Shoquist, Sarah TRAN:EX

From: Richter, Kevin J TRAN:EX
Sent: November 14, 2021 1:50 PM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Cousins, Paula TRAN:EX; Sirett, Steve TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Gedney, Vanessa

R TRAN:EX

Subject: Closures: Highway 1 (Fraser Canyon) & Highway 5 (Coquihalla)

Highway 1 closed due to rockfalls.

Highway 5 closed due water across the road and earth movement.

Areas are experiencing significant precipitation which is triggering multiple events along the corridors.

Geotech enroute to assess.

Roads closed due to high risk to public and workers.

Will update as more information becomes available.

Weather and topography negatively impacting communications.

Traffic being rerouted to Highway 3 and Highway 99.

Sent from my iPhone

Shoquist, Sarah TRAN:EX

From: Harrison, Veronica TRAN:EX
Sent: November 15, 2021 11:17 AM

To: Ma, Bowinn TRAN:EX

Subject: FW: Update: 11:00, Weather Closures on Provincial Highways & Roads

----Original Message----

From: Richter, Kevin J TRAN:EX < Kevin.Richter@gov.bc.ca>

Sent: November 15, 2021 11:14 AM

To: Fleming, Rob TRAN:EX <Rob.Fleming@gov.bc.ca>; Harrison, Veronica TRAN:EX <Veronica.Harrison@gov.bc.ca>; Champion, Ella D TRAN:EX <Ella.D.Champion@gov.bc.ca>; Crebo, David GCPE:EX <David.Crebo@gov.bc.ca>; Krishna, Kaye TRAN:EX <Kaye.Krishna@gov.bc.ca>; Hayre, Courtney TRAN:EX <Courtney.Hayre@gov.bc.ca>; Phillips, Holly TRAN:EX <Holly.Phillips@gov.bc.ca>; Sirett, Steve TRAN:EX <Steve.Sirett@gov.bc.ca>; Cousins, Paula TRAN:EX <Paula.Cousins@gov.bc.ca>; Bhatti, Ashok A TRAN:EX <Ashok.Bhatti@gov.bc.ca>; Staite, Janelle A TRAN:EX <Janelle.Staite@gov.bc.ca>; Gedney, Vanessa R TRAN:EX <Vanessa.Gedney@gov.bc.ca>

Subject: Update: 11:00, Weather Closures on Provincial Highways & Roads

HIGHWAY IMPACTS:

South Coast Region

Highway 7 - Seabird Island

- •Closed between Walheach Road to Johson Slough •Two debris flows and down powerlines across the highway.
- Emergency crews and heavy equipment currently staged on either side of the closure.
- Currently 175 vehicles, with 250 people stranded between the debris flows. No injuries reported.
- Heavy equipment actively excavating the east side and west sides.
- •ETO: Unknown assessment in progress

Highway 1

- •Closed between Popkum and Hope (Highway 9 exit to Flood-Hope Exit).
- Multiple debris flows across all travel lanes in both directions (5 known sites).
- •No people trapped.
- Heavy equipment on both sides of closure.
- · Geotech assessment pending.
- •ETO: Unknown assessment in progress

Highway 3 – Sunshine Valley

- Closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1) Multiple debris flows across the highway.
- All stranded individuals have been transported to Manning Park •Heavy equipment on site.
- •ETO: Unknown assessment in progress

Highway 5 - Othello

- Closed.
- Both southbound lanes have been washed away.
- •Heavy washout with debris, mud, and water on road •Heavy equipment on site.
- •ETO: Unknown assessment in progress

Highway 5 – 10 Mile Creek

- •Closed between 10 Mile Creek and Portia Interchange.
- •Two debris flows across travel lanes.
- Valley Helicopter has evacuated all 20 stranded individuals to Hope.
- •Once flows subside and Geotech assessment takes place crews will begin work on the debris flows.
- Heavy machinery on site.
- •ETO: Unknown assessment in progress

Highway 7 - Mt Woodside

- •Closed between Highland Blvd to Bodher Road •Water is flowing down and pooling significantly •Rocks falling in the vicinity of the water flow, unable to safely operate equipment •Heavy equipment arriving.
- •ETO: Unknown assessment in progress

Other Locations:

Highway 7 - Maple Ridge

•Closed between 240th Street to 272nd Street •Water and debris on the highway.

Highway 11

• Closed at Valley Rd due to flooding across the highway near Willband Creek Park.

Columbia Valley Road at Lakeshore Drive

•Closed at Lakeshore Drive due to a washed out culvert •Detour established through the FN reserve, first responders on-scene maintaining the closure •High water flow has overwhelmed culvert and undermined the road

Rockwell Drive

- •Losing asphalt in 3 places at Green Point, risk is high around 3380 Rockwell Drive where flow rate is significantly higher than drainage sizing.
- •Residents have been evacuated along Green Point and RCMP/Fire are going door-to-door notifying residents of the hazards •Debris flow cleared at 3380 with loader to allow residents to get away from rapidly deteriorating asphalt
- •Managing closure until Dynasty Traffic on-site to relieve, ETA 30-60 min •On 300 street tracked excavator arrival, crews will begin clearing facilitating drainage

Hemlock Valley Road

•Flashing arrow board at Seabird advising of closures further up •Initial reports indicate drainage appliances working correctly

Farms Road

- Road closed
- •Road is under water between Dale Road and Stave Lake Road

Dale Road

- Road closed
- •Road is under water

Various locations

•Isolated pooling into travelled lanes in many locations in Agassiz area •Significant flow across roads at Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows •Large concrete box culvert installed on Sylvester last year is beyond capacity and underwater oOverflow path maxed out and water pooling on road oFlow is leading to Lundgren which may be at risk

Highway 13

•SB ramp to Hwy 1 eastbound has flooded and Ramp is closed

Highway 10

•EB at 177B fast lane blocked with vactor truck parked on sanitary manhole lid, raw sewage floating out Surrey looking after it

Highway 99

•SB and NB between Shell Rd and Westminster Hwy slow lanes flooded as well as ramps to Hwy 91 closed •Currently one lane in each direction remain open, plan is to close it in both directions. On site assessing.

Highway 91

•WB ½ km W of Westminster Hwy still need to repair fire hyd and repave shoulder, Richmond doing the work •SB at Cliveden slow lane flooded •Nordel interchange minor flooding on a few ramps vehicles still getting through

Highway 91A

•SB ramp to Howes, right side of ramp flooded vehicles still getting through

Highway 14 - E of Sooke

- •Closed at Impala Road.
- •Flooding over the barrier across both lanes •Water level between 1-2 meters deep.
- •No detour available as local roads are flooded.
- •ETO: Unknown assessment in progress

Highway 1 - Duncan

- •Closed at Mt Sicker Road
- •Flooding over the barrier across both lanes •Water level between 1-1.5 meters deep.
- •No detour available
- •ETO: Unknown assessment in progress

Highway 1 - Malahat

- Closed Tunnel Hill
- Flooding over the barrier across both lanes Water level between 1-1.5 meters deep.
- •No detour available
- •ETO: Unknown assessment in progress

Other Locations:

Briarwood Road (Shawnigan Lake area)

- •Road and culvert washed out.
- •High water levels continue and temporary bridge has been requested.
- Residents are trapped.
- •ETO: Unknown assessment in progress

Significant flooding on local side roads however too any to mention.

SIR

Highway 5 Coquihalla

- •Closed in both directions between Hope and Merritt •Continuing to see heavy rain across corridor, 196mm of rain fell over last 36 hours (as of 6am) at Coquihalla Summit •Helicopter flight is on standby due to weather •Significant damage to both the highway and structures (Bottle Top Bridge) but not a full picture yet.
- Expecting Coquihalla to be closed for multiple days.

Highway 1 – Fraser Canyon

- Closed at Spences Bridge.
- Debris flows have been identified south of Lytton at Tank Hill and other locations are also seeing mud across the highway.

Highway 1 - Kamloops to Golden

- •One lane open.
- Debris removal in progress.

Highway 3 – Princeton

- Closed
- Flooding over road.
- •Once water recedes, we will assess the damage.

Highway 3 - Fernie

- Closed
- •Flooding with a local detour in place
- •We assess when water levels recede.

Highway 5A - Princeton

- Open
- •Water has receded and safe to open.

Highway 23 north of Nakusp

- •Reports of a slide.
- •Staff are on route to investigate.

Highway 99 35 km W of Lillooet

•Closed in both directions due to a mudslide •Confirming details.

MoTI and MC staff and equipment have been fully deployed during the weekend, day and night.

MEDIA CALLS

- -09:00 call this morning when well with Minister Farnworth: Paula and Janelle provided technical support
- -scheduled 15:00 media call today, GCPE to provide details

Shoquist, Sarah TRAN:EX

From: Harrison, Veronica TRAN:EX
Sent: November 15, 2021 9:40 AM

To: Ma, Bowinn TRAN:EX

Subject: FW: Weather Impacts: South Interior Region

----Original Message----

From: Richter, Kevin J TRAN:EX < Kevin.Richter@gov.bc.ca>

Sent: November 15, 2021 7:29 AM

To: Fleming, Rob TRAN:EX <Rob.Fleming@gov.bc.ca>; Harrison, Veronica TRAN:EX <Veronica.Harrison@gov.bc.ca>; Champion, Ella D TRAN:EX <Ella.D.Champion@gov.bc.ca>; Crebo, David GCPE:EX <David.Crebo@gov.bc.ca>; Krishna, Kaye TRAN:EX <Kaye.Krishna@gov.bc.ca>; Hayre, Courtney TRAN:EX <Courtney.Hayre@gov.bc.ca>; Phillips, Holly TRAN:EX <Holly.Phillips@gov.bc.ca>; Sirett, Steve TRAN:EX <Steve.Sirett@gov.bc.ca>; Cousins, Paula TRAN:EX <Paula.Cousins@gov.bc.ca>; Bhatti, Ashok A TRAN:EX <Ashok.Bhatti@gov.bc.ca>; Staite, Janelle A TRAN:EX <Janelle.Staite@gov.bc.ca>; Gedney, Vanessa R TRAN:EX <Vanessa.Gedney@gov.bc.ca>

Subject: Weather Impacts: South Interior Region

Highway 5 Coquihalla

Closed in both directions between Hope and Merritt due to active mudslides and debris flows.

