous year, resulted in the creation of an empirical fire ban matrix and standard protocols which were in place by April 2010 (Please see Appendix 5 for the complete SCES fire ban matrix).

While there is no evidence to suggest that issuance of a full fire ban may have prevented the 2009 North Strathcona Fire, it could be argued that SCES would have been quicker to institute such controls if streamlined procedures and clear protocols had previously been established. Issuance of a fire ban would, at the very least, have resulted in increased awareness among residents of the extreme fire risk, and possibly have reduced recreational use of the affected area at the time.

These claims can be supported by the speed with which SCES instituted a second fire ban from September 24 to October 7, 2009, and the ease with which Strathcona visitors and residents understood, accepted and complied. It is also not unreasonable to suggest that the increased number of "illegal fires" reported to 911, as well as an increase in enquiries received by both 211[7] and SCES Administration on the subject of fire bans, fines and fire permits during this period, reflected an increased awareness of burning control regulations among Strathcona County residents and visitors.

It is interesting to note that SCES was very quick to issue full fire bans in 2010 (first in April and again in May), after these refined standards and protocols

---

[7] 211 is [a 24 hour] easy to remember telephone number that connects people to a full range of non-emergency social, health, and government services in the community (http://211edmonton.com/about211/211faq.php).

were put into place. Of even more interest is the fact that, after experiencing wildland fires of increasing magnitude for two years in a row, and despite increased levels of fire risk, the north Strathcona area remained "fire-free" in 2010.

2.3   Recommendations and Lessons Learned

- A number of factors can play a role in determining when a fire ban is declared, including:
  - ‣ levels of both recent and total precipitation;
  - ‣ the risk of a fire getting out of control;
  - ‣ relation between temperature and humidity;
  - ‣ water restrictions or water bans; and/or
  - ‣ appropriate staffing and equipment availability

- A Strathcona County Fire Ban Matrix has been developed to incorporate all above considerations and provide a consistent, evidence-based method of determining when a full fire ban should be put into place.

- A Standard Operating Policy (SOP) has been developed and adopted by SCES which clearly outlines procedures and protocols to implement burning control measures in Strathcona County. These protocols have greatly reduced the ambiguity and costs associated with invoking and revoking a full fire ban.

- Erring on the side of caution and invoking a full fire ban sooner rather than later raises awareness of fire risk and burning regulations among residents, businesses and visitors of Strathcona County. This in turn promotes community participation in reduced fire hazards.

Section C: Field Operations

Section C investigates all aspects of the response effort in the field during the course of the wildfire, including the aspect of Emergency Social Services (ESS) provided to evacuees. Data for this section was gathered through a review of all SCES records relating to the incident, including dispatch transcripts, officer narratives, reports from debriefings conducted with Mutual Aid, outside agencies and other departments, as well as anecdotal accounts from various County personnel.

1. Fire Suppression Efforts

On the afternoon of May 3, 2009 at 2:45 p.m. SCES crews were dispatched to Township Road (TWP) 562 and west of Range Road (RR) 212 for an outside fire. Captain Nicholson, the initial officer on scene, reported two distinct fires located on the east and west sides of Highway (Hwy) 830 discharging large columns of grey/black smoke.

1.1 Observations:

Captain Nicholson and initial crews immediately began protecting structures threatened on the east side of Hwy 830, north of TWP 564, and established a staging area at the entry to Shiloh Ranch[8]. Platoon Chief (PC) Nixon was the next commanding officer on scene and directly began attacking the wildland fire located on the West side of Hwy 830 in the area of RR 212 and TWP 564. At this point there were approximately 35 fire fighters from SCES operating on the two fires.

On both sides of the highway, the fires were supplied with extremely dry conditions and relatively high winds. Mutual Aid Resources were immediately requested, with Fire Departments from Andrew, Edmonton, Dow Chemicals, Shell Scotford, Fort Saskatchewan, and Beaver County responding units to assist. Bruderheim and Lamont County were not available as they were managing a portion of the East fire in their areas.

---

[8] Shiloh Ranch is a private youth ranch for disadvantaged children, run on a not-for-profit basis.

Deputy Chiefs (DC) Jones and Elliott arrived on scene at approximately 4:00 p.m. as the requirement to escalate the response was apparent. DC Jones assumed command of the East incident, PC Nixon assumed command of the West incident and DC Elliott assumed area command, supporting both incidents. Concurrently, Fire Chief Darrell Reid was establishing the Department Operations Centre (DOC) at Fire Station #1 and activating the Emergency Operations Centre (EOC) in County Hall. The Strathcona County Incident Command Post (ICP) was also dispatched to the area at this time to provide further command capability.

RCMP and fire resources commenced with a voluntary evacuation of threatened residents, livestock and visitors to the Bruderheim Natural area, a popular motorized recreation vehicle spot. Although effective evacuation was achieved for acreage residents in the first few hours, there were challenges in removing recreation vehicle operators from the scene. There were also certain challenges in assisting agricultural residents with evacuation of livestock. Further details on the Emergency Social Services (ESS) aspect of the response are contained in segment 2 of this section.

Concurrently, the utilities and energy companies who operate pipelines, power lines, and petroleum sites/plants in the area were contacted to provide expertise in isolating risks from these hazards. The Salvation Army was also dispatched to ensure evacuated residents were cared for, and to provide meals for emergency responders.

Fire suppression efforts utilized by fire fighters and officers were basic wildland/urban interface controls, using water to wet down fire areas, manual labor to excavate ground fires, and structure protection measures. These efforts proved rather effective, but very labor intensive for the duration of the day and early evening operations on May 3. At 22:20 hrs, the work completed on both fires over the previous seven hours was beginning to prove successful. Crews were able to regroup and overhaul was initiated on both fires. The EOC was discontinued and by 01:00 hrs on May 4, most mutual aid resources had been released. Area command was assigned to Platoon Chief (PC) Sutton, west command consisted of two brush trucks and one tanker unit doing roving patrols

for overhaul, and the east command consisted of one squad, one tanker, and one brush truck also doing roving patrols for overhaul.

Unfortunately, the early morning of May 4 produced winds gusting to 50 km/h from the west, which started large flare ups as the fire was pushed into high fuel loads. At 03:00 hrs the west fire was deemed out of control in several areas due to the fact that crews were finding it difficult to travel in the wildland areas in darkness.

At dawn the high winds and temperature hindered firefighting efforts and both fires flared up again. The main issue with fire growth was structure protection as more buildings were being threatened. The majority of the effort on May 4 was spent in trying to protect homes, secure heavy equipment such as bulldozers with operators for building effective fire breaks and organizing command with multiple public and private agencies. Provincial Sustainable Resources Development (SRD), Forestry Division, was able to immediately provide three air tanker groups that could drop

a total of over 40,000 liters of fire retardant. Even though this air support found operations difficult due to the size of the fire, there was some reprieve observed. In addition to the air support, Alberta SRD approved a request from both Lamont and Strathcona County to provide ground support and approximately 90 SRD and SRD contract employees were deployed to Heartland Hall (Fire Station #4).

May 5 maintained similar weather patterns with ever changing gusting winds and increased temperature with decreased humidity. After 48 hours of extraordinary fire growth and even greater fire suppression efforts, 130 fire fighters, two air tanker groups, three bulldozer groups with three bulldozers per group, and a number of mutual aid resources were still working on restricting fire movement and protecting structures.

Although Mutual Aid Partners were released by the end of the first week, SCES fire fighters, Contractors and SRD crews continued to battle the wildfire over the next two months with varying success. By the end of May, total fire

costs were estimated to be in excess of $834,000. Factors unrelated to the actual response also hindered their efforts. Interference from ATV operators in the area increased to a level that forced SRD crews to relocate their base of operations. At this point, SCES closed the area to all non-essential traffic and recreational use. This restriction remained in effect until the incident was deemed officially over.

During the last week of May, SRD crews began a formal demobilization, but maintained a presence at the scene, operating from their temporary base located near Station #4, Heartland Hall. Throughout the month of June, both SRD and SCES crews continued to search out and deal with troublesome hotspots. These patrols continued until the 2009 North Strathcona Wildfire was officially declared extinguished on Friday, July 3, nearly ten weeks after the initial call to 911.

For a detailed timeline of this incident, please see Appendix 6.

1.2   Findings:

a) Command and Coordination

Command coordination was in place for the first 72 hours, but challenges with control were lacking in several areas. The scope of the incident required a larger command structure than typically utilized by SCES. Area Command was established at the onset with two separate commands reporting for day one; however, there was some confusion on this organization of command in the subordinate levels reporting to the separate East and West commands.

This was rectified at the start of day two, with Area Command and two subordinate geographic commands being abolished and replaced by a single Command, Operations Section and Divisions/Groups being established as necessary. On day three, command became unified with SRD with Deputy Section Chiefs established as required.

As stated, control over outside agencies was lacking. Having mutual aid resources available was a definite benefit, but the size and intensity of the wildfire coupled with challenges in communication produced a risk for these resources.

Self-deployed resources were also a definite issue. Research has shown that this type of "emergent activity" is common in disaster situations. Invariably, there is a convergence of resources into the affected community, a "'mass assault' of independent and decentralized activity" (Perry, 1991, p.202; Wenger, 1992, p.3; Scawthorn and Wenger, 1990, p2-3; Auf der Heide, 1989, p.75; Wenger et.al., 1987, p.20 as cited in Drabek & McEntire, 2003, p.100). Often, "groups … emerge to begin automatically responding to the needs of one another" without official sanction (Fischer, 2002, p.124). During times of community crisis, self-deployed or "emergent groups" represent "a potential source of knowledge, funds, equipment, and human resources" that may be critical to response or recovery efforts (Wachtendorf, 2001, p.11). On the other hand, as they commonly operate independent of traditional authority, such groups also have the potential of further disrupting response efforts that may already be strained (Fowler, 2008, p.1).

One particular instance during the 2009 North Strathcona Fire supports this claim. A private corporation took the initiative to provide assistance that was not officially sanctioned. Although this company provides an excellent service, it does so at an elevated cost. In addition to escalated costs, because this company did not coordinate its efforts through area command, they not only created a potential duplication of effort, they also lacked access to information that could have been critical to the safety of their own resources. In other words, by not placing themselves under the established unified command, they became another "uncontrollable element in the response milieu whose appearance … [created] complications for security and site safety" (Kendra & Wachtendorf, 2002, p.138).

b) Communications

Communications, always an issue in emergent situations, presented several challenges during this incident. These challenges, however, helped to not

only identify some important deficiencies within SCES' current radio system, but also identify possible solutions through a unique opportunity to test new technology introduced through the collaboration of two of its vendors.

In the past, radio communication to the northern area of Strathcona County has consistently proven ineffective, due mainly to the height and coverage of the radio tower in the Heartland area. A new radio system had been purchased and put into operations approximately one year prior, which greatly reduced this deficiency; however, it was still being dealt with at the time the 2009 North fire occurred.

During this time frame, SCES, in partnership with Westcan Communication Services and Motorola, was conducting the first-in-the-world test of 4.9 Ghz technology. The 2009 North Strathcona Fire provided the unexpected opportunity to field-test newly-developed bridging radio technology used as part of the trial. The bridge provides the user with the ability to "link" two different radio systems, giving the separate users the ability to speak with one another using their own radio equipment. There were challenges using a new system "on the fly", but it did display some promise for future operations. In addition to the bridging technology, Westcan provided emergency radio assistance, portable towers and radio-coverage monitoring and service.

