

Jang, Monica EMLI:EX

From: O'Riley, Christopher <Chris.Oriley@bchydro.com>
Sent: November 15, 2021 7:04 AM
To: Mihlar, Fazil EMLI:EX; MacLaren, Les EMLI:EX
Subject: Re: Hope area status

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Most of the customers in Hope and Spuzzum were restored at 1:30 in the morning as one line was brought back and circuits were reconfigured.

On Nov 14, 2021, at 10:02 PM, O'Riley, Christopher <Chris.Oriley@bchydro.com> wrote:

Just letting you know we have some really challenging conditions in the Hope area with about 5300 customers out overnight.

Begin forwarded message:

From: "Mitha, Charlotte" <charlotte.mitha@bchydro.com>
Date: November 14, 2021 at 9:37:57 PM PST
To: "O'Riley, Christopher" <Chris.Oriley@bchydro.com>
Subject: FW: Hope area status

Hi Chris,

The updates I am getting from various sources aren't good...here's the summary:
HOP substation is normally supplied from 2 lines, 60L10 and 60L95. Both lines have been reported to wiped out in a landslide near WAH generating station.
Crews have been patrolling both lines and sectionalizing under the guidance of FVO. We have numerous sites where landslides have damaged structures. Unfortunately the contingency plan for feeding Hope with an alternate circuit, 60L93, has just now been lost due to another landslide bringing down conductor across highway 7 and trapping people in their vehicles. Crews are onsite at this specific location applying grounds to remove the wire. We are now not able to reconfigure the 60kV system as planned to energize Hope.
Crews will continue to work through the night where they are able to safely do so, but given the damage we know we have and highways still closed it looks like Hope will be out overnight. Crews are being told stand down if any concerns with safety of patrolling.
Out of WAH we have four distribution feeders and two of them are damaged (51 and 52). We were able to restore all but approx. 300 customers but we have lost the WAH unit again – cooling water issue and a problem with the penstock inlet valve apparently. They can't safely get up there to check it out tonight.
We do have a crew and local firefighters stuck at the WAH powerhouse due to a slide in the area. They are awaiting the highway re-opening.

At Spuzzum (SZM), we have 75 customers normally supplied from 60L10. With some sectionalizing they may be able to serve from Boston Bar and get all of SZM restored tonight.

That's it for now....except it is snowing in the interior so that will bring some outages.

Charlotte

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Jang, Monica EMLI:EX

From: Mah-Paulson, May EMLI:EX
Sent: November 16, 2021 8:01 AM
To: Mihlar, Fazil EMLI:EX; MacLaren, Les EMLI:EX
Cc: Jang, Monica EMLI:EX; Schwabe, Michelle EMLI:EX
Subject: Fwd: Enbridge Incident near Hope - update

FYI.

Begin forwarded message:

From: "Paulson, Ken" <Ken.Paulson@bcogc.ca>
Date: November 16, 2021 at 7:57:02 AM PST
To: "Mah-Paulson, May EMLI:EX" <May.Mah-Paulson@gov.bc.ca>
Cc: "Swan, Trevor" <Trevor.Swan@bcogc.ca>, "Johnson, Andy" <Andy.Johnson@bcogc.ca>, "Currie, Graham OGC:IN" <Graham.Currie@bcogc.ca>, "Dalton, Peter OGC:EX" <Peter.Dalton@bcogc.ca>, "Koosmann, Nicole" <Nicole.Koosmann@bcogc.ca>, "Parsonage, Kevin D OGC:IN" <Kevin.Parsonage@bcogc.ca>, "XT:Kennedy, Mayka GCPE:IN" <Mayka.Kennedy@bcogc.ca>, "Smook, Patrick" <Patrick.Smook@bcogc.ca>
Subject: FW: Enbridge Incident near Hope - update

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi May.

Last night at 1:47 am (MST) we received notification that Enbridge's 30" pipeline near Hope was "compromised" and needed to be shut down for safety. The pipeline is regulated by the Canada Energy Regulator and supplies gas to the Lower Mainland and Vancouver Island.

At the location of the shut down, the pipeline is looped with a 36" pipeline that continues to operate. At this point we have no indications of a significant supply disruption.

The Commission has offered assistance to the CER per our MoU.

We will keep you informed of developments as they occur.

Ken



Ken Paulson, P.Eng
Executive Vice President, Chief
Operating Officer
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From: Parsonage, Kevin D <Kevin.Parsonage@bcogc.ca>

Sent: Tuesday, November 16, 2021 7:33 AM

To: Incident Notification Level III <OGCincidentnotificationlevelIII@bcogc.ca>

Subject: RE: Enbridge Incident near Hope - update

Morning update:

The incident is affecting Enbridge's 30" pipeline, which has been partially depressured as a precaution. Their 36" line is unaffected at this point, so gas supply is being maintained.

Peter Dalton is in touch with Fortis and the CER as the situation evolves and will be the OGC point of contact going forward.

Thanks,



Kevin Parsonage M.A.Sc., P.Eng.
Supervisor, Integrity Programs
Kevin.Parsonage@bcogc.ca

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From: Parsonage, Kevin D

Sent: Tuesday, November 16, 2021 2:38 AM

To: Incident Notification Level III <OGCincidentnotificationlevelIII@bcogc.ca>

Subject: Enbridge Incident near Hope

This pipeline is regulated by the Canada Energy Regulator. This is not an OGC incident.

Received call from EMBC at 01:47 MST. The Enbridge mainline has been compromised near Hope, BC and needs to be de-pressured to prevent rupture. The line will be vented at 67301 Othello Road in Hope and Enbridge is looking to evacuate some of the nearby residents due to the noise that will result from the venting. Enbridge expects that the venting will take about 6 hours once started.

Note: Information is preliminary at this time. More information will be provided as it becomes available. This incident may impact the Fortis natural gas supply.



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Jang, Monica EMLI:EX

From: Wolf, Viva EMLI:EX
Sent: November 16, 2021 9:30 AM
To: Mihlar, Fazil EMLI:EX
Cc: Mah-Paulson, May EMLI:EX; Jang, Monica EMLI:EX
Subject: TMC Update re Weather Events
Attachments: BC Weather Event - Update.docx

Good Morning Fazil,

TMC provided the attached update re the recent weather events west of Kamloops. Line 1 was shut in proactively and TMC does not anticipate that it will restart until they have a full inspection of the line. They are expecting to do that today, weather permitting. Recommendations for critical areas and start up will arise from that inspection. Shippers should be notified by 4:00pm today of the restart plan. TMC will keep me in the loop and I will pass along anything else that I get.

Thanks!

Viva Wolf
A/Executive Director
Oil Infrastructure Group
Ministry of Energy, Mines, and Low Carbon Innovation
P: 236-478-2268 M: 250-893-5681

BC Weather Event – November 15, 2021

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If you are approached by media or members of the public, please instruct them to contact our media line at media@transmountain.com or info@transmountain.com.

External Media

Trans Mountain received several media requests (below) and posted the following on social media

- Twitter: <https://twitter.com/TransMtn/status/1460364171778961408>
- Facebook: <https://www.facebook.com/160937600737130/posts/2085823681581836/?d=n>
- LinkedIn: https://www.linkedin.com/posts/trans-mountain_rainstorms-force-evacuation-of-canadian-town-activity-6866129862688669696--guz/

Jang, Monica EMLI:EX

From: Richardson, Roari EMLI:EX
Sent: November 16, 2021 10:22 AM
To: Edmonds, Claire EMLI:EX; Warnock, Joie EMLI:EX; Tseng, Eugene EMLI:EX; McRae, Meghan GCPE:EX; Yano, Brady GCPE:EX; Jang, Monica EMLI:EX; Mihlar, Fazil EMLI:EX
Subject: FW: Enbridge Westcoast Pipeline - BC Floods

Hi All,

Just sharing as an FYI.

Cheers,
Roari

Roari Richardson
Senior Ministerial Advisor
Minister of Energy, Mines and Low Carbon Innovation
C: 250-883-1370
E: roari.richardson@gov.bc.ca
Pronouns: he/him

From: Brittany Kelly <Brittany.Kelly@enbridge.com>
Sent: November 16, 2021 10:17 AM
To: Richardson, Roari EMLI:EX <Roari.Richardson@gov.bc.ca>
Cc: Mike Gladstone <Mike.Gladstone@enbridge.com>; Nadine Barber <nadine.barber@enbridge.com>
Subject: Enbridge Westcoast Pipeline - BC Floods

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Roari,

I wanted to flag that as a precautionary measure Enbridge shut down a segment of 30-inch natural gas pipeline in the Coquihalla river valley this morning due to the flooding in southern B.C. Below is our statement including some details on impact to natural gas deliveries.

I'll keep you updated on this. Please let me know if you have any questions.

Cheers,

Brittany

Statement

Enbridge is closely monitoring the flooding situation in southern B.C.

Brittany Kelly

Senior Government Affairs Advisor
Public Affairs, Communications & Sustainability

ENBRIDGE INC.

TEL: 403-718-3434 | CELL: 403-923-3330
200, 425 - 1st Street S.W. Calgary, AB T2P 3L8

enbridge.com

Safety. Integrity. Respect.

Jang, Monica EMLI:EX

From: MacLaren, Les EMLI:EX
Sent: November 16, 2021 11:04 AM
To: Mah-Paulson, May EMLI:EX; Mihlar, Fazil EMLI:EX
Cc: Jang, Monica EMLI:EX; Schwabe, Michelle EMLI:EX
Subject: RE: Weather Impacts & gas lines

Fortis reports for Princeton, there was a line break on a bridge, which has been crimped off and secured. They will need to turn off valves for the 1,200 accounts, repair the break, flush the system, and go door to door re-lighting pilots. They may also have to replace some water-damaged meters. They feel they can redeploy staff to do this but access is an issue.

For Merritt, the gas system is still operational, and they are monitoring closely. Again access is an issue.

Les

From: Mah-Paulson, May EMLI:EX <May.Mah-Paulson@gov.bc.ca>
Sent: November 16, 2021 10:13 AM
To: Mihlar, Fazil EMLI:EX <Fazil.Mihlar@gov.bc.ca>; MacLaren, Les EMLI:EX <Les.MacLaren@gov.bc.ca>
Cc: Jang, Monica EMLI:EX <Monica.Jang@gov.bc.ca>; Schwabe, Michelle EMLI:EX <Michelle.Schwabe@gov.bc.ca>
Subject: FW: Weather Impacts & gas lines

FYI

From: Dalton, Peter <Peter.Dalton@bcogc.ca>
Sent: November 16, 2021 9:35 AM
To: Paulson, Ken OGC:IN <Ken.Paulson@bcogc.ca>; Johnson, Andy <Andy.Johnson@bcogc.ca>; Swan, Trevor <Trevor.Swan@bcogc.ca>; Mah-Paulson, May EMLI:EX <May.Mah-Paulson@gov.bc.ca>
Cc: XT:Kennedy, Mayka GCPE:IN <Mayka.Kennedy@bcogc.ca>; Koosmann, Nicole <Nicole.Koosmann@bcogc.ca>; Currie, Graham OGC:IN <Graham.Currie@bcogc.ca>; Smook, Patrick <Patrick.Smook@bcogc.ca>; OGC Emergency Officer <ogc.emergencyofficer@bcogc.ca>
Subject: Weather Impacts & gas lines

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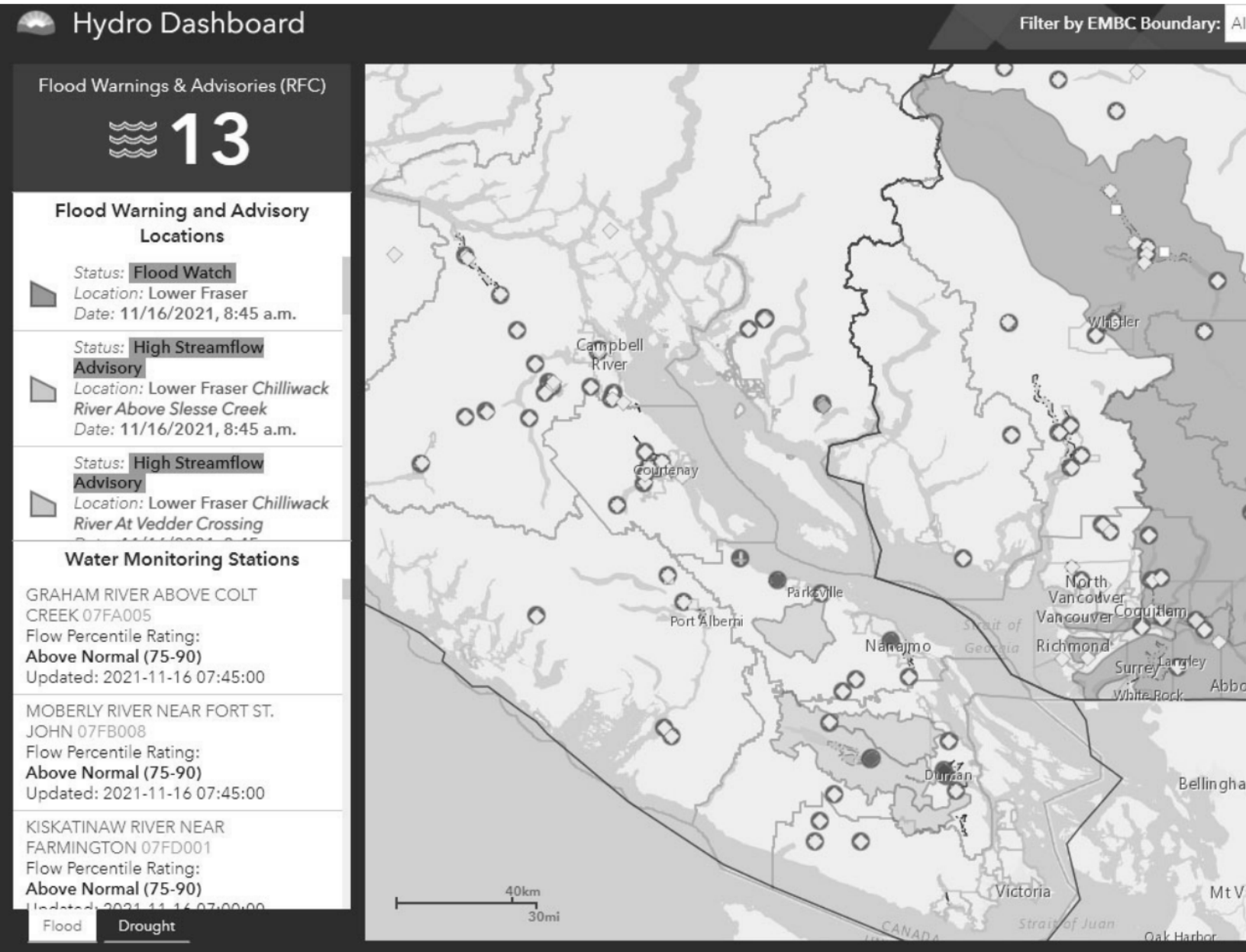
Fortis BC:

- Sunshine Coast at Roberts Creek distribution line and intermediate pressure line exposed in creek. Hydro line de-energized and FD on scene.
- Halfmoon Bay distribution pressure line is exposed
- A main distribution line at Princeton is impacted with up to 1200 customers possibly affected
- Distribution line at Merritt is impacted but the full extent cannot be confirmed due to current high-water levels
- Fraser Valley distribution line service in a farmer's field near Seabird Island is leaking and being isolated

Enbridge:

- Enbridge has sent out a “shipper notification” regarding reduced gas flow but at this point in time, substantive downstream customer impacts are not expected.
- A full assessment is underway and the control room is closely monitoring flood-affected areas.
- Once conditions allow, Enbridge will conduct overflights to assess any further impacts. At present, there is no estimated time for when this will occur.

