City of Richmond

Report to Committee

To:	Community Safety Committee	**Date:**	November 8, 2006
From:	Jim Hancock Fire Chief	**File:**	
Re:	**Electrical Safety Inspection Program – An Alternate Approach to Combating Grow Operations**		

Staff Recommendation

That Council endorse the creation of an Electrical Safety Inspection Program for Richmond on a one-year trial basis.

That:

1. A temporary 2007 funding source of $560,100 for a pilot Electrical Safety Inspection program be identified through the 2007 budget process and that inspection revenues be used to offset the program expenses.

2. The BC Safety Authority provide cost-effective electrical inspection services for a one-year period and the Fire Chief be authorized to execute all necessary documents.

3. One-year temporary clerical position, a fire inspector, and two police officers be funded to run the new Electrical Safety Inspection program for the trial period

4. The appropriate bylaw changes required for the new Electrical Safety Inspection program be presented to Council.

5. Richmond's unusual electrical consumption records be requested from BC Hydro.

6. Program status reports be provided after the first 6 months and 12 months of the program.

Jim Hancock
Fire Chief (2700)

Att. 5

FOR ORIGINATING DIVISION USE ONLY	
ROUTED TO: **CONCURRENCE** R.C.M.P. ..... Y ☑ N ☐ Law ..... Y ☑ N ☐ Budgets ..... Y ☑ N ☐ Taxes ..... Y ☑ N ☐ Building Approvals ..... Y ☑ N ☐	**CONCURRENCE OF GENERAL MANAGER**
REVIEWED BY TAG YES ☑ NO ☐	**REVIEWED BY CAO** (ACTING) YES ☑ NO ☐

Staff Report

Origin

This report responds to Council's referral requesting information on Surrey's new Electrical Safety Inspection Program and its regulations.

Findings Of Fact

Surrey introduced a pilot Electrical Safety Inspection program based on the findings and suggestions contained in Fire Chief Len Garis's report "*Eliminating Residential Marijuana Grow Operations – An Alternate Approach*" ***(Attachment 1)***.

The City of Surrey's grow op data analysis from 1997 to 2003, ***(Attachment 2)*** revealed significant findings that led to the introduction of the new program. Their data indicated the percentage of:

- Fires as a result of marijuana grow ops was increasing.
- Full criminal investigation of grow ops was decreasing.
- Residential electrical fires involving grow ops was increasing.
- Indoor grow ops with children was increasing.
- Grow ops found in houses were extensive.

Surrey's pilot electrical safety inspection program was introduced with a focus on fire/life safety and property loss prevention and not criminal prosecution. The electrical safety program inspection process is outlined in ***Attachment 3***.

The tasks of accurately producing and comparing Richmond's historical grow op data to that of Surrey's has proved problematic for both Fire and Police. However, discussions with Fire-Rescue and RCMP personnel confirm that the trends identified in Surrey's data as shown above, are also prevalent in Richmond.

There is no reason to believe that the grow op problem in Richmond is significantly different from that of Surrey, other than Richmond's population is slightly less than half of Surrey's. Fire-Rescue has also asked BC Hydro to identify the total number of occurrences of high residential electrical consumption for Richmond.

Analysis

At the conclusion of Surrey's pilot program, Surrey reported the following program outcomes:

- Reduction in the number of structure fires.
- Elimination of unusual hazards (entanglement, electrocution).
- Elimination of electrical hazards that potentially could lead to fire.
- Increased public awareness.
- Improvement of neighbourhoods.
- Relocation of grow ops to industrial or remote locations.
- Reduction in neighbourhood criminal activity.

Surrey's demonstration project March 15 to June 3, 2005 netted significant results with:

420 police tips processed with 400 locations reviewed
78 grow locations terminated power
30 grow locations terminated by police or hydro as theft of power
11 grow locations required 7-day notice to repair
229 grow locations rendered safe
28 residences contained 49 children
7 residences did not contain a grow op
94% of the locations had electrical safety violations

The outcome of Surrey's inspection team was a:

1. Reduction in the amount of property loss.
2. Increase in the risk to growers by introducing:
    - Closer scrutiny by other jurisdictions (Provincial, Federal, foreign)
    - Increased financial risk to growers
    - Increased public awareness and increased reporting
    - Major impact on growers with minimal government cost.

The success of their pilot programs has led both Surrey and Abbotsford to continue and expand on their programs. Surrey and Abbotsford are both in the process of adding additional inspection teams.

Surrey has adopted bylaw amendments to address concerns identified from their pilot program and to include a cost recovery component outlined in ***Attachment 4***. Surrey also recognized the need for legislative changes and championed Provincial legislation that as of May 2006 allows BC Hydro to provide unusually high electrical consumption records to municipalities upon request.

Surrey Fire-Rescue and the BC Safety Authority are actively promoting and encouraging cities within the GVRD to introduce an Electrical Safety Inspection program. They have indicated that as more communities adopt this program, displaced grow operators will follow the path of least resistance and relocate to cities without this program. Richmond and a number of other cities are investigating this program including: Coquitlam, Port Coquitlam, Squamish, Hope, Mission, Kent/Agassiz.

<u>Accessing Electrical Consumption Records</u>

In May 2006, new legislative amendments were made to the BC Safety Standards Act that will help local authorities target and shut down marijuana grow operations.

Municipalities can request unusually high electrical consumption records for their city from BC Hydro. Hydro will provide the name of account holder, civic address, and relevant consumption records for residential homes that meet or exceed 93 kilowatt-hours per day, which is 3 times the normal consumption rate.

The City can share the information with the police for the purpose of ensuring the safety of electrical inspectors and avoiding interference with ongoing investigations, however the police cannot use this indirect information source from the City to obtain a search warrant. The electrical consumption records remain protected from members of the public under the freedom of information and personal privacy legislation.

Should Council choose to access Richmond's electrical consumption records an electrical safety inspection program would need to be introduced.

Inspection Volume

In 2006 Surrey's inspection team was able to inspect 353 homes in a year. This roughly equates to 4 inspections a day twice a week given the 24-hour notice requirement.

Electrical Inspection Services

Historically, municipalities determined whether they provided their own electrical inspection services or had the services provided by the BC Safety Authority. Eight cities or districts, including Vancouver, Surrey, and Burnaby have opted to hire their own electrical inspectors. Other cities and districts including Richmond and Abbotsford have services provided through the BC Safety Authority. Richmond currently has two provincial BCSA electrical safety inspectors.

Abbotsford is using the services of the BC Safety Authority (BCSA) electrical inspectors as part of their electrical safety inspection program; have reported no concerns with service; and are in the process of negotiating their fee for service agreement.

The BCSA has recently advised that local governments can carry out the work under the Safety Standards Act if they seek to develop an administrative agreement with the Province and have a Safety Manager. Alternately as each local government develops their program they can discuss contracting with the BCSA for an Electrical Safety Officer who would be assigned to them.

Bylaw Amendments

Richmond's current Property Maintenance and Repair Bylaw No. 7897 was modeled after Surrey's original bylaw. Richmond's bylaw contains re-occupancy requirements to ensure the building complies with all BC Provincial Code Regulations and Municipal Bylaws such as: Building, Electrical, Plumbing, Gas, Fire, and other health and safety requirements (such as mould). Richmond's bylaws would need to be amended and can be compared against the City of Chilliwack's as they have developed a model bylaw for use by other cities.

Electrical Safety Inspection Team Resources

Surrey's team is comprised of a Fire Inspector (team lead), an Electrical Inspector, two General Duty RCMP Officers to keep the peace, and is supported by an Administrative Clerk. Abbotsford uses the same model and has a Building Inspector "on call" as needed.

An Electrical Safety Program for Richmond

To create an electrical safety inspection program, similar to Surrey and Abbotsford, the City will need to:

- Negotiate a cost-effective electrical inspection service delivery with the BC Safety Authority;
- Fund and create an electrical safety inspection team of fire, police and an electrical inspector personnel;
- Amend its relevant bylaws; and
- Formally request from BC Hydro, Richmond's unusual electrical consumption records.

Financial Impact

This program is designed on the following financial premises:

1. That the fees for the special safety inspection include the initial inspection property search, and notice posting, are borne by the property owner.

2. That the program is cost recoverable through the fees collected from the property owners.

In Surrey, inspections start at $2,000.00 as set by their bylaw. Richmond's inspection fees would likely start at $1,450.00 which covers annual salary costs. A service cost (overhead) would be added to the inspection fee to cover items such as (training, computer, vehicles, etc.). If the fees are not paid prior to re-occupancy or by December 31st of the year, then they are added to the property taxes in arrears. Richmond would use the same system of fee recovery as Surrey. This system is not without its challenges in that the recovery of the inspection fees may be paid outside of a calendar year in which the expenses of the program are incurred or possibly delayed for a total of three years.

Given the revenue stream flaws and potential for delays in payment staff suggest that for the pilot, the program expenses of $560,100 ***Attachment 5*** be funded through the 2007 budget process during additional level budget considerations and that revenues received offset the program expenses. A funding source has not been identified for the $560,100.

Conclusion

Accessing Richmond's irregular electrical consumption records through BC Hydro and processing the information through an Electrical Safety Inspection program is an effective and proven way of addressing grow ops and their associated safety risks. Potential benefits include:

- Reducing the number of structure fires.
- Eliminating unusual hazards (entanglement, electrocution).
- Eliminating electrical hazards that potentially could lead to fire.
- Increasing public awareness.
- Improving neighbourhoods.
- Relocating grow ops to other locations.
- Reducing neighbourhood criminal activity.
- Recovering costs.

It is for the above reasons that staff recommend that Council consider adopting a pilot electrical safety inspection program for Richmond.

Geoff Lake
Deputy Chief (2734)

Sandra Pearson
Manager, Fire Rescue (2750)

ATTACHMENT 1

Eliminating Residential Marijuana Grow Operations – An Alternate Approach

A report on Surrey, British Columbia's
ELECTRICAL FIRE AND SAFETY INVESTIGATION INITIATIVE

BY

LEN GARIS, FIRE CHIEF
CITY OF SURREY, B.C.

EXECUTIVE SUMMARY

When one system fails to solve a problem, the logical approach is to either change it or augment it. In B.C., the sheer number of marijuana grow operations – promoted by a climate of high reward and low risk – have overwhelmed the criminal justice system. The multi-agency development of the Electrical and Fire Safety Inspection (EFSI) Initiative that began in fall 2004 was a reaction to the current system's inability to control the proliferation of grow operations and the many public safety hazards associated with them.

This report introduces the EFSI program, an alternative approach to dealing with grow operations that puts public safety above criminal prosecution. EFSI is not intended to replace the criminal justice system, but rather to complement it. This administrative approach allows local governments to efficiently and legally address the prevalent fire and electrocution risks associated with grow operations without drawn-out criminal investigations. At the same time, it attends to the backlog of police tips and multitudes of low-level grow operations, helping free up police resources to attack the crime networks behind the marijuana trade.

