

JASPER-CHETAMON WILDFIRE AUG 31 - SEPT 13, 2022

MUNICIPAL RESPONSE

AN OPERATORS DISCUSSION



- Jasper was without reliable power for 5 $\frac{1}{2}$ days
- Evacuation decision point was if we could not operate the WWTP. "We are in an emergency situation. We cannot have an environmental emergency too."
- Jasper's typical demand is 7.5 MW. Generators being brought in were 1.8 MW per unit.
- WWTP Class IV BNR Plant. ~4500 M3 day. Backup Power generator is 200 KVA, line power is 400 KVA.
- Typical tourist traffic \sim 27,000 per day
- Parks Canada Disaster Team \sim 400 staff, temp kitchen, 4"water line from hydrant, 6" line in sewer manhole.
- 13 helicopters active for bucketing operations including a command and control helicopter







SEPT 02 10:47AM

LIGHTNING STRIKE AT THE TOP OF CHETAMON MOUNTAIN EVENING AUG 31

FIRE 1000M FROM POWER LINES

SEPT 02 3:13PM WIND PICKED UP AROUND NOON

SEPT O2 7:43PM FIRE BURNT TO THE VALLEY FLOOR 500M FROM POWER LINES





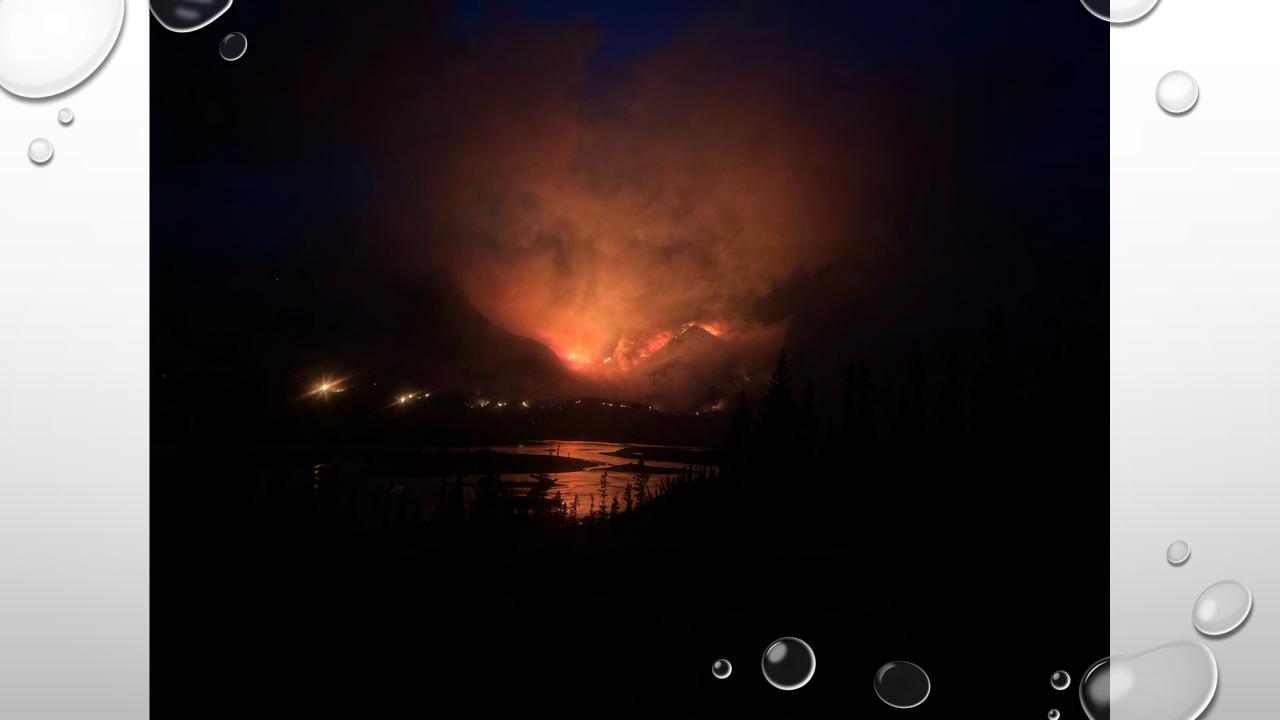
SEPT 03

FIRE NOW 300M FROM POWER LINES

ECC DECIDING VARIOUS CONCERNS INCLUDING EVACUATION OF THE TOWN

















SEPT 04

FIRE HITS THE GAS AND POWER LINE R.O.W. AT 12:37 PM

FIRST POWER OUTAGE OCCURS ABOUT 6:00 PM. ~90 MINUTES

TEMPORARY GENERATORS ARRIVED AND BEING HOOKED UP

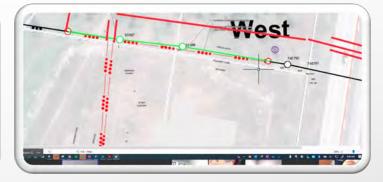
FIRE HAS GROWN TO 1500+ HECTARES



SEPT 05 POWER LINES FAILED AROUND 1:05 AM PLANNING FOR A LONG TERM MULTI-DAY EVENT







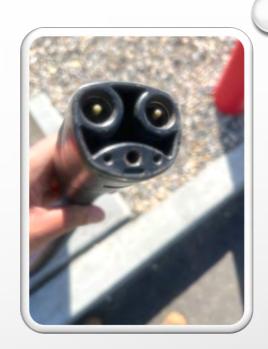
FIRE ESTIMATED TO BE 8500 HECTARES

1ST GENERATOR FAILURE AT WWTP

ECC FULLY ACTIVATED; COMMUNICATIONS TO COMMUNITY; FUEL SCHEDULE ESTABLISHED; GENERATOR CHECKS ONGOING; ESS ACTIVATED WITH ACTIVITY CENTRE BECOMING CHARGING/INFO CENTRE