Another communication challenge involved mutual aid and external auto-deployed resources. With a finite number of SCES radios and personnel, it was difficult to assign either to external parties. At times, mutual aid resources were held back because SCES Command had no method of communicating with them. Although cell phones filled this gap to a certain extent, this solution was far from ideal. A more effective solution was demonstrated in the deployment of an Edmonton Fire Battalion Chief to the SCES Incident Command Post (ICP). During the first 24 hours, this officer became the main point of communication between the Edmonton contingent and the area commander, promoting a swift and seamless transfer of crucial information between the two parties.

c) Staffing and Integration of Mutual Aid Resources

Re-evaluation of fuel packets did occur at regular intervals with crews and resources requested and assigned as needed to protect the various well-heads and properties in the area. A more efficient use of mutual aid resources, however, could have been instituted. Requests for mutual aid assistance were "bunched" too closely together and as a result, resources were not evenly available or dispersed across operational periods. In fact, at times, it was

discovered that mutual aid resources had been deemed surplus and released, as opposed to being staged and ready, just as the situation changed and the need for these resources became apparent.

Accountability for tracking team members was also problematic; it was not always maintained and teams did not always preserve group cohesion. This accountability issue was further confounded among external teams by unfamiliarity, not only with department-specific terminology but also with local geography. These challenges were alleviated to some degree by the use of the Incident Command System (ICS) and the inclusion of the Edmonton Fire Battalion Chief in incident command as mentioned previously in this section.

In fact, this suggests a solution that could have been easily expanded to integrate all mutual aid and county resources: divide field staff into "joint" teams; for example, group two SCES personnel with two mutual aid personnel. This not only addresses communication issues by providing each team with compatible radio technologies and common terminology, it also addresses geographical concerns. Furthermore, it ensures a "vested" interest within each team. Perhaps most importantly of all, however, such blended crews represent an increased ability to meet obligations with regard to crew safety.

d) Safety and Accountability

To address issues noted above, a system of tracking resources and their location was developed and implemented within the first 72 hours. Based on ICS principles, this system provided a consistent daily overview of who was on duty, what roles or functions were assigned and/or performed and any safety issues encountered.

SCES also employed its traditional system of tracking employees using accountability tags attached to a "board". These tags are assigned to each member at the commencement of their career with SCES, a system used in many departments throughout North America. Although this

system has proven efficient in smaller events, its use on a significant incident with multiple fronts proved far more challenging. As well, the accountability of external resources was identified as being less than adequate at times.

Safety and accountability was a particular issue in the first two days of the event. Crews were worked extremely hard for extended hours with little to no rehabilitation scheduled. Crews that initially responded to the incident had been on duty since 06:00 hrs that morning, but were held by necessity on the fireground until approximately 23:00 hrs that night. Not only did this increase the risk of error or injury, it also revealed a serious flaw in the planning process; a reactive rather than proactive mentality which gave little thought towards what resources SCES had in reserve for the future or left in place for day to day operations. SCES' human resource profile at the onset of the incident was lean. Fire officers and fire fighters faced an ever changing event with an ever changing roster of part time fire fighters, mutual aid and external, auto-deployed resources. In fact, at one point, staffing pressures caused recruits still in their orientation period to be called into active duty. Although Occupational Health and Safety (OHS) Codes require such members to be under the direct supervision of a competent worker, this was not always the case.

SCES, however, prides itself on the direction of safety in the station and on the fireground. Within the first 24 hours of this event, the issue of time and resource management was brought forward and addressed. Over the next two days, one person was assigned the duty of better organizing personnel. Consistent, scheduled shifts of eight to ten hours were established for fire fighters on an overtime basis to ensure regular shifts were not impacted. At the onset, the shifts consisted of eight to twelve fire fighters with officers; as the event decelerated, shifts of two to six fire fighters were established. This proved useful as the mode turned to the overhaul stage. Fire fighters were able to respond to smaller incidents in the region while SRD provided support for ongoing wildland firefighting in the north.

Personnel Accountability Report (PAR) checks were also completed at every shift, however, this was done on a sporadic basis at best; units and groups were largely left to their own devices. Although a rudimentary sign-in procedure was used at the Incident Command Post (ICP) in an attempt to track mutual aid and private resources, a more formalized process would definitely have enabled more efficient coordination and accountability of resources. Daily Safe Work Plans, establishing pertinent hazards, controls and procedures to mitigate

hazards and risk also provide better risk management for larger events of longer duration. This is a common SRD practice that has since been adopted by SCES.

Fortunately, only two relatively minor injuries were reported during the entire event, and both involved external personnel. This is an important statistic, considering that the size and scope of this event was beyond anything the department had encountered in the past.

e) Incident Command System (ICS) Utilization

Although, as mentioned previously, ICS principles were employed to track accountability and safety, the ICS hierarchical structure, itself, was not developed at a pace appropriate to incident progression. Several vital roles were not filled until serious issues were encountered. A delay in appointing Staging and Logistics Officers, for example, caused a delay in the establishment of a staging area distinct and separate from the camp area set aside for food, rest and maintenance breaks. This created several points of confusion. Arriving resources had no clear reporting point and had difficulty checking in. Staged resources mingled with those out of service and were then not readily available for deployment. Having Staging and Logistics Officers in place immediately ensures an early ability to track and move the right resources to the right place at the right time. Moreover, through the early establishment of separate, distinct and supervised staging and camp areas, these resources are usually physically located where they are expected to be.

Location of command post, day 1.

Another ICS role that would have dramatically increased operational efficiency is the Officer "Scribe". Scribes can greatly facilitate information transfer and buffer their officers from unnecessary interruption. More importantly, they enable a thoroughly detailed and accurate incident progression record for later analysis and cost recovery applications.

f) Logistics

Apart from issues noted in previous sections, the major logistical challenges faced in this incident dealt either with food and water provision for responders and evacuees, or identification and management of vendors and contractors for required resources.

In order to meet the obligation of ensuring adequate provision for evacuees and responders, SCES called in the Salvation Army to provide food support from the initial onset throughout the first month of the incident, with some assistance from Shell Scotford's catering service. As the event proceeded, a number of helpful residents also sought to assist in this regard, but with questionable results. As in any situation where food is provided on a "commercial" or "public" basis, it is crucial to ensure that the providers meet Alberta Health Requirements. This is generally done through a rigorous inspection of the preparation process, which is not always possible when food is prepared off-site or in non-professional kitchens. For this reason, food offerings were not always received in the spirit in which they were given. In fact, in one particular instance, a complaint was made that SCES fire fighters had refused or thrown food away, untouched, in front of the donors who had brought it. The complaint was investigated, but due to a lack of recorded evidence, it was impossible to determine the exact details. Fortunately, this appears to have been an isolated episode, but nevertheless, SCES personnel were instructed to be more circumspect in future.

In addition to issues revolving around food preparation, there were also challenges with how it was distributed and to whom. To address hygiene issues in the field, handwash stations at eating or catering areas could have ensured decreased cross contamination. With regard to distribution issues, a system of meal tickets (with accompanying instructions on where and how to use them) could have provided better controls on actual food consumption.

A second major logistical challenge dealt with the identification and management of vendors and contractors for other required resources, such as bull dozers and sanitation equipment (porta potties). It was sometimes difficult to differentiate between officially contracted and "emergent" (self-deployed) resources. Required information, such as Occupational Health and Safety (OHS) and Worker Compensation Board (WCB) compliance, or details on billing and service agreements, was not always provided. As well, verification and/or tracking of actual services rendered proved lacking at times.

Several solutions for these issues were suggested during the debriefing sessions. One of the most practical was the creation of a "Pre-approved Vendor List", a list of contractors and vendors who have agreed to provide necessary

resources at a pre-negotiated price during emergency events. This would ensure provision of resources that are properly trained and compatible within the guidelines of SCES operations as well as a full understanding of vendor processes and expectations before the contracted work is undertaken.

In addition to the Approved Vendor list, a proper check-in/out system, such as a time clock, could ensure proper tracking controls are in place. An official system of identification, such as magnetic door logos for official contractor vehicles, is also needed to clearly differentiate them from self-deployed resources. These solutions not only address the need for timely provision of appropriate resources and responsible financial oversight, but also increase site safety and security.

g) Situational Awareness

Initial size-up and strategies involved in dealing with two concurrent wildfires was difficult with limited human resources. As well, the sheer size of the area, coupled with topographical features such as heavy brush and limited sight-lines, impeded the rapid collection of accurate and comprehensive intelligence at ground level. These difficulties were quickly resolved once aerial reconnaissance had been obtained and Strathcona County's Geographic Information Systems (GIS) Department began plotting the data onto meaningful and detailed maps.

h) Planning and Training

Deficiencies and challenges were also noted in the areas of planning and training. One major deficiency lay in the fact that although the SCES portion of the County's Emergency Response Plan was up to date in electronic draft format, this information had not yet been made official or shared with key personnel in hard copy format as per normal process. As a result, the plan was found lacking when put into play and valuable time was wasted in re-gathering crucial information.

This deficiency is a common issue in emergency management. Although research suggests more emphasis should be placed on the planning process than the plan, itself (Wachtendorf and Kendra, 2006), this does not always happen. It can be difficult for staff facing other work demands, to justify spending the necessary time preparing and planning for something that may never happen (Fowler, 2008). To address this issue, SCES piloted a Strathcona County Emergency Management Agency (SCEMA) in January 2010, whose mandate

and focus is to redesign and improve the County's existing emergency management and business continuity plans and processes.

Also related to a planning deficiency was the fact that SCES did not have personnel with Dozer Boss Training for constructing proper dozer (fire) guards. This is a tactic strongly recommended and used by SRD. Having properly trained staff right at the outset can drastically and immediately restrict fire extension. Not having this capability for the first two days severely limited SCES' ability to complete an early, efficient strategic fire containment. Since this incident, Strathcona County has trained and certified six Strathcona County employees in proper dozer guard construction tactics.

1.3   Recommendations and Lessons Learned

- Utilizing water and basic manual labor for protection of structures was appropriate, but proved ineffective for restricting fire growth in large wildland/forest fires. Early acquisition of heavy equipment with trained operators for constructing proper fire breaks would provide increased efficiency in fire suppression efforts.

- Smooth communication with and integration of mutual aid resources proved challenging. The standard and consistent use of "blended" crews could not only address communication and safety issues, but also ensure the existence of a "vested" interest in all fire fighting teams.

- Control and coordination of self deployed resources (emergent activity or groups) can also become a challenge in large incidents. A consistent system and process, such as a pre-approved vendor list, can facilitate identification and/or coordination of unauthorized activity into the authorized response.

- A pre-approved vendor list and contracting system for heavy equipment also ensures provision of resources that are properly trained and compatible within the guidelines of SCES operations and prior full understanding of vendor processes and expectations.

- OHS obligations require that recruits who have not completed their orientation period be under the direct supervision of a competent worker at all times. Such supervision, however, may not always be feasible. Where resource needs require the deployment of such inexperienced recruits, their roles should be limited to those which do not put them at risk (i.e. aide/scribe duties, logistical support, rehabilitation or medical monitoring). *continued next page*

1.3   Recommendations and Lessons Learned *(cont'd)*

- Fire crews working extended hours with little to no scheduled rehabilitation increases the risk of error or injury. Food provision and rest break coordination must be considered a critical aspect of incident planning.

- The Incident Command System (ICS) is "a proven management system based on successful business practices and is the result of decades of lessons learned in the organization and management of emergency incidents" (City of Edmonton Office of Emergency Preparedness, 2009, p.9). Building the "bench strength" of Strathcona County within ICS would ensure ICS is used to full extent and that its hierarchical structure is developed at a pace appropriate to incident progression.

- Initial size up and strategies involved in dealing with two concurrent fires was difficult with limited human resources. The acquisition of air support during initial onset can provide rapid, accurate and comprehensive intelligence gathering. This facilitates the early development of effective incident action plans and swifter implementation of appropriate strategy and tactics.