Corridor evacuated yesterday and remains closed.

As soon as safe, we will fly the route to get an initial assessment of the damage.

Until assessment complete will not know magnitude of damage and length of the closure.

Segment is also expecting snow this afternoon, which will hinder the cleanup efforts.

Highway 1 Fraser Canyon

Closed at Spences Bridge to support closures along the segment in SCR.

Highway 1 - Kamloops to Golden

Closed west of Revelstoke at 3 Valley Gap due to excessive water at the bluffs, bringing down rocks and debris. As soon as safe, we will fly the route to get an initial assessment of the conditions.

Highway 3

Closed at Princeton due to flooding.

Once water recedes, we will assess the damage.

Highway 3 is also closed at Fernie due to flooding with a local detour in place; crews continue to bail out the culvert and we will assess when water levels recede.

Highway 93S (Kootenay National Park)

Closed SB between Banff and Radium due to extreme winter conditions and a jack knifed commercial vehicle on the Alberta section.

Highway 23 north of Nakusp

Reports of a slide.

Staff are on route to investigate.

No people are trapped in SIR, based on available information.

Many commercial vehicles staged across the region.

MoTI and MC staff are fully deployed throughout. Staff have been working through the night. Coordinating with emergency services.

Shoquist, Sarah TRAN:EX

From: Liu, Ange TRAN:EX

Sent: November 18, 2021 3:15 PM

To: Ma, Bowinn TRAN:EX

Subject: Fwd: DOC Situation Report #11 - Thursday, Nov 18 1500hrs

Begin forwarded message:

From: "Crebo, David GCPE:EX" < David.Crebo@gov.bc.ca>

Date: November 18, 2021 at 3:08:35 PM PST

To: "Liu, Ange TRAN:EX" <Ange.Liu@gov.bc.ca>, "Dhaliwal, Gurveen TRAN:EX"

<Gurveen.Dhaliwal@gov.bc.ca>

Subject: FW: DOC Situation Report #11 - Thursday, Nov 18 1500hrs

From: Farmer, Elena TRAN:EX <Elena.Farmer@gov.bc.ca>

Sent: November 18, 2021 3:07 PM

To: Bhatti, Ashok A TRAN:EX <Ashok.Bhatti@gov.bc.ca>; Canil, Brigid TRAN:EX

<Brigid.Canil@gov.bc.ca>; Chang, Joyce TRAN:EX <Joyce.Chang@gov.bc.ca>; Folk, Trent TRAN:EX <Trent.Folk@gov.bc.ca>; Goes, Sandra TRAN:EX <Sandra.Goes@gov.bc.ca>; Halwani, Lina TRAN:EX <Lina.Halwani@gov.bc.ca>; Hinze, Dawn TRAN:EX <Dawn.Hinze@gov.bc.ca>; Lalani Kotlyarov, Rizwana TRAN:EX <Rizwana.Lalani.Kotlyarov@gov.bc.ca>; Lee, Chris TRAN:EX <Chris.Lee2@gov.bc.ca>; Loranger,

Danielle TRAN:EX <Danielle.Loranger@gov.bc.ca>; Ludwar, Kenedee TRAN:EX

<Kenedee.Ludwar@gov.bc.ca>; Pearson, Michael TRAN:EX <Michael.Pearson@gov.bc.ca>; Porter, Jay C
TRAN:EX <Jay.Porter@gov.bc.ca>; Staite, Janelle A TRAN:EX <Janelle.Staite@gov.bc.ca>; Wang, Kaley
TRAN:EX <Kaley.Wang@gov.bc.ca>; Yancey, Stefan G TRAN:EX <Stefan.Yancey@gov.bc.ca>; Richter,

Kevin J TRAN:EX <Kevin.Richter@gov.bc.ca>; Pilkington, Ian TRAN:EX <Ian.Pilkington@gov.bc.ca>;

Cousins, Paula TRAN:EX <Paula.Cousins@gov.bc.ca>; Sirett, Steve TRAN:EX <Steve.Sirett@gov.bc.ca>;

Gerraghty, David E TRAN:EX < David.Gerraghty@gov.bc.ca>; Case, Brent A TRAN:EX

<Brent.Case@gov.bc.ca>; Lutz, Carl B TRAN:EX <Carl.Lutz@gov.bc.ca>; Lolacher, Russel TRAN:EX

<Russel.Lolacher@gov.bc.ca>; Crebo, David GCPE:EX <David.Crebo@gov.bc.ca>; Chambers, Craig

GCPE:EX <Craig.Chambers@gov.bc.ca>; Bowness, Lisanne GCPE:EX <Lisanne.Bowness@gov.bc.ca>;

Hayre, Courtney TRAN:EX <Courtney.Hayre@gov.bc.ca>; Allwood, Angie TRAN:EX

<Angie.Allwood@gov.bc.ca>; Dinney, Michael TRAN:EX <Michael.Dinney@gov.bc.ca>; Reimer, Kristen
TRAN:EX <Kristen.Reimer@gov.bc.ca>; Judson, Neil TRAN:EX <Neil.Judson@gov.bc.ca>; McLeod, Gavin
TRAN:EX <Gavin.McLeod@gov.bc.ca>

Cc: Folk, Trent TRAN:EX <Trent.Folk@gov.bc.ca>; Braun, Michael TRAN:EX <Michael.Braun@gov.bc.ca>; Bui, Phu TRAN:EX <Phu.Bui@gov.bc.ca>; Stevenson, Christie TRAN:EX <Christie.Stevenson@gov.bc.ca>; Beitel, Katrina TRAN:EX <Katrina.Beitel@gov.bc.ca>; Thomas, Michael TRAN:EX

<Michael.Thomas@gov.bc.ca>; Kang, Gina TRAN:EX <Gina.Kang@gov.bc.ca>; Aljanaby, Dana TRAN:EX <Dana.Aljanaby@gov.bc.ca>

Subject: RE: DOC Situation Report #11 - Thursday, Nov 18 1500hrs

Good afternoon,

Find below the Situation Report #11 for the Atmospheric River Event.

KEY INFORMATION:

- LMD DOC activated to support highway closures related to flooding and landslides caused by the Atmospheric River
- Flood Waring remains in effect for the Sumas River and area.
- High Stream flow advisory in effect for the Fraser Valley and tributaries, Fraser Canyon and tributaries and Chilliwack River

WEATHER FORECAST:

- Precipitation: Light rain will begin Thursday morning and continue off and on through the day
 and into early Thursday evening before tapering off in the mid to late evening. Increased cloud
 cover will keep temperatures warmer tonight, but clouds will start to clear after midnight
 Thursday night, allowing temperatures to get a bit cooler.
- Winds & Gusts: Light wind.
- Temperatures: Current 4°C. Snow Levels 400-800m.
- Friday has a 30% chance of precipitation, Saturday has a 60% chance of Precipitation.

HIGHWAY IMPACTS:

Priority Locations:

Highway 7 – Mission to Agassiz

- Open to two way traffic.
- Heavy equipment continue to work open the merge lane.

Highway 7 – Agassiz to Hope

- Open to emergency vehicles.
- Passenger and commercial vehicles piloted out of Hope
- Heavy equipment removing debris and repairing erosion
- ETO: SLAT opening expected at 1600 hrs

Highway 1 – Popkum to Hope

- Closed between Popkum and Hope.
- Multiple debris flows across all travel lanes in both directions and locations of significant shoulder and lane erosion.
- Heavy equipment working.
- ETO: Sunday November 21: 1800 hrs for emergency access only.

Highway 1 – Fraser Canyon (South Coast and Southern Interior)

- Closed between Hope and Spences Bridge.
- Significant failures at Nicomen Bridge, Tank Hill and Jackass Mountain.
- Other areas with shoulder/lane erosion and debris on road.
- Emergency access available between Hope and Boston Bar.
- Heavy equipment working on debris and erosion areas.
- ETO: plans being developed for significantly impacted areas

Highway 1 – Abbotsford

- Closed between McCallum Rd to Yale Rd. (flooding).
- Water is starting to recede.
- ETO: Unknown assessment in progress.

Highway 3 – Sunshine Valley

- Closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway and some shoulder erosion.
- Heavy equipment working.
- ETO: Friday evening for emergency access.

Hwy 5 – Hope to Merritt

- Closed
- Kilometers of highway (numerous locations) impacted with debris on highway and areas where the shoulders and lanes have been eroded.
- Othello Both SB lanes have been washed away ~1 km.

- Othello Bridge impacted by debris
- Jessica Bridge 2 bridge jump spans lost
- Caroline Bridge bridge approach fills eroded
- Juliet Bridge 2 bridge jump spans compromised
- Bottletop Bridge 3 bridge jump spans lost and substantial approach fill erosion
- Brodie Bridge bridge abutment compromised

Silver Skagit Road

- Multiple mudslides have closed Silver Skagit Road
- Heavy equipment working.

Highway 11 - Mission

• Closed from Hazelwood Drive to Valley Rd and Delair to the USA border (flooding).

Rockwell Drive – District of Kent

- Closed at Lillooet Drive (erosion).
- · Heavy equipment working.

