

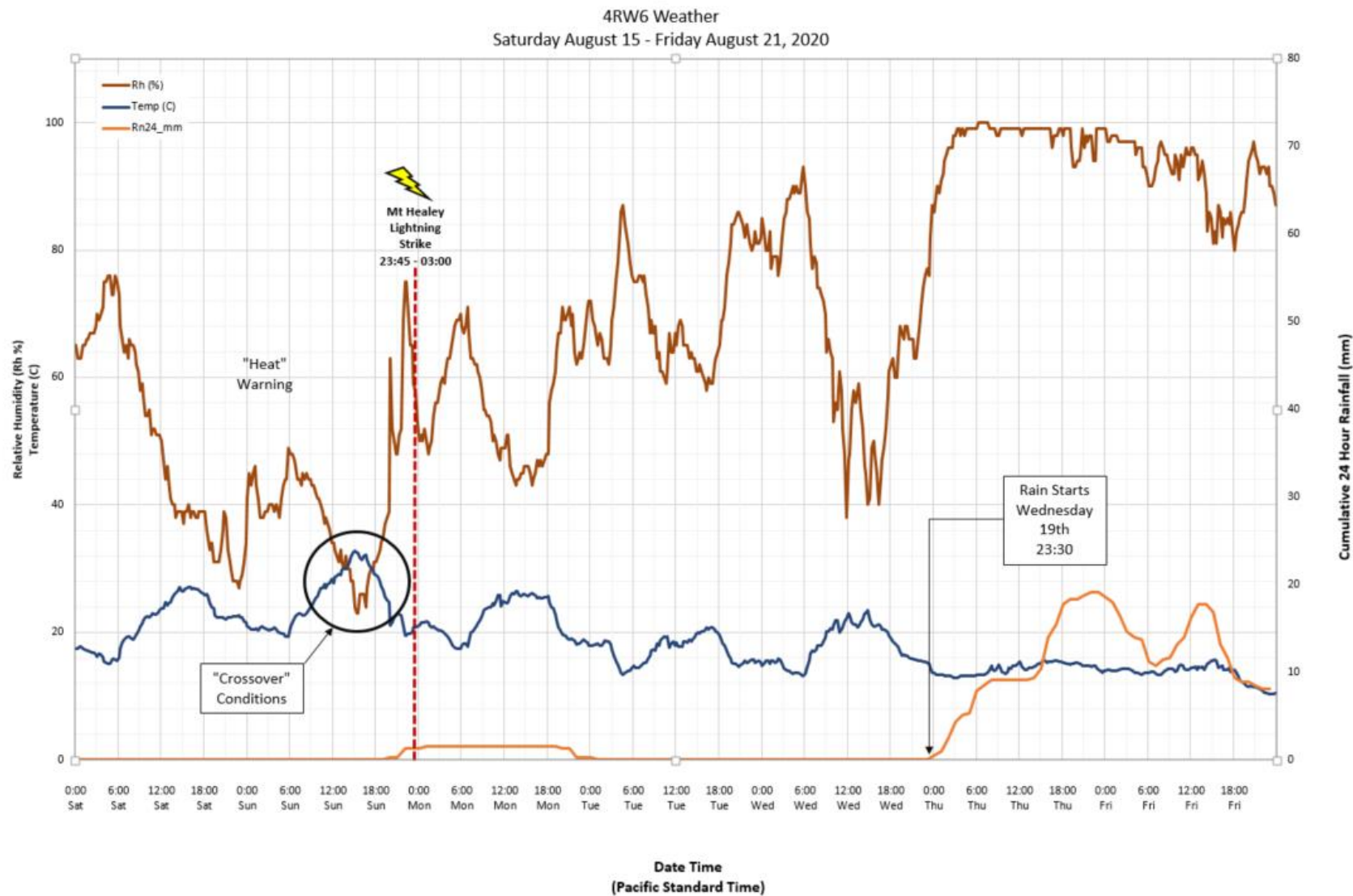
Appendix A

Fire Weather, Wildfire Preparedness, Log of Actions, and Suppression Resources Wildfires on Horton Ridge in the GVWSA – August 17 to 31, 2020

Fire Weather Conditions and Fire Hazard

The following table and graph show the weather and fire conditions recorded at the nearest weather station at similar elevation and position (4RW weather station) to the fire locations for the period before and during the wildfires.