- Basic mapping of wildland areas should be employed from the onset of the event. Strathcona County has an extremely robust GIS department that is very competent in providing excellent maps with great detail and information.

- The lack of officers assigned to Planning and Logistics roles at the scene from initial onset caused delay in mitigation actions. Having these roles assigned early relieves the pressure on the Incident Commander, allowing him to focus on long term strategy rather than immediate tactics and provides for better situational awareness.

- Although more emphasis should be placed on the planning process, it can be difficult for staff facing other work demands to justify spending the necessary time. To address this issue, SCES has created the Strathcona County Emergency Management Agency (SCEMA) pilot project, whose focus is to redesign and improve the County's existing emergency management process.

2. Emergency Social Services (ESS)

Information for the following segment was provided by Family and Community Services (FCS) Department through a review of their records, debriefs and anecdotal accounts.

2.1 Observations

To provide for residents and visitors responding to the voluntary evacuation of the area called for on the afternoon of May 3, a Reception Centre was opened at the Moyer Recreation Centre in Josephberg around 19:00 hours that same evening. The role of Reception Centre Manager was initially filled by Emergency Services personnel, although an FCS Coordinator and Supervisor were immediately dispatched to the facility. Upon arrival, the two FCS staff assisted the SCES Captain, Fire Prevention & Investigation and the SCES Public Safety Education & Marketing Specialist in preparing the Reception Centre to receive evacuees.

Volunteer resources from the Salvation Army were already at work preparing food in anticipation of potential demand[9]. These volunteers operated independently in a self-contained unit, but remained under the direction of the Reception Centre Manager. RCMP Victim Services volunteers also arrived at the Moyer Centre later that evening to assist with supportive counseling for evacuees.

On May 4, following a clarification of roles, FCS staff assumed the role of Reception Centre Manager, leaving SCES personnel to deal with any media who might arrive at the Centre. Victim Services volunteers were directed to act as liaison between any evacuees wanting to return to their homes and the RCMP who could escort them there. When the Centre was open to the public, a Recreation Parks and Culture (RPC) staff member was always present to assist with access issues and answer questions pertaining to facility details. FCS staff members worked in two to four member teams, depending on the time of day; a total of six different FCS staff participated throughout the course of the event.

From May 4th to May 9th (when the EOC was also stood down), the Reception Centre was opened on a daily basis between 09:00 hours and 19:00 / 20:00 hours, when direction to close was received from the EOC. Contact was maintained between the Reception Centre and the ESS Manager in the EOC via cell phone.

---

[9]The food was later redeployed to the incident staging area when evacuees failed to materialize.

During this time period, only two evacuees registered at the Centre, and neither chose to remain. Other visitors included the Elected Official for the area, the Community Liaison Officer and a health inspector who arrived on the second day to examine the kitchen facilities and discuss food distribution with Reception Centre staff. Media also came to the site on three separate occasions asking to speak with evacuees.

2.2   Findings

The authority to call for an evacuation (on either a voluntary or mandatory basis) during a declared State of Local Emergency is derived through the *Emergency Management Act* (RSA 2000, Chapter E-6.8, Article 19 [1, g]). Along with this authority, however, comes a responsibility to "make arrangements for the adequate care and protection of those persons or livestock …" (p.13).

The establishment of the Reception Centre addressed this obligation; however, there was initial confusion over which County department was responsible for this aspect of the response. Despite FCS' predetermined role as the provider of Emergency Social Services (ESS) in Strathcona County, SCES personnel continued to manage the Reception Centre that first evening. This was due in part to the fact that SCES initiated the set up, had better access to current information and more familiarity with emergency situations. The FCS staff initially dispatched had prior training, but little experience in such an operation and therefore deferred to SCES personnel. Further confusion ensued with the arrival of Victim Services volunteers, as they, too, appeared uncertain of their role and from whom they should take direction. Although the issue was quickly resolved, it highlights a need for further clarification, training and practice with regard to Emergency Social Service (ESS) roles, expectations and responsibilities.

A second deficiency noted in ESS operations for this incident was the fact that the "Emergency Kit" (forms, supplies, etc) thought to be stored at one of the Fire Halls no longer existed; it was also unclear who would have been responsible for bringing the kit out to the Reception Centre if it had existed. To address this gap, FCS staff at the centre began "developing forms" in anticipation of arriving evacuees. The lack of other on-hand supplies[10], however, meant that the obligation to provide adequate care for evacuees beyond the provision of shelter, food and water could not have been met immediately, although access to any required item was available if the need arose.

---

[10] i.e. reading material, activities, spare clothing, hygienic items, diapers, etc.

This experience generated a significant amount of conversation among FCS staff regarding preparedness and needs for such an event. With assistance from the pilot Emergency Management Agency (SCEMA), FCS has already addressed this issue. In the first six months of 2010, Alberta Emergency Management Agency (AEMA) facilitated training courses for both FCS and SCEMA staff were conducted on ICS, ESS and Registry & Enquiry (R&I) Centre operations. In addition to the courses, the department (in conjunction with SCEMA) ran a mock disaster exercise in the fall of 2010 to provide their staff an opportunity to gain experience and confidence in practicing these newly acquired skills.

2.3   Recommendations and Lessons Learned

- Clarification, training and practice with regard to Emergency Social Service (ESS) roles, expectations and responsibilities is crucial to the efficient operation of a Reception and/or R&I Centre during an emergent event. FCS, in conjunction with the pilot SCEMA, is already in the process of addressing this situation.

- Access to a sufficient supply of forms, lists of needed office supplies, and other basic necessities is equally crucial to the efficient operation of a Reception Centre. The preparation of adequate emergency kits beforehand can not only ensure adequate provision for evacuees, but also reduces stress levels among workers. This, in turn, creates a more calming and hospitable environment for all, an important goal in an already anxiety-provoking situation.

Section D – The Emergency Operations Centre (EOC)

Section D examines the activities of municipal officials and County administration working in the Emergency Operations Centre (EOC) to support field operations

1.   EOC Operation

Data on the operation, performance and staffing of the EOC was gathered in the following manner.

On September 30, 2009, an EOC Debrief was conducted by SCES. Over the four days preceding this debrief, telephone surveys were individually conducted with County Staff who were identified from the EOC registration sheets. These surveys were designed to assess staff comfort with their roles and responsibilities within the EOC environment, the effectiveness of communication within the EOC, provide overall feedback on their experience and generate suggestions for improvement. A summary of survey findings was used to stimulate thought and generate further discussion at the formal debriefing session. The remainder of this Section deals with information so gathered.

1.1   Observations

In late afternoon of May 3 as the magnitude of the 2009 North Strathcona Wildfire first became apparent, the Emergency Operations Centre (EOC) was activated in Conference Centre #1, County Hall, only to be stood down shortly after midnight when conditions appeared to indicate the fire was under control. Several hours later, when the winds increased and it became evident that this assumption was incorrect, the EOC was reopened and remained opened for the duration of that week (to May 9, 2009). The Department Operations Centre (DOC) located at Fire Hall #1 was also run in conjunction with the EOC on various occasions during that same week.

1.2   Findings:

a) The initial response

In keeping with lessons learned from the 2008 North Strathcona Fire, the EOC was opened at an early stage of the incident. An overly optimistic analysis of the situation, however, led to the erroneous conclusion that the EOC was redundant long before a true sense of the incident had been obtained. Ironically, although this decision was no doubt influenced by a natural desire to minimize inconvenience to EOC staff and maximize operational efficiency, it had exactly the opposite effect to that intended.

b) Command Coordination and ICS

As mentioned previously, the EOC and the DOC were run in conjunction from two separate locations during the initial week of the incident. Running two simultaneous operations centres, however, has the potential to create confusion and does not follow proper ICS Chain of Command ideology. Ideally, the EOC should run the entire event with the DOC element physically represented within the same location. This avoids duplication of effort and delayed access to important and often time sensitive information.

c) Communications

Overall, survey respondents and debrief participants felt that communication within the EOC (i.e. about the event, assigned tasks, feedback on tasks, etc.) was effective. The on time, regular "as promised" briefings, in particular, were cited by participants as a major positive process.

One or two areas of concern, however, were identified by Legislative and Legal Services (LLS), the department responsible to keep a record of the actions and decisions made in the course of the emergency. Oftentimes, these representatives were not able to capture these points, either because they were not included in key conversations or were physically located too far away from 'the action' to hear the discussions. According to one participant: "Relying on overheard conversations is not conducive to good recordkeeping, yet that is often the way we were able to capture anything".

Adding to this concern was the fact that the EOC forms intended to capture a decision or action were not consistently completed and/or provided to LLS. Accurate and timely completion and provision of these forms would not only

provide a more complete historical record of the event, it would also greatly enhance the accuracy and completeness of the regular briefings provided to participants as the incident progressed. One suggestion for improvement generated during the debriefing was to provide these forms and briefings in an electronic format. This format would allow all participants to access updated information at their convenience and to communicate asynchronously to avoid unnecessary workflow disruptions.

This electronic format would necessitate access to the County's email and document management system within the EOC, which was another suggestion for improvement generated from the debrief session. It was felt that such access would encourage staff whose offices are located within County Hall, to remain at their station in the EOC rather than returning to their desks to check on day to day tasks. Such absences have not only the potential to delay or interrupt EOC workflow, but can also create a secondary disruptive effect in the form of extraneous conversation or "bustle" as staff members enter or leave the room.

One participant reported "there was a sense that if you left the EOC for any length of time, you needed to catch up quickly" (SCES, 2009). Provision of regular bulleted points of development and updates on the outside world, as well as a "daily summary" at shift changes, was one learning identified that helped to provide direction and avoid duplication of work and unnecessary interruptions of other staff. It is also important to ensure that all visitors and staff in the EOC are aware of communication and confidentiality protocols.

d) Staffing and Integration of Mutual Aid Resources

Initial staffing for the EOC was composed of the Chief Commissioner in his role as Director of Emergency Management and key personnel from SCES, Corporate Planning & Intergovernmental Affairs (CPIA) and Communications, the three departments most impacted at the onset of the incident. As the incident progressed, it became evident that support from other departments would be required. Staff from Legislative and Legal Services (LLS), Transportation and Agriculture Services (TAS) and Information Technology Services (ITS) were called in on May 4 to fill

the roles previously established for their respective departments through the Strathcona County Emergency Preparedness Plan. In addition to internal County Staff, a representative from the Alberta Emergency Management Agency (AEMA) was also in attendance to provide a link to related activities happening simultaneously in other neighboring jurisdictions.

Overall, survey and debrief results indicated that "virtually everyone felt they knew their roles" although there was some confusion "caused by people being asked to perform unaccustomed tasks". This confusion appeared directly related to the fact that not all staff in attendance had had previous experience working in the EOC environment and were thus unsure of the expectations associated with their assigned role (SCES, 2009). One suggestion to ensure role competency is to institute a competency "sign-off" for EOC roles.

e) Safety and Accountability

One problem noted within EOC operations was inadequate security and identification of authorized EOC personnel. The current location of the EOC is too accessible to the outside world (i.e. large windows) and does not effectively balance security with access.

As well, although a well-established registration process (and provision of ID tags for EOC participants) does exist, it was not followed consistently, which resulted in an incomplete registration record of EOC participants. This came to light during the debrief, when several County Staff members questioned why they had not been invited to participate in the survey although they had been part of EOC operations.

Several participants also reported having issues with people "wandering in" or "hanging out" in the EOC longer than was strictly necessary. Others commented on the lack of a clear process on getting information into or out of the EOC with a minimum of interruption. One participant questioned whether or not EOC operations conformed to the County's Occupational Health and Safety Rules on working alone.