To provide context to information about the EFSI program, this report also delves into the marijuana trade in B.C. and outlines the challenges of the current criminal justice approach to grow operations. Marijuana is a multi-billion-dollar industry in B.C., producing revenues in the neighbourhood of forestry and tourism. Since the early 1990s, this illicit business has expanded exponentially, to the point that RCMP analysts estimate that some 20,000 grow operations are now pumping out BC Bud – the popular term for B.C.-grown marijuana – in ever-increasing quantities.

BC Bud finds a ready market south of the border; in fact, 50 to 80% of the marijuana grown in B.C. is believed to be destined for the U.S. The proceeds return to B.C.'s crime networks – mainly, outlaw motorcycle groups and Vietnamese gangs – in the form of cash, guns and drugs such as cocaine. The involvement of these crime networks has turned grow operations – and the neighbourhoods they inhabit – into battlegrounds, as competing groups invade other grow operations, and, sometimes, the homes of innocent people. This adds to the significant fire and electrocution risks that accompany residential grow operations, which typically employ unsafe and illegal electrical practices and overload the building's electrical circuits. As a result, grow operations are 24 times more likely to catch fire than normal homes.

Increased and targeted policing resources have so far been unable to curb the growth of the marijuana trade in B.C. and other provinces. For some Canadian police departments, grow operations constitute more than half of their drug cases – they're drowning in the numbers. In Surrey, for example, the RCMP detachment took down 257 grow operations in 2004 – about 13% of the city's estimated 2,000 grow houses. In Surrey, as in other communities, there is a growing trend towards "no case" seizures (dismantling of grow operations without criminal prosecution) as the prosecutorial requirements become more and more stringent. This is coupled with the seeming reluctance of the courts to address the burgeoning marijuana trade through increased penalties. While the grow operations

proliferate, conditional sentences (served at home) are on the rise and fewer convicted growers are going to jail.

In light of this dismal scenario, the collaborative development of the EFSI program and the 90-day demonstration project in Surrey emerge as a fresh alternative. Concluding on June 3, 2005, the demonstration project showed the EFSI to be an efficient and cost-effective means to address the persistent public safety threats related to grow operations. The five-person team is credited with rendering safe – and temporarily disrupting – 118 grow operations in Surrey during the demonstration.

As was expected, the pilot project also uncovered a variety of issues and obstacles that need to be addressed as the program evolves and expands. The City of Surrey is committed to pursuing and strengthening the Electrical and Fire Safety Inspection program in a manner that maintains its credibility and effectiveness. But ultimately, if the EFSI project is to make any real impact on B.C.'s grow operation crisis, local governments across the province must take a leadership role in its widespread adoption.

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ACKNOWLEDGEMENTS

The following people contributed time and expertise to this report:

- Dr. Darryl Plecas, Professor and Chair, Department of Criminology/Criminal Justice at the University College of the Fraser Valley
- Umendra Mital, P Eng, City Manager, City of Surrey
- Insp. Paul Nadeau, Major Case Manager, RCMP "E" Division
- Chief Glen Sanders, President, Fire Chiefs' Association of British Columbia
- Supt. Fraser MacRae, Officer in Charge, Surrey RCMP
- Lori Wanamaker, Assistant Deputy Minister, Housing, Building and Safety, Ministry of Community, Aboriginal and Women's Services
- Lorena Staples, Q.C., Staples McDannold Stewart Barristers and Solicitors
- Tom Lewis, Assistant Fire Chief, Surrey Fire Department (pilot project team leader)
- James Bond, Assistant Fire Chief, Surrey Fire Department
- Jim Barker, Manager, Electrical Section, City of Surrey
- Robert Prior, Director, Federal Prosecution Service in B.C.
- Kevin Begg, Assistant Deputy Minister/Director of Police Services, Ministry of Solicitor General
- Electrical and Fire Safety Inspection pilot project team members RCMP Cpl. Paul Allemekinders and Cpl. Chris Gerow, Fire Department Cpt. Ron Cross and Cpt. Lowell Shaw, Ken Hoyem and Kevin Wiersma (electrical inspectors) and Carol Richardson (clerk)
- Cpl. Vince Arsenault, Marijuana Enforcement Team, Surrey RCMP
- Tom Brown, Manager of Security Services, Accenture Business Services of British Columbia (security services for BC Hydro)
- Michael Sommers, Principal, SMG/Columbia Consulting Group (consultant for British Columbia Safety Authority)
- Bob Elton, President and CEO, BC Hydro
- Gord Roberts, Intelligence Coordinator, Surrey RCMP drug section
- Kyle Friesen, Legal Advisor, RCMP Legal Services Department, Department of Justice

PROBLEM: MARIJUANA GROW OPERATIONS

Cultivating marijuana is big business in British Columbia, representing an estimated $7 billion of trade per year. Despite increased police resources – described in the following chapter – B.C.'s marijuana industry has continued to expand in recent years. And as the number of sites and volume of harvest have grown, so too have the related public safety risks.

HOW BIG IS THE PROBLEM?

Commercial grow operations have clearly existed on some level for decades, to meet the demand from widespread recreational use of marijuana that began in the 1960s and 1970s. But today's sophisticated grow operations and the organized structure behind them – outlined below in more detail – are a more recent phenomenon.

Quantifying the extent and growth of the marijuana cultivation industry is an inexact science, given that it is an illegal activity and therefore hidden from public scrutiny. However, a review of known indicators – related to law enforcement of grow operations – reveals an obvious pattern of growth in the last decade. RCMP statistics show the number of marijuana plants seized across Canada increased six-fold between 1993 and 2001, from about 238,000 to 1.37 million per year.[1] In that same time frame, the amount of marijuana seized grew almost four-fold, from 7,314 kilograms to 28,746 kilograms.

For a look at B.C.'s marijuana trade, here is some of the data reported in the 2005 study *Marihuana Growing Operations in British Columbia Revisited 1997-2003* (Darryl Plecas, Arli Malm and Bryan Kinney)[2]:

- The number of cases brought to the attention of police in B.C. tripled from 1,489 in 1997 to 4,514 cases in 2003.
- From 1997 to 2003, police seized more than 2.4 million marijuana plants and 19,325 kilograms of harvested marijuana in B.C.
- From 1997 to 2003, the quantity of plants seized per year more than doubled and the quantity of harvested marijuana more than tripled.
- The average number of plants seized per grow operation increased from 141 in 1997 to 208 in 2003 – a 47.5% increase. The growth is more dramatic when indoor operations are considered separately: from an average of 149 plants per site in 1997 to 236 in 2003 – a 58% increase.

In an attempt to determine how many grow operations exist in B.C., the Fraser Institute developed a calculation in its 2004 report *Marijuana Growth in British Columbia*

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[1] *Drug Situation in Canada – 2001* was written by the RCMP Criminal Intelligence Directorate (2002). Source for final two sentences in paragraph.

[2] *Marihuana Growing Operations in British Columbia Revisited 1997-2003* was conducted by Dr. Darryl Plecas, Arli Malm and Bryan Kinney through the Centre for Criminal Justice Research (an International Centre for the Urban Research Studies-affiliate lab) at the University College of the Fraser Valley. Funded by RCMP "E" Division, the study reviewed all 25,014 alleged marijuana cases that came to the attention of police in B.C. from 1997 to 2003. It was completed in March 2005. Information presented is from pages 10, 23, 27 and 26.

(Stephen T. Easton)[3] The report estimated B.C. has 7,000 to 17,550 grow operations, each of which yields 13.3 kilograms of product, for a total annual harvest of between 168 and 420 metric tonnes. It also estimated the export value of that yield in 2000 to be about $2 billion.

However, those estimates are considerably lower than those used by RCMP "E" Division.[4] RCMP analysis gauges the annual marijuana trade in B.C. at $7 billion – placing it in the vicinity of agriculture, tourism and forestry in terms of impact on the B.C. economy.

That number is based on the assumption that B.C. has 20,000 grow operations (each with 250 plants) that produce a combined total of 3.7 million pounds (1,678 metric tonnes) of product per year.[5]

According to RCMP Insp. Paul Nadeau, major case manager in "E" Division's drug enforcement branch and head of the Coordinated Marijuana Enforcement Team, "Grow ops are the number one issue facing law enforcement agencies in British Columbia. Period."[6]

Anatomy and Hazards

Indoor marijuana grow operations tend to share similar characteristics. Information gathered for Surrey's Electrical and Fire Safety Inspection team[7] indicates that larger homes are commonly used for indoor operations in order to maximize output. No neighbourhood is safe from grow operations – the operators often convert large houses in upscale residential areas for growing purposes. The renovations and damage caused by the grow operation make these homes uninhabitable for future residents. Unless repairs are made, the house is ruined and property values in the area are reduced.

Here are some other signs of a grow operation[8]:

- Residents rarely appear to be home and attend the house for brief periods of time. The radio and televisions are left on. Mail delivery is left unchecked and junk mail piles up.
- Visitors come and go at odd hours and may behave strangely.
- Entry to the home is usually through the garage or a back entrance to conceal activity.
- The exterior of the home is often untidy, with uncut grass, garbage bags, used soil and plastic pots.

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[3] *Marijuana Growth in British Columbia* was produced in May 2004 by Stephen T. Easton as part of the Fraser Institute's Public Policy Sources series. The report studies the marijuana prohibition in Canada, specifically British Columbia. Information presented is from pages 18 and 20.

[4] "E" Division is the RCMP's B.C. division.

[5] Interview with RCMP Insp. Paul Nadeau, major case manager in "E" Division's drug enforcement branch and head of the Coordinated Marijuana Enforcement Team (May 16, 2005).

[6] Interviewed on Apr. 29, 2005.

[7] Information in this paragraph is from Surrey Assistant Fire Chief Tom Lewis' presentation *Grow Ops: A Matter of Public Safety* (2005), for the Electrical and Fire Safety Inspection team training session.

[8] Lewis (2005).

- Windows are boarded or covered and may have a layer of condensation
- Equipment such as large fans, lights and plastic plant containers is carried into the home.
- Sounds of construction or electrical humming can be heard. Strange odours (a skunk-like smell) emanate from the house
- Hydro metres are tampered with, signs of digging are found near the hydro box.
- The neighbourhood experiences localized surges or decreases in power.
- The property has warning signs, such as "Beware of Dog" or "Guard Dog".

Study of grow operations has highlighted significant associated safety risks, for the public and emergency responders as well as for the operators and their families.[9] According to the study by Dr. Plecas *et al* (2005)[10], 15.3% of indoor grow operations in the subject group had at least one hazard, such as weapons, fire or other drugs. Other potential hazards not addressed by that figure include mould caused by the humid growing environment, the chance of home invasions, and bypasses to steal electricity. In addition, 21% of confirmed grow operations in 2003 had children present, based on Vancouver data.