Hatzic Prairie

- Multiple sideroads closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows

NEXT UPDATE:

• Friday, Nov 19 at 0930 hrs

Regards,

Elena

Elena Farmer (she/her/hers)

DOC Director

P: 236-468-1935

E: Elena.Farmer@gov.bc.ca

From: Farmer, Elena TRAN:EX Sent: November 18, 2021 9:23 AM

To: Bhatti, Ashok A TRAN:EX < Ashok.Bhatti@gov.bc.ca >; Canil, Brigid TRAN:EX

<Brigid.Canil@gov.bc.ca>; Chang, Joyce TRAN:EX <Joyce.Chang@gov.bc.ca>; Folk, Trent TRAN:EX

<Trent.Folk@gov.bc.ca>; Goes, Sandra TRAN:EX <Sandra.Goes@gov.bc.ca>; Halwani, Lina TRAN:EX

<Lina.Halwani@gov.bc.ca>; Hinze, Dawn TRAN:EX <Dawn.Hinze@gov.bc.ca>; Lalani Kotlyarov, Rizwana

TRAN:EX <Rizwana.Lalani.Kotlyarov@gov.bc.ca>; Lee, Chris TRAN:EX <Chris.Lee2@gov.bc.ca>; Loranger,

Danielle TRAN:EX <<u>Danielle.Loranger@gov.bc.ca</u>>; Ludwar, Kenedee TRAN:EX

< Kenedee.Ludwar@gov.bc.ca>; Pearson, Michael TRAN:EX < Michael.Pearson@gov.bc.ca>; Porter, Jay C

TRAN:EX <<u>Jay.Porter@gov.bc.ca</u>>; Staite, Janelle A TRAN:EX <<u>Janelle.Staite@gov.bc.ca</u>>; Wang, Kaley

TRAN:EX <Kaley.Wang@gov.bc.ca>; Yancey, Stefan G TRAN:EX <Stefan.Yancey@gov.bc.ca>; Richter,

Kevin J TRAN:EX < Kevin.Richter@gov.bc.ca>; Pilkington, Ian TRAN:EX < Ian.Pilkington@gov.bc.ca>;

Cousins, Paula TRAN:EX < Paula. Cousins@gov.bc.ca >; Sirett, Steve TRAN:EX < Steve. Sirett@gov.bc.ca >;

Gerraghty, David E TRAN:EX <David.Gerraghty@gov.bc.ca>; Case, Brent A TRAN:EX

<Brent.Case@gov.bc.ca>; Lutz, Carl B TRAN:EX <Carl.Lutz@gov.bc.ca>; Lolacher, Russel TRAN:EX

<Russel.Lolacher@gov.bc.ca>; Crebo, David GCPE:EX <David.Crebo@gov.bc.ca>; Chambers, Craig

GCPE:EX < Craig.Chambers@gov.bc.ca; Bowness, Lisanne GCPE:EX < Lisanne.Bowness@gov.bc.ca;

Hayre, Courtney TRAN:EX < Courtney. Hayre@gov.bc.ca>; Allwood, Angie TRAN:EX

(Angie.Allwood@gov.bc.ca) <Angie.Allwood@gov.bc.ca>

Cc: Folk, Trent TRAN:EX < Trent.Folk@gov.bc.ca >; Braun, Michael TRAN:EX < Michael.Braun@gov.bc.ca >; Bui, Phu TRAN:EX < Phu.Bui@gov.bc.ca >; Stevenson, Christie TRAN:EX < Christie.Stevenson@gov.bc.ca >;

Beitel, Katrina TRAN:EX < Katrina.Beitel@gov.bc.ca; Thomas, Michael TRAN:EX

<<u>Michael.Thomas@gov.bc.ca</u>>; Kang, Gina TRAN:EX <<u>Gina.Kang@gov.bc.ca</u>>; Aljanaby, Dana TRAN:EX <<u>Dana.Aljanaby@gov.bc.ca</u>>

Subject: RE: DOC Situation Report #10 - Thursday, Nov 18 0930hrs

Good afternoon,

Find below the Situation Report #10 for the Atmospheric River Event.

KEY INFORMATION:

- LMD DOC activated to support highway closures related to flooding and landslides caused by the Atmospheric River
- Flood Waring remains in effect for the Sumas River and area.
- High Stream flow advisory in effect for the Fraser Valley and tributaries, Fraser Canyon and tributaries and Chilliwack River

WEATHER FORECAST:

- Precipitation: Light rain will begin Thursday morning and continue off and on through the day
 and into early Thursday evening before tapering off in the mid to late evening. Increased cloud
 cover will keep temperatures warmer tonight, but clouds will start to clear after midnight
 Thursday night, allowing temperatures to get a bit cooler.
- Winds & Gusts: Light wind.
- Temperatures: Current 4°C. Snow Levels 400-800m.
- Friday has a 30% chance of precipitation, Saturday has a 60% chance of Precipitation.

HIGHWAY IMPACTS:

Priority Locations:

Highway 7 – Mission to Agassiz

- Open SLAT.
- Heavy equipment continue to work to fully open.

Highway 7 – Agassiz to Hope

- Open to emergency vehicles.
- 1000+ passenger vehicles piloted out of Hope yesterday between 1700 hrs and 2030 hrs
- Commercial vehicles will be piloted out of Hope at 1000 hrs
- Heavy equipment removing debris and repairing erosion
- ETO: SLAT opening expected at 1500 hrs

Highway 1 – Popkum to Hope

- Closed between Popkum and Hope.
- Multiple debris flows across all travel lanes in both directions and locations of significant shoulder and lane erosion.
- Heavy equipment working.
- ETO: Sunday November 21: 1800 hrs for emergency access only.

Highway 1 – Fraser Canyon (South Coast and Southern Interior)

- Closed between Hope and Spences Bridge.
- Significant failures at Nicomen Bridge, Tank Hill and Jackass Mountain.
- Other areas with shoulder/lane erosion and debris on road.
- Emergency access available between Hope and Boston Bar.
- Heavy equipment working on debris and erosion areas.
- ETO: plans being developed for significantly impacted areas

Highway 1 – Abbotsford

- Closed between McCallum Rd to Yale Rd. (flooding).
- Water is starting to recede.
- ETO: Unknown assessment in progress.

Highway 3 – Sunshine Valley

- Closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway and some shoulder erosion.
- Heavy equipment working.
- ETO: Friday evening for emergency access.

Hwy 5 – Hope to Merritt

- Closed
- Kilometers of highway (numerous locations) impacted with debris on highway and areas where the shoulders and lanes have been eroded.
- Othello Both SB lanes have been washed away ~1 km.
- Othello Bridge impacted by debris
- Jessica Bridge 2 bridge jump spans lost
- Caroline Bridge bridge approach fills eroded
- Juliet Bridge 2 bridge jump spans compromised
- Bottletop Bridge 3 bridge jump spans lost and substantial approach fill erosion
- Brodie Bridge bridge abutment compromised

Silver Skagit Road

- Multiple mudslides have closed Silver Skagit Road
- Heavy equipment working.

Highway 11 - Mission

• Closed from Hazelwood Drive to Valley Rd and Delair to the USA border (flooding).

Rockwell Drive – District of Kent

- Closed at Lillooet Drive (erosion).
- Heavy equipment working.

Hatzic Prairie

- Multiple sideroads closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows

NEXT UPDATE:

• Thursday, Nov 18 at 1500 hrs

Regards,

Elena

Elena Farmer (she/her/hers)

District Manager, Transportation

Lower Mainland District | South Coast Region

Ministry of Transportation and Infrastructure

1500 Woolridge Street, Coquitlam, BC V3K 0B8

P: 236-468-1935

E: Elena.Farmer@gov.bc.ca

From: Farmer, Elena TRAN:EX <Elena.Farmer@gov.bc.ca>

Sent: November 17, 2021 2:55 PM

To: Bhatti, Ashok A TRAN:EX < Ashok.Bhatti@gov.bc.ca >; Canil, Brigid TRAN:EX

<Brigid.Canil@gov.bc.ca>; Chang, Joyce TRAN:EX <Joyce.Chang@gov.bc.ca>; Farmer, Elena TRAN:EX

<Elena.Farmer@gov.bc.ca>; Folk, Trent TRAN:EX <Trent.Folk@gov.bc.ca>; Goes, Sandra TRAN:EX

<<u>Sandra.Goes@gov.bc.ca</u>>; Halwani, Lina TRAN:EX <<u>Lina.Halwani@gov.bc.ca</u>>; Hinze, Dawn TRAN:EX

<Dawn.Hinze@gov.bc.ca>; Lalani Kotlyarov, Rizwana TRAN:EX <Rizwana.Lalani.Kotlyarov@gov.bc.ca>;

Lee, Chris TRAN:EX <Chris.Lee2@gov.bc.ca>; Loranger, Danielle TRAN:EX

<Danielle.Loranger@gov.bc.ca>; Ludwar, Kenedee TRAN:EX < Kenedee.Ludwar@gov.bc.ca>; Pearson,

Michael TRAN:EX < Michael.Pearson@gov.bc.ca >; Porter, Jay C TRAN:EX < Jay.Porter@gov.bc.ca >; Staite,

Janelle A TRAN:EX < <u>Janelle.Staite@gov.bc.ca</u>>; Wang, Kaley TRAN:EX < <u>Kaley.Wang@gov.bc.ca</u>>; Yancey, Stefan G TRAN:EX < Stefan.Yancey@gov.bc.ca>; Richter, Kevin J TRAN:EX < Kevin.Richter@gov.bc.ca>;

Pilkington, Ian TRAN:EX < Ian.Pilkington@gov.bc.ca>; Cousins, Paula TRAN:EX

<<u>Paula.Cousins@gov.bc.ca</u>>; Sirett, Steve TRAN:EX <<u>Steve.Sirett@gov.bc.ca</u>>; Gerraghty, David E

