Wildfires: Emergency Preparedness

An operator's perspective

Warren Brown

Operations and Maintenance Manager

Lytton First Nation



smallwatersystembc.ca



Warren Brown

- Lytton First Nation O&M Manager
- Certified: WTII, WDII,SWWS, SWS, TRU Diploma in WTTP
- 2002-Present with LFN O&M
- 7 CWS (3Ground, 4 Surface)
- 5- Point of Entry (Individual Treatment Systems)
- 35 km of Roads
- Band Buildings

Lytton BC

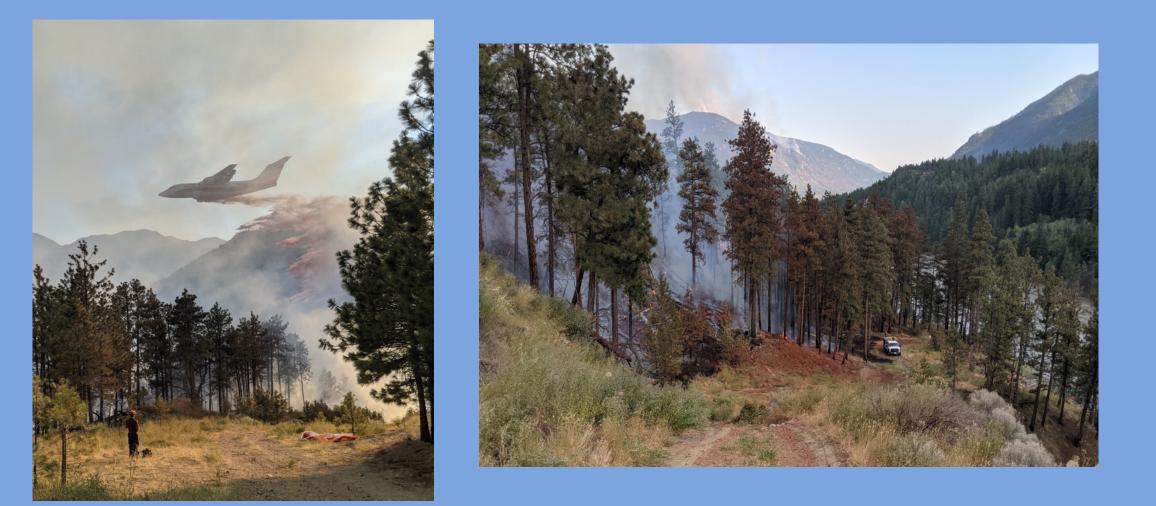
- Inklukcheen
- 4 hrs North of Vancouver, on the Trans Canada #1 Highway in the Fraser Canyon
- Where the Thompson and Fraser Rivers meet
- One of BC's Hot Spots
- George Rd, Mohawkem, Lytton Crk, Alkali, Siska, Jackass, Nohemeen, and this years, Kookipi, Izman and Stein Mtn Fires. This is from the last 3 yrs



Wildfires in the community

- Lytton First Nation has experienced 3 wildfires in the last 3 years.
- **2021** Lytton Creek Fire, had burned 90% of the Village of Lytton and 39 structures on LFN Reserves, 83,671 ha, cause undetermined
- 2021 November Flooding
- 2022 Nohemeen Creek Fire, had burned down 7 structures on LFN Reserves, came within 20 m of our main Slow sand Water Plant, and within 10m of another small water system, 7 Mile
- 2023 Stein Mtn Fire, 4,734.3 ha, came close and threatened more homes on LFN Reserves

Water Bridge Fire June 29, 2021



Water Bridge Fire June 29,2021



Lytton Fire June 30, 2021



- 4:20pm 5:20 pm
- 90% of the Lytton Village was destroyed, and adjacent LFN Reserves
- 39 Band structures lost, on IR#'s 17+18+22
- All Communication within Lytton area was lost on June 30/21, by 5:20 pm. Telus had a Hub set up by July 3/21, with limited range.
- Est. up to 400 people displaced from LFN, due to Evacuations of the Lytton area. Some people have been displaced for up to 15 months, and still to this day.
- People were evacuated to: Lillooet, Boston Bar, Hope, Cache Creek, Merritt, Kamloops, Chilliwack, Abbottsford, Langley



All Communications was lost within Lytton



Aleah Brown Has anyone seen my dad Warren Brown ??