- **Electrical and Fire Hazards**

Electricity is the lifeblood of indoor marijuana grow operations, fueling increasingly sophisticated equipment such as high-wattage lights to boost plant growth as well as fans, pumps and other electrical devices.[11] The demand for improved growing technology resulted in an almost 50% increase in hydroponics shops in B.C. from 2000 to 2004, according to the study by Dr. Plecas *et al* (2005). To power their equipment, grow operations can consume two to five times more electricity than a typical home.[12]

While electric generators are sometimes used, indoor grow operations typically fall into two categories: those that consume large amounts of electricity and pay for it, and those that consume large amounts of electricity but attempt to steal it by tampering with or bypassing the hydro metre.[13] During the seven-year period of the Dr. Plecas *et al* (2005) study, an average of 20% of confirmed cases involved electricity theft. The authors also extrapolated that confirmed thefts from grow ops amounted to $3.2 million worth of electricity in 2003 alone.

BC Hydro subsequently estimated grow-operation-related electricity thefts – including those not identified – to be in the range of $12 million for 2003.[14]

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[9] Plecas *et al* (2005, p. 31-34), *Preliminary Data on Hazards in Marihuana Grow Operations* (Darryl Plecas and Arli Malm, 2004), *Marihuana Grow Operations and Hydro Bypasses Report* (Richard van Leeuwen, P.Eng. 2004)

[10] Plecas *et al* (2005). Information in this paragraph is from page 32

[11] Plecas *et al* (2005, p. 29, 30); van Leeuwen (2004).

[12] *Electrical Cable Temperature and its use in Detecting Marijuana Grow Operations* (Richard van Leeuwen, P.Eng, May 24, 2005, p. 3)

[13] Plecas *et al* (2005). Information in this paragraph from pages 30 and 31

[14] Statement made by Bev Van Ruyven, BC Hydro senior vice-president in charge of distribution, at BC Hydro's revenue requirement hearing on May 19, 2004 in front of the B.C. Utilities Commission

Whether the power is purchased or stolen, these illicit operations typically use an unsafe, unapproved network of electrical wiring that poses significant electrocution and fire risk, according to electrical engineer Richard van Leeuwen's report (2004) on the electrical risks associated with grow operations. His report detailed the following hazards:

- Unsafe electrical practices used during and after the installation of a bypass – including inadequate electrical protection such as open wiring, a lack of fuses or circuit breakers – can cause electrocution, arcing and a high likelihood of fire if there is a short circuit or a bad connection overheats.
- The typical crudely-made bypasses can electrify the conduit, which, if connected to a home's ground rod, could then electrify the surrounding ground. This could result in electrocution for an animal or person up to 10 metres (almost 33 feet) from the ground rod, usually located at the side of a house.
- Tripping, shock and fire hazards are prevalent because the wiring is rarely completed by professionals or installed correctly.
- Grow operations typically overload the electrical circuits, which could cause short circuits or electrification of adjacent metal. This brings with it a significant electrocution hazard for unsuspecting electrical professionals or firefighters.
- Because many grow operations are not constantly monitored, fires that do occur have a greater risk of growing out of control and threatening neighbouring properties.

The fire risk associated with grow operations is significant. From 1997 to 2003, 419 fires occurred at indoor grow operations in B.C., and within that time period, the incidence of fires at indoor grow operations grew from 3.1% in 1999 to 4.7% in 2003.[15]

When Surrey data was examined for the Dr. Plecas *et al* (2005) study, that data revealed that the likelihood of a grow operation catching fire was one in 22 – that is, a home with a grow operation is 24 times more likely to catch fire than a typical home.[16] Other revelations: 8.7% of Surrey's 173 house fires in 2003 were directly attributed to grow operation electrical problems, and the average value of property loss in grow operation electrical fires was nearly twice as high as for typical house fires in Surrey.

A report on grow-operation hazards by Dr. Plecas and Aili Malm (2004) found a connection between hydro bypasses and fires, in that fires occurred in 5.5% of confirmed grow operations with bypasses from 1997 to 2003, compared to 3.7% of grow operations without bypasses.[17]

However, the Dr. Plecas *et al* (2005) study stressed that in general, the fire hazard associated with grow operations is related not to bypasses specifically, but to the myriad electrical problems that arise from the prevalent unsafe, improper and illegal electrical practices used at these illicit operations.[18]

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[15] Plecas *et al* (2005, p. 32)

[16] Plecas *et al* (2005). Information in this paragraph is from pages 33 and 34.

[17] Plecas and Malm (2004, p. 2)

[18] Plecas *et al* (2005, p. 34)

- **Violence**

Six per cent of grow operations have guns on hand[19], and many have reinforced windows and doors and/or booby traps. This is a reaction to the increase in "grow rips" -- home invasions at grow operations – that appears to have corresponded with the proliferation of grow operations. RCMP Insp. Paul Nadeau said grow operators fear the organized crime networks more than the police, and he suspects police only hear about a fraction of the home invasions that occur because most are not reported.[20] Still, the incidence of known grow rips was significant enough to prompt Surrey RCMP to issue a warning to grow operators in 2004.[21] The press release detailed a series of four grow rips – including two attempts at non-grow operations – and reported that 13 grow rips or attempted grow rips had occurred in a 30-day period in Surrey alone.

"Violence has always been an intrinsic part of the production, trafficking and distribution of illicit drugs, and marihuana is no exception," said a 2004 RCMP report on drugs in Canada.[22] "The general consensus among law enforcement is that violent incidents are on the rise in most areas of the country, although this increase cannot be quantified through hard data at this point. Home invasions, drug rip-offs, burglaries, assaults, and murders are only a few examples of the dangers that are par for the course when dealing in drugs. Booby traps of all sorts, usually intended to protect the grow operations from thieves, are reported."

The spillover of violence from grow operations is a major hazard for operators as well as innocent members of the public. And increasingly, more and more children are being put at risk. A study of Vancouver data indicates a growing number of children are present at grow operations.[23] According to the data, at least one child was found at 20% of grow operations in 2003, up from 13.7% in 2002 and 4.5% in 2001.

- **Other hazards**

Other typical hazards found at marijuana grow operations included booby traps, explosives and dangerous chemicals (2.1% of all confirmed cases), drugs such as heroin or cocaine (3.6%) and other weapons such as knives (2.9%).[24] As mentioned above, booby traps are becoming more prevalent, creating added risk for emergency responders. As well, the humidity required for an optimal growing environment frequently leads to mould and fungus – a health hazard -- while the buildings' structural integrity can be compromised by unapproved renovations and sloppy irrigation practices that rot flooring.[25] The operations can also create a low-oxygen environment, and gases from chemicals used in the process can build up in the home.[26]

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[19] Plecas *et al* (2005, p. 32)

[20] Interviewed on Apr. 29, 2005

[21] *Pot growers beware – Grow rippers are out there*, Surrey RCMP press release (Jan. 9, 2004)

[22] *Drug Situation in Canada – 2003* was written by the RCMP Criminal Intelligence Directorate (2004)

[23] Plecas and Malm (2004, p. 3)

[24] Plecas *et al* (2005, p. 32)

[25] Information from interviews of Surrey's Electrical Fire and Safety Inspection team members and walk-through of grow operation sites (Apr. 28, 2005)

[26] Lewis (2005)

Who's Involved

The notion that grow operations are small independent outfits is an outdated one. Far from being mom-and-pop pursuits, grow operations in B.C. are considered by the RCMP to be money machines that fund major crime networks.[27] In fact, B.C.'s Organized Crime Agency has estimated that outlaw motorcycle gangs and Vietnamese crime groups control 85% of B.C.'s marijuana trade.[28] Robert Prior, Director of the Federal Prosecution Service in B.C., likened the province's marijuana trade to a pyramid sales scheme, in which a large number of small operators feed into a central network. That way, if one operator goes, the structure of the network isn't affected.[29]

RCMP believe 50-80% of B.C.-grown marijuana is exported to the United States to create revenue for local crime networks.[30] This seems likely, given that B.C.'s estimated annual marijuana crop works out to almost a pound for each and every British Columbian. In addition, seizures of U.S.-bound Canadian marijuana at the border rose from 2,235 kilograms in 2000 to 15,697 kilograms in 2003.[31] South of the border, BC Bud – as it is commonly known – is a lucrative commodity, according to an RCMP report. BC Bud can fetch up to $6,000 US per pound in southern California, and it is commonly traded for cocaine, which is then smuggled back into Canada.[32] As well, there also appear to be clear links between marijuana grow operations and other organized crime activities, including money laundering, auto theft, gaming, drug and weapons smuggling.[33]

Caucasians are still the most common ethnic group in the marijuana growing business, but the number of Vietnamese suspects has increased dramatically in recent years, according to the Plecas *et al* (2005) study. Between 1997, the number of Vietnamese suspects involved in marijuana growing operations rose from 2% to 36%, representing a 26% increase.[34] This is supported by in-field observations from Surrey's Electrical and Fire Safety Inspection team, which found people of Vietnamese descent at most of the grow operations it inspected.[35] As well, Citizenship and Immigration Canada Intelligence has reported the possibility that Vietnamese people from Europe and Australia are being recruited to be crop-sitters (to monitor grow operations) and to learn how to grow marijuana.[36]

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[27] Interview with RCMP Insp. Paul Nadeau (Apr. 29, 2005) and Surrey RCMP Supt. Fraser MacRae (May 9, 2005)

[28] Organized Crime Agency of British Columbia's Annual Report (2001, p. 23)

[29] Interviewed on May 2, 2005

[30] Interview with Insp. Nadeau (Apr. 29, 2005)

[31] RCMP Criminal Intelligence Directorate (2004)

[32] RCMP Criminal Intelligence Directorate (2002)

[33] *NCC Working Group on Marijuana Grow Operations, Report and Recommendations to Ministers* (2003, p. 7) written by a working group of the National Coordinating Committee on Organized Crime

[34] Plecas *et al* (2005, p. 36, 37)

[35] Interviewed on Apr. 28, 2005

[36] NCC Working Group on Marijuana Grow Operations (2003, p. 7)

Grow Operation Locations

Where is marijuana being grown in B.C.? The study by Dr. Plecas *et al* (2005) suggests that while the problem is widespread, certain regions are clearly hotbeds for marijuana cultivation.[37] For example, 72% of the 25,014 cases recorded between 1997 and 2003 were in the Lower Mainland and Vancouver Island. In 2003, 10 of B.C.'s 149 jurisdictions accounted for more than half of all grow operation cases. With the exception of Prince George and Kelowna, all were in the Lower Mainland. Of those, Surrey had 441 (9.77%) of the 4,514 cultivation cases in B.C. in 2003, followed by Vancouver, with 335 (7.42%). All 10 jurisdictions had seen at least a 150% rise in cases from 1997 to 2003.