Map shows affected areas, legend at right.



Peter Dalton

Director, Security & Emergency Management
Peter.Dalton@BCOGC.ca

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Jang, Monica EMLI:EX

From: Mah-Paulson, May EMLI:EX
Sent: November 16, 2021 12:10 PM
To: Mihlar, Fazil EMLI:EX
Cc: Wolf, Viva EMLI:EX; Jang, Monica EMLI:EX
Subject: FW: TransMountain Operations

Hi Fazil – the CER has indicated that they are monitoring both the Trans Mountain and Enbridge/Spectra situations and they are not aware of any supply issues.

May

From: Paulson, Ken <Ken.Paulson@bcogc.ca>
Sent: November 16, 2021 11:31 AM
To: Mah-Paulson, May EMLI:EX <May.Mah-Paulson@gov.bc.ca>
Subject: Fwd: TransMountain Operations

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Fyi

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From: Chris Loewen <Chris.Loewen@cer-rec.gc.ca>
Sent: Tuesday, November 16, 2021 11:27:57 AM
To: Paulson, Ken <Ken.Paulson@bcogc.ca>; Sandy Lapointe <Sandy.Lapointe@cer-rec.gc.ca>
Cc: Chris Finley <Chris.Finley@cer-rec.gc.ca>; Kent Lien <Kent.Lien@cer-rec.gc.ca>
Subject: RE: TransMountain Operations

Hi Ken,

Update from Enbridge is that at this point in time, there remains no substantive downstream supply impacts as the 36" line remains operational. The 36" line has no impacts and the 30" is currently isolated between Stations 8A and 8B. They are finally able to get in the air today and assessing the situation. Enbridge will update us with any significant changes. I'll let you know (or Chris / Kent may contact Peter) if there are any developments that change the supply outlook.

C

From: Paulson, Ken <Ken.Paulson@bcogc.ca>
Sent: Tuesday, November 16, 2021 10:26 AM
To: Sandy Lapointe <Sandy.Lapointe@cer-rec.gc.ca>
Cc: Chris Loewen <Chris.Loewen@cer-rec.gc.ca>
Subject: RE: TransMountain Operations

CAUTION: This message was sent from outside of the organization.
MISE EN GARDE: Ce message a été envoyé de l'extérieur de l'organisation.

Thanks folks.



Ken Paulson , P.Eng
Executive Vice President, Chief Operating
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From: Sandy Lapointe <Sandy.Lapointe@cer-rec.gc.ca>
Sent: Tuesday, November 16, 2021 9:16 AM
To: Paulson, Ken <Ken.Paulson@bcogc.ca>
Cc: Chris Loewen <Chris.Loewen@cer-rec.gc.ca>
Subject: RE: TransMountain Operations

Ken, I am copying Chris on this response. We are not aware of any supply issues. We are monitoring both TransMountain and the Enbridge/Spectra situation.

Sandy

From: Paulson, Ken <Ken.Paulson@bcogc.ca>
Sent: Tuesday, November 16, 2021 10:10 AM
To: Sandy Lapointe <Sandy.Lapointe@cer-rec.gc.ca>
Subject: TransMountain Operations

CAUTION: This message was sent from outside of the organization.
MISE EN GARDE: Ce message a été envoyé de l'extérieur de l'organisation.

Hi Sandy.

Our DM is asking if there are any anticipated supply issues associated with the temporary shut down of the TransMountain pipeline yesterday.

Anything you can share?

Ken

Ps...we are also following the Enbridge incident near Hope. Let us know if there is anything we can do to assist.



Ken Paulson , P.Eng
Executive Vice President, Chief Operating
Officer
Ken.Paulson@bcogc.ca

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Jang, Monica EMLI:EX

From: MacLaren, Les EMLI:EX
Sent: November 16, 2021 2:19 PM
To: Mah-Paulson, May EMLI:EX; Mihlar, Fazil EMLI:EX
Cc: Jang, Monica EMLI:EX; Schwabe, Michelle EMLI:EX
Subject: RE: Weather Impacts & gas lines

Hi May

Not sure if you have been hearing from Enbridge, but Fortis provided a shot from a video pasted below. The 30" line is the line on the left in the river. Impact appears much more extensive than reported this morning. This could be a growing issue heading into the heating season.

Les

Page 18 of 58

Withheld pursuant to/removed as

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From: MacLaren, Les EMLI:EX

Sent: November 16, 2021 11:04 AM

To: Mah-Paulson, May EMLI:EX <May.Mah-Paulson@gov.bc.ca>; Mihlar, Fazil EMLI:EX <Fazil.Mihlar@gov.bc.ca>

Cc: Jang, Monica EMLI:EX <Monica.Jang@gov.bc.ca>; Schwabe, Michelle EMLI:EX <Michelle.Schwabe@gov.bc.ca>

Subject: RE: Weather Impacts & gas lines

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For Merritt, the gas system is still operational, and they are monitoring closely. Again access is an issue.

Les

From: Mah-Paulson, May EMLI:EX <May.Mah-Paulson@gov.bc.ca>

Sent: November 16, 2021 10:13 AM

To: Mihlar, Fazil EMLI:EX <Fazil.Mihlar@gov.bc.ca>; MacLaren, Les EMLI:EX <Les.MacLaren@gov.bc.ca>

Cc: Jang, Monica EMLI:EX <Monica.Jang@gov.bc.ca>; Schwabe, Michelle EMLI:EX <Michelle.Schwabe@gov.bc.ca>

Subject: FW: Weather Impacts & gas lines

FYI

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Sent: November 16, 2021 9:35 AM

To: Paulson, Ken OGC:IN <Ken.Paulson@bcogc.ca>; Johnson, Andy <Andy.Johnson@bcogc.ca>; Swan, Trevor <Trevor.Swan@bcogc.ca>; Mah-Paulson, May EMLI:EX <May.Mah-Paulson@gov.bc.ca>

Cc: XT:Kennedy, Mayka GCPE:IN <Mayka.Kennedy@bcogc.ca>; Koosmann, Nicole <Nicole.Koosmann@bcogc.ca>; Currie, Graham OGC:IN <Graham.Currie@bcogc.ca>; Smook, Patrick <Patrick.Smook@bcogc.ca>; OGC Emergency Officer <ogc.emergencyofficer@bcogc.ca>

Subject: Weather Impacts & gas lines

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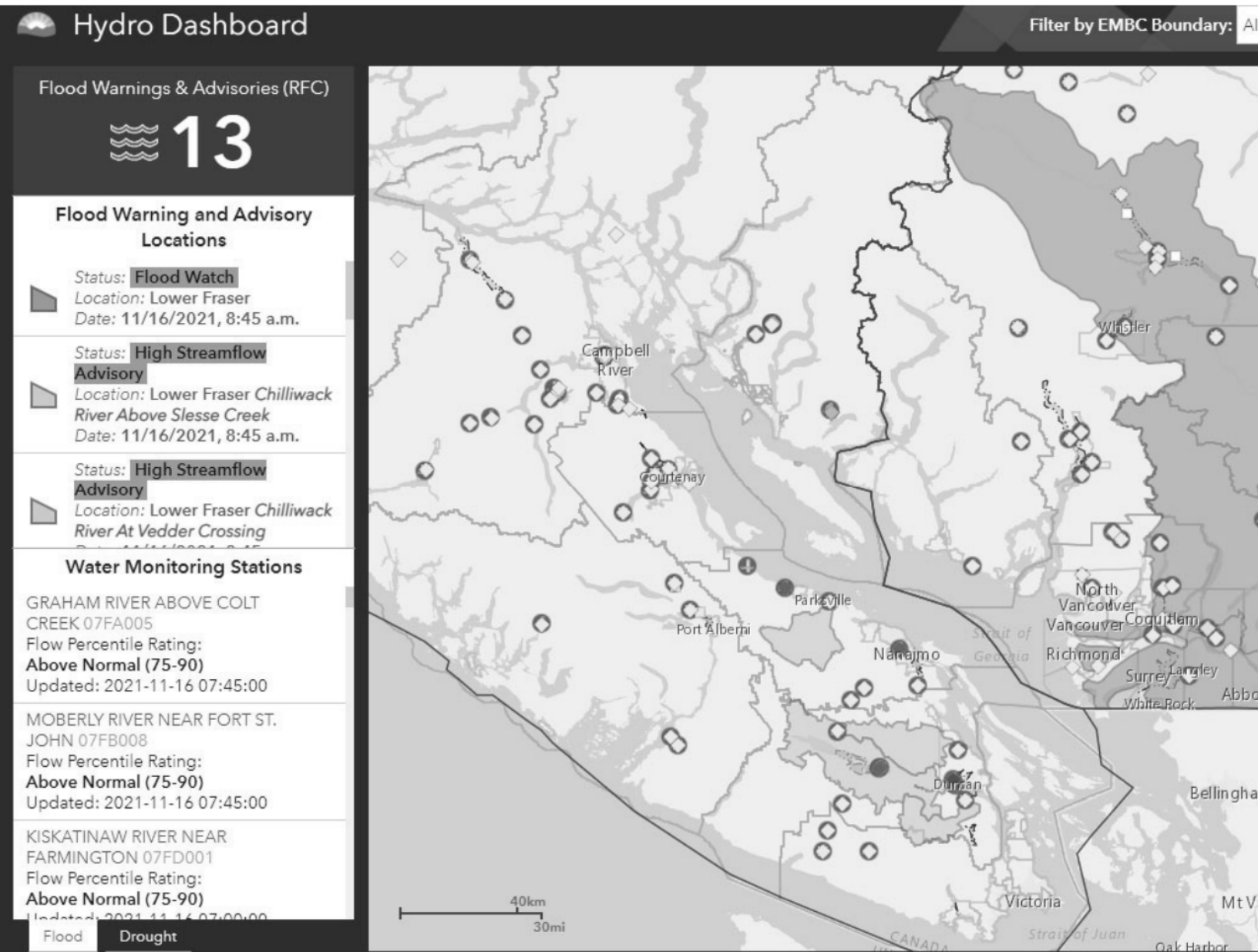
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Enbridge:

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- A full assessment is underway and the control room is closely monitoring flood-affected areas.

- Once conditions allow, Enbridge will conduct overflights to assess any further impacts. At present, there is no estimated time for when this will occur.
- Map shows affected areas, legend at right.



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 Director, Security & Emergency Management
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From: Mah-Paulson, May EMLI:EX
Sent: November 16, 2021 6:38 PM
To: Mihlar, Fazil EMLI:EX; MacLaren, Les EMLI:EX
Cc: Jang, Monica EMLI:EX; Schwabe, Michelle EMLI:EX
Subject: FW: 7pm Update (MST) - Gas lines
Attachments: SWE PREOC Situation Report #3 2021NOV16.pdf; Situation Map #3 2021NOV16.pdf

FYI

From: Dalton, Peter <Peter.Dalton@bcogc.ca>
Sent: November 16, 2021 6:15 PM
To: Paulson, Ken OGC:IN <Ken.Paulson@bcogc.ca>; Swan, Trevor <Trevor.Swan@bcogc.ca>; Johnson, Andy <Andy.Johnson@bcogc.ca>; Mah-Paulson, May EMLI:EX <May.Mah-Paulson@gov.bc.ca>; XT:Kennedy, Mayka GCPE:IN <Mayka.Kennedy@bcogc.ca>
Cc: Koosmann, Nicole <Nicole.Koosmann@bcogc.ca>; Smook, Patrick <Patrick.Smook@bcogc.ca>
Subject: 7pm Update (MST) - Gas lines

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

- Fortis Sechelt transmission line to Trout Lake Area washed out, being depressurized, temporary repairs will occur overnight. No customer impacts at this time.
- 1275 customers in Princeton downtown core are out of service, full restoration may take until the weekend
- LNG plants are on stand-by to backfill supply, but given the imagery of the Enbridge 30" line, some proactive work to identify curtailment targets underway but no suggestion it will be necessary to implement at this time.
- Huntingdon site confirmed as wet but secure.
- Anticipate next Fortis update late morning Wednesday.
- Request in to CER for update on 30" line status
- EMBC sitrep & map attached.



