



**Protection Branch
Ministry of Forests**

Fire Review Summary for Osoyoos Fire (K50195)

Fire Number:	K5-0195	Fire Name:	Osoyoos
Date of detection:	July 16, 2003	Final size:	1,230 ha
Total cost:	\$9.1 Million (Est.)	Total damage:	TBD

Background

An open burning ban was in place in the Penticton Fire Zone as of May 16, 2003. An open burning ban was in place for the entire Kamloops Fire Centre as of June 15, 2003.

The fire has been referred to as the Osoyoos, Chap and Anarchist Mountain Fire because of its proximity to these geographic locations, but it is officially named the Osoyoos Fire.

Fire K5-0195 is believed to have been caused by faulty vehicle brakes on Hwy 3. This interface fire occurred in the southern interior of British Columbia in the Penticton Fire Zone (K5). The initial run of the fire paralleled Hwy 3 to the west and necessitated the closure of the road with traffic stopped at Rock Creek.

Due to the extreme drought conditions and heavy winds, the fire grew to 1,000 ha over the first 24-hour period. Two structures were lost in this fire while numerous homes were saved due to fire fighting efforts.

The Anarchist Mountain area is unincorporated and therefore has no fire department protection, but did have a newly formed volunteer group who were using a purchased fire truck and BCFS equipment. The call from the fire zone for the volunteer group's immediate response also assisted in fewer losses. The relationship between the fire zone and the adjacent local fire department in Osoyoos and Oliver facilitated co-operative dispatches. Having a community contact to assist in coordinating activities during such events is a key relationship in rural areas. Along with a defined command post, a check-in system should be clearly established; including guidelines, procedures and the training normally provided to rural volunteer groups.

Local fire zone staff reported valley temperatures of above 40 degrees celsius, southerly winds of about 30km/hr and a south aspect slope of 60-70% at the fire's point of ignition. Weather station data for July 16, 2003, (reported from the McCuddy weather station approximately 16km north of the point of ignition) was 24.1 degrees celsius, relative humidity 24%, with winds from the south at 23km/hr.



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FIRE WEATHER— JULY 16, 2003 (McCUDDY)

Temp	RH	Wind Dir.	Wind Speed	Precip	FFMC	DMC	DC	ISI	BUI	FWI	DGR Class
24.1	24%	S	23kph	0	93	121	599	21.2	161	60.1	5

Fire Zone Situation

On July 16 the Penticton Fire Zone had a total of 51 fires to date, 15 fires still burning and 2 new fire starts that day. They were in a current and 72-hour anticipated preparedness level 3C.

First calls for this fire were made to two Zone Protection Officers, and both were on 24-hour availability. There were five initial attack crews were on standby, two of which were on 24-hour availability. Local equipment available on standby included a crawler, low bed and a 3000-gallon tanker truck.

Fire Centre Situation

The Kamloops Fire Centre had a total of 191 fires to date, 52 fires still burning, and 13 new fire starts on July 16 with a danger rating of high to extreme throughout the fire centre. They were in a current and 72-hour anticipated preparedness level 3C.

Provincial situation:

Provincially there were 702 fires to date with 144 fires still burning across the province and they experienced 33 new fire starts on July 16 with two notable incidents; the Soda Creek interface fire within the Cariboo Fire Centre and the air tanker crash in the Southeast Fire Centre.

Provincially there were seven unit crews (20-person crews) available and another five unit crews on standby in their respective zones.

Fire Start and Response

The first reporting of the fire was received from the Penticton Fire Department at 11:59 with a second initial phone report from the general public. Due to the proximity of homes and the local intelligence of a Fire Warden advising of the start of an Interface fire, a local Initial Attack crew and forest officer and air tankers en route to a different fire (K50194) were redirected in to K50195. Once the crew arrived at the fire, it was noted that high winds and extreme fire behaviour had already affected the fire.

Direction from the ground by the Incident Commander was excellent when both setting and changing priorities. Initial resources requests to Kamloops Fire Centre were met once a clearly established and identified command post was identified.



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One protection officer was deployed along the east flank of the fire to initiate evacuations. Radio communications were sporadic from this location to other air and ground support. Issuing a SAT phone to all Protection officers and crews could have mitigated any communications difficulties.

Operational effectiveness of the Martin Mars water bomber was discussed, and the Forest Protection Officer requested Mars support to Birdog 31.

The relationship between the Fire Management Team (FMT) (with local zone involvement) and Emergency Operations Centre (EOC) helped operations run smoothly. The zone manager for Penticton is also a current member of the Provincial Emergency Team and assisted with the initial set up of the EOC being that it was the first time ever activated and he had previous experience to share. A representative from the Office of the Fire Commissioner (OFC) was available until the McClure fire started, but remained in contact as a resource as and when needed. Both FMTs commented on how well relations with the EOC and the community worked.

Initial attack concerns due to extreme local weather conditions and suspected arson activity heightened the demand on local resources. The initial attack on the Osoyoos Fire is detailed through the following chronology, detailing all resources including crews and aircraft launched to K50195.