One suggested solution to these issues was to create an "EOC Security Officer/Greeter" role. The presence of the Security Officer could not only serve to discourage and reduce unauthorized and/or unnecessary "visitors", but could also facilitate timely contact with the right person at the right time. This position could be staffed from any department; it is one opportunity for people from other departments to fill non-command roles and increase their comfort level with the inner workings of an EOC.

f) Logistics

Of all operational aspects, the logistical set-up of the EOC generated the most discussion. Although many participants commented on the calm, supportive and respectful environment that existed during its operation, several critical technological and physical gaps were identified:

Technological Gaps

- Existing processes and procedures don't support new technology
- GIS and mapping tools located within the EOC are seriously outdated
- Inadequate access to basic office equipment such as photocopiers, printers and faxes
- Inadequate capacity for laptop networking and connections
- Antiquated phone system
- No support TV/media monitor for live news feeds or contact with outside events

Physical gaps:

- Set up of room is dictated by antiquated phone system and is not the best use of space:
    ‣ busiest departments (i.e. SCES, RCMP, Fleet and Communications) are all located in one corner of the room
    ‣ set up of room was confusing, cramped with blocked sight-lines
    ‣ desks facing the wall not conducive to feeling of "inclusiveness"
    ‣ No "break-out" rooms or "living environment" for night time operations or food/rest breaks
- No clear floor plan provided to reduce set up time
- No floor plan and/or schedule provided outside the room to clearly identify positions and roles. This has since been addressed by the pilot Strathcona County Emergency Management Agency (SCEMA).
- Confusion over what information and/or tools should be kept in Department EOC kits and who is responsible to update same

g) Planning, Training and Preparedness

Another suggestion on increasing comfort levels in the various EOC roles and expectations, or in other words, on overcoming the "EOC Mystique", was to encourage "uninvolved" staff to visit and observe the EOC in action. This solution is problematic, however, as it runs directly counter to the need (as discussed in the previous section) of discouraging and reducing unauthorized and/or unnecessary "visitors". Furthermore, as research into best practices indicates that ICS is becoming the national standard for handling emergency situations in both Canada and the United States, future Strathcona EOC activations will be transitioning towards an ICS-based operation. This will necessitate that all potential EOC staff must have, at the very least, a basic understanding of ICS organization, basic terminology and the common responsibilities associated with ICS assignments.

A more realistic solution would therefore be to provide appropriate training, reinforced through practical application of this new skill set by means of table-top and mock disaster exercises. In keeping with this latter, more practical solution, a new ICS and EOC training program has already been initiated through the SCEMA pilot previously mentioned. As of the date of this report, over 100 staff members have already participated in this new training program and are now certified at the ICS 100 (introductory) level.

1.3   Recommendations and Lessons Learned

- The EOC should be opened earlier than later in an emergent situation, and kept open on a continuous basis until it is certain that the incident is and will remain under control

- The EOC should encompass the DOC as opposed to running two operations centres in conjunction at separate locations. The EOC should run the entire event with the DOC element physically represented within the same location. This avoids duplication of effort and delayed access to important and often time sensitive information.

- Have forms and briefings available electronically

- Have County email and document management systems available at all EOC workstations to relieve day to day work pressures

- Provide regular bulleted points of development and updates on the outside world.   *continued next page*

1.3 Recommendations and Lessons Learned *(cont'd)*

- Provide a daily summary brief at each shift change

- Ensure all visitors and staff are aware of communication and confidentiality protocols

- Involve more departments in initial EOC staffing to ensure continuity and more accurate historical record keeping

- Provide a "heads up" to departments who may need to play a role in the EOC to allow them to get into a "state of readiness"

- Institute a "sign-off" for EOC role competencies

- An EOC technological and physical needs assessment is required to ensure updated processes and procedures, along with the appropriate, updated and necessary tools, are in place

- Update and enforce consistent registration and ID tag process and procedures

- Establish an "EOC Security Officer/Greeter" role

- Encourage all Strathcona County departments to strategize and suggest other potential contributions their staff could make in the EOC during an emergent event

- As research into best practices indicates that ICS is becoming the national standard for handling emergency situations in both Canada and the United States, future Strathcona EOC activations will be transitioning towards an ICS-based operation. A training program on ICS ideology and principles has been initiated for all potential EOC staff, to be reinforced through practical application by means of table-top and mock disaster exercises

Section E – Public Communications

The following section deals with all public communications, specifically public alerting, updates and media notification. Information for the following section was provided by Communications Department through a review of their files, telephone and website logs, staff accounts and anecdotal evidence.

1.   Communications Plan

Throughout the course of the 2009 North Strathcona Wildfire, Strathcona County Communications Department worked closely with SCES and others in the Emergency Operations Centre (EOC). Their role was to ensure that consistent information was made available in a timely manner to a range of stakeholders as the incident evolved.

1.1   Observations

Media accessing the incident site.

Communications personnel were involved in the incident from Sunday, May 3 when the EOC initially opened, and throughout the week while the EOC was in operation. Although the need for Communications assistance was reduced considerably after the EOC closed, the need for a certain level of support continued, gradually tapering off, for a number of weeks. This support extended through May and June in the form of updates to the UPDATEline[11], 211 and the County website, with the last update provided on July 2. Topics included the fire ban, periodic local traffic notices and safety messages as work on extinguishing area hotspots continued.

---

[11] The UPDATEline is a 24-hour recorded information line operated by the Northeast Region Community Awareness Emergency Response (NR CAER) to provide important information on industrial activity and/or ongoing emergent situations. (http://www.nrcaer.com/cms/CommunityNotification/UPDATEline/tabid/1354/language/en-US/Default.aspx)

1.2   Findings

Communication during the wildfires was based on the following key points:

- Use all available communications methods and media.

- Repeat referrals to basic information sources, specifically the UPDATEline and the Strathcona County website. Over the course of the wildfires, the media made use of these as well as the public.

- Provide regular and frequent updates even when the situation shows little to no change. This serves to reassure and confirm that the message does indeed contain the most up to date information.

- Anticipate questions and feedback from the public and centralize the flow of information through a single source, the Emergency Public Information Officer (EPIO) Communications Team.

- Provide clear, consistent messaging. Where personal safety or property is at risk, information needs to be unambiguous, consistent and readily available.

During the wildfire, the County was generally successful in maintaining good communication; few or no instances were identified of misinformation or cases where people did not feel they were adequately informed.

A prime consideration was communication with residents in the immediate area; in other words, the municipality's duty to inform the public of the potential for rapidly worsening conditions and the possibility of evacuation. Another key audience was area industry. Accurate and timely information enabled them to take the necessary steps to mitigate any cascading affect the fire might have had on their facilities. Given the size and intensity of the fire, there was also considerable interest from the news media and the community at large.

1.3 Recommendations and Lessons Learned

- The communications plan requires reorganization for immediacy and ease of use

- Message templates need to be readily available for web, news media, phone centre, resident information, etc.

- More staff need to be recruited and trained in the Emergency Public Information Officer (EPIO)[1] role to allow for redundancy and staff rotation during multiple operational periods for incidents of longer duration. Communications, in conjunction with the pilot SCEMA, has already addressed this situation through an AEMA facilitated EPIO course held for all communications staff from across the County.

- Messages should be disseminated using as wide a variety of communication tools as possible to ensure a rapid, comprehensive and timely dispersal of accurate and consistent information

_____

[1] The ICS EPIO "serves as the conduit for information to internal and external stakeholders, including the media…, seeking information directly from the incident or event" (City of Edmonton Office of Emergency Preparedness, July 2009, p. 41).

2. Communication tools

As indicated previously, a variety of communication tools were used to ensure rapid, comprehensive and timely dispersal of information to both the public and the media as the incident progressed. These tools ranged from messages released via internet and telecommunications-based technology to resident information packages hand-distributed to evacuees in hard copy format.

2.1 Observations

A total of 13 news releases and updates went to the media via email between May 3 and 8. Each release was approved by the senior SCES representative in the EOC. Communications staff, in their role of Emergency Public Information Officers (EPIO), served as the first point of contact for media inquiries, with SCES officers providing all follow-up comments to the media and

doing all interviews. This included interviews in person at the Incident Command Post (ICP) and via the phone from the EOC. In order to better accommodate the many media requests, daily media briefings were scheduled for May 5 and 6 at prearranged times on-site at the ICP.

Communications also prepared and posted over 16 wildfire updates to the Strathcona County website between Sunday, May 3, at 18:15 hours and Friday, May 8, at 11:30 hours. Furthermore, as new information was released by the EOC, it was electronically circulated via an email list to interested stakeholders, including industry, business, County staff, neighboring municipalities, SRD, MLAs and other affected parties.

To ensure a comprehensive distribution of messages, Communications also utilized telecommunications technology. During the period from May 3 to May 11, 13 emergency messages were posted on the UPDATELine, which were listened to 493 times. In addition to the emergency messages, 11 information messages were also posted and accessed 143 times. These updates continued through to the end of June as work continued at the site. County information was also provided to the Alberta Wildfires Update Line. This line is coordinated by the Community Relations Staff at Alberta Sustainable Resource Development (SRD) in conjunction with affected municipalities.

In addition to pre-recorded messages, Communications also assisted with three emergency warning call-outs to residents, all done through the North east Region Community Awareness Emergency Response (NR CAER) Community Notification System (CNS)[12] (May 4: voluntary evacuation, May 5: mandatory evacuation, May 7: evacuation lifted).

Anticipating calls from the public as a result of the wildfires, a Telephone Inquiry Centre was established at 13:00 hours on May 4. The Centre received all approved information updates from the EOC and was staffed by County employees who could answer calls, convey messages to the EOC, or otherwise assist callers. Telephone Centre staff worked a total of 66.5 hours between May 4 and May 8 and took 68 calls.

---

[12] The Northeast Region CAER CNS is an automated call-out system used to inform Strathcona residents about more serious incidents in their immediate area. In emergency situations, residents who have registered for this service will receive a phone call with safety information and instructions. (http://www.nrcaer.com/cms/CommunityNotification/UPDATEline/tabid/1354/language/en-US/Default.aspx)

During this incident, Strathcona County also piloted the use of the 211 service. Message scripts were conveyed to 211 operators through the Information and Volunteer Centre (IVC), and County website and phone lines referred after-hour callers to this service. Updated information and answers to Frequently Asked Questions (FAQs) were provided throughout May and into June when the fire ban in the area took effect.

On Friday, May 8, as Fire Chief Reid arranged to meet with residents returning to their homes, Communications prepared hard copy information packages to be left with each returning family. These packages included a message with key contact information, FireSmart and other materials. No specific feedback was obtained with regard to this communication tool.

For samples of messages and information packages, please see Appendix 7.

2.2   Findings

a) Media releases, briefings and interviews

Providing news releases and updates to the media via email proved extremely efficient and was well received by media representatives, as were the regularly scheduled briefings. Having SCES Command Officers available for interviews also proved particularly effective in providing context and first-hand experience to supplement the general information provided through the updates.