Peter Dalton
Director, Security & Emergency Management
Peter.Dalton@BCOGC.ca

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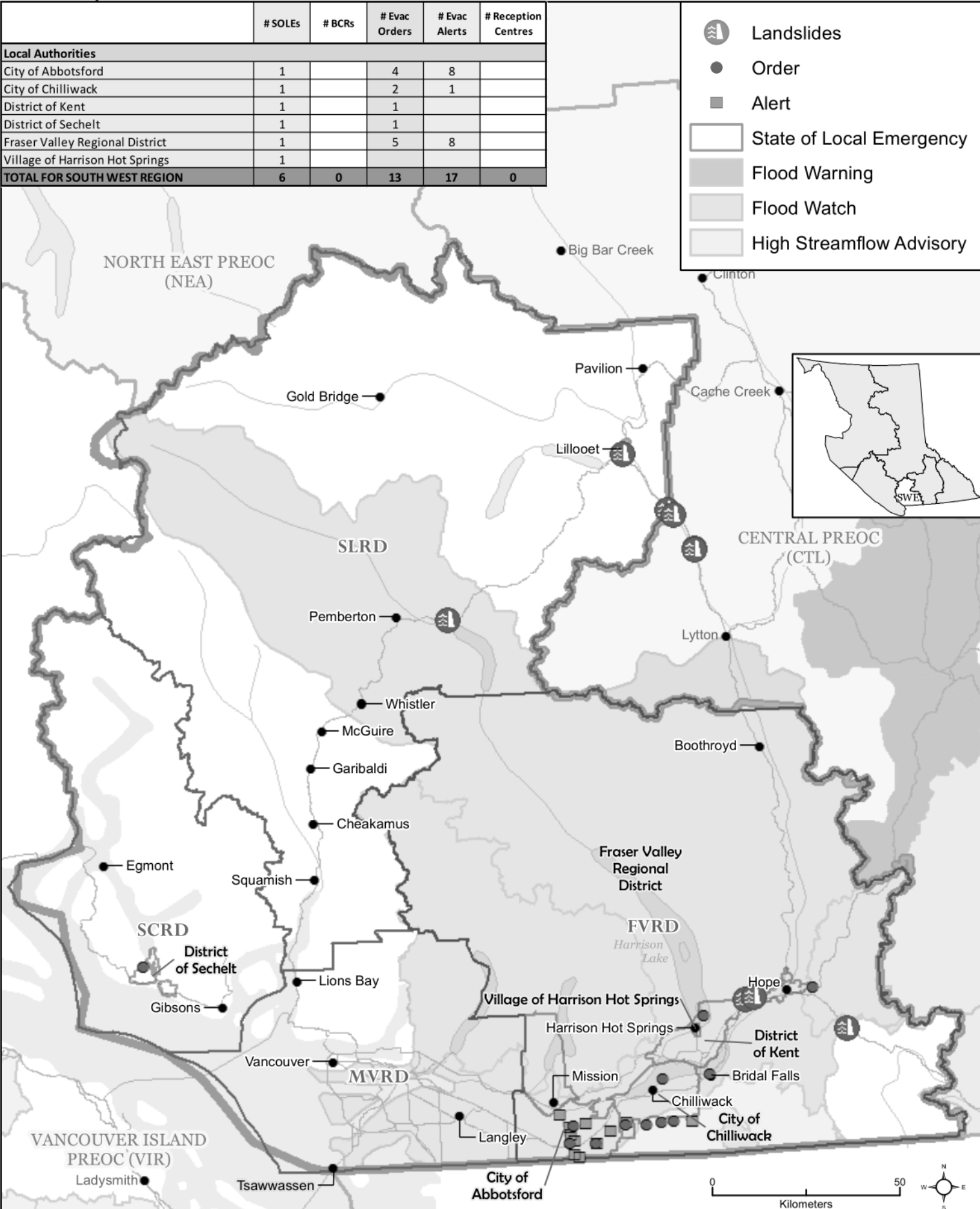
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South West (SWE) Provincial Regional Operational Centre (PREOC) Atmospheric River Events

2021-11-16



Event: Atmospheric River

Date/Time Issued: 2021-11-16; 1630hrs

Task #: 223862

Operational Period: 2021-11-16

Primary PREOC Email: s.17

Primary PREOC Phone: s.17

Primary PREOC Fax: 604-586-4083

Overall Regional Situation: Static

Activated EMBC Staff: 11 Activated TEAMS: 6 Agency: 4 Other: 2

The next Situation Report will be issued: 2021-11-17 at 1530hrs

**** New information**

KEY PROVINCIAL INFORMATION

- The Southwest PREOC is activated to support communities affected by flooding and landslides caused by the Atmospheric River
- Major flooding in the Vancouver Island, Southwest and Central areas of the province from 2021NOV14 onward have caused property and content damages. As a result of the damages sustained from this event, provincial Disaster Financial Assistance (DFA) has been authorized for qualifying claimants, such as home owners, residential tenants, small business owners, farmers, charitable organizations and local government bodies, who were unable to obtain insurance to cover these disaster-related losses. See attachment for more information
- The Southwest PREOC is assisting the District of Hope in accessing critical supplies. Hope estimates they are supporting 1100 evacuees for meals and lodging

Environment Canada

- Rain/Wind and Snowfall Warnings
 - All rain, wind, and snowfall warnings for the SWE areas have ended

River Forecast Centre

- As of 7:45 am November 16th, the River Forecast Centre is maintaining the following advisories:
 - Sumas River and areas around the US Border – Flood Warning (MAINTAINED)
 - Fraser Valley including surrounding tributaries – Flood Watch (MAINTAINED)
 - Fraser Canyon tributaries, including tributaries around Hope – Flood Watch (MAINTAINED)
 - Coquihalla River – High Streamflow Advisory (DOWNGRADED)
 - Chilliwack River – High Streamflow Advisory (DOWNGRADED)
- The River Forecast Centre is ending a Flood Watches and High Streamflow Advisories for:
 - Sea-to-Sky – ENDED
 - Howe Sound – ENDED
 - North Shore Mountains – ENDED
 - Sunshine Coast – ENDED
 - Metro Vancouver - ENDED

The atmospheric river that impacted southern British Columbia over the weekend and Monday has now moved out of the region. Throughout the region river levels have reached their peak levels and have receded overnight Monday and early on Tuesday. Flows and water levels remain high in lake and reservoir-fed watersheds along the Fraser Valley, including the Allouette River and Harrison River. Low-lying terrain around the Sumas River drainage are also expected to

have persistent high-water. Generally dry conditions are expected over the next few days. River levels are expected to continue to recede on Tuesday and through the week

- The next Coordination Call will be 2021NOV16 @ 0900hrs
- **Total Active RCs: 3**
- **Total Active Alerts: 10**
- **Total Orders: 10**
- **Total States of Local Emergency: 5**
- **Total Band Council Resolutions: 0**

WEATHER FORECAST FOR – 2021NOV16

Abbotsford

Wednesday AM	A mix of sun and cloud. Becoming cloudy near noon. High 6
Wednesday PM	Cloudy with 60 percent chance of showers. Low plus 3
Thursday AM	Cloudy with 60 percent chance of showers. High 7
Thursday PM	Cloudy with 60 percent chance of rain showers or flurries. Low plus 1

Pemberton

Wednesday AM	A mix of sun and cloud. Becoming cloudy in the morning. Wind up to 15 km/h. High zero. Wind chill minus 5 in the morning
Wednesday PM	Cloudy. Low minus 3
Thursday AM	Cloudy. High plus 3
Thursday PM	Cloudy periods. Low minus 2

FIRST NATIONS

Chawathil First Nation:

- **Incident:** Flooding
- EOC activated for flooding. 1 home is flooding and material is sliding off of bluffs around the community

Kwikwetlem First Nation:

- **Incident:** Flood Alert
- Put on flood alert from BC Hydro Dams
- EOC activated 2021NOV15

Leq'á:mel First Nation:

- **Incident:** Flooding
- Virtual EOC activated 2021NOV15 due to flooding and 1,000 sandbags requested

Lower Stl'atl'imx (LSTC):

- **Incident:** Heavy rain caused multiple landslides closing roads and affecting power to Douglas, Samahquam, and Skatin
- Approximately 60 households are without power in Samahquam and Skatin
- LSTC has spoken to FLNRO, BC Hydro, and Lizzie Bay/IRM to coordinate efforts to restore power and access. FLNRO and BC Hydro will have assessment crews out first thing 2021NOV16 to begin the repair/reconnection of power lines and routes
- In-SHUCK-ch FSR - Road access to north to Pemberton has not been established for all communities

Lytton First Nation/Camp Hope

- **Incident:** Activated in support of evacuees located at Camp Hope. Additional accommodation may be available at Camp Hope

Matsqui First Nation:

- **Incident:** Localized flooding on IR 2 and IR 4
- Requested sandbags and sand due to localized flooding on IR 2 and IR 4

Peters First Nation:

- **Incident:** Flooding
- EOC activated 2021NOV14 for flooding

Seabird Island

- **Incident:** Flooding
- EOC activated 2021NOV15 for flooding
- Band office and gym have opened as warming station for travellers stranded by highway closures. Seabird Island Band – 2895 Chowat Rd, Agassiz

Shsw'ow'hamel First Nation

- **Incident:** Flooding
- EOC activated 2021NOV15 for flooding

Skawahlook First Nation:

- **Incident:** Flooding
- EOC activated 2021NOV15 for flooding

Soowahlie First Nation:

- **Incident:** Flooding
- EOC activated 2021NOV15 for flooding
- Currently no power or water due to flooding activity since 2021NOV14

Squamish First Nation:

- **Incident:** Flooding
- EOC activated 2021NOV15 for flooding

Sts'ailes First Nation:

- **Incident:** Flooding
- Currently 2 flooded houses and 1 mobile home with water underneath. Community is currently out of sandbags

Sumas First Nation

- **Incident:** Flooding
- EOC activated 2021NOV16 for flooding

LOCAL AUTHORITIES

Abbotsford:

- **Incident:** Heavy rainfall has resulted in several localized mudslides and flooding
- **Alerts:** 8
 - Issued 2021NOV15 for Sumas Prairie: The Southern Rail Line to the West, Whatcom Road to the East, Highway 1 to the North, United States Border to the South (1700 Homes)

- Issued 2021NOV14 for Matsqui Village: Grace Road North to the Matsqui Slough (12 Homes)
- Issued 2021NOV14 for Clayburn Area: Clayburn Village and surrounding area (30 Homes)
- Issued 2021NOV14 for Eagle Mountain Areas: Cranberry Court, Briarwood Place, Doneagle Place (12 -15 Homes)
- Issued 2021NOV14 for Ten Oaks: Mount Blanchard Court, Mount Blanchard Drive and Old Clayburn Road (30 Homes)
- Expanded 2021NOV15 for Sumas Prairie: Westside of Whatcom Road, East of Huntington Village, Southside of Vye Road; Westside of Sumas Way to West of Riverside Road, East of Sumas River Dike to Boundary Road (140 Homes)
- Expanded 2021NOV15 for Straiton Areas: Dawson Road East of Sumas Mountain Road, Straiton Road between Old Clayburn Road and Sumas Mountain Road (60 Homes)
- **Homes Alerted:** 1,987
- **Orders: 2**
 - Issued 2021NOV15 (2 Orders) for Straiton Road (7 Homes, 15 homes)
 - Expanded 2021NOV16 for Sumas Prairie including the area bordered by: Sumas Mountain, DeLair Road and Old Yale Road to the North, The USA Border to the South, Chilliwack City border to the East, The Ridge West of Railway Road to the West (1119 Homes)
- **Homes Ordered:** 1,141
- **State of Local Emergency: 1** – issued 2021NOV15 and expires 2021NOV23 at midnight
- **Reception Centre(s): 1**, Abbotsford Recreation Centre (ARC), 2499 McMillan Road
- **Individuals Registered with ESS:** unknown
- Currently focused on evacuation orders and alerts expanded to include both the east and west sides from the of the dike at Sumas River
- The dike at the Sumas River is at spill levels and the City has a contractor reinforcing the dike at specific locations and have changed their strategy from riprap to block for better stability and less resources to construct
- Utilizing SAR resources, RCMP and Fire to deliver notices to impacted homes
- Mutual Aid is being requested from the local SAR teams
- Reception Centre is located at the Abbotsford Recreation Centre (ARC) 2499 McMillan Road for any residents displaced due to the flooding and/or landslide events currently occurring
- **Road Closures:**
 - Multiple roads are closed due to flooding and/or mudslides. Refer to [Local Government website](#) for list of closures

Bowen Island:

- **Incident:** Flooding
- EOC activated 2021NOV15 due to flooding

Chilliwack:

- **Incident:** Heavy rainfall has resulted in several localized mudslides and flooding causing travellers to be stranded
- **Alerts: 1**
 - Issued 2021NOV16 Yarrow, from Boundary Road to Browne Road, and from the Vedder River to Majuba Hill Road
- **Orders: 2**
 - Issued 2021NOV16 at 0930hrs for Yarrow, from Boundary Road to Browne Road, and all of Majuba Hill
 - Issued 2021NOV15 at 1230hrs for 4 properties on Yale Road and 3 properties on Chartwell Drive
- **State of Local Emergency: 1**, issued 2021NOV15 expires 2021NOV22 at midnight
- **Reception Centres: 2** (Chilliwack Senior Secondary, 46363 Yale Road)
- On 2021NOV15 a State of Local Emergency was declared for areas of the 47000 block of Yale Road and the 47000 block of Chartwell Drive
- **Road Closures:**
 - Multiple roads are closed due to flooding and/or mudslides. Refer to Local Government website for list of closures

Delta:

- **Incident:** Heavy rain caused localized flooding throughout areas of Delta
- EOC Activated in response to issues related to flooding and high winds
- Working to mitigate localized flooding and support critical infrastructure (drainage stations)
- Working to restore communications (internal and external) to full capacity
- Continuing to monitor and support drainage stations

Fraser Valley Regional District:

- **Incident:** Heavy rainfall causing overland flooding and mudslides
- **Alerts: 1**
 - Issued on 2021NOV15 at 1530hrs for Chilliwack River Valley, FVRD Electoral Area "E" for 7 properties on Obyrne Road
- **Homes Alerted: 7**
- **Orders: 5**
 - Issued 2021NOV15 at 1630 for Cultus Lake, FVRD Electoral Area "H" for 17 properties on Lakeshore Drive
 - Issued 2021NOV15 at 1230hrs for Chilliwack River Valley Electoral Area "E" for 13 properties on Chilliwack Lake Road and 8 properties on Wilson Road
 - Issued 2021NOV15 at 0915hrs for Othello Road, FVRD Electoral Area "B" for 3 properties on Fish Camp Road and 5 properties on Othello Road
 - Issued 2021NOV14 at 1130hrs for Bridal Falls Area, FVRD Electoral Area "D" for 1 property on Bridal Falls Road (24 people)
 - Issued 2021NOV15 at 0030hrs for Chilliwack River Valley, FVRD Electoral Area "E" for 4 properties on Auchenway Road
- **Homes Evacuated:** to be confirmed
- **State of Local Emergency: 1** - declared 2021NOV14 at 2230 for all Electoral Areas of the FVRD to remain in force until 2021NOV21 at midnight
- **Reception Centre(s):** (Abbotsford Recreation Centre, 2499 McMillan Road, Abbotsford; Hope Grace Baptist Church, 949 3rd Avenue, Hope; Chilliwack Secondary School 46363 Yale Road, Chilliwack)
- **Individuals Registered with ESS: 11**
- Leisure Valley at Columbia Valley Road, Area H is affected. The local Fire Department is doing a tactical evacuation as needed and overseeing site works to stabilize the scene. The Bell Grove Creek has washed out the shoulder of Columbia Valley Road
- Preliminary Geotechnical Assessment received for Bridal Falls Road shows that the unsafe area extends beyond our current evacuation order area. The Evacuation order will be expanded to include the unsafe lands. All residents willing to evacuate have been evacuated already
- Chilliwack River Valley beyond Edwards Road flooded. MoTI Contractor working on the washout.
- Security in place for Chilliwack River Valley Road, Wilson Road evacuation order
- Taylor Rd: Attended today by Hydrotechnical Engineers to assess the situation. assessment is that there is a section of road/dike that requires immediate attention to be rebuilt. There is no threat of flooding/breaching, however, the structure could fail further which would be a danger to anyone travelling the road/dike. Discussions with Leqamel have indicated that they wish for the FVRD's EOC to coordinate this
- Elbow Creek: Hydrotechnical Engineers assess the situation. Their assessment reported that the seepage experienced yesterday was due to the high water levels but that the dike was not showing any signs of failure and that no further work is required
- 1,000 sandbags have been sent to Chilliwack River Valley. 4,000 sandbags remaining on Gibson Road, Chilliwack
- Damage assessment required at Hope Recreation Centre
- There has been an approximately 50 ft. mudslide in the Bridal Falls area, which has led to an evacuation order at Camperland RV Resort & Cabins on Bridal Falls Rd. in FVRD Electoral Area D. Approximately, 24 people were evacuated
- Four (4) properties have been evacuated at Auchenway Road in Chilliwack River Valley in FVRD Electoral Area E

- The water level at Wilson Road dike in Chilliwack River Valley is approximately 1m below the crest. Operations crew are monitoring the water levels at the dike. The dike is approx. 900m and protects 20 properties and Chilliwack Lake Road. The dike is actively eroding and at risk of overtopping
- Jones Creek water levels are high. A local resident has been providing updates regarding the creek levels. The creek has eroded the banks and is approximately 8ft. away from the structure. The Laidlaw Bridge requires monitoring through MoTI

Village of Harrison Hot Springs:

- **Incident:** Flooding along the Miami Slough
- **State of Local Emergency: 1** – declared 2021NOV15 for the Village of Harrison Hotsprings and expires 2021NOV22 at midnight
- EOC activated on 2021NOV15 due to localized flooding along the Miami Slough
- Maintaining pumps at maximum capacity
- Delivering sand and sandbag for public use
- Informing public to minimize toilet and other sewage use (laundry, washing machines, etc)
- Continuing to monitor water levels and deploy additional pumps if required
- Flooding on Highway 9 Harrison Hot Springs Road & McPherson Road. Limited ability to traverse due to water on road

District of Hope:

- **Incident:** Multiple people stranded by highway closures
- **Reception Centre(s):** 2, 71731 Meadow Road, Fraser Valley B, BC and Hope Grace Baptist Church – 949 3rd Ave. Hope
- **Individuals Registered with ESS:** unknown
- Currently no food in town due to no power. Stores/restaurants closed
- Meal flown in via helicopter 2021NOV16 and provided by Salvation Army
- The EOC was relocated to the Hospital

District of Kent:

- **Incident:** Landslide threatening people and property along Rockwell Drive
- **Orders:** 1, Issued on 2021NOV15 for Rockwell Drive, Rockwell Lane, Rockwell Place, Pirates Lane, Thunderbird Crescent, and Dogwood Lane
- **State of Local Emergency: 1** – declared 2021NOV14 for Rockwell Drive and expires 2021NOV21 at midnight
- **Homes Evacuated: 6**
- **Reception Centre(s):** 2, (Riverside Christian Reformed Church, 7452 Morrow Road; Agassiz Agricultural Hall, 6800 Pioneer Avenue (for evacuees from the Hwy #7 slides))
- **Individuals Registered with ESS: #**
- Multiple landslides on Rockwell Drive (6500, 6900 and 7000 blocks). A tactical evacuation of 6 properties was performed on 2021NOV14
- **Incident:** Hwy 7 landslide
- Multiple landslides have trapped approximated 150 people on Hwy 7 at Seabird Bluffs
- 12 people were rescued from the Hwy 7 incident overnight
- Canada Task Force 1 is on scene supporting the response from the Agassiz Fire Department
- A culvert is blocked on Chaplin Road (Seabird Island) causing significant water backup onto Kamp Road
- Flood pumps at Hammersley Pump Station overheated and shut down
- **Road Closures:**
 - Multiple roads are closed due to flooding and/or mudslides. Refer to Local Government website for list of closures

Langley, Township of:

- **Incident:** Mudslide threatening people and property
- **Homes Evacuated: 1**
- **Individuals Registered with ESS: 2**
- Rainfall caused wide spread flooding on public and private property, as well as parks and trails, and sewer lift stations
- Multiple roads impacted due to flooding
- Engaging geotechnical and structural consultants to assist with slope failures locations when safe to do so
- A mud slide has occurred at 7800 block of 264th Ave. in Langley. The Township is on scene assessing the damage
- 2 adults have been provided 1 night accommodation

Maple Ridge:

- **Incident:** Localized flooding
- EOC activated in response to localized flooding due to the Alouette River
- Monitored South Alouette, North Alouette flows and Fraser River as well as SSO's
- Confirming BC Hydro's release rate and adjusting response as per BC Hydro's predicted spill volumes
- Completing visual inspections along South and North Alouette River
- Continuing to monitor South Alouette River levels

Metro Vancouver Regional District:

- **Incident:** Localized flooding
- EOC activated 2021NOV15 due to localized flooding
- Liquid Waste Services is reporting 8 sewer overflows, and all Wastewater Treatment Plants have had power restored and are operating normally, and within the regulated requirements. Cariboo Dam has been able to manage flows through the Still Creek drainage system throughout the event with minor flooding
- Water Services is monitoring its Dams and is managing turbidity concerns
- Regional Parks currently have 6 parks closed due to flooding conditions, and power has been restored to all locations interrupted 2021NOV15
- Solid Waste Services is reporting all Recycling & Waste Facilities are reopened to full operations. Coquitlam Landfill had an overflow of surface water, which has since been contained and repairs are ongoing to the berm that was damaged
- Gaining situational awareness of impacted infrastructure. Assessing damages and planning for repair or mitigation strategies as required
- **Road Closures:**
- 56th Ave @ 176th Street, Surrey – Partial lane closure
- Blundell & Gilbert, Richmond - Alternating traffic (local traffic only)

Mission:

- **Incident:** Localized flooding and mutual aid
- EOC activated due to localized flooding and to provide mutual aid to Abbotsford
- Public works reports several roads have been reopened. A number are still closed or are single lane due to flooding
- Two residences on King Avenue are isolated due to complete road wash out
- Planning/preparing to open RC in Mission if required to support ESS flood response if required

New Westminster:

- **Incident:** Localized flooding
- EOC activated 2021NOV15 due to localized flooding

Pemberton:

- **Incident:** Flooding
- EOC activated 2021NOV15 due to flood activity
- Heavy rainfall caused significant flows in Pemberton Creek and the Arn Canal causing localized flooding in low-lying areas

- The neighbourhoods of the Peaks, Pioneer Junction, the Trailer Park on Hwy 99, the Industrial Park and One Mile Lake area have all have experienced substantial flooding
- A sandbag station has been set up at Municipal Hall
- Pumping at the Peaks and Pioneer Junction is ongoing.
- One Mile Lake Park, the Boardwalk and trails have been closed due to high water
- Pemberton Fire Rescue was dispatched to assist with pumping in residential areas
- PVDD to continue to monitor rivers, provide ongoing updates, expertise and operational recommendations
- Continuing to liaise with Lil'wat, SLRD and PVDD and relevant agencies to coordinate response

Pitt Meadows, City of

- **Incident:** Heavy rainfall has resulted in multiple roads flooding
- Localized flooding throughout Pitt Meadows. Some areas inundated with water, some roads have been closed and/or have signage placed to be cautious of flooding
- Hammond Road/Airport Way both have localized flooding. Traffic control on scene.
- Dike inspections started
- Inundation mapping from Alouette Dam are being reviewed as they have a freecrest spill peaking around 2400 hr 2021NOV15 at 160 cms. The Pitt River is at high tide for a couple of days
- Alouette River alert notice sent to City Agricultural Advisory Committee
- Determining flood spill conditions and possible scenarios from the Alouette Dam
- Notification to some properties along the Alouette/Pitt Rivers
- Notice to be delivered to property on 224th Ave in regard to potential hazards/flooding due to the freecrest spill from the Alouette Dam

Port Coquitlam:

- **Incident:** Localized flooding
- EOC activated 2021NOV15 due to localized flooding
- High river flows and potential overflow of banks and surrounding land. Drainage infrastructure at maximum capacity. No disruption in solid waste collection. Pump stations at maximum capacity and experienced pump failures
- Closures: Gates parking lot, Traboulay Trail from dog park to Patricia food bridge, Burleigh - Kingsway to Chine

Squamish Lillooet Regional District:

- **Incident:** Flood threat to properties
- **Alerts:** 0
- EOC activated 2021NOV15 due to flood threat to properties and water levels continue to rise
- The evacuation alert issued on 2021NOV15 for Tunnel Station/Upper Paradise Valley – Electoral Area D was rescinded 2021NOV16
- On 2021NOV15 Pemberton Fire Rescue Service advised the SLRD EOC that a mudslide occurred in the vicinity of 1773 Reid Road, inundating the road approx. 1m deep due to a steep creek debris flow
- MFLNRORD geotechnical assessment requested for 2021NOV16

Squamish District

- **Incident:** Localized flooding due to heavy rainfall. Waste Treatment Plant overflowing
- EOC activated 2021NOV15 due to localized flooding concerns
- Wastewater Treatment Plant is overflowing within the District of Squamish

Sunshine Coast Regional District

- **Incident:** Localized flooding due to heavy rainfall
- EOC activated 2021NOV15 due to localized flooding on Day Road in Roberts Creek
- Stormwater flooding and erosion has impacted public services (drinking water, fire flows, roads, transit, wastewater treatment, parks) in 35+ locations, regionally. Fortis reports exposed gas line at Stephens Road and Lower Road and are preparing for re-routing and/or shutoff.

- Working to protect water supply/infrastructure for public health and fire flow (Chapman Creek main, water mains, McNeill Lake dam, Grantham's pump station)
- Working to protect public health / manage impacts of WWTP failure (notifications)
- Addressing current areas of no road access (washout occurred)
- Addressing potential areas of no road access (impending washout)
- Promoting public safety (park closures, awareness of issues/avoid unnecessary travel)
- Boil water advisories issued (2021NOV15 at 1330)

Surrey:

- **Incident:** Localized flooding
- EOC activated 2021NOV15 due to localized flooding

Whistler:

- **Incident:** ESS host community
- Providing support to two evacuees who are unable to return home due to the mudslides

AGENCIES

Ministry of Transportation and Infrastructure (MoTI):

- MoTI South Coast Region has activated their Ministry Operations Centre and District Operations Centre

HEALTH INFORMATION

No impacts reported

LIVE STOCK IMPACTED

No impacts reported

TRANSPORTATION IMPACTED

Drive BC

Highway 1 Both Directions - Highway 1, in both directions. Mudslide between Annis Rd and K St for 38.4 km (Hope to 2 km east of Chilliwack). Road closed. Estimated time of opening not available. Assessment in progress

Highway 1, in both directions. Flooding between Flood Hope Rd and Junction Hwy 8 for 144.3 km (Hope to Spences Bridge). Rockslide. Road closed. Assessment in progress. Estimated time of opening not available

Highway 1, in both directions. Flooding between Exit 90: McCallum Rd and Exit 109: Yale Rd for 20.1 km (Abbotsford to Chilliwack). The road is closed. Estimated time of opening not available. Assessment in progress

Highway 3 Both Directions - Highway 3, in both directions. Mudslide at Sunshine Valley (17 km east of Hope). Road Closed. Assessment in progress. Estimated time of opening not available

Highway 5, in both directions. Mudslide at Exit 202 (11 km south of Great Bear Snowshed). Road closed. Assessment in progress. Estimated time of opening not available. Detour not available. Road closed between Hope and Merritt

Highway 7 Both Directions - Highway 7, in both directions. Mudslide between Johnson Slough Rest Area and Ruby Creek Rd (Kent). Road closed. Assessment in progress. Detour not available

Highway 7, in both directions. Mudslide between Johnson Slough Rest Area and Ross Rd for 12.6 km (Kent to 1 km east of Hope). Road closed. Assessment in progress. Detour not available

Highway 7 Both Directions - Highway 7, in both directions. Mudslide between Highlands Blvd and Bodnar Rd (Kent). Flooding. Road closed. Assessment in progress. Estimated time of opening not available

Highway 11, in both directions. Flooding between Hazelwood Ave and Townshipline Rd for 2.9 km (Abbotsford). Road closed