TRAN:EX < <u>David.Gerraghty@gov.bc.ca</u>>; Case, Brent A TRAN:EX < <u>Brent.Case@gov.bc.ca</u>>; Lutz, Carl B

TRAN:EX <Carl.Lutz@gov.bc.ca>; Lolacher, Russel TRAN:EX <Russel.Lolacher@gov.bc.ca>; Crebo, David

GCPE:EX < David.Crebo@gov.bc.ca >; Chambers, Craig GCPE:EX < Craig.Chambers@gov.bc.ca >; Bowness,

Lisanne GCPE:EX <<u>Lisanne.Bowness@gov.bc.ca</u>>; Hayre, Courtney TRAN:EX <Courtney.Hayre@gov.bc.ca>

Cc: Folk, Trent TRAN:EX < Trent.Folk@gov.bc.ca >; Braun, Michael TRAN:EX < Michael.Braun@gov.bc.ca >; Bui, Phu TRAN:EX < Phu.Bui@gov.bc.ca >; Stevenson, Christie TRAN:EX < Christie.Stevenson@gov.bc.ca >; Beitel, Katrina TRAN:EX < Katrina.Beitel@gov.bc.ca >; Thomas, Michael TRAN:EX

<<u>Michael.Thomas@gov.bc.ca</u>>; Kang, Gina TRAN:EX <<u>Gina.Kang@gov.bc.ca</u>>; Aljanaby, Dana TRAN:EX <<u>Dana.Aljanaby@gov.bc.ca</u>>

Subject: RE: DOC Situation Report #9 - Wednesday, Nov 17 1500hrs Good afternoon,

Find below the Situation Report #9 for the Atmospheric River Event.

KEY INFORMATION:

- LMD DOC activated to support highway closures related to flooding and landslides caused by the Atmospheric River
- Flood Watch in effect for Fraser Valley and tributaries, Fraser Canyon and tributaries and Chilliwack River

WEATHER FORECAST:

- Dry weather will continue today and tonight with thin, high clouds moving into the region and thickening tonight as the next weather disturbance approaches.
- Light rain and snow will begin Thursday morning and continue off and on through the day and into Thursday evening before tapering off near midnight.
- Increased cloud cover will keep temperatures warmer tonight, but clouds will start to clear after midnight Thursday night, allowing temperatures to get a bit cooler, with a freeze likely late overnight, causing concern for frost and ice for any remaining wet roads.
- Dry weather will continue Thursday night and Friday. The weekend is looking mainly dry as well,
 with just a few showers possible at times, mainly Saturday afternoon through Sunday morning.

HIGHWAY IMPACTS:

Priority Locations:

Highway 7 – Mission to Agassiz

- Open SLAT.
- Heavy equipment continue to work to fully open.

Highway 7 – Agassiz to Hope

- Open to emergency vehicles.
- Heavy equipment removing debris and repairing erosion.
- A temporary single lane to re-open at 5pm to allow for a piloted evacuation of Hope.

Highway 1 – Popkum to Hope

- Closed between Popkum and Hope.
- Multiple debris flows across all travel lanes in both directions and locations of significant shoulder and lane erosion.
- Heavy equipment working.
- ETO: Sunday November 21: 1800 hrs for emergency access only.

Highway 1 – Fraser Canyon (South Coast and Southern Interior)

- Closed between Hope and Spences Bridge.
- Significant failures at Nicomen Bridge, Tank Hill and Jackass Mountain.
- Other areas with shoulder/lane erosion and debris on road.
- Emergency access available between Hope and Boston Bar.
- Heavy equipment working on debris and erosion areas.
- ETO: plans being developed for significantly impacted areas

Highway 1 – Abbotsford

- Closed between McCallum Rd to Yale Rd. (flooding).
- ETO: Unknown assessment in progress.

Highway 3 – Sunshine Valley

- Closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway and some shoulder erosion.
- Heavy equipment working.
- ETO: Friday evening for emergency access.

Hwy 5 – Hope to Merritt

- Closed
- Kilometers of highway (numerous locations) impacted with debris on highway and areas where the shoulders and lanes have been eroded.
- Othello Both SB lanes have been washed away ~1 km.
- Othello Bridge impacted by debris
- Jessica Bridge 2 bridge jump spans lost
- Caroline Bridge bridge approach fills eroded
- Juliet Bridge 2 bridge jump spans compromised
- Bottletop Bridge 3 bridge jump spans lost and substantial approach fill erosion
- Brodie Bridge bridge abutment compromised

Silver Skagit Road

- Multiple mudslides have closed Silver Skagit Road
- · Heavy equipment working.

Highway 11 - Mission

Closed from Hazelwood Drive to Valley Rd and Delair to the USA border (flooding).

Rockwell Drive – District of Kent

- Closed at Lillooet Drive (erosion).
- Heavy equipment working.

Hatzic Prairie

- Multiple sideroads closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows

Hwy 99 – Richmond

Fully opened.

NEXT UPDATE:

• Thursday, Nov 18 at 0930 hrs

Regards,

Elena

Elena Farmer (she/her/hers)

District Manager, Transportation

Lower Mainland District | South Coast Region

Ministry of Transportation and Infrastructure

1500 Woolridge Street, Coquitlam, BC V3K 0B8

Lolacher, Russel TRAN:EX < Russel.Lolacher@gov.bc.ca >

P: 236-468-1935

E: Elena.Farmer@gov.bc.ca

From: Farmer, Elena TRAN:EX

Sent: November 17, 2021 9:47 AM

To: Stevenson, Christie TRAN:EX < Christie.Stevenson@gov.bc.ca>; Bhatti, Ashok A TRAN:EX < Ashok.Bhatti@gov.bc.ca>; Staite, Janelle A TRAN:EX < Janelle.Staite@gov.bc.ca>; Richter, Kevin J TRAN:EX < Kevin.Richter@gov.bc.ca>; Pilkington, Ian TRAN:EX < Ian.Pilkington@gov.bc.ca>; Ludwar, Kenedee TRAN:EX < Kenedee.Ludwar@gov.bc.ca>; Pearson, Michael TRAN:EX < Michael.Pearson@gov.bc.ca>; Crebo, David GCPE:EX < David.Crebo@gov.bc.ca>; Bowness, Lisanne GCPE:EX < Lisanne.Bowness@gov.bc.ca>; Chambers, Craig GCPE:EX < Craig.Chambers@gov.bc.ca>;

Cc: Bonhomme, Korry TRAN:EX < Korry.Bonhomme@gov.bc.ca>; Robertson, Steve TRAN:EX < Steve.Robertson@gov.bc.ca>; Bui, Phu TRAN:EX < Phu.Bui@gov.bc.ca>; Cousins, Paula TRAN:EX < Paula.Cousins@gov.bc.ca>; Sirett, Steve TRAN:EX < Steve.Sirett@gov.bc.ca>; Gerraghty, David E TRAN:EX < David.Gerraghty@gov.bc.ca>; Harwood, Paul TRAN:EX < Paul.Harwood@gov.bc.ca>; Slam, Johann TRAN:EX < Johann.Slam@gov.bc.ca>; Braun, Michael TRAN:EX < Michael.Braun@gov.bc.ca>; Jin, James TRAN:EX < James.Jin@gov.bc.ca>; Folk, Trent TRAN:EX < Trent.Folk@gov.bc.ca>; Hinze, Dawn TRAN:EX < Dawn.Hinze@gov.bc.ca>; Kang, Gina TRAN:EX < Gina.Kang@gov.bc.ca>; Beitel, Katrina TRAN:EX < Katrina.Beitel@gov.bc.ca>; Case, Brent A TRAN:EX < Brent.Case@gov.bc.ca>

Subject: RE: DOC Situation Report #8 - Wednesday, Nov 17 1000hrs Good afternoon,

Find below the Situation Report #7 for the Atmospheric River Event. New or updated information has been highlighted in red.

KEY INFORMATION:

- LMD DOC activated to support highway closures related to flooding and landslides caused by the Atmospheric River
- Flood Watch in effect for Fraser Valley and tributaries, Fraser Canyon and tributaries and Chilliwack River

WEATHER FORECAST:

- Precipitation: 30-60% chance of showers this morning, clearing late morning.
- Winds & Gusts: Wind west 20 km/h gusting to 40 km/h becoming light this afternoon.
- Temperatures: Current 2°C. Snow Levels dropping to 200-300m Tuesday.
- Dry conditions expected Tuesday and most of Wednesday, 60% chance of showers Wednesday night

HIGHWAY IMPACTS:

Priority Locations:

Highway 7 - Seabird Island (Agassiz to Mission)

- Highway 7 is closed between Wahleach Road (west) to Johnson Slough (east)
- Two debris flows and down powerlines across the highway.
- All trapped individuals were air lifted to Seabird Island Band Community Gym (~275 people)
- There 6 pieces of equipment on the Wahleach side and then 3 pieces at Johnson Slough side.
- Crews worked through the night and have cleared debris from 2 travel lanes (fog line to fog line) at the western slide site and have 1 lane cleared at the eastern slide site.
- ETO: Access for emergency vehicles only as of Nov 16 1800 hrs.

Highway 7 – Haig Bluffs – REOPENED Monday, Nov 15 at 1730 hrs

Highway 1 - Popkum

- Highway 1 is closed between Popkum and Hope (Highway 9 exit to Flood-Hope Exit).
- Multiple debris flows across all travel lanes in both directions (5 known sites).
- No people trapped.
- Crews working 24-7 to clear water and debris.
- ETO: Sunday November 21: 1800 hrs for emergency access only.

Highway 1 – Fraser Canyon

- Highway 1 closed between Hope and Spences Bridge
- There is a washout at Hells Gate and Alexandra bridge. Water has overtopped the highway and eroding the shoulders and travel lanes.
- No people trapped.
- Excavator and loader on site working. A single lane has been cleared to allow emergency services to Boston Bar.
- We have established n route for emergency access.
- ETO: Tuesday November 16: 1200 hrs emergency access was established.