The study authors did observe a gradual post-2000 trend away from the Lower Mainland towards less densely populated areas such as Vancouver Island, the B.C. coast, the Thompson/Okanagan region and the Kootenays[38] – believed to be an attempt to avoid detection and access larger properties for increased production. In terms of public safety, this is a welcome phenomenon because it removes the significant associated hazards from residential neighbourhoods. It should be emphasized, however, that the Lower Mainland continues to have the province's highest concentration of grow operations.

The Lower Mainland focus for marijuana cultivation is no doubt linked to the prevalence of indoor grow operations in B.C. The Plecas *et al.* (2005) report indicated that, during the study period, 75% of the confirmed grow operations in B.C. were in a house or apartment, compared to 16% in outdoor locations.[39]

When marijuana grow operations are considered on a national basis, B.C. is clearly Canada's leader. The marijuana trade is by no means unique to this province – in 2003, cannabis (marijuana or hashish) played a role in 70% of all drug offences in Canada, 14% of which were related to cultivation.[40] However, B.C. accounted for 38.75% of the nation's marijuana cultivation cases that year, and its rate of 79 cultivation incidents per 100,000 far surpassed the national average of 27 incidents per 100,000.

Conclusion

The rapid expansion of B.C.'s marijuana growing industry is a top policing concern in this province. However, when the myriad hazards are taken into account, it is evident that grow operations are also a significant public safety issue that should not be ignored.

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[37] Plecas *et al.* (2005). Information in this paragraph is from pages 10, 15 and 16.

[38] Plecas *et al.* (2005, p. 15)

[39] Plecas *et al.* (2005, p. 23)

[40] Plecas *et al.* (2005). Information in this paragraph is from page 5.

SOLUTIONS AND SYSTEMS: CRIMINAL JUSTICE SYSTEM

The proliferation of marijuana grow operations in B.C., as discussed in the previous section, has overwhelmed the existing criminal justice system. Despite a coordinated provincial response and the widespread introduction of targeted community-based marijuana sections (widely known as green teams), the problem persists as the continuing atmosphere of high reward and low penalties in B.C. draws more criminals into this lucrative illegal industry. Over the years this issue has absorbed a growing share of anti-drug policing resources – to the point that marijuana grow operations constitute more than half of all drug cases for some Canadian police forces.[41]

OVERVIEW

Across the country, marijuana grow operations are targeted by municipal, provincial and federal police agencies, as well as other federal agencies, while the primary responsibility for prosecution of grow operations lies with the Attorney General of Canada in all provinces but Quebec.[42] The response from RCMP "E" Division (B.C.) has included the creation of a Coordinated Marijuana Enforcement Team in 2004, tasked with investigating the higher-level groups behind B.C.'s marijuana trade.[43] In addition, a number of municipal forces in B.C. have initiated green teams. These green teams respond to complaints, dismantle grow operations and initiate prosecution when possible. CMET works with the municipal green teams on certain files.

Using Surrey as an example, additional resources were added to its RCMP detachment in the fall of 2003 to increase the capacity to respond to grow operations. By October 2004, these resources had evolved to a full-time dedicated marijuana enforcement team. This seven-member green team is part of the department's 25-member drug section and has use of its administrative resources. The team operates on a four-day week and has the capacity to dismantle three to four grow operations per week. Aside from the work involved in obtaining a search warrant, each grow operation search and dismantle process requires the participation of the entire team for an average of four hours. Each case will also produce several hours of paperwork for one or two members of the team.[44]

Last year, the Surrey detachment dismantled 257 grow operations – a combination of the work of the green team and officers encountering grow operations during their regular duties.

The Dr. Plecas *et al* (2005) study showed that from 1997 to 2003, tips from a variety of sources led to 80% of the B.C. marijuana cases in which the information source was

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[41] *Drug Situation in Canada – 2003*, written by the RCMP Criminal Intelligence Directorate (2004)

[42] *NCC Working Group on Marijuana Grow Operations, Report and Recommendations to Ministers* (2003, p. 9), written by a working group of the National Coordinating Committee on Organized Crime

[43] Interview with RCMP Insp. Paul Nadeau, major case manager in "E" Division's drug enforcement branch and head of the Coordinated Marijuana Enforcement Team (May 16, 2005)

[44] Interview with Surrey RCMP Cpl. Vince Arsenault (June 1, 2005). Source for green team information.

identified.[45] When averaged over the seven years, 57% of them came from an anonymous informant or Crimestoppers, and 15% from landlords and neighbours. The statistics also showed that while the percentage of tips from neighbours has climbed steadily from 3% in 1997 to 10% in 2003, information/complaints from BC Hydro stayed relatively flat in absolute terms but declined as a percentage from 8% in 1997 to 2% in 2003.

The same study indicates that police response to a file varies greatly depending on the information source. Tips from landlords and routine checks had the fastest turnaround – on average, searches took place eight days after the file was opened – while tips from neighbours waited an average of 30 days for a search. Tips from Crimestoppers resulted in a search after 41 days, on average – possibly related to the extra work involved in obtaining a search warrant based on anonymous sources.[46]

In Surrey, the green team received 865 grow operation tips in 2004 – an average of 16 to 17 per week.[47] But though the vast majority of the tips it receives are founded, Surrey's seven-person green team simply cannot keep up with the tip load. In some circumstances, the delay in response has been so great that frustrated residents have made false reports – such as a break-in – to force RCMP to visit a suspected grow operation in a more timely fashion.[48]

Based on the Dr. Plecas *et al* (2005) study, Surrey's lack of capacity to promptly deal with tips is echoed at detachments across the province. While the number of tips to police throughout B.C. tripled from 1997 to 2003 (from 1,489 to 4,514), the percentage that received full investigations dropped from 91% to 52%. Correspondingly, the percentage of cases receiving only initial investigation increased from 2% in 1997 to 26% in 2003, and the percentage that received no action at all more than tripled, from 7% in 1997 to 22% in 2003.[49]

When police do discover a grow operation during a search, there has been a growing trend towards "no case" seizures – that is, the grow operation is dismantled but charges against suspects are not pursued.[50] In the instance of a large operation (100 or more plants), the percentage of "no case" seizures increased from an average of 11% in 1997 to 32% in 2003. For small operations with fewer than 10 plants, the percentage of "no case" seizures was even higher: rising from 48% in 1997 to 82% in 2003. Similarly, there has also been a gradual drop in the percentage of grow operation cases in which charges are laid. In 1997, charges were laid in 682 (96%) of grow operation cases. By 2003, that number had declined to 553 (76%).

Why the change? B.C.'s Federal Prosecution Service Director, Robert Prior, said that mainly because of costs, prosecutors have become more careful to ensure they have a good case before laying charges.[51] They must balance the evidence obtained by police

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[45] *Marihuana Growing Operations in British Columbia Revisited 1997-2003*, written by Dr. Darryl Plecas, Arii Malm and Bryan Kinney (2005). Information in this paragraph from page 18.

[46] Plecas *et al* (2005). Information in this paragraph is from page 20.

[47] Based on research by Surrey RCMP drug section Intelligence Coordinator Gord Roberts.

[48] Interview with Surrey RCMP Supt. Fraser MacRae (May 9, 2005).

[49] Plecas *et al* (2005). Information in this paragraph is from page 19.

[50] Plecas *et al* (2005). Information in this paragraph is from pages 40 to 42.

[51] Interviewed on May 2, 2005. Source for information in this paragraph.

with a reasonable possibility of conviction and a public interest in the conviction. The Crown has been working closely with police to ensure that cases that go forward have a higher likelihood of getting convictions.

The result of this shift has been that police are recommending charges in fewer grow operation cases, as evidenced by the statistics above. But when police do recommend charges in a case, Crown counsel lays formal charges 91% of the time.[52]

That translates into a high conviction rate for marijuana growers – but only if they make it to court. From 1997 to 2003, charges were stayed for 43% of suspects in marijuana cultivation cases.[53] The conviction rate is high for the remainder who do go to court, however. Approximately 93% of the suspects that went to court from 1997 to 2003 were convicted.

What becomes of these convicted criminals? Few go to jail. As revealed in the Dr. Plecas *et al* study (2005)[54], an average of 16% of those convicted in marijuana cultivation cases from 1997 to 2003 were imprisoned. In fact, on a year-by-year basis, the percentage of convicted growers sent to jail has dropped steadily, from 19% in 1997 to 10% in 2003. And those who do go to jail are generally back on the street in three to eight months (the average jail term for marijuana cultivation from 1997 to 2003 was five months, including criminals with nine or more past criminal convictions.)

Conversely, the study showed, the percentage of conditional sentences almost tripled from 1997 to 2003, from 15% to 41%. In total, about a third of those convicted received conditional sentences. And while conditional sentences often accompany other penalties, they were the most serious punishment in an average of 40% of the cases during the study period. Other dispositions reviewed in the study include probation (25% of cases), fines (42%), firearms prohibition order (34%), restitution (12%), community service order (5%) and conditional or absolute discharge (5%).

Issues and Obstacles

The rampant growth of marijuana cultivation in B.C. is evidence of major gaps in the existing criminal justice system, as well as other challenges.

- **Capacity**

Simply put, the current system does not have the capacity to curb B.C.'s burgeoning marijuana trade on its own. As detailed above, the problem stretches police resources and overloads the court system. As Robert Prior noted, the system was likely never envisaged to deal with an issue of this magnitude.[55] Simply throwing more police resources at the problem isn't the answer, as that would then create a bottleneck in the courts. "I think everyone realizes that even if the police wanted to dump all their resources into it, we couldn't handle all the cases."

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[52] Plecas *et al* (2005, p. 43)

[53] Plecas *et al* (2005). Information in this paragraph is from page 46.

[54] Plecas *et al* (2005). Information in this and the following paragraph are from page 48 and 53.

[55] Interviewed on May 2, 2005. Source of information in this paragraph.

Using Surrey as an example, its RCMP offers a conservative estimate of roughly 2,000 grow operations in that city alone.[56] Last year, the Surrey detachment dismantled about 13% of that number.

Among the representatives of the criminal justice system interviewed for this report,[57] there was a consensus that the limited resources must be focused on those criminals who are key to the crime networks that are driving the marijuana trade. They also agreed that the problem is that the proliferation of feeder grow operation sites bogs the system down, tying up resources to deal with the branches rather than the tree trunk.

- **Penalties**

While B.C.'s marijuana trade has spiked in the past decade, the penalties don't appear to be keeping up. More and more "no case" seizures are taking place when grow operations are found. Fewer convicted growers are being sentenced and conditional sentences are on the rise.

A national report on marijuana grow operations typified the courts' approach to the marijuana trade as "inconsistent and lenient," and noted that sentences don't reflect the involvement of organized crime networks.[58] "The courts have acknowledged that links do exist, but they are not substantiated by evidence. The sentences are, therefore, not reflective of the fact that MGOs (marijuana grow operations) are part of a much wider criminal element. Furthermore, sentencing does not seem to reflect the wider community impacts of MGOs" such as health and safety hazards.