Date/Time	Status	Temp.	Relative humidity	Total Rain	Windspeed (km/hr)	Wind Direction	Fire Danger Rating	Fine Fuel Moisture Code
Sunday August 16	Hot weather with outflow winds	28°C	34 %	0 mm	9 – 18	NE (outflow)	High	91
Afternoon-overnight	Evening thunderstorm with lightning strikes	High of 33°C	Low of 21 %	1.5 mm	max gusts of 36	SW	n/a	n/a
Monday Aug 17	Two fires detected – suppression begins	25°C	49 %	0 mm	6 – 18 max gusts to 30	NE (outflow)	High	83
Tuesday Aug 18	Fires grow somewhat overnight – suppression continues	18°C	65 %	0 mm	7 - 29	W	High	84
Wednesday Aug 19	Fires contained – mop up	23°C	47 %	0 mm	6 - 18	NE then SW	High	88
Thursday Aug 20	Mop up and rains douse all flames	15°C	99 %	19 mm	5 - 11	NE then SW	Low	22
Friday August 21	Rain and patrol for hotspots	14°C	94 %	8 mm	6 - 30	SW	Low	8
Saturday Aug 22 – Sunday Aug 30	Patrol, heat scanning for hotspots, minor amounts of rain							
Monday Aug 31	Fire declared “out”							



Wildfire Preparedness

The 2020 GVWSA Wildfire Preparedness Plan sets out the number and position of wildland firefighting resources deployed based on Fire Danger Rating. The highest danger rating in the GVWSA for this time period was Extreme and this was the level of preparedness for Sunday and Monday August 16 and 17 with the following in place as per the plan:

Ground Patrol: 3 initial attack crews on shifts of: 06:00 – 14:00; 10:00 – 18:00; 13:00 – 21:00

Air Patrol: twice daily at 10:00 and 15:00

Standby: total of 9 including the Duty Officer

Equipment:

Type	Location
Water Tender (16,600L)	Field Operations Centre (FOC)
Gravel Truck/Tender (6,800 L)	FOC
Mini Tender (2,700 L)	Sooke Dam
Mini Tender (2,700 L)	Sooke Fire Cache
Skidder (1,500 L)	Goldstream Boathouse
Sprinkler Trailer (General)	FOC

Wildfire Response – Highlight of Log of Actions

Sunday August 16

Although lightning was not forecasted at last report on Friday, Watershed Protection (WP) staff note and watch lightning storms on Sunday, following publicly available lightning location information. A compiled view of lightning strikes that night taken from Mount Tolmie looking west is shown below. The storm resulted in nine fire starts in the region and 16 on southern Vancouver Island. Some of the major strikes shown on the right hand side of the compilation may have started the GVWSA fires.



Compilation courtesy of Adam Lee photography



Monday August 17

- 06:00 Early patrol tries to get BCWS lightning locator information at the FOC and departs splitting up in two directions
- 06:55 Patrol reports smoke visible from the Kapoor Mile 10 vantage point, calls in fire report to the office and requests resources. Photo above of initial fire sighting (Healey fire):
- 07:14 Healey fire reported to BCWS (Initial Fire Report) – numbered V61186
- 08:00 First CRD crews with fire suppression resources arrive at Mt Healey
- 08:45 BCWS representative arrives at the FOC to discuss fires and resources
- 09:00 CRD contract helicopter begins bucketing Healey fire using Deception Reservoir
- 10:18 Rithet fire detected by staff enroute to Healey fire
- 10:19 CRD signs over Incident Command of the fires to BCWS
- 10:20 CRD air patrol calls in other fires outside the GVWSA as well as the Rithet fire
- 11:30 Observations of rank 3 (moderately vigorous ground fire) wildfire behavior indicating likely fire spread without air suppression resources
- 13:00 BCWS/CRD discuss use of retardant. Preference for no retardant but priority to limit fire spread. CRD Water Quality approves use of retardant on the fires if deemed necessary.
- 13:10 Staff arrive at Rithet fire – numbered V61180
- 13:10 11,000 L of fire retardant laid out in 4 lines around Healey fire

CRD and BCWS resources (ground and air support) continue to roll out to fires.

Rithet fire receives limited further ground resources due to difficult access, lower priority and smaller size – access trails constructed and a location chosen for a helicopter landing pad.

16:00 Amphibious air tankers (7) skim water (3,000 L per load) from Shawnigan and Cowichan Lakes and apply water to both fires from the air in multiple passes (6 loads per hour) for approximately 2.5 hours. Approximately 300,000 L of water were dropped on the fires.