Highway 1 – Abbotsford

- Sumas River overtopped Highway 1 on Nov 15 at 1920 hrs.
- Highway 1 closed between McCallum Rd to Yale Rd.
- Due to rising water levels the closure was extended east to the Yale Rd interchange and west to McCallum Rd.
- Delivered 40,000 sandbags to Barrowtown pump station and coordinated delivery of new pumps.
- ETO: Unknown assessment in progress.

Highway 3 – Sunshine Valley

- Highway 3 closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway.
- All stranded individuals have been transported to Manning Park.
- Crews working on both ends to clear the debris flows.
- ETO: Sunday November 21: 1800 hrs for emergency access only.

Hwy 5 – Hope to Merritt

- Othello:
 - o Both southbound lanes have been washed away.
 - o Heavy washout with debris, mud, and water on road.
 - Loader on-site, team is organizing excavator to mobilize in the morning for immediate response
 - ETO: Unknown assessment in progress
- Sowoqua
 - The southbound Sowoqua structure has been washed away.
- Dewdney Creek:
 - Debris flow that is covering all the travel lanes.
 - o ETO: Unknown assessment in progress
- 10 Mile Creek
 - Highway 5 is closed between 10 Mile Creek and Portia Interchange.
 - Two debris flows across travel lanes.
 - Valley Helicopter has evacuated all 19 stranded individuals to Hope.
 - o 1 trucker left behind, has been air rescued by EAM.
 - Once flows subside and Geotech assessment takes place crews will begin work on the debris flows.
 - Heavy machinery is at site and additional machinery is on route.
 - o ETO: Unknown assessment in progress

Hwy 7 - Mt Woodside

- Highway 7 closed between Highland Blvd to Bodher Road
- Rock fall with debris and water flowing down the hillside onto the roadway.
- Roadway has been cleared of debris, Geotech has approved SLAT operations.
- Crews focusing on arming slope to re-open Eastbound lanes.
- 1 loader on site.
- ETO: SLAT operations implemented on Nov 17 at 1000 hrs

Silver Skagit Road

- Multiple mudslides have closed Silver Skagit Road
- Stranded individuals at 10 km have made it out. There remains 5 individuals blocked at 13km, who are in a camper with supplies to overnight.
- Crews working to clear the debris to rescue 5 trapped individuals.
- ETO: Unknown assessment in progress

Other Locations:

Highway 11 - Mission

• Highway is closed at Hazelwood Drive and Valley Rd due to flooding across the highway near Willband Creek Park (north of Highway 1).

Highway 11 has been closed from Delair to the USA border.

Columbia Valley Road - Chilliwack

- Road closed at Lakeshore Drive due to a washed out culvert
- High water flow has overwhelmed culvert and undermined the road
- FVRD has initiated Sleepy Hollow Protocol initiated Detour established through the Soowahlie Reserve, first responders on-scene maintaining the closure.
- Crews worked through the night and have established SLAT through Lakeshore Drive.
- Crews are now focusing on Delta Grove Campground area.
- There are 4 pieces of equipment on site.
- ETO: 1800 hrs

Rockwell Drive - District of Kent

- Rockwell Drive closed at Lillooet Drive.
- Losing asphalt in 3 places at Green Point Park
- Residents have been evacuated by local RCMP/Fire. Debris flow cleared to support evacuation.
- Excavator and loader on site and work to begin this morning.

Hatzic Prairie

- Multiple sideroad closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows

Hwy 99 – Richmond

- Highway 99 closed between Westminster Hwy and Oak Street Bridge
- SB has reopened, NB reopened.

NEXT UPDATE:

Wednesday, Nov 18 at 930 hrs

Regards,

Elena

Elena Farmer (she/her/hers)

District Manager, Transportation

Lower Mainland District | South Coast Region

Ministry of Transportation and Infrastructure

1500 Woolridge Street, Coquitlam, BC V3K 0B8

P: 236-468-1935

E: <u>Elena.Farmer@gov.bc.ca</u>

From: Stevenson, Christie TRAN:EX <Christie.Stevenson@gov.bc.ca>

Sent: November 16, 2021 3:59 PM

To: Farmer, Elena TRAN:EX < Elena.Farmer@gov.bc.ca >; Bhatti, Ashok A TRAN:EX

Ashok.Bhatti@gov.bc.ca; Staite, Janelle A TRAN:EX < Janelle.Staite@gov.bc.ca; Richter, Kevin J

TRAN:EX <Kevin.Richter@gov.bc.ca>; Pilkington, Ian TRAN:EX <lan.Pilkington@gov.bc.ca>; Ludwar,

Kenedee TRAN:EX < Kenedee.Ludwar@gov.bc.ca >; Pearson, Michael TRAN:EX

< Michael.Pearson@gov.bc.ca >; Crebo, David GCPE: EX < David.Crebo@gov.bc.ca >; Bowness, Lisanne

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Lolacher, Russel TRAN:EX < Russel.Lolacher@gov.bc.ca >

Cc: Bonhomme, Korry TRAN:EX <<u>Korry.Bonhomme@gov.bc.ca</u>>; Robertson, Steve TRAN:EX <<u>Steve.Robertson@gov.bc.ca</u>>; Bui, Phu TRAN:EX <<u>Phu.Bui@gov.bc.ca</u>>; Cousins, Paula TRAN:EX <<u>Paula.Cousins@gov.bc.ca</u>>; Sirett, Steve TRAN:EX <<u>Steve.Sirett@gov.bc.ca</u>>; Gerraghty, David E TRAN:EX <<u>David.Gerraghty@gov.bc.ca</u>>; Harwood, Paul TRAN:EX <<u>Paul.Harwood@gov.bc.ca</u>>; Slam, Johann TRAN:EX <<u>Johann.Slam@gov.bc.ca</u>>; Braun, Michael TRAN:EX <<u>Michael.Braun@gov.bc.ca</u>>; Jin, James TRAN:EX <<u>James.Jin@gov.bc.ca</u>>; Folk, Trent TRAN:EX <<u>Trent.Folk@gov.bc.ca</u>>; Hinze, Dawn TRAN:EX <<u>Dawn.Hinze@gov.bc.ca</u>>; Kang, Gina TRAN:EX <<u>Gina.Kang@gov.bc.ca</u>>; Beitel, Katrina

TRAN:EX < Katrina. Beitel@gov.bc.ca>

Subject: RE: DOC Situation Report #7 - Tuesday, Nov 16 1600hrs

Good afternoon,

Find below the Situation Report #7 for the Atmospheric River Event. New or updated information has been highlighted in red.

KEY INFORMATION:

- LMD DOC activated to support highway closures related to flooding and landslides caused by the Atmospheric River
- Flood Watch in effect for Fraser Valley and tributaries, Fraser Canyon and tributaries and Chilliwack River

WEATHER FORECAST:

- Precipitation: 30-60% chance of showers this morning, clearing late morning.
- Winds & Gusts: Wind west 20 km/h gusting to 40 km/h becoming light this afternoon.
- Temperatures: Current 2°C. Snow Levels dropping to 200-300m Tuesday.
- Dry conditions expected Tuesday and most of Wednesday, 60% chance of showers Wednesday night

HIGHWAY IMPACTS:

Priority Locations:

Highway 7 - Seabird Island

- Highway 7 is closed between Wahleach Road (west) to Johnson Slough (east)
- Two debris flows and down powerlines across the highway.
- All trapped individuals were air lifted to Seabird Island Band Community Gym (~275 people)
- There 6 pieces of equipment on the Wahleach side and then 3 pieces at Johnson Slough side.
- Geotech assessment okayed work on the Johnson Slough side. Work is underway.
- Secondary Geotech assessment complete, work underway on the Wahleach side.
- ETO: Wednesday November 17: 1500 hrs for emergency access only.

Highway 7 – Haig Bluffs – REOPENED Monday, Nov 15 at 1730 hrs

Highway 1 - Popkum

- Highway 1 is closed between Popkum and Hope (Highway 9 exit to Flood-Hope Exit).
- Multiple debris flows across all travel lanes in both directions (5 known sites).
- No people trapped.
- Geotech assessment completed. EAM workplan developed. Work has started on Flood Hope side and work westward.
- ETO: Sunday November 21: 1800 hrs for emergency access only.

Highway 1 – Fraser Canyon

- Highway 1 closed between Hope and Spences Bridge
- There is a washout at Hells Gate and Alexandra bridge. Water has overtopped the highway and eroding the shoulders and travel lanes.
- No people trapped.
- Excavator and loader on site working. A single lane has been cleared to allow emergency services to Boston Bar.
- We have established n route for emergency access.
- ETO: Tuesday November 16: 1200 hrs emergency access was established.

Highway 1 – Abbotsford

- Sumas River overtopped Highway 1 on Nov 15 at 1920 hrs.
- Highway 1 closed between McCallum Rd to Yale Rd.
- Due to rising water levels the closure was extended east to the Yale Rd interchange and west to McCallum Rd.
- ETO: Unknown assessment in progress.

Highway 3 – Sunshine Valley

- Highway 3 closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway.
- All stranded individuals have been transported to Manning Park.
- Heavy equipment and responders are on route.
- Geotech assessment this morning to establish work plan.
- ETO: Sunday November 21: 1800 hrs for emergency access only.