In his 2003 paper reviewing sentencing in B.C. marijuana cultivation cases, Robert Prior indicates that the presence of certain aggravating factors can lead to a more serious penalty, such as jail time.[59] These include: theft of hydro, evidence of a grow operation's longevity, use of rental property (particularly if it has been modified), taking an active role in the operation, benefiting from the presence of the operation, ownership of the operation, and the presence of children. However, the paper points out, these factors must be weighed against mitigating issues, such as a lack of a criminal record. As well, "if the police wish the Crown to allege any of these aggravating factors, evidence to prove the point beyond a reasonable doubt must be provided."

Outlining the reason for the increase in conditional sentences, the paper notes that Section 718.2 of the Criminal Code "directs that judges are not to deprive an accused of his or her liberty, if less restrictive measures are appropriate."[60] As well, judges are mandated to consider conditional sentences in all cases that would merit a jail term of less than two years. "Trial judges are also working under decisions of the Supreme Court of Canada that say that conditional sentences are in effect jail sentences and that the deterrent value of a sentence being served in the community should not be under-rated." The paper

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[56] Interview with Surrey RCMP Supt. Fraser MacRae (May 9, 2005)

[57] Including Robert Prior (May 2, 2005), Insp. Paul Nadeau (Apr. 29 and May 16), and Surrey RCMP Supt. Fraser MacRae (May 9, 2005)

[58] NCC Working Group on Marijuana Grow Operations (2003). Information in this paragraph from page 8.

[59] *Sentencing Trends for Grow Operations in British Columbia* was first written by Robert Prior (Director, Federal Prosecution Service, B.C. region) in 2002 and updated December 2003. Information and quote in this paragraph are from pages 16 and 17.

[60] Prior (2003). Information and quotes in this paragraph are from pages 17 and 18.

concludes: "Unless the Crown and Court have the evidence needed to support a jail sentence, a conditional sentence will be difficult to oppose in most grow operation cases."

The Dr. Plecas *et al.* (2005) study draws a comparison between the penalties for growing marijuana in B.C. versus Washington State in the U.S.[61] It points out that in Washington State (where sentencing guidelines are in place), 49% of convicted growers in B.C. would have been sentenced to at least five years in jail, and 77% would have been sentenced to at least three months. As noted earlier, only 16% of growers in B.C. were sentenced to jail from 1997 to 2003, and the average sentence was five months. Moreover, no convicted growers in B.C. received a sentence of five years, and only 7% were sentenced to three months or more.

The study also stated that Washington State has "hardly any" marijuana growing operations, compared to thousands in B.C. "In the final analysis, the consequences for involvement in a grow operation in British Columbia, even where a person receives a prison sentence, are likely insufficient to reduce or prevent participation in marihuana grow operations."

Robert Prior, however, warned that comparisons between B.C. and the U.S. cannot be considered entirely accurate because marijuana offences are subject to federal penalties in the U.S.[62]

- **Public apathy**

Lack of public support for the war on marijuana trade is also an obstacle. Marijuana is widely viewed as a benign "soft" drug – many people "look the other way" when it comes to marijuana, while others actively decry the use of tax dollars to curb it. Websites (including www.cannabisnews.com, www.bcbudonline.com and www.maryjanesgarden.com) proudly promote the marijuana culture. The Marijuana Party, a fringe party in B.C.'s 2005 provincial elections whose slogan was "Overgrow the government," ran 44 candidates and earned more than 10,500 votes across the province. Polling agencies report that upwards of half of all Canadians support the decriminalization of marijuana. When police raided Vancouver's Da Kine café in September, 2004 after it openly sold marijuana for several months, they were taunted by a crowd of more than 200 protestors.

As noted by a marijuana grow operation working group of the National Coordinating Committee on Organized Crime, "any policies directed at combating MGOs seem to be offset by the mixed messaging regarding the consumption of marijuana and decriminalization. Public opinion of marijuana seems to indicate an increasing acceptance of the drug, which may translate into an increase in demand."[63]

The tragic deaths of four RCMP officers at a grow operation March, 2005 in Mayerthorpe, Alberta did begin to open the public's eyes to the danger and violence of the marijuana trade, but there is still a steep public relations challenge to be faced.

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[61] Plecas *et al.* (2005). Information in this and the following paragraph are from page 56.

[62] Interviewed on May 2, 2005.

[63] NCC Working Group on Marijuana Grow Operations (2003, p. 13).

- **Growing demand**

The 2005 Canadian Addiction Survey showed that marijuana use in Canada has almost doubled from 1989 to 2004.[64] In 1989, 23.2% of Canadians over age 15 had reported using cannabis at least once in their lifetime, compared to 28.2% in 1994 and 44.5% in 2004. It's important to note that these are national numbers; B.C.'s statistics are even higher, with a result of 51.4% in 2004. On the whole, cannabis use among younger people is more common: 70% of those between ages 18 and 24 report having used it at least once, dropping to 47% for those ages 18 and 19 and almost 30% for those ages 15 to 17.

These signs of expanded recreational marijuana use point to a growing in-country demand for the drug, as well as its increased acceptance by Canadian society.

OUTLOOK

The criminal justice system in Canada, and in B.C. particularly, is clearly losing the war against marijuana production. Increased and targeted resources and efforts have done little to diminish the escalating consequences that the production of this drug has on society's health and safety. The continuing environment of low risk and high reward, combined with the Canadian public's attitude toward the drug and the expansive appetite in the U.S. – and increasingly, close to home – for B.C.-grown marijuana, has given the crime networks the upper hand.

A national report on grow operations predicts that if this situation persists, "police forces alone will have difficulty stemming the supply or dissuading members of criminal networks from engaging in this lucrative market. It is therefore important that any barriers to the work of law enforcement be removed and that they join forces with a number of partners."[65]

Great effort and more resources are needed to win this battle, the report concludes. Otherwise, "the costs of inaction will likely be greater and more difficult to bear for the public."[66]

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[64] *Canadian Addiction Survey: A national survey of Canadians' use of alcohol and other drugs: Prevalence of use and related harms: Detailed report* (E.M. Adlaf, P. Begin and E. Sawka (Eds.), 2005), was published in Ottawa by the Canadian Centre on Substance Abuse. Information in this paragraph is from pages 48, 54.

[65] NCC Working Group on Marijuana Grow Operations (2003, p. 22)

[66] NCC Working Group on Marijuana Grow Operations (2003, p. 23)

Solutions and Systems: Administrative Approach

The Electrical and Fire Safety Inspection Initiative

In autumn of 2004, representatives from agencies and governments in B.C. started discussing an alternative approach to addressing the public safety hazards related to marijuana grow operations – namely, fire and electrocution risks.

A 90-day demonstration project for the Electrical and Fire Safety Inspection (EFSI) Initiative took place in Surrey, B.C. from Mar. 15 to June 3, 2005 with the intent of enforcing the Safety Standards Act at residential grow operations. An EFSI team of police officers, firefighters and an electrical inspector conducted electrical inspections at suspected grow operations that had unusually high electricity consumption. At locations with electrical hazards, or where an inspection was refused, the electricity was shut off until repairs were made and approved by the city's electrical inspectors.

Based on results of the demonstration project and projections, the direct and indirect benefits of the EFSI project include:

- Reducing the significant electrical and fire safety hazards associated with grow operations in residential areas
- Reducing the backlog of grow operation tips to police.
- Dealing with a large number of low-level grow operations or weaker cases, allowing the criminal justice system (police and the courts) to focus on the crime networks behind the marijuana trade
- Serving as a deterrent for the residential marijuana production by interrupting operations and causing an operational hurdle for growers. (Widespread application of the EFSI program is hoped to drive grow operations out of residential areas.)
- Raising public awareness about the dangers associated with grow operations.

Overview

At the heart of the Electrical and Fire Safety Inspection Initiative is the principle that awareness of the grave public safety threat posed by residential marijuana grow operations brings with it a call to action.

As detailed in the previous section, the criminal justice system in B.C. has been unable to address this problem. The idea for an administrative approach as a complement to the burdened criminal justice system arose from discussions in mid-2004 between Surrey Fire Chief Len Garis and Dr. Darryl Plecas about research by the doctor and his team[67] into marijuana grow operations, including their hazards.

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[67] Dr. Darryl Plecas, along with Arli Malm and Bryan Kinney, wrote *Marihuana Growing Operations in British Columbia: An Empirical Survey (1997-2000)*, released in 2002, followed by *Marihuana Growing Operations in British Columbia Revisited (1997-2003)*, released in 2005.

The research pointed to a considerable public safety risk associated with marijuana grow operations, mainly related to the unsafe electrical systems that are the norm with these illegal activities. While there had been a growing awareness of safety hazards linked to grow operations, the research by Dr. Plecas and his team quantified and underscored the risks for the first time. These hazards were further illustrated when Surrey fire statistics were used for a case study. As the idea of an administrative approach to the problem gained momentum, other stakeholders were brought into the mix to lend validity and expertise.[68] The result was a Fire Chiefs' Association of British Columbia report in September 2004 that called on the Ministry of Community, Aboriginal and Women's Services (MCAWS) to act immediately to address the public safety risks from grow operations.[69]

A task force was soon struck to move the issue forward. Regular meetings took place to determine the appropriate course of action and work out the issues. Those at the table included representatives from MCAWS, BC Hydro, the Fire Chiefs' Association, Surrey Fire Department, Ministry of Solicitor General, Office of the Fire Commissioner, Ministry of Attorney General, RCMP "E" Division and the British Columbia Safety Authority.

The process was not without its challenges, given the variety of agencies and organizations that were brought together, as well as the major attitude shift required for the non-traditional approach that was proposed. With public safety as its sole driving force, the EFSI program appears, to some, to contradict the conventional criminal justice approach. It also presented the various parties involved with individual obstacles.

One significant stumbling block – and one that posed the biggest threat to the project's success – was the restrictions the Freedom of Information and Protection of Privacy Act places on BC Hydro about the release of its customers' electricity consumption information. The act's section 25(1)(b) – regarding disclosures in the public interest – initially seemed the appropriate route, but that proved unwieldy because it would require making a case to BC Hydro and the privacy commissioner in each instance.[70] The RCMP's participation in the EFSI teams turned out to be the key, as the act's section 33.2(i) allows BC Hydro to release information to police for criminal investigations.

Delays were also caused by the B.C. Safety Authority's conservative approach in declaring grow operations a public safety hazard. The request arose at a time when the fledgling agency was still struggling with its new challenges as caretaker of the Safety Standards Act and other regulations – previously a government role.[71] BCSA involvement in the EFSI demonstration project was not mandatory, as Surrey is one of

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[68] Initial discussions about an administrative approach to grow operations included Surrey Chief Len Garis, Dr. Darryl Plecas, Richard van Leeuwen (P.Eng), RCMP "E" Division Insp. Paul Nadeau, Lorena Staples (Q.C.) and Fire Chiefs' Association of British Columbia President Glen Sanders.