CHRONOLOGY – INITIAL ATTACK

Time	Description
11:59	Dawn from Penticton Fire Dept reporting grass fire along Hwy 3 – Anarchist Mountain (first report)
12:00	First Initial Phone Report (second report)
12:01	5W51K reporting fire on Anarchist Mountain. Responding with a tank truck.
12:03	Tanker request from Penticton (K5) zone
12:04	Electronic air tanker request
12:04	Water truck and crawler ordered
12:05	Intermediate helicopter PMW redirected from fire 194 to fire 195 (H51 crew and P53 on board)



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Time	Description
12:07	5W51Z en route with crew via ground
12:08	Osoyoos Fire Dept responding
12:08	Second helicopter ordered
12:09	P51 en route from 194 to 195
12:10	Medium helicopter SGT pulled from 194
12:13	Fire Commissioner advised
12:17	Cat and water truck en route
12:19	Helicopter PMW dropped off H53 crew
12:20	Birddog 31 overhead reporting 15 ha
12:21	Vernon Unit Crew requested
12:29	PMW dropped off P53 – to initiate evacuation of residents
12:34	All crews but one being diverted from 194 to 195 (Appendix F)
12:39	2 more cats and low bed ordered
12:40	Helicopter YXL off Penticton base with H54 to 195
12:58	Birddog 31 – reports fire at 30 ha
13:00	Seton Lake Unit Crew – rerouted from Salmon Arm to 195



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Time	Description
13:06	Second medium AHP ordered
13:25	H55 off of 194 en route to 195
13:25	5W51C en route to 195
13:38	Helicopter AHP off Kelowna en route to 195
13:52	Birddog 31 reports 40 ha
14:13	Third medium helicopter (LFT) pulled from 188 to 195
14:32	Birddog 31 reports 50 ha
14:47	Revelstoke tankers requested
14:56	Martin Mars launched
15:23	Birddog 31 reports 60 ha
15:34	H51 on 195
16:53	H52 dispatched from Vernon base to 195
17:50	Birddog 8 reports 300 ha – fire is beyond resources
20:50	Birddog 8 reports winds 20-30km/hr from the south



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CHRONOLOGY OF OTHER SIGNIFICANT DAYS

July 16 – Cross-border relationships worked well when a Washington State Department of Natural Resources representative contacted Penticton Zone Fire Protection Officer, using the BC Forest Service frequency to advise of a flare-up on the fire that needed attention.

July 16 – Winds shifted in the evening blowing to the south, so a request was made to contact the U.S. advising them that the fire has potential to cross the highway and burn into the states.

July 19 – Birdog 31 detected a spot fire in a cut block 2.5 km beyond the northeast corner of the fire. The spot was actioned but continued to burn; extreme weather conditions contributed to the spot's final size of 18.5 hectares. Fire cause was investigated and arson was ruled out.

A 212 Helicopter (Valhalla Helicopters) caught on fire en route to fueling and had to make an emergency landing.

Retardant was dropped on structures in the interface zone for protection of homes, which can be challenging. A Firetrol representative (manufacturer of the fire retardant) quickly addressed community concerns regarding retardant drops and affects.

Some public concerns arose regarding the local volunteer group trying to action the fire near Chapman Road and being directed to leave for their own safety. Public sentiment was swelling that the fire could have been stopped in its initial stages. A public meeting was held to address this issue.

Expanded Attack

RESOURCE AVAILABILITY

Resources deployed to this fire between July 16 and August 15 included:

Unit crews = 5 (100 people) (1 Ontario unit crew)

Contract crew personnel = 230

Support staff = 56

FMT = 2 (1 Ontario FMT)

FMT arrived July 17 – July 30

FMT (Ontario) arrived in Merritt July 26 and were deployed to the fire July 28. They left the fire on Aug 11.

The Ontario Air Branch Director had a well-established working relationship with Kamloops Fire Centre Air Coordinator, which facilitated the continued sharing of aircraft between the fire and zone. Regular redeployment of helicopters from the fire to initial attack targets worked very well. The working relationship between fire 195 and the zone allowed for effective resource sharing.



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Each FMT deployed to this fire was a short team, but requested extra personnel for other functions. Both teams strongly recommend the teams be bigger and support staff be trained prior to deployment.

MAPPING

A local forest protection officer with a handheld GPS unit and a helicopter conducted fire size mapping. The user product was accurate, timely and affective. Land use maps were not readily available, which proved to be especially challenging for the out-of-province FMT. Consistent and reliable mapping services need to be made available.

COMMUNICATIONS

Road and BC Forest Service frequencies needed to be monitored, however most crew radios were only able to scan two frequencies at a time. Improvements in radio capacity would be an asset. Some safety concerns were raised around this issue. Night operations required radio contact, which was established with Kamloops Fire Centre. A medical emergency (asthma attack) necessitated a local response. Radio communications would have been more effective with the nearby fire camp versus Kamloops Fire Centre.

EVACUATION

The local Regional District has developed a 911 emergency mapping system, which aided in the development of the evacuation plans and location of threatened homes for response staff use.

Challenges

- Need for a clearly identified command post as early as possible
- Need for a community contact provided with guidelines, procedures and training, to assist in coordinating activities during project fires is a key to rural interactions
- Need for SAT phone capability with all Protection officers and crews to ensure communication links
- Need for expanded FMT with support staff trained prior to deployment
- Winterization and deployment preparation of fire camps needs to be complete
- Reporting relationships between the local zone, fire centre, and FMT should be clearly defined
- Consistent and reliable mapping services need to be made available
- A briefing package and orientation geared towards an out-of-province fire management team is necessary
- Public concerns need to be addressed directly with information meetings