As the incident was winding down, all incident-related media enquiries were directed to a special email address (emergencyinfo@strathcona.ab.ca) previously created for this purpose as a result of learnings from the 2008 fire and many industrial responses. This proved very effective and has since become an integral part of ongoing SCES public communication protocols.

b) Strathcona County Website (www.strathcona.ab.ca)

The week of May 4 saw the largest number of daily visits in the history of the County website, due in part to the number of people seeking information about the wildfire. The wildfire page received 1,012 visits on Tuesday, May 5, making it the second-most visited page on the website (total visits that day to the County website: 6,548). It was also the second-most visited page on the following day (Wednesday, May 6) with a total of 1,122 visits (total visits to the site that day: 5,975). It is not unreasonable to suggest that this statistic supports the claim that regular updates are necessary, even if the message stays the

same. Not only does this reassure the public that they are receiving the latest and most up to date information, it also has the potential of reducing unauthorized activity within the response. In fact, research has proven that "access to information (or lack thereof) is a key factor" in whether or not such activity occurs (Fowler, 2008, p.v).

c) Email updates

The above claim is also supported by the manner in which the emailed information updates were received by those on the email list referred to previously. These email updates were well received and widely circulated, as evidenced by the following comment from an industry communicator: "The news releases/updates were great – they were brief, to the point and read well via BlackBerry. I think this is also a great way to get info to employees and contractors and keep them informed".

d) The UPDATELine, 1-866-653-9959

It is interesting to note the unprecedented use of this communication tool by Strathcona County residents and visitors at the height of the incident. Typically, the UPDATEline is only accessed around 300 times per month. During the 2009 North Strathcona wildfire, it was accessed over 600 times in the first week alone.

Since that time, SCES has both taken advantage of and encouraged a continued heightened public awareness of this communication tool by expanding its role in ongoing SCES public communication protocols. Information messages on topics ranging from live fire training and fire ban announcements to air quality advisories are now routinely posted on the UPDATEline.

e) Community Notification System (CNS) Call-outs

Although Strathcona County has had access to the NR CAER CNS since its inception in early 2003, the system had rarely, if ever, been utilized by County staff. Although operator training had been initially provided, these skills had not been maintained either through practice or actual use in the intervening years. As a result, the County was unable to independently launch the system when required. Instead, Communications staff prepared and recorded the message for the NR CAER Communications Officer, Brenda Gheran, who handled the actual launch to the designated area.

In addition to the operational complexities of the launch, several instances came to light of affected residents not being registered for call-outs. The wildfire therefore not only highlighted operational gaps in the notification process, it also provided an opportunity for the end user to see the value of registering for this community emergency notification system.

f) Telephone Inquiry Centre

To help centralize information flow during emergencies, Strathcona's Communications Plan calls for a Telephone Inquiry Centre to be set up in Meeting Room A in County Hall. Only the main County switchboard number (780-464-8111) is publicized; the receptionist receives all calls and directs them to one of the phones located in Meeting Room A.

While the number of calls received in this case was not excessively large, it is nonetheless worthwhile to activate this centralized source and be prepared to adjust the number of staff available to answer calls should the situation change.

g) 211

This was the first time Strathcona County has used the 211 service to disseminate information. It was particularly useful in this case as the line is in operation on weekends and evenings. Feedback indicated a number of callers utilized the 211 option for information, particularly with respect to ATV use in the area affected by wildfires.

2.3   Recommendations and Lessons Learned

- Incorporating and optimizing the use of a special email address for media inquiries provides a single, trusted and convenient source of information for the media.

- For media briefings, it is important to provide enough notice to allow for travel to the location. Prearranged times and locations are beneficial when an event is anticipated to be prolonged, however, further consideration is required on how to better accommodate media at the site. Assigning a special "media area" outside the incident perimeter, and arranging a "media pool"[1] are two common methods of achieving this result.   *continued next page*

[1] Media Pooling generally involves one print, one radio and one TV representative, selected by the media, themselves, who are allowed within the site under escort "to get the story on the understanding that all outlets will have access to the resulting images, information and interviews" (AEMA, 2008, p.57).

2.3 Recommendations and Lessons Learned *(cont'd)*

- A consistent and constantly updated message is a key factor in increasing public confidence in response efforts and lessening the potential for emergent activity.

- Use of 24 hour tools such as the UPDATEline and 211 for dissemination of information to the public is highly effective, provided that the information obtained from these sources is always accurate and up to date.

- Although further technical training and practice for in-house launch of the CNS call-out system is required, the system did work as intended during the incident; residents were alerted. This incident demonstrates to both residents and staff that the system is effective, and stresses the value of registering for this service.

- A single, central number for public inquiries proved effective; however, the capacity of the current physical set up would be taxed in a more widespread incident.

- Clear protocols for delivering messages and information to and from the EOC require further development.

- It is essential to be well prepared with more staff on stand-by to handle calls in case the situation escalates. The willingness of staff to work in the Telephone Inquiry Centre on short notice was impressive; however, the process of training, scheduling and recruiting phone centre staff requires refinement.

Section F – Remediation and Cost Recovery

This section deals with remediation efforts undertaken in the area, as well as subsequent cost recovery measures. Emergency Management generally refers to this as the Recovery phase of an incident.

1.   Remediation

Information for this segment was derived from the files, debriefing notes and anecdotal evidence supplied by the various departments involved in the recovery phase of this incident.

1.1   Observations:

On June 16, 2009, in conjunction with the North Strathcona Contact Office (Corporate Planning & Intergovernmental Affairs [CPIA]), SCES held an open house at Fire Station #4, Heartland Hall, for residents in north Strathcona who were affected by the incident. Councillor Fenske, Fire Chief Darrell Reid, Deputy Fire Chiefs Bushell and Elliott and the Heartland Service Area and Rural Liaison Coordinator, Dinah Canart, were on hand to give presentations describing the events and outcomes of the incident and to answer resident questions and concerns.

Actual recovery and remediation efforts were initiated in the months of August, September and October. Work was awarded to contracted services managed by County staff and was completed by December 1, 2009. In the end, over three kilometers of dozer guard and fence lines were repaired.

1.2   Findings

a) Resident Feedback

The Resident Information Open House on June 16 was well attended. Information presented to the residents included overviews on operations, challenges faced during the incident and other emergency management issues. Feedback from residents was generally positive; some concerns were raised and duly addressed, including control of the recreational area and possible improvements to communications. A major resident concern, that SCES did not fully utilize resources present at the scene, was dispelled through provision of the

fact that the resource in question had been self deployed; in other words, it was operating independently of SCES command. As previously mentioned in Section C-1.2 a) of this report, research has shown not only that such "spontaneous organizations often outstrip the capacity of emergency managers to effectively utilize them", but "may [also] create serious problems for first responders" (McEntire, 2004, p.16). For these and other reasons (including cost concerns), a decision was made not to include this particular resource in the official response.

Another issue raised was the great deal of time it was taking for the County to repair land and fences damaged by fire operations. The explanation for this delay was that the Municipal Wildfire Assistance Program (MWAP) was available to cover the repairs for this fire and the County wanted to ensure residents were aware of this.

b) Fire Breaks and Fence Lines

In addition to damage caused by the actual fire, fence lines on both public and private land had been compromised to enable the movement of equipment for fire operations. Furthermore, in order to contain the fire, crews created "dozer guards" (fire breaks), which is the clearing of forested areas to restrict the movement of fire and prevent it from "crowning" through trees and brush.

Throughout August, September and October, SCES representatives worked with legal advice to develop a formal and consistent method of:

- identifying property requiring any repairs

- meeting with residents to review repair requirements

- receiving and verifying formal repair requests, and developing a work plan for completion

Overall, repairs to property were restricted to damaged fence lines and areas where bulldozers had dug dozer guards (i.e. removed standing trees and cultivated the ground to minimize the availability of fuel). Representatives from both SCES and Transportation and Agriculture Services (TAS) visited affected residents to establish an exact estimate of restoration requirements. The following deductions were derived by using Alberta Sustainable Resource global positioning to corroborate the information provided by residents:

- Approximately 8,529 meters of fire break was constructed; approximately 3,100 meters was on land owned by corporations

- A number of smaller fire breaks had been built immediately off lease roads on private land in the northern part of the area. By late summer, these breaks had already witnessed substantial re-growth.

Actual repairs came to an estimated cost of $125,000, and consisted of:

- re-grading the land
- fixing fence lines damaged or cut during response operations
- mulching felled trees
- planting grass seed where requested by the landowner.

One concern raised by a resident during this process dealt with the fact that "cleaning" dozer guard areas would actually improve access for off-road vehicles. This is a serious concern, as the possibility of increased human activity could increase the risk of future fire in the area.

★ 1.3   Recommendations and Lessons Learned

- Open communication can greatly increase public confidence in response and remediation efforts

- Further investigation is required on adequate control of human activity in natural areas for the purpose of reduced fire risk

---

2.   Cost Recovery

Information for the following section was provided by Executive Administration, Community Services Division through a review of their files, staff accounts and anecdotal evidence.

2.1   Observations

An application for recovery of costs associated with the 2009 North Strathcona Wildfire was made on September 11, 2009 to the Municipal Wildfire

Assistance Program (MWAP)[13]. The actual cost of the fire was $4.7 million; the application was based on $4.2 million in eligible incident costs. From this, the County expected to receive $2.6 million, representing an estimated claim of $2,700 for emergency operations, $150,000 for infrastructure damage and $2,400,000 for firefighting .

AEMA acknowledged receipt of the application on September 15 and advised approval of the program for Strathcona on November 26, 2009. In June 2010, Strathcona County received a payment from MWAP of just over $2.1 million.

2.2   Findings

According to MWAP guidelines, the municipality is "eligible for reimbursement of all costs associated with the suppression of the wildfire that are in excess of $25 per capita (at a rate of 75% of eligible costs)". As the wildfire occurred in the rural service area, a formal request was made (and accepted) for the program to use only the rural population (26,112) in reimbursement calculations (Strathcona County, 2009, p.2). This request was based on the Order in Council designating Strathcona County as a specialized municipality (referred to in Section A), and substantially increased the County's potential reimbursement amount.

In total, the County originally anticipated recovering approximately $2.6 million under the program; we received $2.1 million, representing a total difference of approximately $529,000 between what was claimed and what was paid. This was due to the fact that some costs were considered ineligible under the program and costs for emergency service vehicles and materials such as hoses, goggles and nozzles were paid at a greatly discounted rate. This is something to keep in mind for future incidents requiring the County to accrue expected cost recovery.

The MWAP application itself, completed by the Coordinator, Financial Systems and the Accountant, Community Services (Executive Administration), on behalf of SCES, required copies of every invoice related to the fire, as well as copies of all related payroll and vehicle cost records. Collecting said records proved an onerous task; although staff from all affected departments responded fairly quickly, there is a great deal of paperwork and effort involved in such a request on such short notice. It is suggested that, should this issue arise in

---

[13] MWAP is a province wide program "intended to help reduce both the risk and losses associated with wildfires…designed to assist municipalities with extraordinary costs for the suppression of wildfires when they occur (http://www.municipalaffairs.alberta.ca/documents/Wild_Fire_Assistance.pdf).

future, a clearer explanation of the significance of the task (and its potential consequential value for the County) should accompany any similar requests.

The fact that the County established a sub ledger accounting code for the fire from the very beginning was a "life saver" and greatly simplified cost tracking efforts. The sub ledger code was used to record all incident-related costs except for regular staff hours. This exclusion, however, did cause some issues with the MWAP application. Although a detailed record of regular staff hours was also requested, only overtime and casual temporary staff hour records could be supplied.

2.3 Recommendations and Lessons Learned

- It is unlikely that the full amount claimed for vehicles (fire vehicles in particular) will be received under provincial reimbursement programs. This is something to keep in mind for future incidents requiring the County to accrue expected cost recovery

- A clear, comprehensive explanation of the significance of any onerous task (and its potential consequential value for the County) could facilitate staff compliance with such requests made on short notice

- A special sub ledger accounting code established at the onset of a potentially costly event can greatly facilitate cost tracking efforts; this should be used without exception for all incident-related costs, including regular staff hours

References

211 Edmonton. (2010). *About 211*. Retrieved August 30, 2010 from
http://211edmonton.com/about211/211faq.php.

Alberta Emergency Management Act. RSA 2000, Chapter E-6.8.
Alberta Legislation.