Highway 11, in both directions. Flooding between Vye Rd and Delair Rd for 2.0 km (Abbotsford). The road is closed. Estimated time of opening not available. Watch for traffic control

Highway 12, in both directions. Mudslide between Six Mile Rd and Kirbys Flat Rd for 0.2 km (27 to 26 km north of Lytton). Road closed. Geotechnical investigation

Highway 12, in both directions. Mudslide between Fountain Creek Rd and 30 Mile Rd for 2.0 km (15 to 17 km south of Lillooet). Road closed. Assessment in progress

Highway 99, northbound. Flooding between Blundell Rd and Exit 36: Westminster Hwy (Richmond). Road closed. Traffic is being rerouted onto Westminster Highway

Highway 99, in both directions. Mudslide between Lil'wat Pl and Seton Lake Rd for 81.9 km (9 km north of Pemberton to Lillooet). Road closed. Estimated time of opening not available. Assessment in progress

King George Blvd., northbound. Bridge closed at Nicomekl Bridge. Assessment in progress. Please use alternate route

UTILITIES IMPACTED

BC Hydro

- 2021NOV16 update - There are currently 716 customers without power within the Lower Mainland and Sunshine Coast remain without power due to flooding, mud/snow slides and trees down on wires
- **For more information:** <https://www.bchydro.com/power-outages/app/outage-list.html>

- BC Hydro Alerts

- Stave Falls and Ruskin Dams Spill Notification – 2021NOV16, at approximately 1315hrs decrease will commence at the Ruskin Dam & Stave Falls Dam as inflows are decreasing. Ruskin Dam Spill will decrease from 1400 cubic meters per second (cms) to a flow of 500 cms. Stave Falls Spill will decrease from 1350 cubic meters per second (cms) to a flow of 500 cms.
- Wahleach Dam (Jones Lake) Spill Notification – Notification of planned spill release. Lower Jones Creek water levels will rise and may approach bankfull conditions, but no major flooding is expected. The current reservoir elevation is 642.31m. The current release is ~50 cms (cubic meters per second). Forecast spill is reducing, reservoir lowering. The reason for spill inflows event and plant outage
- 2021NOV16 The previously declared flood alert, # ALU_01_2021, downstream of Alouette Dam has been rescinded
- 2021NOV16 the previously declared flood alert # WAH_01_2021 downstream of Wahleach Dam has been rescinded
- 2021NOV16 the previously declared flood alert # CMS_01_2021 downstream of Cheakamus Dam has been rescinded

Enbridge Inc.

- Due to heavy rainfall and increasing river flows, Enbridge has shut down a segment of 30-inch natural gas pipeline in the Coquihalla river valley on the morning of 2021NOV16 as a precautionary measure. The 36-inch natural gas pipeline remains in operation.
- Continuing to monitor the situation and will take further action should they become necessary.

USEFUL LINKS/RESOURCES

[EMBC Current Flooding Information](#)

[River Forecast Centre](#)

[Drive BC](#)

[Environment Canada](#)

[Avalanche Canada Weather Forecast](#)

[BC Hydro](#)

[Disaster Financial Assistance Website](#)

APPROVED BY:

Original signed by

Debbie Alexander

PREOC Deputy Director

Note: Information contained in this situation report is for operational purposes only. The contained information is not meant for public information. If you wish you use contained information for a media release, you must clear it with the PREOC Director.

Jang, Monica EMLI:EX

From: Dick, Robert <robert.dick@tc.gc.ca>
Sent: November 16, 2021 6:55 PM
To: Krishna, Kaye TRAN:EX; Richards, Tara R EMBC:EX
Cc: Bawa, Reg R TRAN:EX; Volk, Kevin TRAN:EX; Mihlar, Fazil EMLI:EX; Heryet, Trevor
Subject: RE: [EXT] RE: Update on BC Situation

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

UNCLASSIFIED / NON CLASSIFIÉ

Thanks. YVR has 15 days inventory and trucks still come up from WA. I've copied Fazil.

We have also placed calls to various airports supporting helicopter operations etc to try to get info on their reserves, and they in turn will need to get a sense of fuel on hand at their suppliers.

Much is coming by rail, need to get a handle on that; it could become something we work with railways to prioritize once some capacity is restored.

Robert Dick

Assistant Deputy Minister, Pacific Region | Sous-ministre adjoint, Région du Pacifique Transport Canada | Transports Canada Robert.Dick@tc.gc.ca | 604-666-5849 (he/him/il)

-----Original Message-----

From: Krishna, Kaye TRAN:EX <Kaye.Krishna@gov.bc.ca>
Sent: Tuesday, November 16, 2021 3:52 PM
To: Richards, Tara R EMBC:EX <Tara.Richards@gov.bc.ca>; Dick, Robert <robert.dick@tc.gc.ca>
Cc: Bawa, Reg R TRAN:EX <Reg.Bawa@gov.bc.ca>; Volk, Kevin TRAN:EX <Kevin.Volk@gov.bc.ca>
Subject: Fwd: [EXT] RE: Update on BC Situation

FYI

Kaye Krishna (she/her)
Deputy Minister
Transportation and Infrastructure

Sent from my iPhone

Begin forwarded message:

From: Serge Corbeil <serge.corbeil@aircanada.ca>
Date: November 16, 2021 at 2:22:11 PM PST
To: "Bawa, Reg R TRAN:EX" <Reg.Bawa@gov.bc.ca>, "Krishna, Kaye TRAN:EX" <Kaye.Krishna@gov.bc.ca>
Subject: RE: [EXT] RE: Update on BC Situation

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Reg,

We had an internal call. We are adding capacity on Vancouver to Kelowna-Vancouver and Toronto-Kelowna-Toronto. It has already been actioned.

We are closely looking at loads on Kamloops-Vancouver-Kamloops. Right now, we see available seats Nov 18-19th, but we will have another internal call in the morning to see if this is changing. We are ready to add capacity on that market as well.

Another thing we are also looking at is demand for movement of goods. Not yet an issue, but if you hear of anything, please do let us know.

Also, we had raised an issue with delivery of jet fuel to YVR with the Pembina line between Burnaby and YVR being down. Air Canada has been sourcing from different places including rail cars from eastern points. With rail lines down, we are closely monitoring this situation. We can manage for the time being, but are keeping a close eye on this.

Serge

[cid:image001.png@01D7DAF5.537813E0]

Serge Corbeil

Director - Government Relations, Local and Provincial

Directeur – Relations gouvernementales, régionales et provinciales

T 604 270-1390 | C 604 562-2175

serge.corbeil@aircanada.ca<<mailto:serge.corbeil@aircanada.ca>>

From: Bawa, Reg R TRAN:EX <Reg.Bawa@gov.bc.ca>

Sent: November 16, 2021 12:24 PM

To: Bowman, Deborah EMLI:EX <Deborah.Bowman@gov.bc.ca>; Serge Corbeil <serge.corbeil@aircanada.ca>; Krishna,

Kaye TRAN:EX <Kaye.Krishna@gov.bc.ca>

Subject: [EXT] RE: Update on BC Situation

CAUTION! External email: Please do not click links or open attachments unless from a trusted sender.

ATTENTION! Courriel externe: N'ouvrir ni liens ni pièces jointes, sauf si l'expéditeur est fiable.

Thank you Deb –

Hi Serge, assessments are taking place today and we should have more information on road closures in the next few days. I will connect with you once we have a better picture. We appreciate ACs response and I would appreciate information as AC contemplates additional capacity decisions.

Thanks
R

Reg Bawa, CPA CGA | Assistant Deputy Minister Transportation Policy and Programs, Ministry of Transportation |
250-888-0658 (cell)

From: Bowman, Deborah EMLI:EX <Deborah.Bowman@gov.bc.ca<mailto:Deborah.Bowman@gov.bc.ca>>
Sent: November 16, 2021 12:17 PM
To: Serge Corbeil <serge.corbeil@aircanada.ca<mailto:serge.corbeil@aircanada.ca>>; Krishna, Kaye TRAN:EX
<Kaye.Krishna@gov.bc.ca<mailto:Kaye.Krishna@gov.bc.ca>>
Cc: Bawa, Reg R TRAN:EX <Reg.Bawa@gov.bc.ca<mailto:Reg.Bawa@gov.bc.ca>>
Subject: RE: Update on BC Situation

Hi Serge, just so you know, I moved to another position in government about a month ago and am cc'ing Reg who has taken over my role at TRAN. Take care and all the best, db

----- Original message -----

From: Serge Corbeil <serge.corbeil@aircanada.ca<mailto:serge.corbeil@aircanada.ca>>
Date: 2021-11-16 12:10 p.m. (GMT-08:00)
To: "Bowman, Deborah EMLI:EX" <Deborah.Bowman@gov.bc.ca<mailto:Deborah.Bowman@gov.bc.ca>>, "Krishna, Kaye TRAN:EX" <Kaye.Krishna@gov.bc.ca<mailto:Kaye.Krishna@gov.bc.ca>>
Subject: Update on BC Situation

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Hi Kaye and Deborah,

We are closely monitoring the situation with road closures due to the storm. In particular, we are looking at demand to evaluate need to add capacity to some markets such as Kelowna, Kamloops and Penticton. Also, we have issued a goodwill policy for people who need to cancel their flights.

This said, is there anything you can share in terms of what you estimate duration of road closures will be?

Thank you!

Serge

[cid:image001.png@01D7DAF5.537813E0]

Serge Corbeil
Director - Government Relations, Local and Provincial

Directeur – Relations gouvernementales, régionales et provinciales

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serge.corbeil@aircanada.ca<mailto:serge.corbeil@aircanada.ca>

Event: Atmospheric River

Date/Time Issued: 2021-11-16; 1630hrs

Task #: 223862

Operational Period: 2021-11-16

Primary PREOC Email:s.17

Primary PREOC Phone:s.17

Primary PREOC Fax: 604-586-4083

Overall Regional Situation: Static

Activated EMBC Staff: 11 Activated TEAMS: 6 Agency: 4 Other: 2

The next Situation Report will be issued: 2021-11-17 at 1530hrs

**** New information**

KEY PROVINCIAL INFORMATION

- The Southwest PREOC is activated to support communities affected by flooding and landslides caused by the Atmospheric River
- Major flooding in the Vancouver Island, Southwest and Central areas of the province from 2021NOV14 onward have caused property and content damages. As a result of the damages sustained from this event, provincial Disaster Financial Assistance (DFA) has been authorized for qualifying claimants, such as home owners, residential tenants, small business owners, farmers, charitable organizations and local government bodies, who were unable to obtain insurance to cover these disaster-related losses. See attachment for more information
- The Southwest PREOC is assisting the District of Hope in accessing critical supplies. Hope estimates they are supporting 1100 evacuees for meals and lodging

Environment Canada

- Rain/Wind and Snowfall Warnings
 - All rain, wind, and snowfall warnings for the SWE areas have ended

River Forecast Centre

- As of 7:45 am November 16th, the River Forecast Centre is maintaining the following advisories:
 - Sumas River and areas around the US Border – Flood Warning (MAINTAINED)
 - Fraser Valley including surrounding tributaries – Flood Watch (MAINTAINED)
 - Fraser Canyon tributaries, including tributaries around Hope – Flood Watch (MAINTAINED)
 - Coquihalla River – High Streamflow Advisory (DOWNGRADED)
 - Chilliwack River – High Streamflow Advisory (DOWNGRADED)
- The River Forecast Centre is ending a Flood Watches and High Streamflow Advisories for:
 - Sea-to-Sky – ENDED
 - Howe Sound – ENDED
 - North Shore Mountains – ENDED
 - Sunshine Coast – ENDED
 - Metro Vancouver - ENDED

The atmospheric river that impacted southern British Columbia over the weekend and Monday has now moved out of the region. Throughout the region river levels have reached their peak levels and have receded overnight Monday and early on Tuesday. Flows and water levels remain high in lake and reservoir-fed watersheds along the Fraser Valley, including the Allouette River and Harrison River. Low-lying terrain around the Sumas River drainage are also expected to

have persistent high-water. Generally dry conditions are expected over the next few days. River levels are expected to continue to recede on Tuesday and through the week

- The next Coordination Call will be 2021NOV16 @ 0900hrs
- **Total Active RCs: 3**
- **Total Active Alerts: 10**
- **Total Orders: 10**
- **Total States of Local Emergency: 5**
- **Total Band Council Resolutions: 0**

WEATHER FORECAST FOR – 2021NOV16

Abbotsford

Wednesday AM	A mix of sun and cloud. Becoming cloudy near noon. High 6
Wednesday PM	Cloudy with 60 percent chance of showers. Low plus 3
Thursday AM	Cloudy with 60 percent chance of showers. High 7
Thursday PM	Cloudy with 60 percent chance of rain showers or flurries. Low plus 1

Pemberton

Wednesday AM	A mix of sun and cloud. Becoming cloudy in the morning. Wind up to 15 km/h. High zero. Wind chill minus 5 in the morning
Wednesday PM	Cloudy. Low minus 3
Thursday AM	Cloudy. High plus 3
Thursday PM	Cloudy periods. Low minus 2

FIRST NATIONS

Chawathil First Nation:

- **Incident:** Flooding
- EOC activated for flooding. 1 home is flooding and material is sliding off of bluffs around the community

Kwikwetlem First Nation:

- **Incident:** Flood Alert
- Put on flood alert from BC Hydro Dams
- EOC activated 2021NOV15

Leq'á:mel First Nation:

- **Incident:** Flooding
- Virtual EOC activated 2021NOV15 due to flooding and 1,000 sandbags requested

Lower Stl'atl'imx (LSTC):

- **Incident:** Heavy rain caused multiple landslides closing roads and affecting power to Douglas, Samahquam, and Skatin
- Approximately 60 households are without power in Samahquam and Skatin
- LSTC has spoken to FLNRO, BC Hydro, and Lizzie Bay/IRM to coordinate efforts to restore power and access. FLNRO and BC Hydro will have assessment crews out first thing 2021NOV16 to begin the repair/reconnection of power lines and routes
- In-SHUCK-ch FSR - Road access to north to Pemberton has not been established for all communities

Lytton First Nation/Camp Hope

- **Incident:** Activated in support of evacuees located at Camp Hope. Additional accommodation may be available at Camp Hope