S

Jen Brown

Aleah Brown last I saw him was top of stein school road directing traffic. He was worried bout all of you. I told him where you all are.

1y Like Reply

Aleah Brown

Jen Brown thank you 💖 we were able to get in touch with him a few hours ago

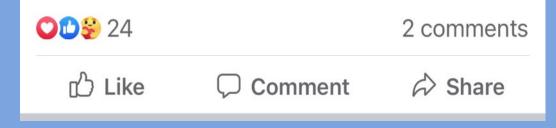
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Aleah Brown

Me, Angelala B Brown, Kylee Dunham , Jeff Dunham and fur babies + kids are in Abbotsford now at a Sandman hotel. Dad Warren Brown is still in Lytton helping last I heard. We are all safe

...



Ready to protect what we had left



Helping where we could





Leaving to meet up with family



Leaving to meet up with family



Leaving to meet up with family



Returning to start our Recovery



Getting Water Systems operating again



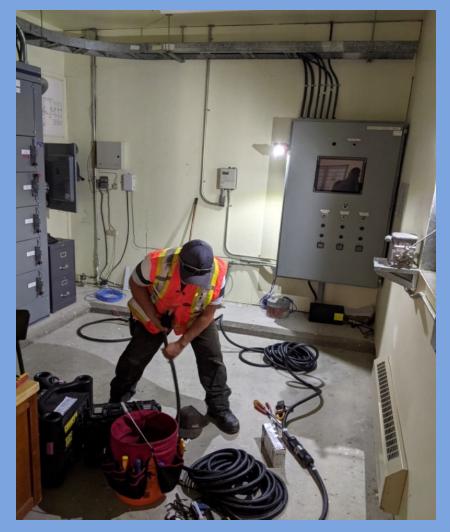


Donated Generator



Setting up for Generator connections





Thinking outside the box





Making repairs









Sights and sounds never forgotten



November 2021 Floods



Nickeyeah Creek





Nickeyeah Creek





Kwellanac Creek





Kwellanac Creek



Winter Snow



New Backhoes



Lytton First Nation bringing people home











Nohemeen Fire 2022

- 6 Band Homes lost
- Communications were good
- Est. 300 people displaced
- People evacuated to: Lillooet and Cache Creek. We still had evacuees in these same places from the year before.
- Construction Crews stopped their work and volunteered to help where needed



Fighting, Hauling and Filling













New trucks finally arrive

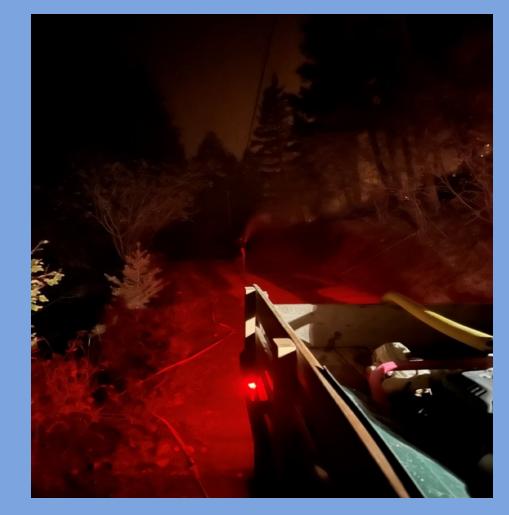


New Water Trailers came in



Stein Mountain Fire 2023





9 Mile creek



11 Mile





Steel roofing, Hardy board siding



Well #3, remediated and in use again



New Flatdeck trucks finally arrive



Water Quality

- During these emergencies, all water systems were under Boil Advisory, until we started our Sampling again
- Main purpose was to get our Hydrants back on line, in hopes of saving what we had left
- Developed new Procedures on the fly, for all temporary measures
- 2021, It took us 3 days to get Water moving with Generators.
- 2022, we had water moving by the next day with Generators
- 2023, same day for one system



LFN's Water Team During all Fires

Left – Right

- Andrew Loring, Loring Elect.
- Me
- Dion Moody, SWS, ROWP, VFD
- Bryan Phillips, WTI, WDI, SWWS, SWS
- Daniel Mundall, ComCom Services (Not in picture)



All the Services and Agencies that helped with the Disaster/Recovery

Days during the Disaster

- Lytton VFD
- LFN O&M Dept
- BCWS
- Locals
- Local Highway Dept
- RCMP
- ComCom Services
- Dent and Matcon Construction companies