Alberta Emergency Management Agency (AEMA). (2008). *Emergency Public
Information Course – Student Package.*

Alberta Forest and Prairie Protection Act. RSA 2000, Chapter F-19.
Alberta Legislation.

Alberta Municipal Affairs. (2010). *2009 official population list*. Retrieved February
23, 2010 from http://municipalaffairs.gov.ab.ca/documents/LGS/2009pop.pdf.

Alberta Municipal Affairs. (2010a). The Municipal Wildfire Assistance Program.
Retrieved September 3, 2010 from http://www.municipalaffairs.alberta.ca/
documents/Wild_Fire_Assistance.pdf).

City of Edmonton Office of Emergency Preparedness. (July 2009). *Introduction to
Incident Command System – ICS 100 Student Manual – Self Study Guide.*

Drabek, T.E. & McEntire, D.A. (2003). Emergent phenomena and the sociology
of disaster: Lessons, trends and opportunities from the research literature.
Disaster Prevention and Management, 12(2), p.97-112.

Fischer, H.W. (2002). Terrorism and 11 September 2001: does the "behavioral
response to disaster" model fit? *Disaster Prevention and Management*, 11(2),
p.123-127.

Fowler, Beverley. (2008). *Emergent citizen groups and command and control:
Competing paradigms in the 2005 Lake Wabamun, Alberta disaster response*.
U of A Master's Study. Unpublished.

Harrington, K. (Ed.). (1983). The Fire Department. *Sherwood Park, the First
Twenty-five Years.* Josten's / National School Services, p. 66-87 [Local
compilation].

Kendra, J.M. & Wachtendorf, T. (2002). Creativity in emergency response after
the World Trade Center attack. *DRC Preliminary Papers.* Report No. 324.
Newark, Delaware: Disaster Research Center, University of Delaware.

McEntire, D.A. (2004). *The status of emergency management theory: Issues, barriers and recommendations for improved scholarship.* FEMA Higher Education Conference. Emmitsburg. MD. Retrieved June 8, 2008 from http://www.training.fema.gov/EMIWeb/downloads/David%20McEntire%20%20%20Status%20of%20Emergency%20Management%20Theory.pdf.

Miller, D.A. (2010). *Fire Investigation Report; Incident Number: 2009/May/03 14:42:29.* SCES Department Files.

Northeast Region Community Awareness Emergency Response (NR CAER). (2010). *Community Notification.* Retrieved August 30, 2010 from http://www.nrcaer.com/cms/CommunityNotification/UPDATEline/tabid/1354/language/en-US/Default.aspx

Partners in Protection. (2010). *FireSmart: Protecting Your Community from Wildfire.* Retrieved February 16, 2010 from http://www.partnersinprotection.ab.ca/downloads/PDF/chapter1.pdf .

Reid, D.B. (2009). *Managing change to improve selected organizational outcomes at Strathcona County Emergency Services.* Unpublished.

Reid, D.B. (June, 2009) *Strathcona County Emergency Services: The 2009 north strathcona fire public presentation.* SCES department files.

Strathcona County. (2010). *Frequently requested bylaws.* Retrieved May 13, 2010 from http://www.strathcona.ca/departments/ Legislative_and_Legal_Services/frequently-requested-bylaws.aspx

Strathcona County. (2009). *Application for Municipal Wildfire Assistance Program (MWAP) – Cover letter.* SCES department files.

Strathcona County. (2007). *About Strathcona County.* Retrieved October 24, 2009 from http://www.strathcona.ab.ca/Strathcona/Council/ About+Strathcona+County/default.htm

Strathcona County. (2005). *Role and Authority of a Councillor.* Retrieved October 24, 2009 from http://www.strathcona.ab.ca/Strathcona/Council/ Mayor+and+Councillors/Councillor+Peter+Wlodarczak/Newspaper+Columns/ role+and+authority+of+a+councillor.htm.

Strathcona County Emergency Services (SCES). (2010). *About our Department.* Retrieved February 16, 2010 from http://www.strathcona.ab.ca/Strathcona/ Departments/Emergency+Services/default.htm

SCES. (2009). *Notes from EOC and Field Staff Debrief, 2009 North Strathcona Wild Fire.* SCES Department Files.

Titan Systems Corporation. (n.d.) *Arlington County after-action report on the response to the September 11 terrorist attack on the Pentagon.* Retrieved October 23, 2009 from http://www.arlingtonva.us/departments/Fire/edu/about/FireEduAboutAfterReport.aspx .

Wachtendorf, T. (2001). Suggestions for Canadian inter-organizational collaboration in disaster mitigation. *DRC Preliminary Papers.* Report No. 312. Newark, Delaware: Disaster Research Center, University of Delaware.

Wachtendorf, T. & Kendra, J.M. (2006). *Improvising disaster in the city of jazz: Organizational response to Hurricane Katrina*. Retrieved March 24, 2008 from http://understandingkatrina.ssrc.org/Wachtendorf_Kendra/printable.html.

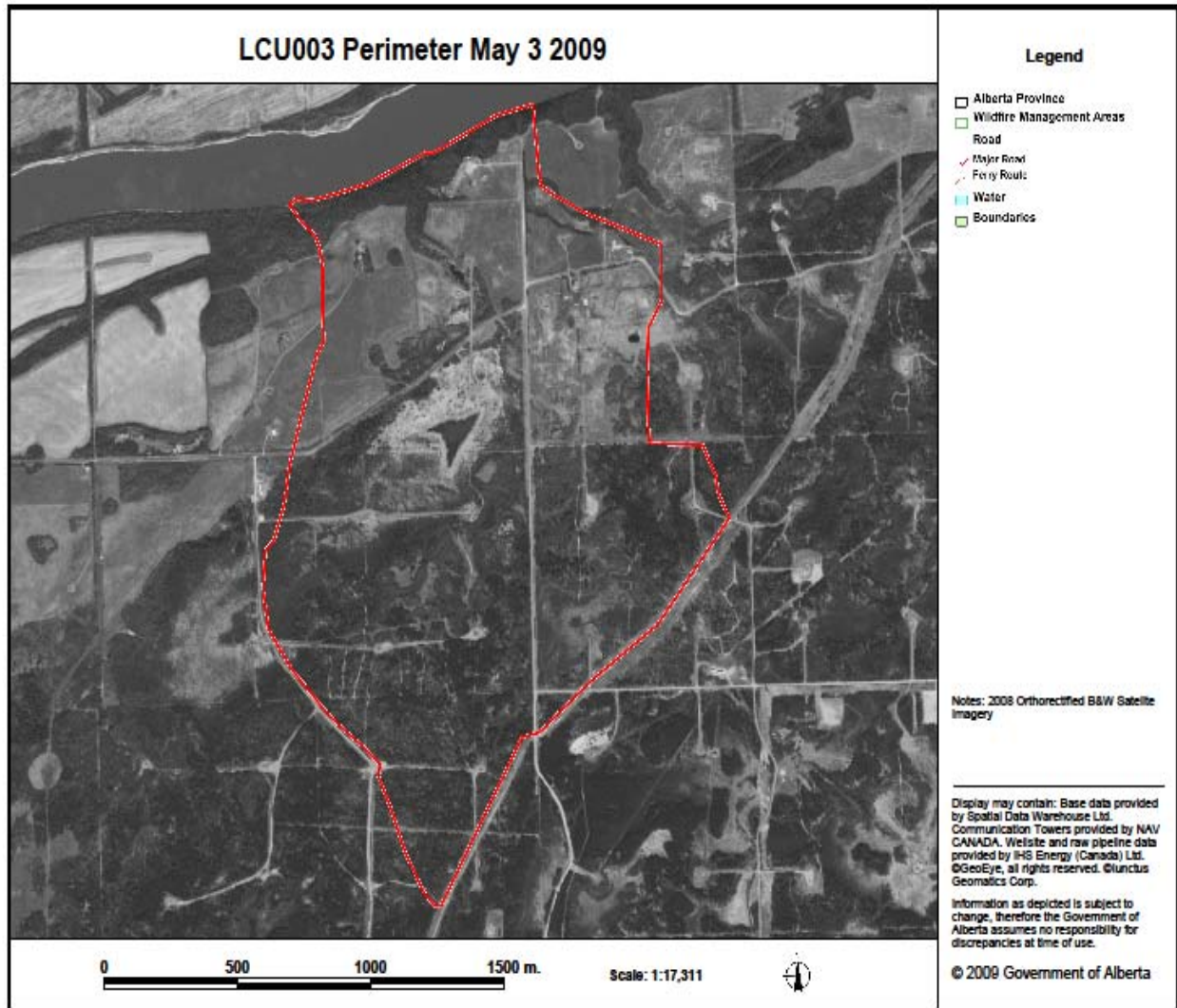# Appendix 1: North Strathcona Wildfire Area of Origin

Source: Miller, D. (2010). *2009 North Fire Investigation Report, Appendix H*

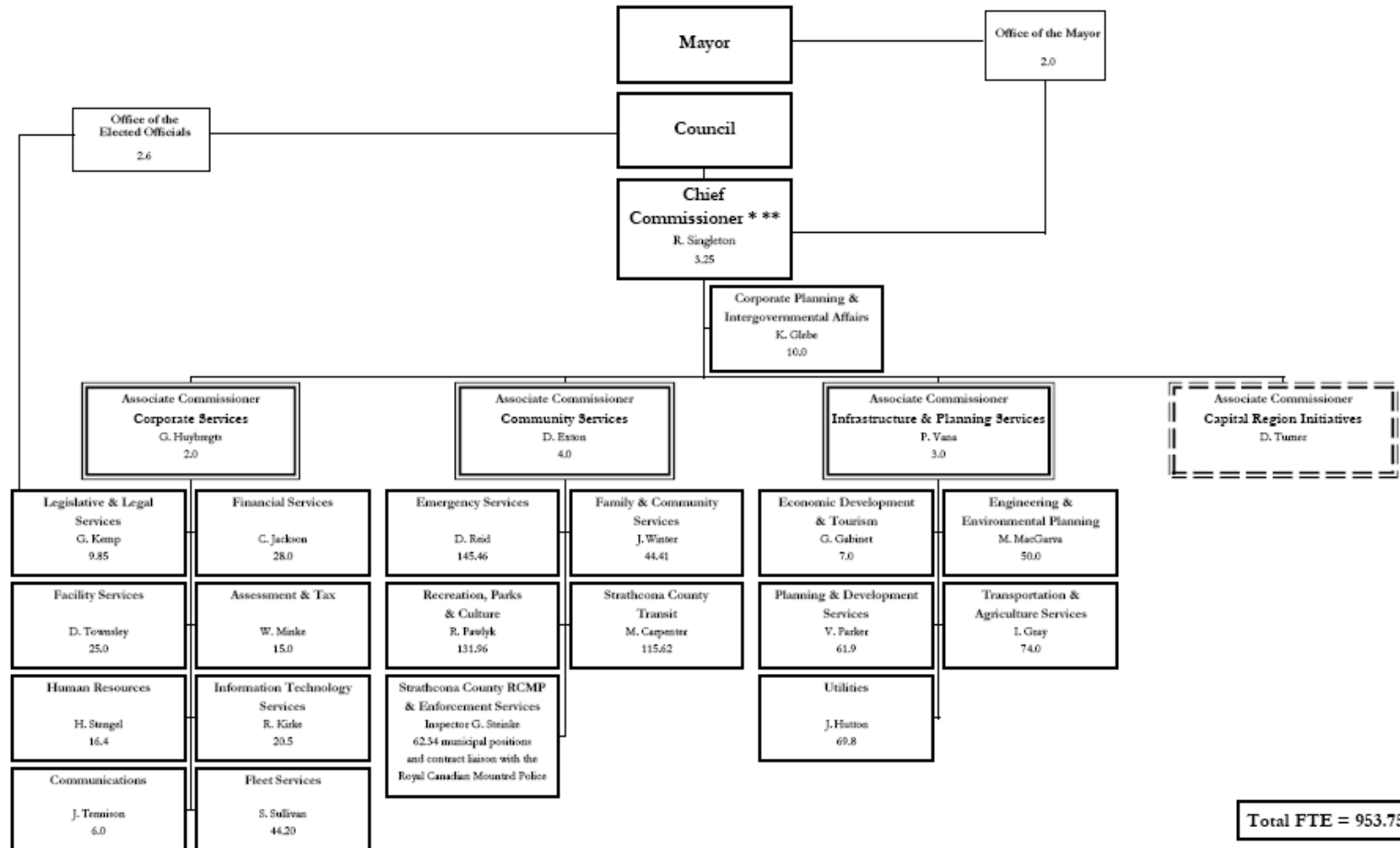## Appendix 2: North Strathcona Wildfire Perimeter (May 3, 2009)