ELECTRIC VEHICLES

UNABLE TO SOURCE A BACKUP GENERATOR FOR HIGH SPEED CHARGERS

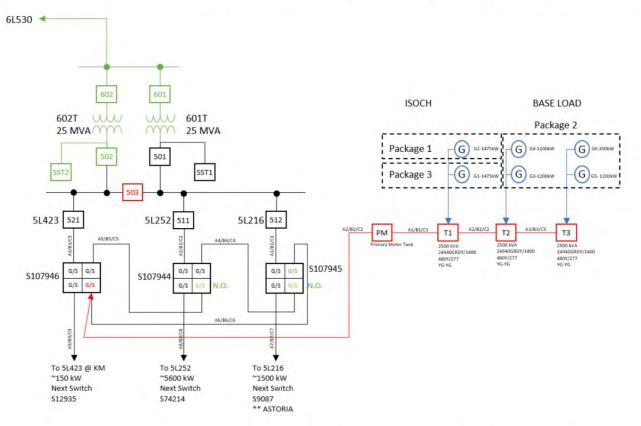
EVACUATION CONCERNS AS WE MAY HAVE HAD UP TO 40 EV'S IN JASPER



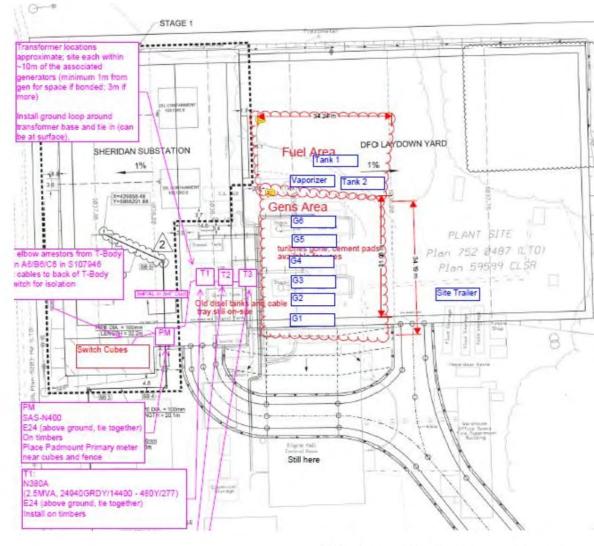


TEMPORARY GENERATION PLANT

TEMPORARY GENERATION PLANT



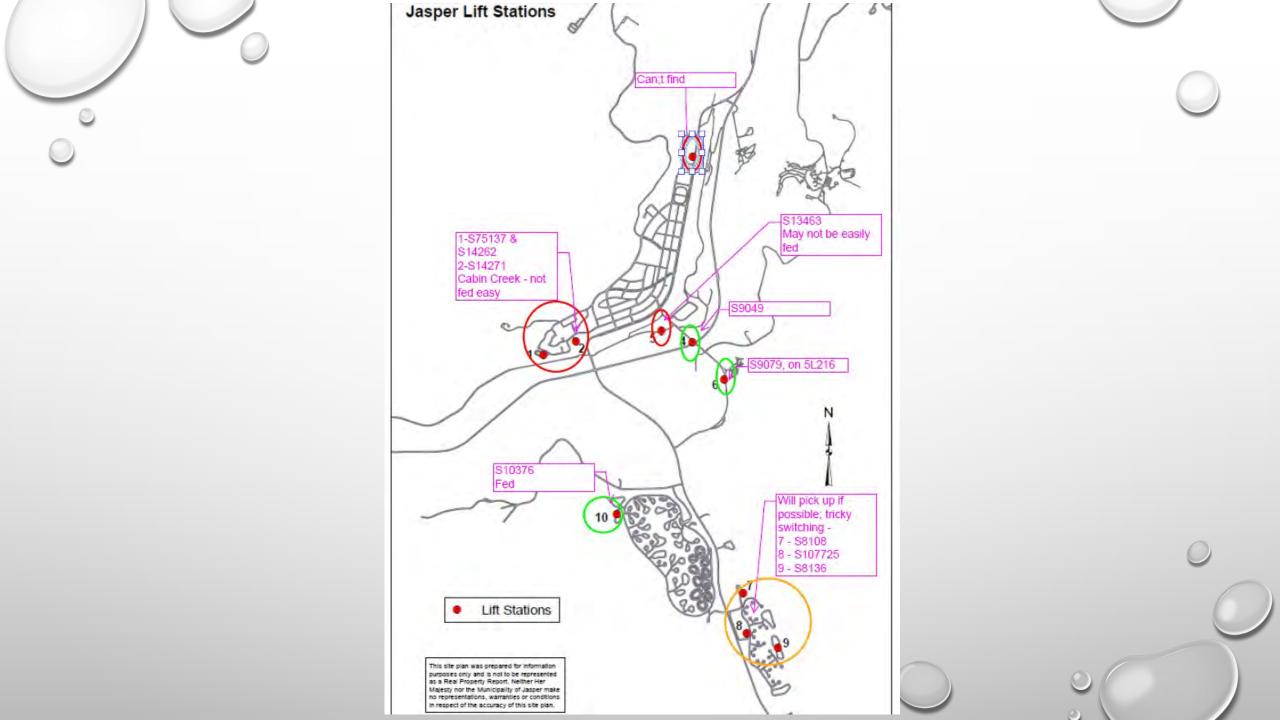
Schematic of generation connection to Sheridan substation



Site layout of equipment



LIQUIFIED NATURAL GAS









SEPT 6 BUSINESS AS USUAL AT OPERATIONS

UTILITIES STAFF CONTINUED PLANNED MAINTENANCE WORK WHILE DEALING WITH SERVICING MULTIPLE GENERATORS.