Matsqui First Nation:

- **Incident:** Localized flooding on IR 2 and IR 4
- Requested sandbags and sand due to localized flooding on IR 2 and IR 4

Peters First Nation:

- **Incident:** Flooding
- EOC activated 2021NOV14 for flooding

Seabird Island

- **Incident:** Flooding
- EOC activated 2021NOV15 for flooding
- Band office and gym have opened as warming station for travellers stranded by highway closures. Seabird Island Band – 2895 Chowat Rd, Agassiz

Shsw'ow'hamel First Nation

- **Incident:** Flooding
- EOC activated 2021NOV15 for flooding

Skawahlook First Nation:

- **Incident:** Flooding
- EOC activated 2021NOV15 for flooding

Soowahlie First Nation:

- **Incident:** Flooding
- EOC activated 2021NOV15 for flooding
- Currently no power or water due to flooding activity since 2021NOV14

Squamish First Nation:

- **Incident:** Flooding
- EOC activated 2021NOV15 for flooding

Sts'ailes First Nation:

- **Incident:** Flooding
- Currently 2 flooded houses and 1 mobile home with water underneath. Community is currently out of sandbags

Sumas First Nation

- **Incident:** Flooding
- EOC activated 2021NOV16 for flooding

LOCAL AUTHORITIES

Abbotsford:

- **Incident:** Heavy rainfall has resulted in several localized mudslides and flooding
- **Alerts:** 8
 - Issued 2021NOV15 for Sumas Prairie: The Southern Rail Line to the West, Whatcom Road to the East, Highway 1 to the North, United States Border to the South (1700 Homes)

- Issued 2021NOV14 for Matsqui Village: Grace Road North to the Matsqui Slough (12 Homes)
- Issued 2021NOV14 for Clayburn Area: Clayburn Village and surrounding area (30 Homes)
- Issued 2021NOV14 for Eagle Mountain Areas: Cranberry Court, Briarwood Place, Doneagle Place (12 -15 Homes)
- Issued 2021NOV14 for Ten Oaks: Mount Blanchard Court, Mount Blanchard Drive and Old Clayburn Road (30 Homes)
- Expanded 2021NOV15 for Sumas Prairie: Westside of Whatcom Road, East of Huntington Village, Southside of Vye Road; Westside of Sumas Way to West of Riverside Road, East of Sumas River Dike to Boundary Road (140 Homes)
- Expanded 2021NOV15 for Straiton Areas: Dawson Road East of Sumas Mountain Road, Straiton Road between Old Clayburn Road and Sumas Mountain Road (60 Homes)
- **Homes Alerted:** 1,987
- **Orders: 2**
 - Issued 2021NOV15 (2 Orders) for Straiton Road (7 Homes, 15 homes)
 - Expanded 2021NOV16 for Sumas Prairie including the area bordered by: Sumas Mountain, DeLair Road and Old Yale Road to the North, The USA Border to the South, Chilliwack City border to the East, The Ridge West of Railway Road to the West (1119 Homes)
- **Homes Ordered:** 1,141
- **State of Local Emergency: 1** – issued 2021NOV15 and expires 2021NOV23 at midnight
- **Reception Centre(s): 1**, Abbotsford Recreation Centre (ARC), 2499 McMillan Road
- **Individuals Registered with ESS:** unknown
- Currently focused on evacuation orders and alerts expanded to include both the east and west sides from the of the dike at Sumas River
- The dike at the Sumas River is at spill levels and the City has a contractor reinforcing the dike at specific locations and have changed their strategy from riprap to block for better stability and less resources to construct
- Utilizing SAR resources, RCMP and Fire to deliver notices to impacted homes
- Mutual Aid is being requested from the local SAR teams
- Reception Centre is located at the Abbotsford Recreation Centre (ARC) 2499 McMillan Road for any residents displaced due to the flooding and/or landslide events currently occurring
- **Road Closures:**
 - Multiple roads are closed due to flooding and/or mudslides. Refer to [Local Government website](#) for list of closures

Bowen Island:

- **Incident:** Flooding
- EOC activated 2021NOV15 due to flooding

Chilliwack:

- **Incident:** Heavy rainfall has resulted in several localized mudslides and flooding causing travellers to be stranded
- **Alerts: 1**
 - Issued 2021NOV16 Yarrow, from Boundary Road to Browne Road, and from the Vedder River to Majuba Hill Road
- **Orders: 2**
 - Issued 2021NOV16 at 0930hrs for Yarrow, from Boundary Road to Browne Road, and all of Majuba Hill
 - Issued 2021NOV15 at 1230hrs for 4 properties on Yale Road and 3 properties on Chartwell Drive
- **State of Local Emergency: 1**, issued 2021NOV15 expires 2021NOV22 at midnight
- **Reception Centres: 2** (Chilliwack Senior Secondary, 46363 Yale Road)
- On 2021NOV15 a State of Local Emergency was declared for areas of the 47000 block of Yale Road and the 47000 block of Chartwell Drive
- **Road Closures:**
 - Multiple roads are closed due to flooding and/or mudslides. Refer to Local Government website for list of closures

Delta:

- **Incident:** Heavy rain caused localized flooding throughout areas of Delta
- EOC Activated in response to issues related to flooding and high winds
- Working to mitigate localized flooding and support critical infrastructure (drainage stations)
- Working to restore communications (internal and external) to full capacity
- Continuing to monitor and support drainage stations

Fraser Valley Regional District:

- **Incident:** Heavy rainfall causing overland flooding and mudslides
- **Alerts: 1**
 - Issued on 2021NOV15 at 1530hrs for Chilliwack River Valley, FVRD Electoral Area "E" for 7 properties on Obyrne Road
- **Homes Alerted: 7**
- **Orders: 5**
 - Issued 2021NOV15 at 1630 for Cultus Lake, FVRD Electoral Area "H" for 17 properties on Lakeshore Drive
 - Issued 2021NOV15 at 1230hrs for Chilliwack River Valley Electoral Area "E" for 13 properties on Chilliwack Lake Road and 8 properties on Wilson Road
 - Issued 2021NOV15 at 0915hrs for Othello Road, FVRD Electoral Area "B" for 3 properties on Fish Camp Road and 5 properties on Othello Road
 - Issued 2021NOV14 at 1130hrs for Bridal Falls Area, FVRD Electoral Area "D" for 1 property on Bridal Falls Road (24 people)
 - Issued 2021NOV15 at 0030hrs for Chilliwack River Valley, FVRD Electoral Area "E" for 4 properties on Auchenway Road
- **Homes Evacuated:** to be confirmed
- **State of Local Emergency: 1** - declared 2021NOV14 at 2230 for all Electoral Areas of the FVRD to remain in force until 2021NOV21 at midnight
- **Reception Centre(s):** (Abbotsford Recreation Centre, 2499 McMillan Road, Abbotsford; Hope Grace Baptist Church, 949 3rd Avenue, Hope; Chilliwack Secondary School 46363 Yale Road, Chilliwack)
- **Individuals Registered with ESS: 11**
- Leisure Valley at Columbia Valley Road, Area H is affected. The local Fire Department is doing a tactical evacuation as needed and overseeing site works to stabilize the scene. The Bell Grove Creek has washed out the shoulder of Columbia Valley Road
- Preliminary Geotechnical Assessment received for Bridal Falls Road shows that the unsafe area extends beyond our current evacuation order area. The Evacuation order will be expanded to include the unsafe lands. All residents willing to evacuate have been evacuated already
- Chilliwack River Valley beyond Edwards Road flooded. MoTI Contractor working on the washout.
- Security in place for Chilliwack River Valley Road, Wilson Road evacuation order
- Taylor Rd: Attended today by Hydrotechnical Engineers to assess the situation. assessment is that there is a section of road/dike that requires immediate attention to be rebuilt. There is no threat of flooding/breaching, however, the structure could fail further which would be a danger to anyone travelling the road/dike. Discussions with Leqamel have indicated that they wish for the FVRD's EOC to coordinate this
- Elbow Creek: Hydrotechnical Engineers assess the situation. Their assessment reported that the seepage experienced yesterday was due to the high water levels but that the dike was not showing any signs of failure and that no further work is required
- 1,000 sandbags have been sent to Chilliwack River Valley. 4,000 sandbags remaining on Gibson Road, Chilliwack
- Damage assessment required at Hope Recreation Centre
- There has been an approximately 50 ft. mudslide in the Bridal Falls area, which has led to an evacuation order at Camperland RV Resort & Cabins on Bridal Falls Rd. in FVRD Electoral Area D. Approximately, 24 people were evacuated
- Four (4) properties have been evacuated at Auchenway Road in Chilliwack River Valley in FVRD Electoral Area E

- The water level at Wilson Road dike in Chilliwack River Valley is approximately 1m below the crest. Operations crew are monitoring the water levels at the dike. The dike is approx. 900m and protects 20 properties and Chilliwack Lake Road. The dike is actively eroding and at risk of overtopping
- Jones Creek water levels are high. A local resident has been providing updates regarding the creek levels. The creek has eroded the banks and is approximately 8ft. away from the structure. The Laidlaw Bridge requires monitoring through MoTI

Village of Harrison Hot Springs:

- **Incident:** Flooding along the Miami Slough
- **State of Local Emergency: 1** – declared 2021NOV15 for the Village of Harrison Hotsprings and expires 2021NOV22 at midnight
- EOC activated on 2021NOV15 due to localized flooding along the Miami Slough
- Maintaining pumps at maximum capacity
- Delivering sand and sandbag for public use
- Informing public to minimize toilet and other sewage use (laundry, washing machines, etc)
- Continuing to monitor water levels and deploy additional pumps if required
- Flooding on Highway 9 Harrison Hot Springs Road & McPherson Road. Limited ability to traverse due to water on road

District of Hope:

- **Incident:** Multiple people stranded by highway closures
- **Reception Centre(s):** 2, 71731 Meadow Road, Fraser Valley B, BC and Hope Grace Baptist Church – 949 3rd Ave. Hope
- **Individuals Registered with ESS:** unknown
- Currently no food in town due to no power. Stores/restaurants closed
- Meal flown in via helicopter 2021NOV16 and provided by Salvation Army
- The EOC was relocated to the Hospital

District of Kent:

- **Incident:** Landslide threatening people and property along Rockwell Drive
- **Orders:** 1, Issued on 2021NOV15 for Rockwell Drive, Rockwell Lane, Rockwell Place, Pirates Lane, Thunderbird Crescent, and Dogwood Lane
- **State of Local Emergency: 1** – declared 2021NOV14 for Rockwell Drive and expires 2021NOV21 at midnight
- **Homes Evacuated: 6**
- **Reception Centre(s):** 2, (Riverside Christian Reformed Church, 7452 Morrow Road; Agassiz Agricultural Hall, 6800 Pioneer Avenue (for evacuees from the Hwy #7 slides))
- **Individuals Registered with ESS: #**
- Multiple landslides on Rockwell Drive (6500, 6900 and 7000 blocks). A tactical evacuation of 6 properties was performed on 2021NOV14
- **Incident:** Hwy 7 landslide
- Multiple landslides have trapped approximated 150 people on Hwy 7 at Seabird Bluffs
- 12 people were rescued from the Hwy 7 incident overnight
- Canada Task Force 1 is on scene supporting the response from the Agassiz Fire Department
- A culvert is blocked on Chaplin Road (Seabird Island) causing significant water backup onto Kamp Road
- Flood pumps at Hammersley Pump Station overheated and shut down
- **Road Closures:**
 - Multiple roads are closed due to flooding and/or mudslides. Refer to Local Government website for list of closures

Langley, Township of:

- **Incident:** Mudslide threatening people and property
- **Homes Evacuated: 1**
- **Individuals Registered with ESS: 2**
- Rainfall caused wide spread flooding on public and private property, as well as parks and trails, and sewer lift stations
- Multiple roads impacted due to flooding
- Engaging geotechnical and structural consultants to assist with slope failures locations when safe to do so
- A mud slide has occurred at 7800 block of 264th Ave. in Langley. The Township is on scene assessing the damage
- 2 adults have been provided 1 night accommodation

Maple Ridge:

- **Incident:** Localized flooding
- EOC activated in response to localized flooding due to the Alouette River
- Monitored South Alouette, North Alouette flows and Fraser River as well as SSO's
- Confirming BC Hydro's release rate and adjusting response as per BC Hydro's predicted spill volumes
- Completing visual inspections along South and North Alouette River
- Continuing to monitor South Alouette River levels

Metro Vancouver Regional District:

- **Incident:** Localized flooding
- EOC activated 2021NOV15 due to localized flooding
- Liquid Waste Services is reporting 8 sewer overflows, and all Wastewater Treatment Plants have had power restored and are operating normally, and within the regulated requirements. Cariboo Dam has been able to manage flows through the Still Creek drainage system throughout the event with minor flooding
- Water Services is monitoring its Dams and is managing turbidity concerns
- Regional Parks currently have 6 parks closed due to flooding conditions, and power has been restored to all locations interrupted 2021NOV15
- Solid Waste Services is reporting all Recycling & Waste Facilities are reopened to full operations. Coquitlam Landfill had an overflow of surface water, which has since been contained and repairs are ongoing to the berm that was damaged
- Gaining situational awareness of impacted infrastructure. Assessing damages and planning for repair or mitigation strategies as required
- **Road Closures:**
- 56th Ave @ 176th Street, Surrey – Partial lane closure
- Blundell & Gilbert, Richmond - Alternating traffic (local traffic only)

Mission:

- **Incident:** Localized flooding and mutual aid
- EOC activated due to localized flooding and to provide mutual aid to Abbotsford
- Public works reports several roads have been reopened. A number are still closed or are single lane due to flooding
- Two residences on King Avenue are isolated due to complete road wash out
- Planning/preparing to open RC in Mission if required to support ESS flood response if required

New Westminster:

- **Incident:** Localized flooding
- EOC activated 2021NOV15 due to localized flooding

Pemberton:

- **Incident:** Flooding
- EOC activated 2021NOV15 due to flood activity
- Heavy rainfall caused significant flows in Pemberton Creek and the Arn Canal causing localized flooding in low-lying areas