Hwy 5 – Hope to Merritt

- Othello:
 - Both southbound lanes have been washed away.
 - Heavy washout with debris, mud, and water on road.
 - Loader on-site, team is organizing excavator to mobilize in the morning for immediate response
 - ETO: Unknown assessment in progress
- Sowoqua
 - o The southbound Sowoqua structure has been washed away.
- Dewdney Creek:
 - o Debris flow that is covering all the travel lanes.
 - o ETO: Unknown assessment in progress
- 10 Mile Creek
 - o Highway 5 is closed between 10 Mile Creek and Portia Interchange.
 - Two debris flows across travel lanes.
 - Valley Helicopter has evacuated all 19 stranded individuals to Hope.
 - o 1 trucker left behind, has been air rescued by EAM.
 - Once flows subside and Geotech assessment takes place crews will begin work on the debris flows.
 - Heavy machinery is at site and additional machinery is on route.
 - ETO: Unknown assessment in progress

Hwy 7 - Mt Woodside

- Highway 7 closed between Highland Blvd to Bodher Road
- Rock fall with debris and water flowing down the hillside onto the roadway.
- Geotech assessment completed.
- Roadway has been cleared of debris, arranging for engineers to come out to assess roadway and culvert.
- 1 loader on site.
- ETO: 1800 hrs for emergency access only.

Silver Skagit Road

- Multiple mudslides have closed Silver Skagit Road
- Stranded individuals at 10 km have made it out. There remains 5 individuals blocked at 13km, who are in a camper with supplies to overnight.
- ETO: Unknown assessment in progress

Other Locations:

Highway 7 - Maple Ridge - REOPENED Monday, Nov 16 at 2130 hrs

Highway 11 - Mission

- Highway is closed at Hazelwood Drive and Valley Rd due to flooding across the highway near Willband Creek Park (north of Highway 1).
- Highway 11 has been closed from Delair to the USA border.

Columbia Valley Road – Chilliwack

- Road closed at Lakeshore Drive due to a washed out culvert
- High water flow has overwhelmed culvert and undermined the road
- FVRD has initiated Sleepy Hollow Protocol initiated Detour established through the Soowahlie Reserve, first responders on-scene maintaining the closure.

- Crews worked through the night and have established SLAT through Lakeshore Drive.
- Crews are now focusing on Delta Grove Campground area.
- There are 4 pieces of equipment on site.
- ETO: 1800 hrs

Rockwell Drive – District of Kent

- Rockwell Drive closed at Lillooet Drive.
- Losing asphalt in 3 places at Green Point Park
- Residents have been evacuated by local RCMP/Fire. Debris flow cleared to support evacuation.
- Excavator and loader on site and work to begin this morning.

Hatzic Prairie

- Multiple sideroad closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows

Hwy 13 – Aldergrove – REOPENED Nov 15 at 2015 hrs

Hwy 99 – Richmond

- Highway 99 closed between Westminster Hwy and Oak Street Bridge
- SB has reopened, NB still remains closed.

NEXT UPDATE:

Wednesday, Nov 17 at 0900 hrs

Regards,

Elena

Elena Farmer (she/her/hers)

DOC Director

P: 236-468-1935

E: Elena.Farmer@gov.bc.ca

From: Farmer, Elena TRAN:EX Sent: November 16, 2021 8:54 AM

To: Bhatti, Ashok A TRAN:EX < Ashok.Bhatti@gov.bc.ca >; Staite, Janelle A TRAN:EX

<Janelle.Staite@gov.bc.ca>; Richter, Kevin J TRAN:EX < Kevin.Richter@gov.bc.ca>; Pilkington, Ian

TRAN:EX < lan.Pilkington@gov.bc.ca>; Ludwar, Kenedee TRAN:EX < Kenedee.Ludwar@gov.bc.ca>;

Pearson, Michael TRAN:EX < Michael.Pearson@gov.bc.ca>; Crebo, David GCPE:EX

<<u>David.Crebo@gov.bc.ca</u>>; Bowness, Lisanne GCPE:EX <<u>Lisanne.Bowness@gov.bc.ca</u>>; Chambers, Craig

GCPE:EX <Craig.Chambers@gov.bc.ca>; Lolacher, Russel TRAN:EX <Russel.Lolacher@gov.bc.ca>

Cc: Stevenson, Christie TRAN:EX <Christie.Stevenson@gov.bc.ca>; Bonhomme, Korry TRAN:EX

<Korry.Bonhomme@gov.bc.ca>; Robertson, Steve TRAN:EX <<u>Steve.Robertson@gov.bc.ca</u>>; Bui, Phu

TRAN:EX <Phu.Bui@gov.bc.ca>; Cousins, Paula TRAN:EX <Paula.Cousins@gov.bc.ca>; Sirett, Steve

TRAN:EX <<u>Steve.Sirett@gov.bc.ca</u>>; Gerraghty, David E TRAN:EX <<u>David.Gerraghty@gov.bc.ca</u>>;

 $Harwood, Paul\ TRAN: EX\ (\underline{Paul.Harwood@gov.bc.ca}) < \underline{Paul.Harwood@gov.bc.ca} >; Slam, Johann\ TRAN: EX$

<Johann.Slam@gov.bc.ca>; Braun, Michael TRAN:EX < Michael.Braun@gov.bc.ca>

Subject: RE: DOC Situation Report #5 - Tuesday, Nov 16 0900hrs

Good afternoon,

Find below the Situation Report #5 for the Atmospheric River Event. New or updated information has been highlighted in red.

KEY INFORMATION:

- LMD DOC activated to support highway closures related to flooding and landslides caused by the Atmospheric River
- Flood Watch in effect for Fraser Valley and tributaries, Fraser Canyon and tributaries and Chilliwack River

WEATHER FORECAST:

- Precipitation: 30-60% chance of showers this morning, clearing late morning.
- Winds & Gusts: Wind west 20 km/h gusting to 40 km/h becoming light this afternoon.

- Temperatures: Current 2°C. Snow Levels dropping to 200-300m Tuesday.
- Dry conditions expected Tuesday and most of Wednesday, 60% chance of showers Wednesday night

HIGHWAY IMPACTS:

Priority Locations:

Highway 7 - Seabird Island

- Highway 7 is closed between Wahleach Road (west) to Johnson Slough (east)
- Two debris flows and down powerlines across the highway.
- All trapped individuals were air lifted to Seabird Island Band Community Gym (~275 people)
- There 6 pieces of equipment on the Wahleach side and then 3 pieces at Johnson Slough side.
- Geotech assessment okayed work on the Johnson Slough side. Work is underway.
- Secondary Geotech assessment this morning to establish work method/plan for Wahleach. Minor works underway until Geotech has cleared.
- ETO: Unknown assessment in progress

Highway 7 – Haig Bluffs – REOPENED Monday, Nov 15 at 1730 hrs

- Highway 7 between Johnson Slough and Haig
- A debris flow that has covered all travel lanes, as well as BC Hydro lines.
- Approximately 700 vehicles are trapped.
- Trapped vehicles to routed to Hope once the slide is cleared.
- BC Hydro on scene and has given the go ahead to begind work on the east end of the highway.
- EAM on scene with 2 pieces of heavy equipment to begin clearing the debris.
- ETO: Unknown assessment in progress

Highway 1 - Popkum

- Highway 1 is closed between Popkum and Hope (Highway 9 exit to Flood-Hope Exit).
- Multiple debris flows across all travel lanes in both directions (5 known sites).
- No people trapped.
- Geotech assessment completed. EAM is developing a work plan to begin removing debris. Work to start on Flood Hope side and work westward.
- Equipment is currently being deployed to the west and east end of the closure.
- ETO: Unknown assessment in progress

Highway 1 – Fraser Canyon

- Highway 1 closed between Hope and Spences Bridge
- There is a washout at Hells Gate and Alexandra bridge. Water has overtopped the highway and eroding the shoulders and travel lanes.
- No people trapped.
- Excavator and loader on site working.
- Working to establish an route for emergency access.
- ETO: Unknown assessment in progress

Highway 1 – Abbotsford

- Sumas River overtopped Highway 1 on Nov 15 at 1920 hrs.
- Highway 1 was closed between Highway 11 to No. 3 Rd.
- Due to rising water levels on Nov 16 0300 hrs, the closure was extended east to the Yale Rd interchange at 0500 hrs.
- ETO: Unknown assessment in progress.

Highway 3 – Sunshine Valley

- Highway 3 closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway.
- All stranded individuals have been transported to Manning Park.
- Heavy equipment and responders are on route.
- Geotech assessment this morning to establish work plan.

• ETO: Unknown – assessment in progress

Hwy 5 – Hope to Merritt

- Othello:
 - o Both southbound lanes have been washed away.
 - o Heavy washout with debris, mud, and water on road.
 - Loader on-site, team is organizing excavator to mobilize in the morning for immediate response
 - ETO: Unknown assessment in progress
- Sowoqua
 - o The southbound Sowoqua structure has been washed away.
- Dewdney Creek:
 - o Debris flow that is covering all the travel lanes.
 - ETO: Unknown assessment in progress
- 10 Mile Creek
 - Highway 5 is closed between 10 Mile Creek and Portia Interchange.
 - Two debris flows across travel lanes.
 - Valley Helicopter has evacuated all 19 stranded individuals to Hope.
 - 1 trucker slept through the evacuation and remain trapped. EMBC has been notified to arrange evacuation.
 - Once flows subside and Geotech assessment takes place crews will begin work on the debris flows.
 - o Heavy machinery is at site and additional machinery is on route.
 - o ETO: Unknown assessment in progress

Hwy 7 - Mt Woodside

- Highway 7 closed between Highland Blvd to Bodher Road
- Rock fall with debris and water flowing down the hillside onto the roadway.
- Geotech assessment this morning to develop work plan.
- 1 loader on site.
- ETO: Unknown assessment in progress

Silver Skagit Road

- Multiple mudslides have closed Silver Skagit Road
- 1 confirmed individual trapped who advised that small cars, trailers and campers also trapped.
- EMBC has been notified to arrange evacation of stranded individuals.
- ETO: Unknown assessment in progress

Other Locations:

Highway 7 - Maple Ridge – REOPENED Monday, Nov 16 at 2130 hrs

- Highway 7 is closed between 240th Street to 272nd Street due water and debris on the highway.
- Water has subsided and currently working to clear the mud on the roadway.
- ETO: 1900 hrs

Highway 11 - Mission

 Highway is closed at Hazelwood Drive and Valley Rd due to flooding across the highway near Willband Creek Park.