[69] *Confidential Report to the Government of British Columbia (Ministry of Community, Aboriginal and Women's Services) On an Urgent Matter of Public Safety* (Fire Chiefs' Association of British Columbia, Sept. 9, 2004).

[70] *Marijuana Growing Operations/Hydro Service Bypasses – Authority to Disconnect Power* (Lorena Staples, Q.C., Oct. 27, 2004, p. 3).

[71] Interview with Michael Sommers, consultant for B.C. Safety Authority (May 2, 2005). Source for information in paragraph.

eight B.C. cities with delegated authority for its own electrical inspections. However, BCSA support was sought to help legitimize the project and provide the groundwork for its growth in the future. In March 2005, shortly before the demonstration project began, the authority issued an information bulletin that linked marijuana grow operations with electrical hazards and provided authority for inspections related to enforcing the Safety Standards Act. "Immediate action may be taken to disconnect the electrical supply to the premises to prevent injury and property damage."[72]

Individual perspectives and biases at times delayed the progress and could have easily bogged down the project indefinitely. In the end, however, it was concern about the proliferation of grow operations and the undeniable safety threats they pose that created a common ground, spurring the various parties to overcome their concerns, maneuver around the obstacles and work collaboratively to make the EFSI pilot happen.

Aside from its key goal of making neighbourhoods safer, the project early on showed promise of complementing the criminal system's war on marijuana grow operations. Fire Chiefs' Association of B.C. President Glen Sanders noted that its streamlined approach effectively reduces a public safety threat without getting tied up by process, as is the case with the criminal justice system.[73] To RCMP "E" Division Insp. Paul Nadeau, the EFSI project's novel approach is necessary to tackle a problem that has overwhelmed police capacity. "It's bigger than the criminal aspect, and the fact is, we just can't keep up."[74] By dealing with the low-level operations that bog down the criminal system, Nadeau said, the EFSI program allows for a more strategic, proactive approach to enforcement.

Each player involved in the project's formation invested resources – time, energy and financial – in an exciting example of multi-agency cooperation. For example, to cover off the RCMP involvement, Insp. Nadeau created an operational plan that was submitted to the Drug Enforcement Agency for approval. The B.C. Safety Authority also hired a consultant to help it work through EFSI-related issues.

The City of Surrey emerged as a leader in the project, having helped develop the concept, lobbied to move it forward and then planned and hosted the pilot. From City of Surrey Manager Umendra Mital's point of view, the goal of reducing a known public safety threat clearly fell within the city's mandate.[75] To that end, Surrey was initially prepared to absorb the anticipated demonstration costs of $40,000 to $60,000, long before $50,000 in funding from the Ministry of Solicitor General became available in April. City departments involved in the project received whatever support they needed. For example, Surrey's fire and electrical departments assumed responsibility for developing the EFSI team operational guidelines and training program in preparation for the demonstration project.

Surrey's forward-thinking staff and management effectively propelled the project within an environment of managed risk. To City Manager Mital, it was a striking example of the

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[72] From *Electrical Hazards Resulting from Marijuana Grow Operations*, an information bulletin (#B-EI 050304-1) released by the British Columbia Safety Authority on Mar. 4, 2005 and written by Rick May, Provincial Safety Manager, Electrical.

[73] Interviewed on Apr. 29, 2005.

[74] Interviewed on Apr. 29, 2005.

[75] Interviewed on May 4, 2005.

culture of creative management that enables Surrey to undertake innovative alternative approaches such as the EFSI program.

EFSI Demonstration Project

A demonstration project was a critical step in gaining acceptance of the EFSI program as a legitimate alternate approach to dealing with grow operation hazards. Surrey hosted a 90-day pilot from Mar. 15 to June 3, 2005, having already dedicated months to creating a comprehensive operational plan with 49 guidelines to address inspection team safety, operations, training, inter- and intra-agency issues and administration.

A separate RCMP operational plan, created through "E" Division, covered off police-oriented issues that included the possible perception of police conducting warrant-less searches and using the EFSI program as a pretext to raid grow operations. It outlined the need to focus on the program's public safety objectives to avoid this potential problem.[76]

A three-day training program began Mar. 15 for the city, RCMP and fire department staff involved in developing and delivering the demonstration project. In all, 22 people attended, including two guests from Abbotsford. The training included details about residential electrical systems and grow operations, team safety, inspection authority and legal issues, the inspection process, media relations with media practice scenarios, and three field exercises using actors as the occupants.

Each inspection team consists of an electrical inspector, a firefighter and two police officers, supported by a clerk. A number of additional personnel were also trained to provide for backup and rotating assignments.

The team operated four days a week during business hours. Its in-field work began Mar. 21, with drive-by inspections of 105 addresses from police tips.

The process used during the demonstration period was as follows:

1. The RCMP submit suitable tips to the EFSI team for investigation. (These were primarily older tips that appeared to be either low-level operations or lacked sufficient evidence to make a good case.)
2. Team members do a drive-by of the addresses to note the size and age of the home and other potential power uses, such as a pool. Security issues are noted and license plates on vehicles are run to determine if the owner has a history of violence or drugs, as a safety precaution for the team.
3. The police members on the EFSI team submit Freedom of Information (FOI) requests to BC Hydro for the electricity consumption of houses believed to be grow operations. Hydro's Freedom of Information Coordinating Office processes these requests on a case-by-case basis and discloses or withholds requested information in accordance with the FOIPP act.
4. Hydro's security department – Accenture Business Services for Utilities – reviews locations approved for suspected theft. Sites with suspected bypasses – denoting an electricity theft – are forwarded to police.

[76] Interview with Insp. Paul Nadeau on Apr. 29, 2005. Source of information in paragraph.

5. Once information has been obtained from BC Hydro's FOI office, the sites are researched by the EFSI clerk for city information including building permits, floor plans, aerial photos, inspection documents, bylaw complaints and dog licenses.

6. The EFSI team then approaches the properties. If the occupants respond to the knock on the door, they are asked for permission to enter and conduct an electrical inspection, or are given the option of setting up an appointment within 48 hours. If there is no response to the knock – the most common result – three notices are posted on the property requiring the occupant to call for an electrical inspection within 48 hours or the power will be disconnected. Notices are also couriered to the property owner and resident.

7. If no appointment is made, the team returns in 48 hours, knocks on the door, and turns off the power if there is no response. In most cases, however, an appointment is made within the required timeframe and the inspection takes place. After the team arrives on the site, the police officers secure the premises first. While the occupants wait outside, the electrical official inspects the house, almost always finding cause for a disconnection due to electrical code violations. If children are present, the Ministry of Children and Family Development is contacted.

8. The file is then turned over to the city's electrical department, which follows up with the permitting/reconnection process.

- **Outcomes**

In its 90 days of operation (which included the training period), the EFSI team processed 420 police tips and, from the evaluation of those, dealt with 126 residences. The team found cause to terminate the power at 78 residences and issue seven-day repair notices at 11 others.

In addition, the EFSI team's activities identified 30 residences with hydro bypasses. Ten of these were referred to police and 20 to BC Hydro, which terminated their electricity.

Overall, a total of 119 – approximately 94% – of the 126 residences needed to be rendered safe in some manner. The remaining seven residences did not show indications of having been a grow operation and were consuming high amounts of electricity for legitimate reasons.

Also notable was the fact that children (49 in total) were found at 28 – 22% – of the residences dealt with by the team.

Other statistics from the demonstration period include:

- The average file required 3.9 hours of time from start to finish.
- The team averaged 35 power disconnects per month.
- In total, 400 locations were reviewed through Freedom of Information requests to BC Hydro.
- 10 more possible electricity bypasses are still to be dealt with by BC Hydro.

As it turned out, in 49 of the cases, the necessary repairs were made and electrical permits were issued on average within five to six days of the inspection and/or disconnection – a

few as rapidly as the next day. BC Hydro reconnected the power for these properties on average within about four days of the electrical permit being issued (for those reconnected within the pilot period).

The demonstration project garnered considerable interest and inquiries from governments and fire departments across B.C. that are struggling with grow operations. In mid-May, the City of Calgary sent a police and fire officer to view the EFSI procedure. Calgary, which estimates grow operations there steal $53 million worth of power per year, has launched a multi-stakeholder coalition to address the issue.

EFSI Issues and Obstacles

Along with its obvious successes, the demonstration project in Surrey also revealed a number of issues and challenges.

- **Cultural bias**

One of the first and most enduring obstacles to the EFSI program was – and is – the necessary change in mindset. The traditional law enforcement approach, because of capacity issues as well as its inherent checks and balances, moves too slowly to address the heightening public safety risk caused by the proliferation of grow operations. To be successful, this alternative approach needs an alternative frame of mind – one that puts public safety ahead of catching and punishing criminals. It challenges the participants involved – from police, fire services and electrical inspectors to governments, BC Hydro and the B.C. Safety Authority – to revisit their attitudes and operations, to think beyond their own organizations and, ultimately, to view public safety as the primary driver for combating residential grow operations.

From time to time, conflicts arose during the project development process as participants struggled with these shifts from the norm. What eventually emerged, however, was a common understanding and acknowledgement that it was no longer possible to ignore this major public safety threat, and that involvement in the EFSI pilot project was a moral responsibility.

Certainly, the strongest bias to overcome has been the view that the criminal justice system is the only acceptable way to tackle grow operations. After all, the EFSI system gives growers enough notice to remove any evidence needed for prosecution, and its main penalty is to turn off the power, in most cases temporarily.

However, these two methods are by no means mutually exclusive. In fact, as supporters of the EFSI project have indicated, it frees up officers from pursuing the petty operators to allow them to go after the major crime networks behind the marijuana trade. This shift in viewpoint is likely easier for RCMP management to absorb than officers on the front lines, according to RCMP "E" Division Insp. Paul Nadeau.[27]

[27] Interviewed on Apr. 29, 2005

During the three-day training workshop for the EFSI pilot, Surrey Assistant Fire Chief Tom Lewis (the team leader) experienced some skepticism from the assigned police officers and employed a team development technique to break down the barriers.[78]

Soon into the project, the officers had bought into the objectives and some even cancelled their holidays during the demonstration period, according to Insp. Nadeau.[79]

- **Displacement**

If the EFSI program isn't adopted by other jurisdictions, displacement of the problem could be another issue. For the project to be successful on a widespread basis, it must be applied universally, or at least regionally. Otherwise, grow operators will simply move to non-EFSI communities.