Sustainable Resources May 3rd, 2009 GPS fire perimeter

Source: Miller, D. (2010). *2009 North Fire Investigation Report, Appendix D*

Appendix 3: Strathcona County Organizational Chart (2009)


```
                              ┌─────────────┐                    ┌─────────────────┐
                              │    Mayor    │────────────────────│ Office of the Mayor │
                              └─────────────┘                    │       2.0       │
                                                                 └─────────────────┘
┌──────────────────┐          ┌─────────────┐
│ Office of the    │          │   Council   │
│ Elected Officials│──────────└─────────────┘
│       2.6        │
└──────────────────┘          ┌─────────────────────┐
                              │ Chief               │
                              │ Commissioner * **   │
                              │ R. Singleton        │
                              │ 3.25                │
                              └─────────────────────┘

                              ┌──────────────────────────┐
                              │ Corporate Planning &     │
                              │ Intergovernmental Affairs │
                              │ K. Glebe                 │
                              │ 10.0                     │
                              └──────────────────────────┘
```

Associate Commissioner Corporate Services G. Huybregts 2.0	Associate Commissioner Community Services D. Exton 4.0	Associate Commissioner Infrastructure & Planning Services P. Vana 3.0	Associate Commissioner Capital Region Initiatives D. Turner

Legislative & Legal Services G. Kemp 9.85	Financial Services C. Jackson 28.0	Emergency Services D. Reid 145.46	Family & Community Services J. Winter 44.41	Economic Development & Tourism G. Gabinet 7.0	Engineering & Environmental Planning M. MacGarva 50.0
Facility Services D. Townsley 25.0	Assessment & Tax W. Minke 15.0	Recreation, Parks & Culture R. Pawlyk 131.96	Strathcona County Transit M. Carpenter 115.62	Planning & Development Services V. Parker 61.9	Transportation & Agriculture Services I. Gray 74.0
Human Resources H. Stengel 16.4	Information Technology Services R. Kirke 20.5	Strathcona County RCMP & Enforcement Services Inspector G. Steinke 62.54 municipal positions and contract liaison with the Royal Canadian Mounted Police		Utilities J. Hutton 69.8	
Communications J. Tennison 6.0	Fleet Services S. Sullivan 44.20				

Total FTE = 953.75

Strathcona County

August 1, 2009
Approved by: Chief Commissioner_____

* Designated Officer - Chief Administrative Officer
** Appointed - Director of Emergency Preparedness

1

Appendix 4: Strathcona County Emergency Services Organizational Chart (2009)
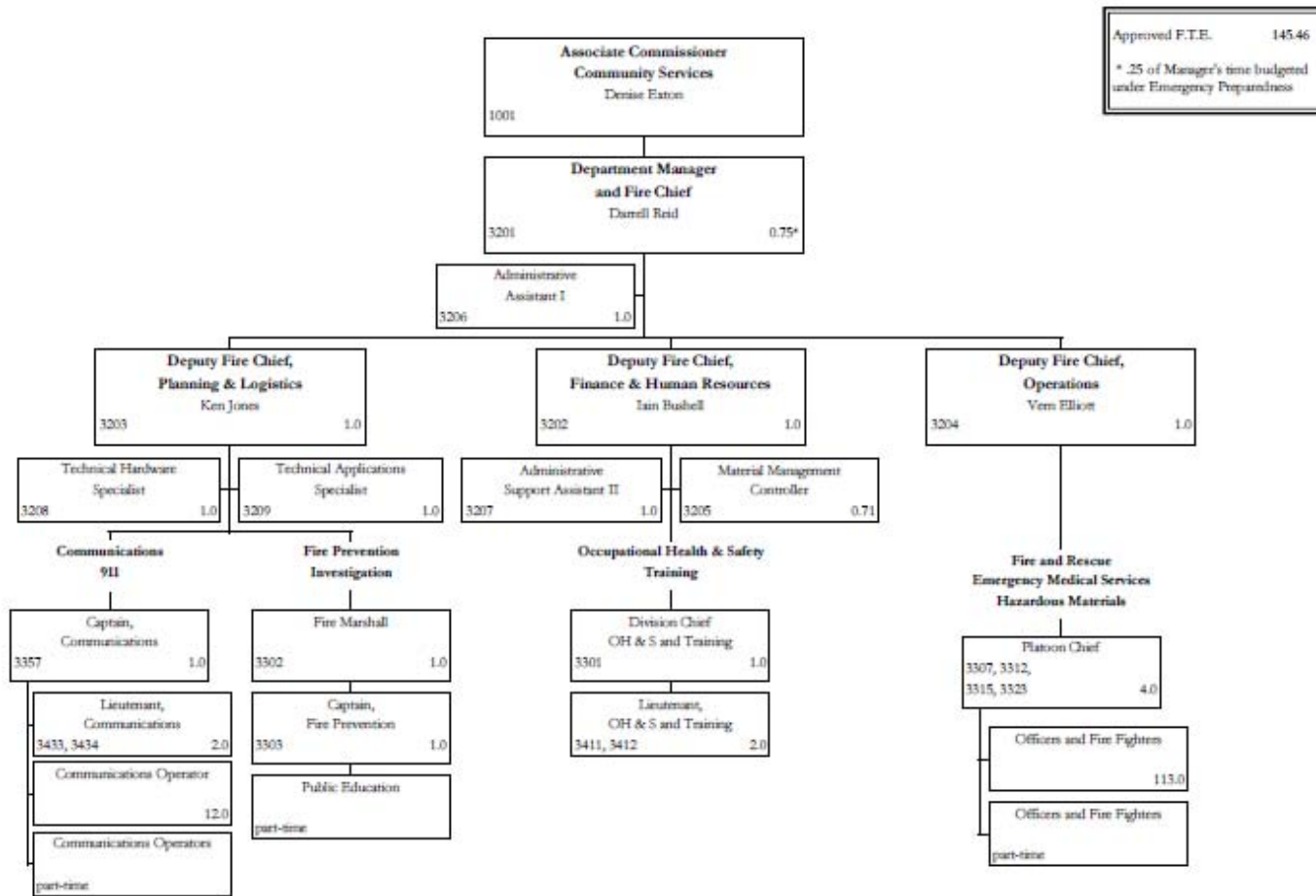
Strathcona County
Emergency Services
May 19, 2009
Approved by: D. Reid _____ J. D. Exton _____
Human Resources _____ R. Singleton _____

15

Appendix 5: Strathcona County Fire Ban Matrix

Strathcona County Fire Ban Matrix

The following criteria will be used to determine the requirement for a fire ban in Strathcona County. This Matrix is to be used as a guide only and does not totally encompass human activity, values at risk, political influence and/or other affects.
To utilize the map, plot the daily information on the matrix, add the Risk Level of each criteria for the RISK TOTAL.

If the RISK TOTAL is equal to or greater than 14, a Fire Ban should be initiated for all of Strathcona County.

Criteria	0	1	2	3	4	RISK LEVEL
Accumulated Weekly Precipitation	< 75 mm	50-75 mm	25-50 mm	1-25 mm	0-1 mm	0
Large Fire Potential (SRD)*	None	Low	Med	High	Very high	0
Fire Danger Forecast	Low	Mod	High	Very High	Extreme	0
Fire Weather Index	0-5	5-10	10-20	20-30	>30	0
Agency Preparedness Level	1	2	3	4	5	0
Human Activity Estimate					Long Weekend	0
Risk Total						0

*Go to Current PM Weather Forecast to establish large fire potential for LB (Lac La Biche) fire area

Note: Hyperlinks were created in 2010. Future Matrices may require re-establishment.

Appendix 6: Detailed Timeline of the 2009 North Strathcona Wildfire

Onset and Response Activities (May 3rd – July 3rd, 2009)				
Date	**SCES**	**EOC and other County Departments**	**Mutual Aid**	**Emergent Group and other "Unauthorized" Activity**
May 3, 2009 14:42	9-1-1 receives the first of a total of 34 calls reporting an outside fire two major wild land fires are identified as developing simultaneously approximately 7 km apart Initial units dispatched to area AEMA advised			
15:30		RCMP begins evacuation of 6 – 10 homes east of Hwy 830. ATV and Motorbike users are asked to leave the area between Twp 564 and Hwy 830	AEMA advised and MESA vehicle dispatched	
16:00	DOC established Incident Command Post dispatched Mutual Aid requested from surrounding municipalities and SRD	EOC established Utilities and petroleum plants/ sites contacted to provide expertise in isolating risks from these hazards	Utilities and petroleum plants/sites responded Units responded from: • Edmonton Fire Rescue • Fort Saskatchewan • Shell Scottford • Dow Chemicals • Andrew • Beaver County	
22:20	Suppression efforts beginning to prove successful; crews regrouped and overhaul activities commenced			

Onset and Response Activities (May 3rd – July 3rd, 2009) continued				
Date	SCES	EOC and other County Departments	Mutual Aid	Emergent Group and other "Unauthorized" Activity
May 4, 2009 01:00	Roving patrols for overhaul established	EOC Stood down	Mutual Aid Partners released	
03:00	increased wind activity causes large flare ups west fire now deemed out of control in several areas; east fire also elevated		Mutual Aid Partners recalled	
10:00	Suppression efforts became focused on protection of homes, appropriation of heavy equipment and operators to build fire breaks	EOC Reopened Press release issued; public asked to comply with road closures and prepare for possible evacuation. An additional 3 – 4 homes are evacuated. Information updates scheduled to occur every three hours for Updateline and website until incident deemed over	SRD provides: • 3 air tanker groups with the potential to drop over 40,000 litres of fire retardant • 88 SRD and SRD contract employees deployed to Heartland Hall (Fire Station #4)	
12:00	Fires deemed approximately twice the size of fire occurring same area in previous spring west fire considered "80% held"; east fire considered "held" Coordinated efforts with Lamont County through direct communication in field	Following County Dept. now assisting both within and outside of EOC: • Communications – issues press releases, information updates • RPC – opens Moyer Centre as Reception Centre for resident assistance	Mutual Aid partners continue to assist AEMA provides continuous updates Lamont continues efforts on their side of municipal boundary	

Onset and Response Activities (May 3rd – July 3rd, 2009) continued				
Date	SCES	EOC and other County Departments	Mutual Aid	Emergent Group and other "Unauthorized" Activity
May 4, 2009 (cont'd) 13:00	Continued to respond to additional fire, rescue and EMS calls unrelated to fire incident Continued liaison with industry	• Facilities – staffs switchboard, assisting in EOC • Transit – provides additional transportation • FCS – provides resources on standby at reception centre, liaison with Volunteer Centre • Fleet – provides fuel, mechanics, towing at scene • CPIA – assists in EOC • TAS – provides helicopter fuel	AHS issues "Frontline" alert; provides additional ambulance coverage County of Lamont deploys EPWS to order evacuation of their citizens	
	Door to door evacuation of residents begins in area between Rg Rds 205 and 213 and north of TWP 560	• RCMP assists with evacuation, road control and communication	Salvation Army mobilized to provide assistance to evacuated residents and meals for emergency responders	
16:00	Fire now deemed to cover about 3,000 acres	Commissioner issues update to County staff		