Total Deployment

CRD	BCWS
24 personnel, 2 water tenders, 1 intermediate helicopter	Two 8 person contract crews, 3 officers, 1 light helicopter, 1 intermediate helicopter, air tankers



Healey Fire - Monday



Rithet Fire - Monday

Tuesday August 18

08:30 The CRD EOC is officially opened and a task number requested and provided by EMBC.

Limited fire spread overnight, continuation of ground fire suppression with helicopter air support with containment of both fires achieved by end of day. BCWS provides one Incident Commander for each fire. The helicopter pad at the Rithet fire is constructed.

Total Deployment

CRD	BCWS
23 personnel, 2 water tenders	One 20 person unit crew, two 8 person contract crews, 4 contract fallers, 3 officers, 1 intermediate helicopter, 1 medium helicopter, 1 heavy helicopter

Wednesday August 19

Fires remain contained and suppression within the fire area begins, along with start of mop-up meaning extinguishing all flames and cooling hotspots with water within the fire area.

Total Deployment

CRD	BCWS
13 personnel, 2 water tenders	One 20 person unit crew, two 8 person contract crews, 4 contract fallers, 2 officers

Thursday August 20

Mop up continues aided by approximately 20 mm of rainfall that begins in the late afternoon.

Total Deployment

CRD	BCWS
11 personnel, 1 water tender	One 20 person unit crew, two 8 person contract crews, 2 officers

Friday August 21

An additional 8 mm of rain falls. Mop up activities largely complete. Demobilization and patrol begins.

Total Deployment

CRD	BCWS
7 personnel, 1 water tender	Two 3 person Initial attack crews

Saturday Aug 22 – Sunday Aug 30

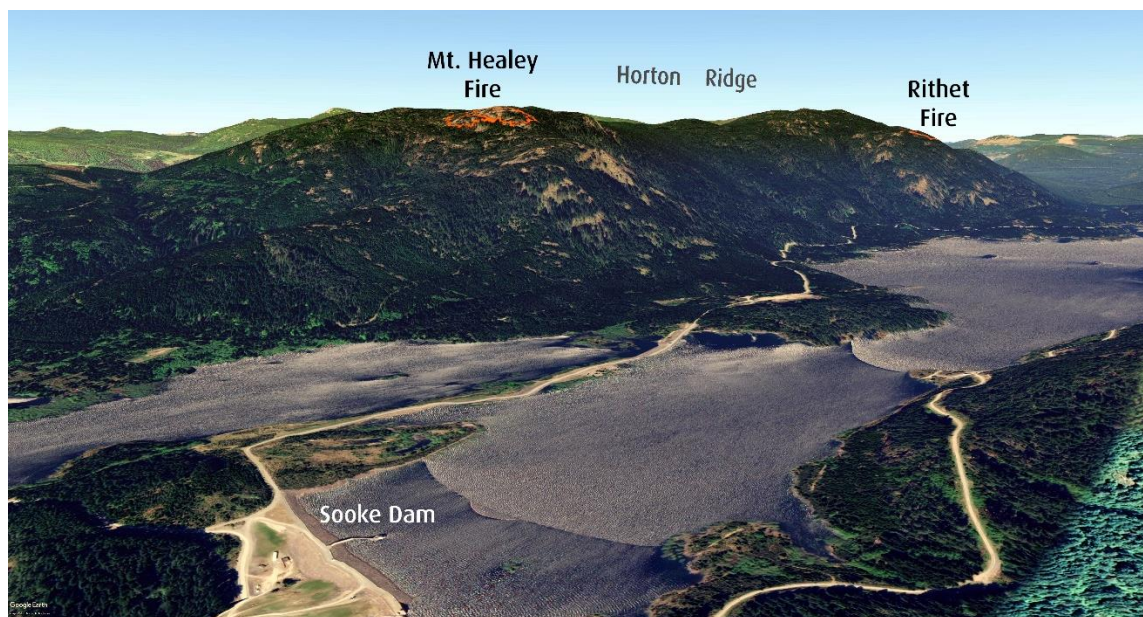
Daily patrol by CRD and BCWS, heat scanning for hotspots, minor amounts of rain. Fire declared out by BCWS on Monday Aug 31.



View of Healey fire (V61186) relative to the Communications Facility, Sooke Lake Reservoir, Intake Tower and Deception Reservoir.



View of Rithet fire (V11860) relative to Sooke Lake Reservoir.



A rendered view of the location of the two fires relative to Sooke Lake and Deception Reservoirs.