WWTP GENERATOR FAILED TWICE ONCE WITH A COOLANT LEAK THEN WATER

PUMP.

FIRE PROTECTION LINES







HIGH VOLUME SPRINKLER SYSTEMS DEPLOYED

FIRE PROTECTION LINES DEPLOYED TO PROTECT THE WTP, TOWN AND THE TRANS-MOUNTAIN INFRASTRUCTURE

CAPABLE OF DELIVERING 100MM PER HOUR COVERING 150 M RADIUS.









LOW GESURE REAL REPORT LINE SULES.

COOLANT LEAK

WATER PUMP

LAB HAD MINIMAL POWER

RENTAL UNIT 400 KVA

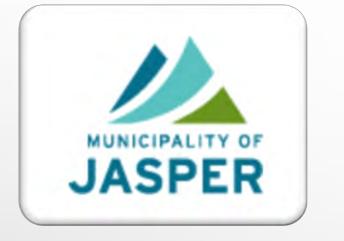
HOMEOWNERS AND BUSINESSES HAD DANGEROUS CONNECTIONS

FLEET STANDARDIZATION; HITCH SIZING; CONNECTIONS





UNIFIED COMMAND







MUNICIPALITY OF JASPER

COMMUNICATION WITH THE COMMUNITY

ENSURE UTILITIES REMAINED FUNCTIONAL

LOSS OF WWTP WOULD INITIATE EVACUATION

PARKS CANADA

FIRE FIGHTING INCLUDING BACK BURNS

HELICOPTER OPERATIONS

WORK WITH ALBERTA WILDFIRE FOR BOMBER SUPPORT

ATCO ELECTRIC PROVIDE TEMPORARY GENERATION LINE REPAIRS



MANAGING THE EMERGENCY

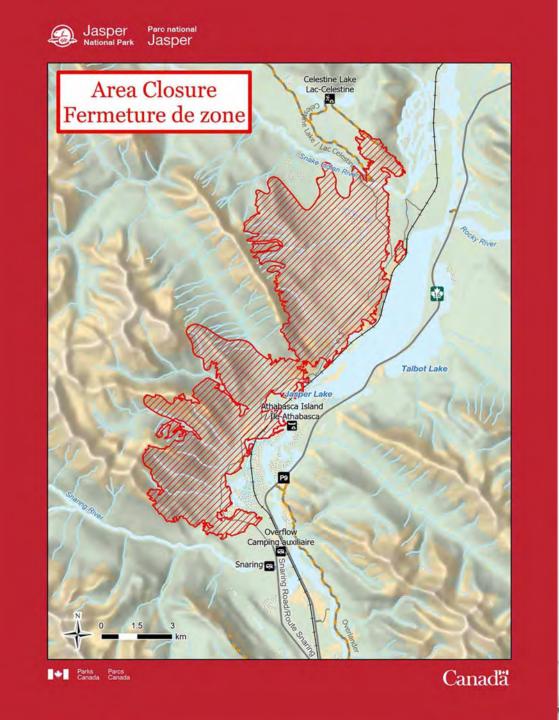
Organizational strength, all 3 agencies trained to appropriate Incident Command System (ICS), with many trained in specific roles: ie Logistics, Operations, Planning.

Communications ESS set up Community Charging and Info Centre. Ice was available for food preservation. Included everything from facebook updates to Mayor on National News.

Regulatory Compliance

Aquatera and Municipality had a meeting with AEP and Environment Canada to advise them we were in emergency situation. Minor releases had happened.

Staff rotations established. Calls for generator service from other agencies including AHS. Critical that staff are fully informed about the event.









TYPICAL POWER POLE

POLES SURROUNDED BY 10MM STEEL BARRELS, FILLED WITH TREATED GRAVEL.