BC Hydro could face another type of displacement. Grow operators who formerly paid for power might opt to bypass the system and start stealing power to avoid detection by the EFSI team.[80]

- **Access to information**

The project demonstration indicated that more sources of information are needed to launch EFSI investigations. Barriers included:

  - Legislation

    The Freedom of Information and Protection of Privacy Act, as it currently stands, is a considerable hindrance to the ability of the EFSI to eliminate the public safety risk from residential grow operations. At the moment, BC Hydro is permitted to disclose information to law enforcement agencies in accordance with the FOIPP act and related policy direction from the government-issued manual associated with that statute. Currently, the permitted disclosures do not include the proactive provision of high consumption locations.

  - Other grow operation indicators

    While the EFSI demonstration project was limited to detecting grow operations through electrical consumption, a number of other indicators could be used to identify suspected grow operations (typical physical characteristics of a grow operation). The use of infrared technology could also be used to identify grow operations.

If the RCMP run out of backlogged files to provide to the EFSI team, the challenge for the police would be deciding which new files would be pursued through traditional methods and which would be handed over to the EFSI team.[81]

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[78] Asst. Fire Chief Lewis allowed the members to go through the Forming, Storming, Norming, Performing stages, which begin with individual biases, continue with dialogue and conflict, proceed to start settling into a common purpose and finally performing and renewing to stay at the peak. Interviewed Apr. 28, 2005

[79] Interviewed on Apr. 29, 2005

[80] Interview with Tom Brown, manager of security services for Accenture Business Services (security agency for BC Hydro) (May 3, 2005)

[81] Interview with Insp. Paul Nadeau (Apr. 29, 2005)

The policing screening process for tips is critical, because the EFSI approach might preclude a criminal investigation in cases that initially appear to be low-level grow operations.[82]

- **Legal challenge**

Given the litigious nature of today's society and the cash resources available to the marijuana trade kingpins, there is a chance of a court challenge as to the legality of the inspections. However, there is legal precedent for administrative searches of this type – a similar case in the Ontario Supreme Court said searches for administrative procedures, such as bylaw infractions, were not subject to the Charter of Rights and Freedoms search and seizure provisions.[83]

So, while it's unlikely such a challenge would be successful, a court case might dampen cities' enthusiasm for taking on the project

- **Capacity, resources and cooperation**

Continuation and expansion of the EFSI program will require additional resources and multi-agency cooperation.

- BC Hydro

Expansion of the EFSI program around the province would most certainly result in capacity issues at BC Hydro. Its security department – which was already burdened by the work associated with just one EFSI project in Surrey – would be stretched to process the projected deluge of diversion investigations.[84] Additional resources in BC Hydro's FOI office might also be required.

- British Columbia Safety Authority

The B.C. Safety Authority performs electrical inspections throughout B.C. except for eight municipalities that have delegated authority, including Surrey. The now independent, cost-neutral agency would require a funding source to cover any additional workload resulting from an expanded EFSI application in the province.[85]

Communities without delegated authority would require BCSA cooperation to adopt the EFSI program

- RCMP

An offshoot of the EFSI project has been the identification of more thefts of power. A large proportion of Surrey RCMP's green team resources were dedicated to investigating EFSI-generated hydro theft cases during the demonstration project.[86] Surrey RCMP staffing for the EFSI demonstration was absorbed with existing resources, however

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[82] Interview with Robert Prior, Director of the Federal Prosecution Service in B.C. (May 2, 2005)

[83] Interview with Lorena Staples, Q.C. (May 6, 2005)

[84] Interview with Tom Brown (May 3, 2005)

[85] Interview with Michael Sommers (May 2, 2005)

[86] Interview with Surrey RCMP Cpl. Vince Arsenault (June 1, 2005)

- City

A dedicated EFSI team would require ongoing staffing of the fire, electrical and clerk positions. The project also significantly increases the workload for the city's electrical department, which conducts all follow-up inspections during the reconnection/permit process.[87]

Cooperation is also key. Surrey's pilot project benefited from the positive relationship between the various sectors involved. Cities that proceed with EFSI programs will require similar good working relationships between their fire, police and electrical inspection sectors to avoid turf wars.

- **Legitimacy**

The ongoing success and integrity of the EFSI project will rely on the diligent observation of its fundamentals: removing the public safety threat associated with residential grow operations. All data used must be thoroughly examined to ensure it has a very high likelihood of finding grow operations.

- **Cost recovery**

No cost-recovery mechanism was in use during the demonstration project, other than the standard permit fee for approval of the electrical repairs. The inspection process during the pilot encountered little resistance from grow operators, but the introduction of cost-recovery bylaw would likely change this.

- **Lack of follow-up**

Follow-up on cases was not addressed by the demonstration project. After the power is disconnected from an address, responsibility for the site shifts from the EFSI team to the city's electrical inspection department. Once the permit requirements are fulfilled, the power is reconnected and the operators are free to get back to business. There is then a delay in obtaining information about that address from BC Hydro. New consumption data can be provided by BC Hydro immediately after the completion of the first meter-reading cycle (i.e. after 30 or 60 days), providing disclosure would be in accordance with the FOIPP act.

- **Public perception and safety issues**

The EFSI brings a perceived new role not only to police officers – whose main function during inspections is to keep the peace – but also to firefighters, Hydro staff and electrical inspectors. Initially, some concerns were raised that the program's links to closing down grow operations could negatively effect public perception of these individuals and either make them targets or damage their image in the community.

However, it's believed these issues won't materialize as long as the project remains true to its primary goal of improving public safety.

The issue of ensuring the safety for firefighters and electrical inspectors during EFSI inspections was resolved by incorporating a police presence on the inspection teams to keep the peace. On no occasion was the team's safety threatened during the demonstration project.

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[87] Interview with Jim Barker, Manager of Surrey electrical section (May 4, 2005)

OUTLOOK

Surrey's groundwork in planning and hosting the EFSI demonstration project will provide a valuable template for other jurisdictions. Following its demonstrated success, the challenge now is to keep the momentum going, make any necessary changes and incorporate an ongoing evaluation process to ensure its long-term integrity.

Province-wide – or at least regional – application of the EFSI program will be necessary if it is to have any widespread impact on residential grow operations in B.C. In the best-case scenario, EFSI teams located in every residential community will provide such a fast response to grow operation tips that they will be driven out of neighbourhoods altogether.

As in Surrey, local governments will be required to take the lead role in adopting the EFSI strategy to make their communities safer. But movement at the provincial level is also necessary, particularly in terms of legislation that will allow for creative approaches to entrenched problems. The proposed legislative changes to provide access to BC Hydro records should only be the first step.

- **Next steps**

Work has already begun on initiatives to improve the program.

- Legislation

The Ministry of Community, Aboriginal and Women's Services and Ministry of Solicitor General are designing legislative changes that would require BC Hydro to report unusual electricity consumption to local safety authorities as a course of business. A draft is anticipated for the fall 2005 or spring 2006 session of the Legislature.

- Activities in Surrey

  - The city is working with an electrical engineer to develop a procedure for using infra-red technology to detect the higher electrical cable temperatures at grow operations with high consumption or bypasses.
  - Surrey is investigating a cost-recovery bylaw to recoup costs associated with the EFSI investigations. It already has a precedent – when grow operations are busted now, the city charges the property owners for any police and fire costs.
  - Surrey is planning a bylaw revision to address the dangerous structural alterations common in grow operations by forcing owners to meet the city's regulations and the B.C. Building Code.
  - Research is underway to find standards to address the health concerns presented by mould and mildew found at grow operations.
  - Surrey is developing a subjective criteria to further assist in the identification of grow operations for EFSI purposes, based on

information provided by the police tip and the inspection team's observations of the site.

- The city is pulling together a comprehensive policy for the EFSI project based on the results of the demonstration period.

COMPARATIVE ANALYSIS: COSTS AND OUTCOMES

Both the criminal justice system and the Electrical and Fire Safety Inspection program share a similar goal: to keep communities safe from marijuana grow operations. Beyond that, their approaches diverge, with the traditional system focused on prosecuting the growers and the EFSI system centered on removing the public safety threat associated with residential grow operations.

Given the vast differences between the two systems (including operational issues and objectives), it should be noted that a side-by-side comparison is not wholly representative of either approach. Nor is such a comparison entirely realistic, as the EFSI system is not being proposed as a replacement for criminal prosecution. However, a comparison does serve to highlight the efficiency of the EFSI program and the inability of the criminal justice system to curb the increase in grow operations.

As noted earlier, Surrey is estimated to have 2,000 grow operations.

- **EFSI**

During the demonstration period from Mar. 15 to June 3, 2005, the EFSI team rendered safe 119 grow operations – including sites whose electrical systems had been addressed and those referred to police due to hydro thefts. It should be noted that 49 of the sites had power restored, many within 10 days of the inspection. On average, the team processed each case in 3.9 hours, including all research, reports and site visits.

The five-person EFSI team worked four 8.5-hour shifts per week and completed an average of 35 power disconnects per month (8.75 per week) during the pilot project. Estimated costs associated with the project (including staffing and other resources) were $1,160 per power disconnect, $40,616 per month, and $121,848 for the 90-day period.[88]

- **RCMP**

In that same 90-day period, the Surrey RCMP detachment took down a total of 75 grow operations – 28 by the green team and 47 by uniformed officers. At sites dealt with by the green team, each search involves six or seven officers working for an average of four hours, in addition to the additional hours, if not days, expended during the pre-search investigation and on post-search paperwork.

Surrey's seven-person green team – which works four 10-hour shifts per week and has use of drug section support staff – has the capacity to take down three to four grow operations per week (12 to 16 per month). However, in the first five months of 2005, the green team took down 52 grow operations – an average of 2.4 per week.[89]

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[88] Based on an average of 35 power disconnects per month. It includes salaries for clerk, electrical inspector, fire captain, supervision by an assistant fire chief (plus 20% overhead for supplies, equipment, transportation etc.), as well as Surrey Electrical Department resources and two RCMP members (whose cost is based on the annual average per-member cost of $115,000, including salary and associated supply costs, that is used for budgeting purposes).

[89] Interview with Cpl. Vince Arsenault (June 1, 2005). Source for information in this paragraph.

Estimated staffing costs to Surrey for the green team during the pilot period were: $7,089 per grow op dismantle, $66,164 per month and $198,493 for the 90-day duration.[90]

The green team's ability to take down larger numbers of grow operations is hindered by the increasing size of individual operations, more time being spent on property seizures (18 houses are currently under restraint), increasing difficulty in obtaining search warrants, and an increasing number of "grow rips" (averaging two per week) that divert their attention.[91]

- **The bigger picture**

Based strictly on the statistics, it is clear that the EFSI system is able to meet its objectives less expensively and more efficiently than the criminal justice system. But the question of which system is better lies in whether one ranks public safety higher than criminal prosecution. Administered in concert, the two systems may achieve even greater gains in ridding our communities of marijuana grow operations and the public safety threats that accompany them.