- The neighbourhoods of the Peaks, Pioneer Junction, the Trailer Park on Hwy 99, the Industrial Park and One Mile Lake area have all have experienced substantial flooding
- A sandbag station has been set up at Municipal Hall
- Pumping at the Peaks and Pioneer Junction is ongoing.
- One Mile Lake Park, the Boardwalk and trails have been closed due to high water
- Pemberton Fire Rescue was dispatched to assist with pumping in residential areas
- PVDD to continue to monitor rivers, provide ongoing updates, expertise and operational recommendations
- Continuing to liaise with Lil'wat, SLRD and PVDD and relevant agencies to coordinate response

Pitt Meadows, City of

- **Incident:** Heavy rainfall has resulted in multiple roads flooding
- Localized flooding throughout Pitt Meadows. Some areas inundated with water, some roads have been closed and/or have signage placed to be cautious of flooding
- Hammond Road/Airport Way both have localized flooding. Traffic control on scene.
- Dike inspections started
- Inundation mapping from Alouette Dam are being reviewed as they have a freecrest spill peaking around 2400 hr 2021NOV15 at 160 cms. The Pitt River is at high tide for a couple of days
- Alouette River alert notice sent to City Agricultural Advisory Committee
- Determining flood spill conditions and possible scenarios from the Alouette Dam
- Notification to some properties along the Alouette/Pitt Rivers
- Notice to be delivered to property on 224th Ave in regard to potential hazards/flooding due to the freecrest spill from the Alouette Dam

Port Coquitlam:

- **Incident:** Localized flooding
- EOC activated 2021NOV15 due to localized flooding
- High river flows and potential overflow of banks and surrounding land. Drainage infrastructure at maximum capacity. No disruption in solid waste collection. Pump stations at maximum capacity and experienced pump failures
- Closures: Gates parking lot, Traboulay Trail from dog park to Patricia food bridge, Burleigh - Kingsway to Chine

Squamish Lillooet Regional District:

- **Incident:** Flood threat to properties
- **Alerts:** 0
- EOC activated 2021NOV15 due to flood threat to properties and water levels continue to rise
- The evacuation alert issued on 2021NOV15 for Tunnel Station/Upper Paradise Valley – Electoral Area D was rescinded 2021NOV16
- On 2021NOV15 Pemberton Fire Rescue Service advised the SLRD EOC that a mudslide occurred in the vicinity of 1773 Reid Road, inundating the road approx. 1m deep due to a steep creek debris flow
- MFLNRORD geotechnical assessment requested for 2021NOV16

Squamish District

- **Incident:** Localized flooding due to heavy rainfall. Waste Treatment Plant overflowing
- EOC activated 2021NOV15 due to localized flooding concerns
- Wastewater Treatment Plant is overflowing within the District of Squamish

Sunshine Coast Regional District

- **Incident:** Localized flooding due to heavy rainfall
- EOC activated 2021NOV15 due to localized flooding on Day Road in Roberts Creek
- Stormwater flooding and erosion has impacted public services (drinking water, fire flows, roads, transit, wastewater treatment, parks) in 35+ locations, regionally. Fortis reports exposed gas line at Stephens Road and Lower Road and are preparing for re-routing and/or shutoff.

- Working to protect water supply/infrastructure for public health and fire flow (Chapman Creek main, water mains, McNeill Lake dam, Grantham's pump station)
- Working to protect public health / manage impacts of WWTP failure (notifications)
- Addressing current areas of no road access (washout occurred)
- Addressing potential areas of no road access (impending washout)
- Promoting public safety (park closures, awareness of issues/avoid unnecessary travel)
- Boil water advisories issued (2021NOV15 at 1330)

Surrey:

- **Incident:** Localized flooding
- EOC activated 2021NOV15 due to localized flooding

Whistler:

- **Incident:** ESS host community
- Providing support to two evacuees who are unable to return home due to the mudslides

AGENCIES

Ministry of Transportation and Infrastructure (MoTI):

- MoTI South Coast Region has activated their Ministry Operations Centre and District Operations Centre

HEALTH INFORMATION

No impacts reported

LIVE STOCK IMPACTED

No impacts reported

TRANSPORTATION IMPACTED

Drive BC

Highway 1 Both Directions - Highway 1, in both directions. Mudslide between Annis Rd and K St for 38.4 km (Hope to 2 km east of Chilliwack). Road closed. Estimated time of opening not available. Assessment in progress

Highway 1, in both directions. Flooding between Flood Hope Rd and Junction Hwy 8 for 144.3 km (Hope to Spences Bridge). Rockslide. Road closed. Assessment in progress. Estimated time of opening not available

Highway 1, in both directions. Flooding between Exit 90: McCallum Rd and Exit 109: Yale Rd for 20.1 km (Abbotsford to Chilliwack). The road is closed. Estimated time of opening not available. Assessment in progress

Highway 3 Both Directions - Highway 3, in both directions. Mudslide at Sunshine Valley (17 km east of Hope). Road Closed. Assessment in progress. Estimated time of opening not available

Highway 5, in both directions. Mudslide at Exit 202 (11 km south of Great Bear Snowshed). Road closed. Assessment in progress. Estimated time of opening not available. Detour not available. Road closed between Hope and Merritt

Highway 7 Both Directions - Highway 7, in both directions. Mudslide between Johnson Slough Rest Area and Ruby Creek Rd (Kent). Road closed. Assessment in progress. Detour not available

Highway 7, in both directions. Mudslide between Johnson Slough Rest Area and Ross Rd for 12.6 km (Kent to 1 km east of Hope). Road closed. Assessment in progress. Detour not available

Highway 7 Both Directions - Highway 7, in both directions. Mudslide between Highlands Blvd and Bodnar Rd (Kent). Flooding. Road closed. Assessment in progress. Estimated time of opening not available

Highway 11, in both directions. Flooding between Hazelwood Ave and Townshipline Rd for 2.9 km (Abbotsford). Road closed

Highway 11, in both directions. Flooding between Vye Rd and Delair Rd for 2.0 km (Abbotsford). The road is closed. Estimated time of opening not available. Watch for traffic control

Highway 12, in both directions. Mudslide between Six Mile Rd and Kirbys Flat Rd for 0.2 km (27 to 26 km north of Lytton). Road closed. Geotechnical investigation

Highway 12, in both directions. Mudslide between Fountain Creek Rd and 30 Mile Rd for 2.0 km (15 to 17 km south of Lillooet). Road closed. Assessment in progress

Highway 99, northbound. Flooding between Blundell Rd and Exit 36: Westminster Hwy (Richmond). Road closed. Traffic is being rerouted onto Westminster Highway

Highway 99, in both directions. Mudslide between Lil'wat Pl and Seton Lake Rd for 81.9 km (9 km north of Pemberton to Lillooet). Road closed. Estimated time of opening not available. Assessment in progress

King George Blvd., northbound. Bridge closed at Nicomekl Bridge. Assessment in progress. Please use alternate route

UTILITIES IMPACTED

BC Hydro

- 2021NOV16 update - There are currently 716 customers without power within the Lower Mainland and Sunshine Coast remain without power due to flooding, mud/snow slides and trees down on wires
- **For more information:** <https://www.bchydro.com/power-outages/app/outage-list.html>

- BC Hydro Alerts

- Stave Falls and Ruskin Dams Spill Notification – 2021NOV16, at approximately 1315hrs decrease will commence at the Ruskin Dam & Stave Falls Dam as inflows are decreasing. Ruskin Dam Spill will decrease from 1400 cubic meters per second (cms) to a flow of 500 cms. Stave Falls Spill will decrease from 1350 cubic meters per second (cms) to a flow of 500 cms.
- Wahleach Dam (Jones Lake) Spill Notification – Notification of planned spill release. Lower Jones Creek water levels will rise and may approach bankfull conditions, but no major flooding is expected. The current reservoir elevation is 642.31m. The current release is ~50 cms (cubic meters per second). Forecast spill is reducing, reservoir lowering. The reason for spill inflows event and plant outage
- 2021NOV16 The previously declared flood alert, # ALU_01_2021, downstream of Alouette Dam has been rescinded
- 2021NOV16 the previously declared flood alert # WAH_01_2021 downstream of Wahleach Dam has been rescinded
- 2021NOV16 the previously declared flood alert # CMS_01_2021 downstream of Cheakamus Dam has been rescinded

Enbridge Inc.

- Due to heavy rainfall and increasing river flows, Enbridge has shut down a segment of 30-inch natural gas pipeline in the Coquihalla river valley on the morning of 2021NOV16 as a precautionary measure. The 36-inch natural gas pipeline remains in operation.
- Continuing to monitor the situation and will take further action should they become necessary.

USEFUL LINKS/RESOURCES

[EMBC Current Flooding Information](#)

[River Forecast Centre](#)

[Drive BC](#)

[Environment Canada](#)

[Avalanche Canada Weather Forecast](#)

[BC Hydro](#)

[Disaster Financial Assistance Website](#)

APPROVED BY:

Original signed by

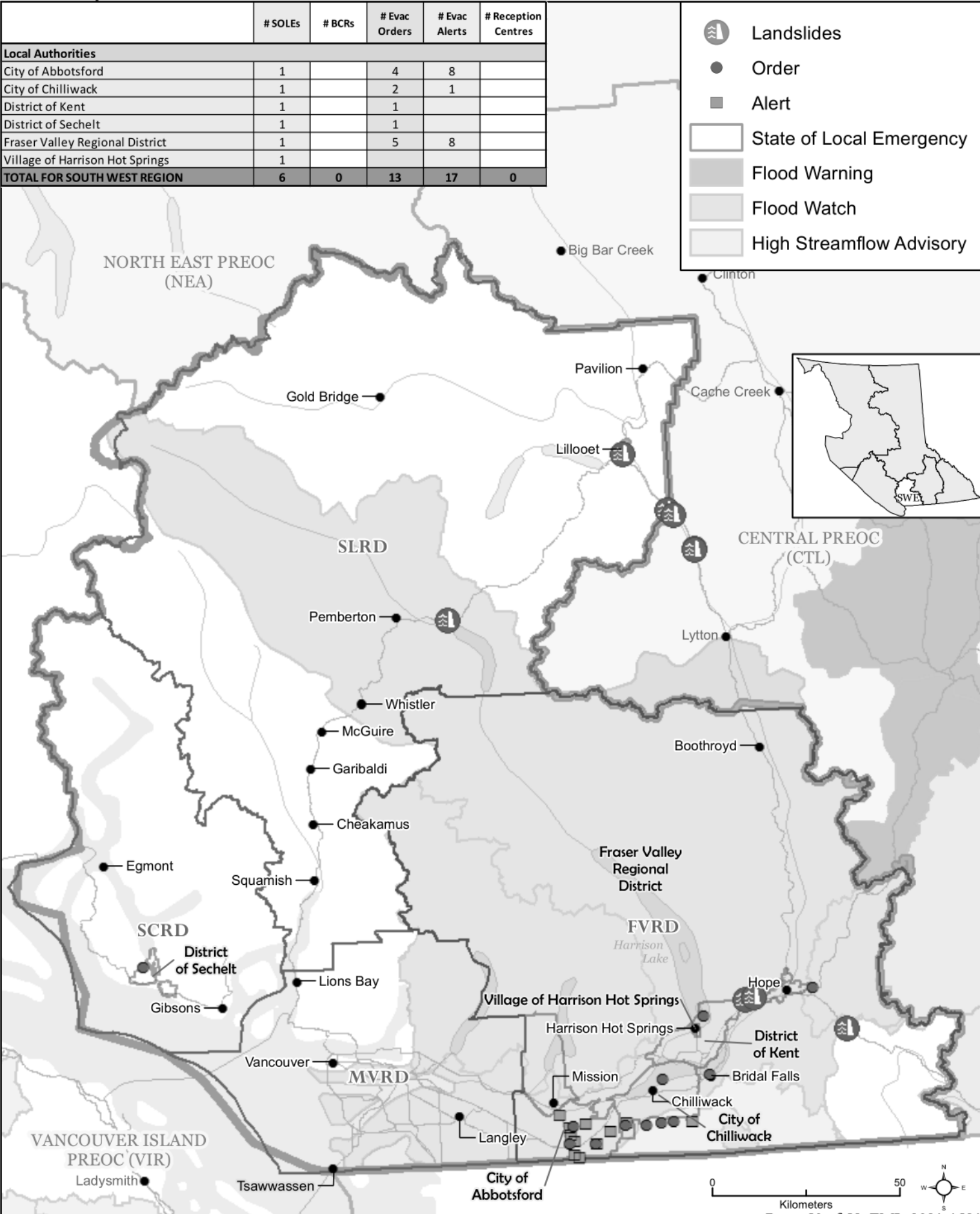
Debbie Alexander

PREOC Deputy Director

Note: Information contained in this situation report is for operational purposes only. The contained information is not meant for public information. If you wish you use contained information for a media release, you must clear it with the PREOC Director.

South West (SWE) Provincial Regional Operational Centre (PREOC) Atmospheric River Events

2021-11-16



Morrison, Lauren EMLI:EX

From: MacLaren, Les EMLI:EX
Sent: November 16, 2021 11:04 AM
To: Mah-Paulson, May EMLI:EX; Mihlar, Fazil EMLI:EX
Cc: Jang, Monica EMLI:EX; Schwabe, Michelle EMLI:EX
Subject: RE: Weather Impacts & gas lines

Fortis reports for Princeton, there was a line break on a bridge, which has been crimped off and secured. They will need to turn off valves for the 1,200 accounts, repair the break, flush the system, and go door to door re-lighting pilots. They may also have to replace some water-damaged meters. They feel they can redeploy staff to do this but access is an issue.

For Merritt, the gas system is still operational, and they are monitoring closely. Again access is an issue.