POLES ARE TREATED WITH CREOSOTE

LINES ARE INSULATED





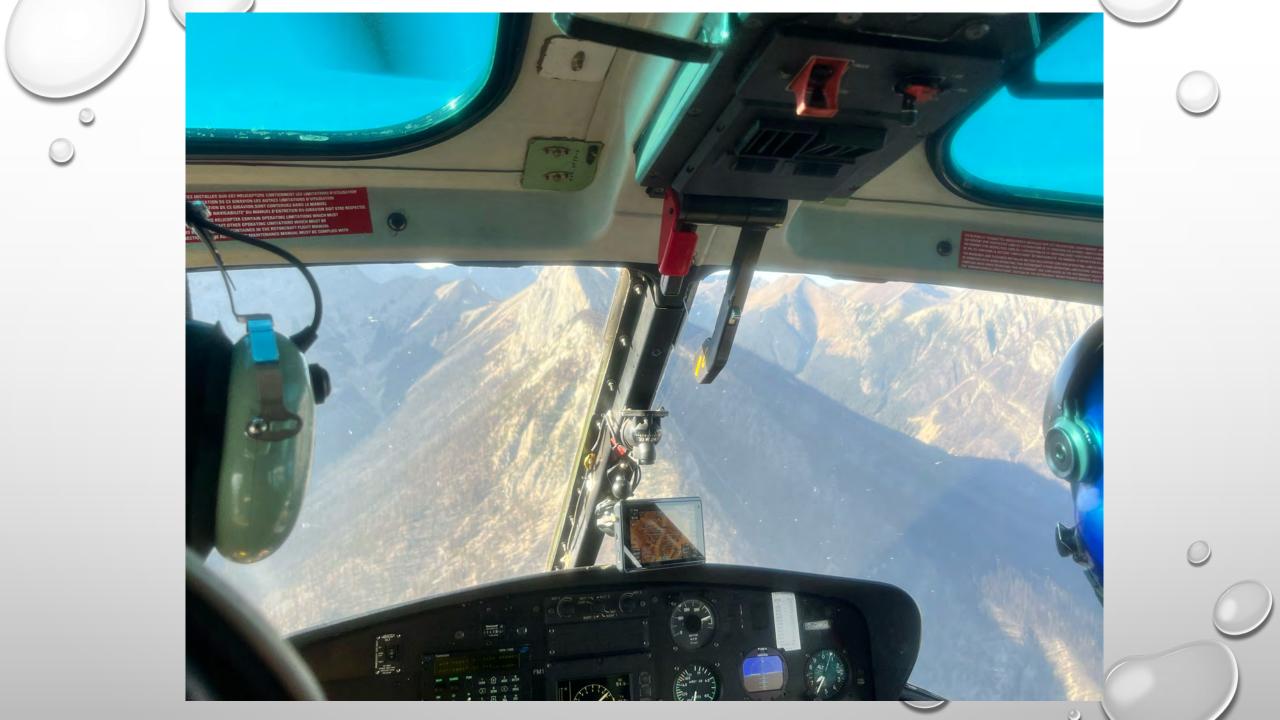


















- HAD A LARGE CONTINGENT OF STAFF TRAINED TO ICS 300
- ESS FULLY ESTABLISHED FOOD DROP OFF CHARGING STATION/INFO CENTRE
- COMMUNICATIONS CONSISTENT MESSAGING BY ALL 3 PARTIES (MUNI, ATCO, PC)
- COMMUNITY
- PLANS ESTABLISHED EARLY FOR CLEANUP AFTER EVENT SOLID WASTE PICKUP– MUNICIPAL BUSINESS CONTINUITY – PROBLEMS NOTED WORKED INTO THE NEXT BUDGET
- PAST TABLE-TOP EXERCISES PAID OFF MOST IN THE ECC KNEW/WORKED WITH EACH OTHER

THINGS THAT DIDN'T GO SO WELL...

- L.N.G. FUEL SUPPLY IS NOT CONSISTENT
- LONG LEAD TIME TO SOURCE 7.5 MW GENERATION
- LOSS OF FOOD
- BUSINESS CONTINUITY