Columbia Valley Road – Chilliwack

- Road closed at Lakeshore Drive due to a washed out culvert
- High water flow has overwhelmed culvert and undermined the road
- FVRD has initiated Sleepy Hollow Protocol initiated Detour established through the Soowahlie Reserve, first responders on-scene maintaining the closure.
- Crews worked through the night and have established SLAT through Lakeshore Drive.
- Crews are now focusing on Delta Grove Campground area.
- There are 4 pieces of equipment on site.
- ETO: 1800 hrs

Rockwell Drive – District of Kent

- Rockwell Drive closed at Lillooet Drive.
- Losing asphalt in 3 places at Green Point Park
- Residents have been evacuated by local RCMP/Fire. Debris flow cleared to support evacuation.
- Excavator and loader on site and work to begin this morning.

Hatzic Prairie

- Multiple sideroad closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows

Hwy 13 – Aldergrove – REOPENED Nov 15 at 2015 hrs

Southbound ramp to Hwy 1 eastbound has flooded and ramp is closed

Hwy 99 - Richmond

- Highway 99 closed between Westminster Hwy and Oak Street Bridge
- All lanes flooded.

NEXT UPDATE:

Tuesday, Nov 16 at 1200 hrs

Regards,

Elena

Elena Farmer (she/her/hers)

DOC Director

P: 236-468-1935

E: Elena.Farmer@gov.bc.ca

From: Farmer, Elena TRAN:EX < Elena.Farmer@gov.bc.ca>

Sent: November 15, 2021 5:26 PM

To: Bhatti, Ashok A TRAN:EX <Ashok.Bhatti@gov.bc.ca>; Staite, Janelle A TRAN:EX

<Janelle.Staite@gov.bc.ca>; Richter, Kevin J TRAN:EX <<u>Kevin.Richter@gov.bc.ca</u>>; Pilkington, Ian

TRAN:EX < ! Ludwar, Kenedee TRAN:EX < Kenedee.Ludwar@gov.bc.ca;

Pearson, Michael TRAN:EX < Michael.Pearson@gov.bc.ca >; Crebo, David GCPE:EX

<David.Crebo@gov.bc.ca>; Bowness, Lisanne GCPE:EX <Lisanne.Bowness@gov.bc.ca>; Chambers, Craig

GCPE:EX < Craig.Chambers@gov.bc.ca >; Lolacher, Russel TRAN:EX < Russel.Lolacher@gov.bc.ca >

Cc: Stevenson, Christie TRAN:EX < Christie TRAN:EX Christie TRAN:EX Christie.Stevenson@gov.bc.ca Bonhomme Korry TRAN:EX

<Korry.Bonhomme@gov.bc.ca>; Bui, Phu TRAN:EX <Phu.Bui@gov.bc.ca>; Cousins, Paula TRAN:EX

<Paula.Cousins@gov.bc.ca>; Sirett, Steve TRAN:EX <<u>Steve.Sirett@gov.bc.ca</u>>; Gerraghty, David E

TRAN:EX < David.Gerraghty@gov.bc.ca >

Subject: Re: DOC Situation Report #4 - Monday, Nov 15 1600hrs

Evening All,

The Sumas River has overtopped H1 in Abbotsford. H1 closure between H11 and No. 3 Rd. is going in now.

The H7 Haig slide has been cleared and we are working to pilot vehicles out to Hope.

Regards,

Elena

Sent from my iPhone

On Nov 15, 2021, at 4:20 PM, Farmer, Elena TRAN:EX <<u>Elena.Farmer@gov.bc.ca</u>> wrote:

Good afternoon,

Find below the Situation Report #4 for the Atmospheric River Event. New or updated information has been highlighted in red.

KEY INFORMATION:

- LMD DOC activated to support highway closures related to flooding and landslides caused by the Atmospheric River
- Rainfall warnings have ended.
- Wind warning in effect for Howe Sound and Fraser Valley.
- Flood Watch in effect for Fraser Valley and tributaries, Fraser Canyon and tributaries and Chilliwack River

WEATHER FORECAST:

- Precipitation: 15-25 mm rain expected through to 17:00 18:00 this afternoon.
 Dry this evening and overnight
- Winds & Gusts: Strong SSE winds continue with gusts up to 55-65 km/h tapering off by midnight turning.
- Temperatures: Current 12°C. Snow Levels dropping to 500-400m early Tuesday AM (16th) as winds shift WNW.
- Dry conditions expected Tuesday to Friday.

HIGHWAY IMPACTS:

Priority Locations:

Highway 7 - Seabird Island

- Highway 7 is closed between Wahleach Road to Johnson Slough.
- Two debris flows and down powerlines across the highway.
- Currently 175 vehicles, with approximately 250 people stranded between the debris flows. No injuries reported.
- Air evacuations are underway, approximately half of the stranded individuals have been relocated to Seabird Island Band community gym.
- Emergency crews and heavy equipment currently staged on either side of the closure.
- There 6 pieces of equipment on the Wahleach (west end) and then 3 pieces at Johnson slough side.
- EAM has broken ground, and are actively excavating the east side and west as slides have temporarily stopped.
- ETO: Unknown assessment in progress

Highway 7 – Haig Bluffs

- Highway 7 between Johnson Slough and Haig
- A debris flow that has covered all travel lanes, as well as BC Hydro lines.
- Approximately 700 vehicles are trapped.
- Trapped vehicles to routed to Hope once the slide is cleared.
- BC Hydro on scene and has given the go ahead to begind work on the east end
 of the highway.
- EAM on scene with 2 pieces of heavy equipment to begin clearing the debris.
- ETO: Unknown assessment in progress

Highway 1 - Popkum

- Highway 1 is closed between Popkum and Hope (Highway 9 exit to Flood-Hope Fxit).
- Multiple debris flows across all travel lanes in both directions (5 known sites).
- No people trapped.
- Geotech on route. Geotech assessment required prior to any cleanup activities.
- Equipment is currently being deployed to the west and east end of the closure.
- ETO: Unknown assessment in progress

Highway 1 - Fraser Canyon

- Highway 1 closed between Hope and Spences Bridge
- There is a washout at Hells Gate and Alexandra bridge. Water has overtopped the highway and eroding the shoulders and travel lanes.

- No people trapped.
- Excavator and loader on site working.
- ETO: Unknown assessment in progress

Highway 1 – Abbotsford

- Sumas River and Nooksack River are currently on the brink of flooding the Sumas Prairie (Cole Rd to Whatcom Rd).
- In preparation we will be proactively closing Highway 1 in both directions from Highway 11 to No. 3 Rd at 1900 hrs.

Highway 3 – Sunshine Valley

- Highway 3 closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway.
- All stranded individuals have been transported to Manning Park.
- Heavy equipment and responders are on route.
- ETO: Unknown assessment in progress

Hwy 5 – Hope to Merritt

- Othello:
 - Both southbound lanes have been washed away.
 - Heavy washout with debris, mud, and water on road.
 - Loader on-site, team is organizing excavator to mobilize in the morning for immediate response
 - ETO: Unknown assessment in progress
- Sowoqua
 - The southbound Sowoqua structure has been washed away.
- Dewdnev Creek:
 - Debris flow that is covering all the travel lanes.
 - Assessment in progress
- 10 Mile Creek
 - o Highway 5 is closed between 10 Mile Creek and Portia Interchange.
 - Two debris flows across travel lanes.
 - Valley Helicopter has evacuated all 19 stranded individuals to Hope.
 - Once flows subside and Geotech assessment takes place crews will begin work on the debris flows.
 - Heavy machinery is at site and additional machinery is on route.
 - ETO: Unknown assessment in progress

Hwy 7 - Mt Woodside

- Highway 7 closed between Highland Blvd to Bodher Road
- Rock fall with debris and water flowing down the hillside onto the roadway.
- Geotech assessment pending. Assessment required prior to initiating cleanup activities.
- 1 loader on site.
- ETO: Unknown assessment in progress

Other Locations:

Highway 7 - Maple Ridge

- Highway 7 is closed between 240th Street to 272nd Street
- Water and debris on the highway.
- Water has subsided and currently working to clear the mud on the roadway.
- ETO: 1900 hrs

Highway 11 - Mission

 Highway is closed at Hazelwood Drive and Valley Rd due to flooding across the highway near Willband Creek Park.

Columbia Valley Road – Chilliwack

- Road closed at Lakeshore Drive due to a washed out culvert
- High water flow has overwhelmed culvert and undermined the road
- FVRD has initiated Sleepy Hollow Protocol initiated Detour established through the Soowahlie Reserve, first responders on-scene maintaining the closure.

Rockwell Drive - District of Kent

- Rockwell Drive closed at Lillooet Drive.
- Losing asphalt in 3 places at Green Point Park
- Residents have been evacuated by local RCMP/Fire. Debris flow cleared to support evacuation.
- Excavator and loader on site.

Hatzic Prairie

- Multiple sideroad closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer,
 Sylvester at Kontney and Seux, and many other smaller isolated flows

Hwy 13 - Aldergrove

- Southbound ramp to Hwy 1 eastbound has flooded and ramp is closed
 Hwy 99 Richmond
 - Highway 99 closed between Westminster Hwy and Oak Street Bridge
 - All lanes flooded.

UBC

Chancellor Blvd has reopned in both directions.