Les

From: Mah-Paulson, May EMLI:EX <May.Mah-Paulson@gov.bc.ca>
Sent: November 16, 2021 10:13 AM
To: Mihlar, Fazil EMLI:EX <Fazil.Mihlar@gov.bc.ca>; MacLaren, Les EMLI:EX <Les.MacLaren@gov.bc.ca>
Cc: Jang, Monica EMLI:EX <Monica.Jang@gov.bc.ca>; Schwabe, Michelle EMLI:EX <Michelle.Schwabe@gov.bc.ca>
Subject: FW: Weather Impacts & gas lines

FYI

From: Dalton, Peter <Peter.Dalton@bcogc.ca>
Sent: November 16, 2021 9:35 AM
To: Paulson, Ken OGC:IN <Ken.Paulson@bcogc.ca>; Johnson, Andy <Andy.Johnson@bcogc.ca>; Swan, Trevor <Trevor.Swan@bcogc.ca>; Mah-Paulson, May EMLI:EX <May.Mah-Paulson@gov.bc.ca>
Cc: XT:Kennedy, Mayka GCPE:IN <Mayka.Kennedy@bcogc.ca>; Koosmann, Nicole <Nicole.Koosmann@bcogc.ca>; Currie, Graham OGC:IN <Graham.Currie@bcogc.ca>; Smook, Patrick <Patrick.Smook@bcogc.ca>; OGC Emergency Officer <ogc.emergencyofficer@bcogc.ca>
Subject: Weather Impacts & gas lines

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

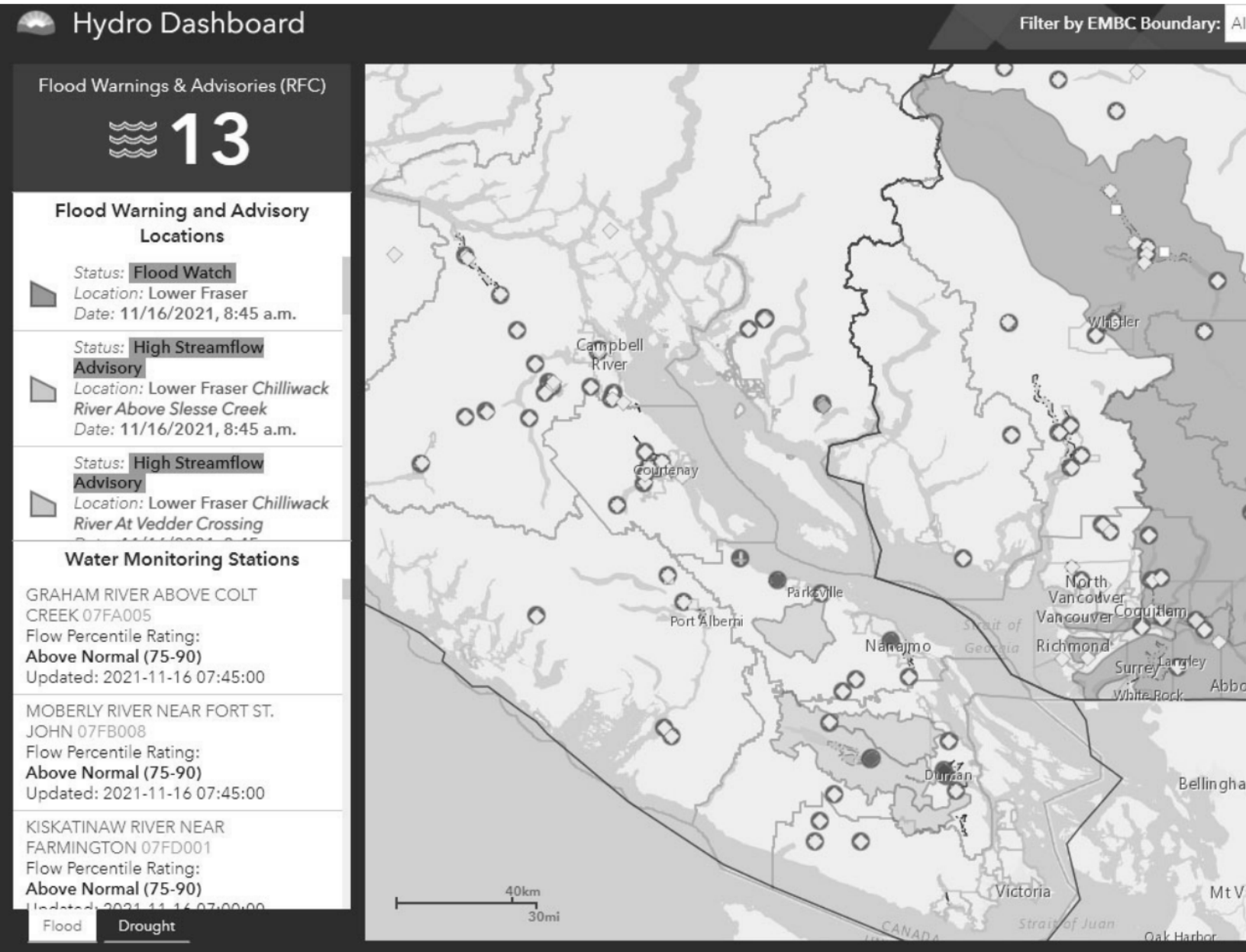
Fortis BC:

- Sunshine Coast at Roberts Creek distribution line and intermediate pressure line exposed in creek. Hydro line de-energized and FD on scene.
- Halfmoon Bay distribution pressure line is exposed
- A main distribution line at Princeton is impacted with up to 1200 customers possibly affected
- Distribution line at Merritt is impacted but the full extent cannot be confirmed due to current high-water levels
- Fraser Valley distribution line service in a farmer's field near Seabird Island is leaking and being isolated

Enbridge:

- Enbridge has sent out a “shipper notification” regarding reduced gas flow but at this point in time, substantive downstream customer impacts are not expected.
- A full assessment is underway and the control room is closely monitoring flood-affected areas.
- Once conditions allow, Enbridge will conduct overflights to assess any further impacts. At present, there is no estimated time for when this will occur.

Map shows affected areas, legend at right.



Peter Dalton

Director, Security & Emergency Management
Peter.Dalton@BCOGC.ca

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Morrison, Lauren EMLI:EX

From: O'Riley, Christopher <Chris.Oriley@bchydro.com>
Sent: November 14, 2021 10:03 PM
To: Mihlar, Fazil EMLI:EX; MacLaren, Les EMLI:EX
Subject: Fwd: Hope area status

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Just letting you know we have some really challenging conditions in the Hope area with about 5300 customers out overnight.

Begin forwarded message:

From: "Mitha, Charlotte" <charlotte.mitha@bchydro.com>
Date: November 14, 2021 at 9:37:57 PM PST
To: "O'Riley, Christopher" <Chris.Oriley@bchydro.com>
Subject: FW: Hope area status

Hi Chris,

The updates I am getting from various sources aren't good...here's the summary:

HOP substation is normally supplied from 2 lines, 60L10 and 60L95. Both lines have been reported to wiped out in a landslide near WAH generating station.

Crews have been patrolling both lines and sectionalizing under the guidance of FVO. We have numerous sites where landslides have damaged structures. Unfortunately the contingency plan for feeding Hope with an alternate circuit, 60L93, has just now been lost due to another landslide bringing down conductor across highway 7 and trapping people in their vehicles. Crews are onsite at this specific location applying grounds to remove the wire. We are now not able to reconfigure the 60kV system as planned to energize Hope.

Crews will continue to work through the night where they are able to safely do so, but given the damage we know we have and highways still closed it looks like Hope will be out overnight. Crews are being told stand down if any concerns with safety of patrolling.

Out of WAH we have four distribution feeders and two of them are damaged (51 and 52). We were able to restore all but approx. 300 customers but we have lost the WAH unit again – cooling water issue and a problem with the penstock inlet valve apparently. They can't safely get up there to check it out tonight.

We do have a crew and local firefighters stuck at the WAH powerhouse due to a slide in the area. They are awaiting the highway re-opening.

At Spuzzum (SZM), we have 75 customers normally supplied from 60L10. With some sectionalizing they may be able to serve from Boston Bar and get all of SZM restored tonight.

That's it for now....except it is snowing in the interior so that will bring some outages.

Charlotte

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Morrison, Lauren EMLI:EX

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To: Mihlar, Fazil EMLI:EX; MacLaren, Les EMLI:EX
Cc: Jang, Monica EMLI:EX; Schwabe, Michelle EMLI:EX
Subject: FW: Weather Impacts & gas lines

FYI

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Sent: November 16, 2021 9:35 AM
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Cc: XT:Kennedy, Mayka GCPE:IN <Mayka.Kennedy@bcogc.ca>; Koosmann, Nicole <Nicole.Koosmann@bcogc.ca>; Currie, Graham OGC:IN <Graham.Currie@bcogc.ca>; Smook, Patrick <Patrick.Smook@bcogc.ca>; OGC Emergency Officer <ogc.emergencyofficer@bcogc.ca>
Subject: Weather Impacts & gas lines

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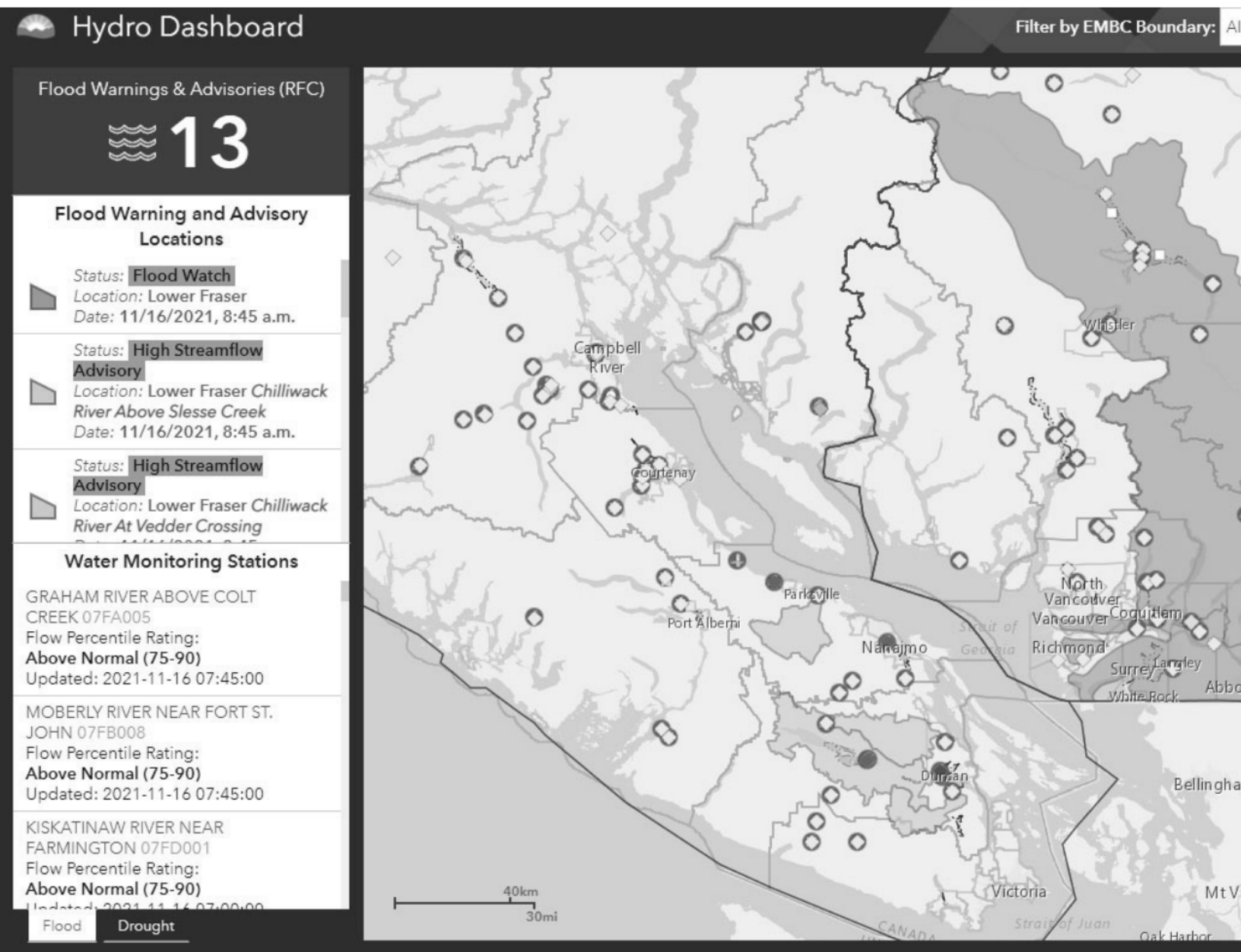
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Morrison, Lauren EMLI:EX

From: Mah-Paulson, May EMLI:EX
Sent: November 16, 2021 6:38 PM
To: Mihlar, Fazil EMLI:EX; MacLaren, Les EMLI:EX
Cc: Jang, Monica EMLI:EX; Schwabe, Michelle EMLI:EX
Subject: FW: 7pm Update (MST) - Gas lines
Attachments: SWE PREOC Situation Report #3 2021NOV16.pdf; Situation Map #3 2021NOV16.pdf

FYI

From: Dalton, Peter <Peter.Dalton@bcogc.ca>
Sent: November 16, 2021 6:15 PM
To: Paulson, Ken OGC:IN <Ken.Paulson@bcogc.ca>; Swan, Trevor <Trevor.Swan@bcogc.ca>; Johnson, Andy <Andy.Johnson@bcogc.ca>; Mah-Paulson, May EMLI:EX <May.Mah-Paulson@gov.bc.ca>; XT:Kennedy, Mayka GCPE:IN <Mayka.Kennedy@bcogc.ca>
Cc: Koosmann, Nicole <Nicole.Koosmann@bcogc.ca>; Smook, Patrick <Patrick.Smook@bcogc.ca>
Subject: 7pm Update (MST) - Gas lines

[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.

- Fortis Sechelt transmission line to Trout Lake Area washed out, being depressurized, temporary repairs will occur overnight. No customer impacts at this time.
- 1275 customers in Princeton downtown core are out of service, full restoration may take until the weekend
- LNG plants are on stand-by to backfill supply, but given the imagery of the Enbridge 30" line, some proactive work to identify curtailment targets underway but no suggestion it will be necessary to implement at this time.
- Huntingdon site confirmed as wet but secure.
- Anticipate next Fortis update late morning Wednesday.
- Request in to CER for update on 30" line status
- EMBC sitrep & map attached.



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