[90] Figure based on the average per-member cost of $115,000 (including salary and associated supply costs) used for budgeting purposes.

[91] Interview with Cpl. Vince Arsenault (June 1, 2005). Source for information in this paragraph.

Conclusion

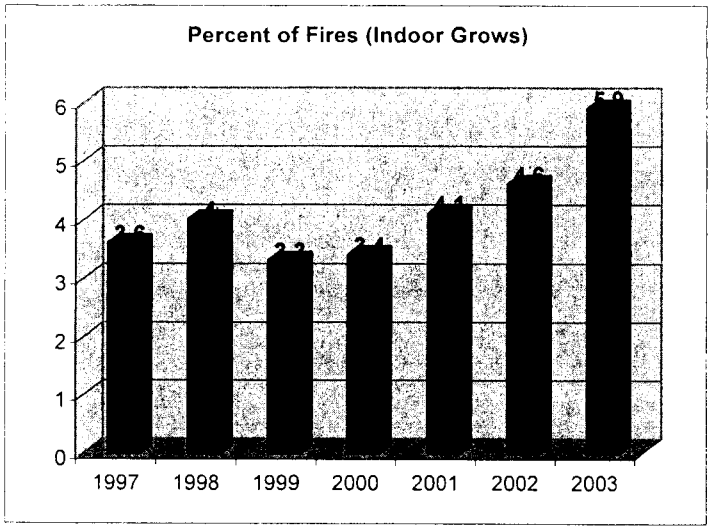
Marijuana grow operations have become an enormous societal problem that requires a multi-faceted response. The criminal justice system in B.C. – and indeed, across Canada – has become overwhelmed by the ever-increasing number of grow operations in the last decade. The proliferation of low-level grow operations absorb the available resources and shift the focus away from the high-level organized crime networks that control the marijuana trade. While this situation persists, indoor grow operations are infiltrating more and more of our neighbourhoods, bringing with them myriad public safety hazards and a culture of violence and crime.

The Electrical and Fire Safety Inspection Initiative offers an alternate, administrative approach as a complement – not replacement – to the existing criminal system. While EFSI programs are by no means a complete solution, they quickly and efficiently mitigate some of the immediate safety concerns related to residential grow operations – something the traditional approach has failed to do. In addition, EFSI programs support the criminal justice system by helping reduce the backlog of grow operation tips and freeing up the resources needed to bring down the marijuana-funded crime networks.

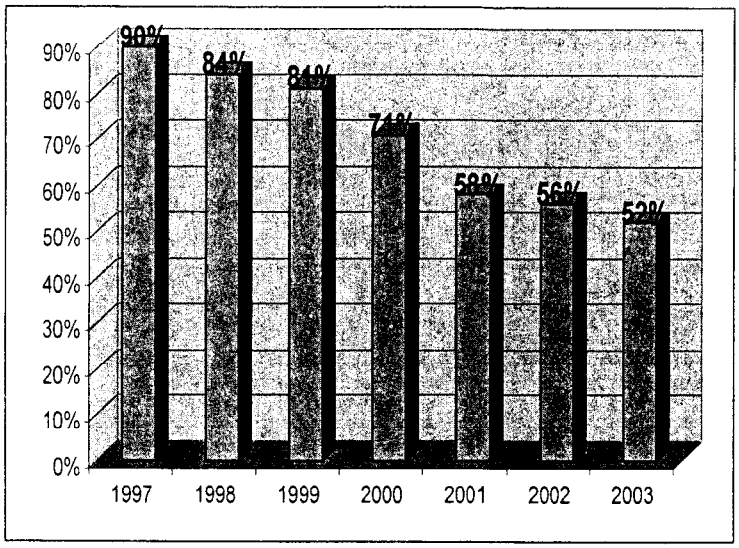
Our conventional approach to marijuana grow operations must be augmented by new and creative methods that attack this entrenched problem on many levels. EFSI programs should be considered an important tool in both the short-term and long-term battle against marijuana grow operations.

ATTACHMENT 2
Source: City of Surrey, Fire Department Public Presentation

Percent of Fires (Indoor Grows)



Percent of Full Criminal Grow Op Investigations

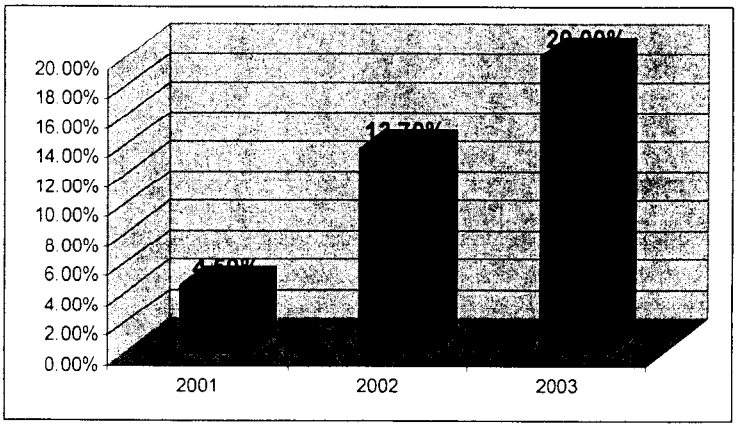


Residential Electrical Fires In Surrey

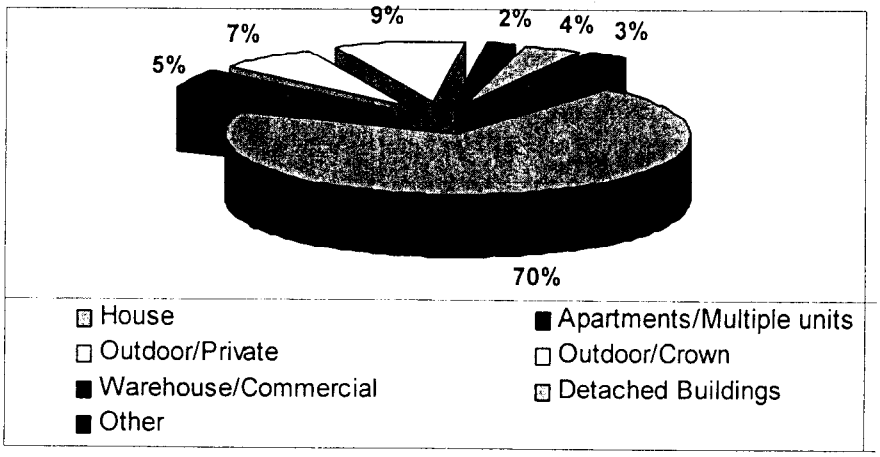
Residential Electrical Fires In Surrey Involving Grow Operations

Year	# of Fires	% Involving Grow Operations
1997	107	0.9
1998	128	6.3
1999	112	6.3
2000	135	5.2
2001	135	3.0
2002	142	1.4
2003	173	8.7
Average		4.7

Founded Grow Ops with Children



Distribution of Grow Ops by Property Type



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Attachment 3- Electrical Safety Inspection Program Process

PRE INSPECTION PHASE

- Data acquisition from BC Hydro.
- Data analysis and inspection decision including:
  Drive-by observations (including use of thermal imaging camera) and removal of inspections based on the RCMP's recommendation due to team safety or active investigation considerations.
- Inspection notice preparation and delivery.
- Inspection appointment set with property owner/agent.
- Electrical service cut-off decision for failure to provide access in the required time.

INSPECTION PHASE

- Entry & team inspection
  Team composition: Electrical Inspector, Fire Inspector, and two RCMP general duty members to keep the peace.
- Electrical cut-off consideration based on inspection findings and risk assessment.
- Discussions with property owner/agent on findings, remediation work; and process.
- Calls to other agencies such as BC Ministry of Children and Family Development.
- Placement of information on property records, notification to insurance companies and financial institutions.
- Placement of fees owing on tax and inspection records.

POST INSPECTION PHASE

- Formal inspection findings report and instructions to the owner and/or agent.
- Re-Occupancy Permit
  - Certification for Health Safety (mould)
  - Certification for Structural Integrity
  - Certification for Electrical Safety
  - Certification for Gas Safety
  - Payment of Inspection Program Fees

SCHEDULE A

Fees and Service Costs

Fees

The following fees apply under this bylaw:

1. Special safety inspection, including initial property research, the posting of a notice of inspection and the initial inspection	$2,000.00
2. After the initial inspection, each additional inspection, per inspection	$500.00
3. For a subsequent inspection if the owner or occupier has failed to undertake an action by the Fire Chief, the Council or a person authorized under the bylaw to order the action	$500.00
4. Shutting off a water service	$100.00
5. Re-connecting a water service	$100.00
6. Re-inspecting and re-sealing a water service after alteration or tampering	$500.00
7. All applicable permit fees payable under applicable City bylaws.	

Service Costs

The following service costs apply under this bylaw:

1. Item (a) in the definition of service costs – administration and overhead	$300.00
2. Items (b) through (i) in the definition of service costs	Actual cost to the City

Attachment 5 – Richmond's Proposed Electrical Safety Inspection Program Costs

Administrative Staff (Fire PG 15)	$ 47,733	
Fire Prevention Officer	$ 98,248	1 Year Temp Funding
Electrical Safety Inspector*	$175,000	1 Year Fee-For-Service
	$321,000	

*Fee-for-Service Agreement
2 days/wk 8:30am – 4:30pm
7 hrs x 2 days x 50 wks = 700 hrs
700 hours x $250.00/hour + GST (full rebate to City)

2 General Duty RCMP officers $239,100
1 Year temporary funding of two
RCMP resources
(4 days/wk 8:30am – 4:30 pm)

Notes:

Building Approvals Inspections. The program will have an unknown impact on Building Approvals gas and building inspection services. Permit activity will increase due to the need to correct building and gas deficiencies prior to building re-occupancy. The cost for Building Approvals inspection services is covered in the existing permit fees structure, however should the workload get too high, Building Approvals would hire additional auxiliary staff out of their permit revenues.

Supplies for the Fire Officer and Administrative Clerk would be provided at no additional cost by Fire. Items include: portable computer; cell phone; vehicle; clothing; flash lights; ladder; and consumable office supplies.

Training - Surrey's Fire Rescue Department has offered to assist Richmond to start their program. In addition to job shadowing, safety, procedural, and conflict resolution training would be provided to team participants. Richmond would seek to train in conjunction with other cities also starting their own programs. Costs would be minimal.

Inspection Fees - The program's staffing costs, totalling $560,100, would be factored into the inspection fees along with supply costs and charged back to property owners. Council is being asked to fund the program costs up front. The inspection fees collected would be credited against the program expenses.

The maximum number of inspections is assumed to be 384 based on 4 inspections/day x 2 days /week x 48 wks over a year period. The salary costs of $560,100 would equate to an inspection fee of $1450.00. There would be an additional service fee added to cover program overhead costs.