Recovery Period

• EMBC

• ESS

•

•

- Red Cross
- LFN/FNESS •
- ISC/EMAP
- Interior Health •
- Urban Systems
- SPCA - BC Hydro

 - Loring Elect. FNHA
- Kala Sciences - Rubicon

- Dent Construction - Lytton VFD

- Matcon
- Samaritan Purse - Other Groups/Agencies
- IBI Group

- CNR

- Fort Modular/Steel River
- Camp Hope

- Telus

A shout out to these groups

AquaIntelligent

- Constant Monitoring
- Simple phone App

ComCom Services

Helping with Electrical and Control needs



Lytton in the Recovery and pushing forward



How and Where are we are now

- Essential Services have returned
- Mental Health and Wellness is available and ongoing
- Schools are back in session
- Workers returning to their offices
- Celebrations/Events planning and happening
- Returning to our everyday routines have been slow, due to the uncertainty of the continuing wildfires
- Lytton waves are coming back







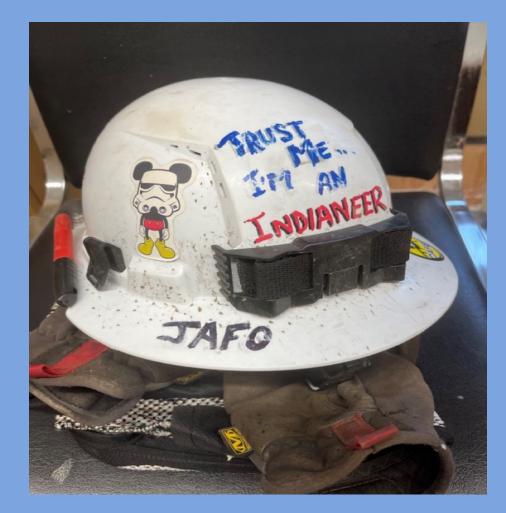




LFN O&M Dept. Improvements

Since the Lytton Fire, LFN O&M has:

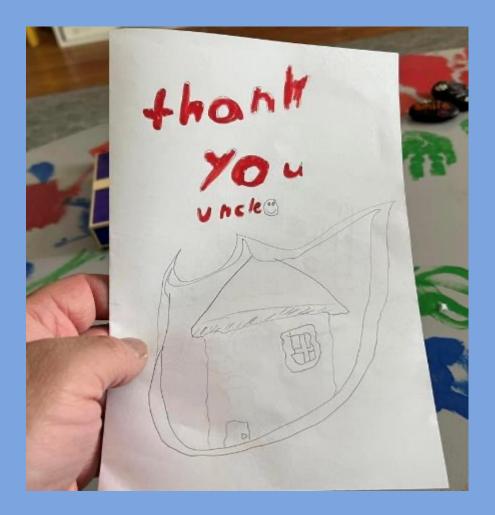
- Keeping water tanks filled at the end of the day
- Increased or upgraded Fire Equipment, Plows, Sanders and Heavy Equipment
- Equipment and tools on each side of the river
- Increased field staff
- More radio communication, Cell Group Chats
- Installed Electrical Auto Dis-Connects on each CWS
- Developed Fire Mitigation plans for CWS
- Increased Fire, First-Aid, and EOC training courses
- Go bags and proper gear for crew

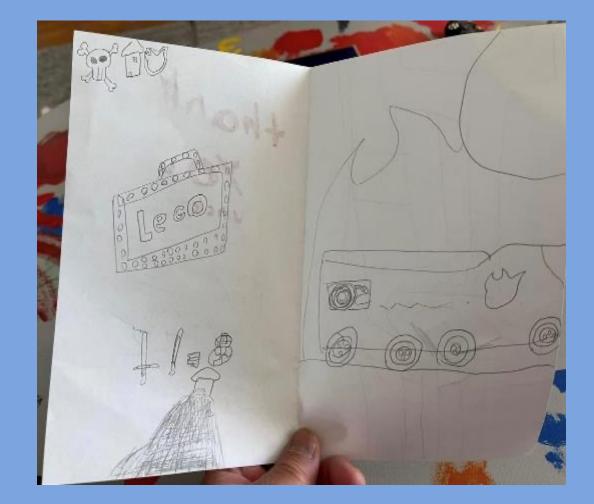


Emergency Fire Fighting Equipment



The highlights of what we have done





Warren Brown, O&M Manager Lytton First Nation <u>warren.brown@lfn.band</u> Q&A



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