Onset and Response Activities (May 3rd – July 3rd, 2009) continued				
Date	**SCES**	**EOC and other County Departments**	**Mutual Aid**	**Emergent Group and other "Unauthorized" Activity**
May 5, 2009 09:30 16:00 17:00	All fire permits suspended Fire expands and crosses river into Sturgeon crews focus efforts on protecting endangered homes and properties Evacuation area expanded to include all lands north of TWP Rd 560 and evacuation becomes mandatory Fires now deemed out of control; east fire now called "Lamont fire"; west fire now called "Strathcona fire" Concern raised that two fires could potentially join together Full Fire Ban issued for all of Strathcona County	Issuance of information updates for Updateline and website continue Intense local media interest and public attention continues Mayor declares State of Local Emergency	Provincial fire advisory issued Mutual Aid partners continue to assist AEMA continues to monitor situation NR CAER assists with activation of CNS and public alerting with the County Unified command established between Strathcona, Lamont and SRD Schedule established for conference calls between GEOC and EOC to occur daily at 10:00 and 18:00 hours Information updates from Lamont County EOC continue to be regularly received Strathcona Fire Ban posted on Alberta Fire Ban website	Skidster with water tank and large cargo type truck with crew from an independent contractor appears at an endangered residence. Crew could not provide any official authorization but indicated they "would get paid". Remained at scene but provided little to no effective assistance and at times interfered with official responders

Onset and Response Activities (May 3rd – July 3rd, 2009) continued				
Date	**SCES**	**EOC and other County Departments**	**Mutual Aid**	**Emergent Group and other "Unauthorized" Activity**
May 6, 2009				
09:45	New fire occurs in Hastings Lake area of County	EOC continues to operate Information updates continue to be issued at regular intervals	Beaver County provides mutual aid assistance for new fire in Hastings Lake area	Food donations for crews begin to pour in from community Some conflict occurs when private donations are refused due to uncertainty over food preparation procedures.
10:30	Fires grown to an estimated 8,400 acres Evacuation continues to be in effect; however, residents allowed 30 minute escorted access to properties, depending on fire conditions and safety factors	RCMP Victim Services coordinates resident escorted access	Approximately 200 fire fighters from various agencies (including SCES) now working in the field	Anecdotal stories begin to circulate of food offerings being refused or "tossed out" in front of resident who brought it. Due to lack of recorded evidence, alleged incident(s) was not formally investigated.
13:13	investigation into Provincial Municipal Wildfire Assistance Program Guidelines begins Issuance of private fireworks permits now prohibited	Commissioner issues second update to County staff Finance initiates formal tracking process for fire fighting costs	City of Edmonton and Alberta Environment provide air monitoring equipment AHS issues Health & Safety Advisory on air quality due to smoke	
17:00	16 residences now evacuated smoke release now affecting road traffic and visibility; Highway 830 between Highway 15 and Highway 38 remains closed	Public and resident enquiries continue to be received in EOC call centre, some of which indicate lack of awareness of County public alerting system in place	SRD issues Notice to Airmen (NOTAM) covering an approximate area from Cooking Lake east to Highway 855, restricting air traffic access from ground level to 4000 feet in elevation STARS (medivac) alerted and placed on standby	

Onset and Response Activities (May 3rd – July 3rd, 2009) continued				
Date	**SCES**	**EOC and other County Departments**	**Mutual Aid**	**Emergent Group and other "Unauthorized" Activity**
May 7, 2009				
09:00	Fire reported to be under control; perimeters established and crews working to extinguish hotspots No homes lost although a private youth camp suffered major damage At its peak, Strathcona fire rated as 5 (on a scale of 6) Fire Ban still in effect	EOC stood down State of Local Emergency lifted Evacuation lifted for area north of Township Road 560; residents allowed to return to homes Press release issued and residents notified		
15:40	Briefing provided and Action Plan to mitigate overall costs is presented at special Council Meeting Wildfire now affecting an estimated 3,365 hectares on land in northern Strathcona and Lamont Counties; costs incurred to date are in excess of $500,000	Special Council Meeting held to authorize expenditure to implement action plan and deal with AHS complaint Council and Chief Commissioner/Director of Emergency Management commended all County staff involved for their actions to date	AHS raises concern over perceived failure of Strathcona County to meet EMS contractual obligations	
17:00	Time required to completely extinguish this fire is estimated at an additional 3 weeks		Unified Incident Command (SCES/LFD/SRD) officially declares fire under control Demobilization of aircraft and heavy equipment planned to occur over the next 24 hours	

		EOC and other County		Emergent Group and other
Date	**SCES**	**Departments**	**Mutual Aid**	**"Unauthorized" Activity**
May 8 - 9	Suppression activities continue	Communications Department conducts follow up tasks (i.e. summary of calls, media coverage, wrap-up press releases, etc.) Chief Commissioner issues third and final update to staff and commendations to all involved	All Mutual Aid Partners with the exception of SRD crews released	
May 10	Over 100 fire fighters and support staff continue to actively work on site	Council requests ATV use continue to be prohibited and access to area continues to be restricted Communications issues appropriate notification to the community via press release, website and Updateline 211 continues to provide 24 hour support for resident enquiries	SRD prepares for gradual demobilization of SRD crews as work progresses Crews continue to deal with hot spots and overhaul	
May 11 - 12	Increased fire behaviour necessitates increased patrols; hottest area identified on Lamont side of fire		Utility crews begin preparations to restore area utilities AHS indicates concern over number of ambulances remaining on standby in Strathcona	

Onset and Response Activities (May 3rd – July 3rd, 2009) continued

Onset and Response Activities (May 3rd – July 3rd, 2009) continued				
Date	**SCES**	**EOC and other County Departments**	**Mutual Aid**	**Emergent Group and other "Unauthorized" Activity**
May 13 – 26	Total fire costs now estimated in excess of $834,000 Crews continue to patrol for and deal with hot spots Fire Ban remains in effect	Community updated through News release and Updateline message	Thermal imaging scans performed at SCES request	
May 26	Aerial survey indicates two prime areas of concern. SCES recommends closure of area to non-essential traffic and recreational use		Interference from ATV operators causes SRD crews to relocate	
May 27 - 28			SRD begins formal demobilization	
May 29		Communications issues news release re area closure as of 16:00 hours Updateline and 211 receive updated messages		
May 30	Crews continue to deal with hotspots and patrol area			
June 16	Informational Open House for residents and stakeholders held at Heartland Hall			
July 3	Incident deemed officially over	Area re-opened for recreational use	All SRD crews released	

Recovery and Clean up Activities (July 4th – Spring 2010)				
Date	**SCES**	**EOC and other County Departments**	**Mutual Aid**	**Emergent Group and other "Unauthorized" Activity**
July 4 - 30	Crews continue to patrol area for hotspots and overhaul			
August		Executive Administration begins Municipal Wildfire Cost Recovery Grant Applications		
September	Representatives from TAS and SCES visit area residents to assess fire break and other damage caused by fire fighting efforts. Repair and restoration process begins			
	Focus Groups, Surveys and a series of debrief meetings are held for data gathering purposes			
October	Work begins on After Action Report			
December 1	Remediation Work completed			
January 1, 2010	Emergency Management Agency Pilot Project initiated to better prepare for and manage emergent events in Strathcona County.			
Spring 2010	Crews again patrol area after receiving reports of smoke in the air A series of firesmart presentations are offered in rural communities	All County departments participate in ICS and EOC training workshops All County departments participate in improved business continuity planning		
Fall/Winter 2010	After Action Report released			

Appendix 7: Sample Resident Information Package

North Strathcona County fire

For residents returning home – key information and contacts

We understand the distressing time these past days have been for you and your families. We trust the following information and key contacts will be helpful to you as you return back home.

Important to note

- The wildfires continue to burn in the areas north of Township Road 560. Conditions can change, and until the fires are fully suppressed, you need to be prepared to leave quickly should conditions change and fire again becomes a threat.
- In being prepared to leave, consider medications, eyeglasses and parking vehicles with free access out.
- Call **9-1-1** if you require emergency response.

Resources to help

Strathcona County

- **Emergencies: 9-1-1**
- Notices on the UpdateLine at **1-866-653-9959** if circumstances change
- RCMP Victim Services: 780-449-0153
- Family and Community Services: 780-920-3590
- Heartland Hall Contact Offices: 780-893-1177
- Strathcona County: 780-464-8111

Alberta Health Services (formerly Capital Health)

- The Medical Officer of Health advises that if people are susceptible to respiratory conditions and there is smoke in the vicinity of their homes, they may not want to stay in the area. People who experience difficulty breathing should consult their physicians.
- 1-866-408-5465 (LINK)
- www.albertahealthservices.ca

Air quality – Alberta Environment

- Current air quality and the air quality index can be viewed at Alberta Environment's website at www3.gov.ab.ca/env/air/'index) etc.
- Call: 1-877-247-7333

Alberta Sustainable Resource Development

- Alberta's Wildfires Update Line: 1-866-916-INFO (4636)
- http://www.srd.gov.ab.ca/wildfires/firesmart/

Facts of the fire

The burned area in Strathcona County covers an estimated 8,400 acres, an area three times the size of Sherwood Park. At its peak, the Strathcona fire was rated as 5 (6 being the highest) on the scale of severity. A total of 200 firefighters were on the scene in the last few days. Strathcona County Emergency Services worked closely with emergency responders from Bruderheim and Lamont, along with Alberta Sustainable Resource Development.

Strathcona County

EMERGENCY SERVICES

May 7, 2009

INSURANCE BUREAU OF CANADA

BUREAU D'ASSURANCE DU CANADA

General Info For those Homeowners who have an active Home or Tenant Insurance policy

What you should do first?

As soon as you and your family are safe, contact your insurance representative/broker or insurer directly with as much detail as possible. They are there to help you.

Your insurer needs to hear from you or your broker/agent before they can activate a claims file. **The quicker contact is made, the quicker your claims process begins.**

What your policy may cover?

→ If your house is unlivable, your policy may include coverage for the cost of additional temporary living expenses such as hotel fees, etc. if the occupants had to evacuate their homes due to damage, or mass evacuation orders.

→ Money to buy immediate necessities may also be available through your policy.

→ Homeowner and tenant insurance policies generally cover the cost of repairing homes and replacing damaged belongings. And may also cover food spoilage due to potential power outages resulting from the fire along with the smoke damage to the interior of the home.

What you will need when you call?

→ Your policy number if you have it.

→ The address of the insured property where the incident occurred.

→ Your insurance representative may need to ask you a series of questions to verify that you are the policyholder.

What happens next?

It's a stressful time and you need help. Insurance companies – our members – want to make the claims process as simple and stress-free as possible to get you back to your normal life as quickly as possible.

Once you contact your insurance representative and a claim is opened the following is a **shortlist of what you can expect from your insurance company:**

→ a claims adjuster will be assigned to work with you in managing your insurance claim;

→ your insurer will arrange trades people to repair or replace your home;

→ your insurer will arrange the replacement of your damaged or destroyed contents with an equivalent item where possible and if coverage exists; and,

→ you may need to prove ownership in some cases such as receipts, valuations or photos of damaged items, however in the event of total losses, the claims representative/adjuster will work with you.

Contact your insurance representative as soon as safely possible.

For general insurance information, please call IBC's Consumer Information Centre at 1-800-377-6378.