NEXT UPDATE:

Monday, Nov 16 at 0900 hrs

Regards,

Elena

Elena Farmer (she/her/hers)

District Manager, Transportation

Lower Mainland District | South Coast Region

Ministry of Transportation and Infrastructure

1500 Woolridge Street, Coquitlam, BC V3K 0B8

P: 236-468-1935

E: Elena.Farmer@gov.bc.ca

From: Farmer, Elena TRAN:EX

Sent: November 15, 2021 2:03 PM

To: Bhatti, Ashok A TRAN:EX (Ashok.Bhatti@gov.bc.ca) <Ashok.Bhatti@gov.bc.ca>;

Staite, Janelle A TRAN:EX (<u>Janelle.Staite@gov.bc.ca</u>) < <u>Janelle.Staite@gov.bc.ca</u>>;

Richter, Kevin J TRAN:EX <Kevin.Richter@gov.bc.ca>; Pilkington, Ian TRAN:EX

<lan.Pilkington@gov.bc.ca>; Ludwar, Kenedee TRAN:EX <Kenedee.Ludwar@gov.bc.ca>;

Pearson, Michael TRAN:EX (Michael.Pearson@gov.bc.ca)

< Michael. Pearson@gov.bc.ca>; Crebo, David GCPE: EX < David. Crebo@gov.bc.ca>;

Bowness, Lisanne GCPE:EX <Lisanne.Bowness@gov.bc.ca>; Craig GCPE:EX Chambers

(<u>Craig.Chambers@gov.bc.ca</u>) < <u>Craig.Chambers@gov.bc.ca</u>>; Lolacher, Russel TRAN:EX

<Russel.Lolacher@gov.bc.ca>

Cc: Stevenson, Christie TRAN:EX (Christie.Stevenson@gov.bc.ca)

<<u>Christie.Stevenson@gov.bc.ca</u>>; Bonhomme, Korry TRAN:EX

<Korry.Bonhomme@gov.bc.ca>; Bui, Phu TRAN:EX <Phu.Bui@gov.bc.ca>

Subject: RE: DOC Situation Report #3 - Monday, Nov 15 1400hrs Good afternoon,

Find below the Situation Report #3 for the Atmospheric River Event. New or updated information has been highlighted in red.

KEY INFORMATION:

- LMD DOC activated to support highway closures related to flooding and landslides caused by the Atmospheric River
- Rainfall warnings have ended.
- Wind warning in effect for Howe Sound and Fraser Valley.
- Flood Watch in effect for Fraser Valley and tributaries, Fraser Canyon and tributaries and Chilliwack River

WEATHER FORECAST:

- Precipitation: 15-25 mm rain expected through to 17:00 18:00 this afternoon.
 Dry this evening and overnight
- Winds & Gusts: Strong SSE winds continue with gusts up to 55-65 km/h tapering off by midnight turning.
- Temperatures: Current 12°C. Snow Levels dropping to 500-400m early Tuesday AM (16th) as winds shift WNW.
- Dry conditions expected Tuesday to Friday.

HIGHWAY IMPACTS:

Priority Locations:

Highway 7 - Seabird Island

- Highway 7 is closed between Walheach Road to Johnson Slough.
- Two debris flows and down powerlines across the highway.
- Currently 175 vehicles, with approximately 250 people stranded between the debris flows. No injuries reported.
- Agassiz EOC is activated and working on the excavation of the stranded individuals.
- Air evacuations are underway, approximately half of the stranded individuals have been relocated to Seabird Island Band community gym.
- Emergency crews and heavy equipment currently staged on either side of the closure.
- There 6 pieces of equipment on the Walheach (west end) and then 3 pieces at Johnson slough side.
- EAM has broken ground, and are actively excavating the east side and west as slides have temporarily stopped.
- ETO: Unknown assessment in progress

Highway 7 – Haig Bluffs

- Highway 7 between Johnson Slough and Haig
- A debris flow that has covered all travel lanes, as well as BC Hydro lines.
- Approximately 700 vehicles are trapped.
- Two pieces of heavy equipment mobilizing to Haig (east side).
- ETO: Unknown assessment in progress

Highway 1 - Popkum

- Highway 1 is closed between Popkum and Hope (Highway 9 exit to Flood-Hope Exit).
- Multiple debris flows across all travel lanes in both directions (5 known sites).
- No people trapped.
- Geotech on route. Geotech assessment required prior to any cleanup activities.
- Equipment is currently being deployed to the west and east end of the closure.

ETO: Unknown – assessment in progress

Highway 1 – Fraser Canyon

- Highway 1 closed between Hope and Spences Bridge
- There is a washout at Hells Gate and Alexandra bridge. Water has overtopped the highway and eroding the shoulders and travel lanes.
- No people trapped.
- Excavator and loader on site working.
- ETO: Unknown assessment in progress

Highway 3 – Sunshine Valley

- Highway 3 closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway.
- All stranded individuals have been transported to Manning Park.
- Heavy equipment and responders are on route.
- ETO: Unknown assessment in progress

Hwy 5 – Hope to Merritt

- Othello:
 - Both southbound lanes have been washed away.
 - Heavy washout with debris, mud, and water on road.
 - Loader on-site, team is organizing excavator to mobilize in the morning for immediate response
 - ETO: Unknown assessment in progress
- Sowoqua
 - The southbound Sowoqua structure has been washed away.
- Dewdney Creek:
 - o Debris flow that is covering all the travel lanes.
 - Assessment in progress
- 10 Mile Creek
 - o Highway 5 is closed between 10 Mile Creek and Portia Interchange.
 - Two debris flows across travel lanes.
 - Valley Helicopter has evacuated all 19 stranded individuals to Hope.
 - Once flows subside and Geotech assessment takes place crews will begin work on the debris flows.
 - Heavy machinery is at site and additional machinery is on route.
 - ETO: Unknown assessment in progress

Hwy 7 - Mt Woodside

- Highway 7 closed between Highland Blvd to Bodher Road
- Rock fall with debris and water flowing down the hillside onto the roadway.
- Geotech assessment pending. Assessment required prior to initiating cleanup activities.
- 1 loader on site.
- ETO: Unknown assessment in progress

Other Locations:

Highway 7 - Maple Ridge

- Highway 7 is closed between 240th Street to 272nd Street
- Water and debris on the highway.

Highway 11 - Mission

 Highway is closed at Hazelwood Drive and Valley Rd due to flooding across the highway near Willband Creek Park.

Columbia Valley Road – Chilliwack

Road closed at Lakeshore Drive due to a washed out culvert

- High water flow has overwhelmed culvert and undermined the road
- FVRD has initiated Sleepy Hollow Protocol initiated Detour established through the Soowahlie Reserve, first responders on-scene maintaining the closure.

Rockwell Drive - District of Kent

- Rockwell Drive closed at Lillooet Drive.
- Losing asphalt in 3 places at Green Point Park
- Residents have been evacuated by local RCMP/Fire. Debris flow cleared to support evacuation.
- Excavator and loader on site.

Hatzic Prairie

- Multiple sideroad closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer,
 Sylvester at Kontney and Seux, and many other smaller isolated flows

Hwy 13 - Aldergrove

- Southbound ramp to Hwy 1 eastbound has flooded and ramp is closed
 Hwy 99 Richmond
 - Highway 99 closed between Westminster Hwy and Oak Street Bridge
 - All lanes flooded.

UBC

Chancellor Blvd closed due to flooding and downed trees.

NEXT UPDATE:

Monday, Nov 15 at 1600 hrs

Regards,

Elena

Elena Farmer (she/her/hers)

DOC Director

P: 236-468-1935

E: Elena.Farmer@gov.bc.ca

From: Farmer, Elena TRAN:EX

Sent: November 15, 2021 12:01 PM

To: Bhatti, Ashok A TRAN:EX (<u>Ashok.Bhatti@gov.bc.ca</u>) < <u>Ashok.Bhatti@gov.bc.ca</u>>;

Staite, Janelle A TRAN:EX (Janelle.Staite@gov.bc.ca) < Janelle.Staite@gov.bc.ca>;

Richter, Kevin J TRAN:EX < Kevin.Richter@gov.bc.ca>; Pilkington, Ian TRAN:EX

<lan.Pilkington@gov.bc.ca>; Ludwar, Kenedee TRAN:EX < Kenedee.Ludwar@gov.bc.ca>;

Pearson, Michael TRAN:EX (Michael.Pearson@gov.bc.ca)

<<u>Michael.Pearson@gov.bc.ca</u>>; Crebo, David GCPE:EX <<u>David.Crebo@gov.bc.ca</u>>;

Bowness, Lisanne GCPE:EX < Lisanne.Bowness@gov.bc.ca >; Craig GCPE:EX Chambers

(<u>Craig.Chambers@gov.bc.ca</u>) < <u>Craig.Chambers@gov.bc.ca</u>>; Lolacher, Russel TRAN:EX

<<u>Russel.Lolacher@gov.bc.ca</u>>

Cc: Stevenson, Christie TRAN:EX (Christie.Stevenson@gov.bc.ca)

<Christie.Stevenson@gov.bc.ca>; Bonhomme, Korry TRAN:EX

<Korry.Bonhomme@gov.bc.ca>; Bui, Phu TRAN:EX <Phu.Bui@gov.bc.ca>

Subject: RE: DOC Situation Report #2 - Monday, Nov 15 1200hrs

Good morning

Find below the Situation Report #2 for the Atmospheric River Event. New or updated information has been highlighted in red.

KEY INFORMATION:

- LMD DOC activated to support highway closures related to flooding and landslides caused by the Atmospheric River
- Rainfall warnings have ended.

- Wind warning in effect for Howe Sound and Fraser Valley.
- Flood Watch in effect for Fraser Valley and tributaries, Fraser Canyon and tributaries and Chilliwack River

WEATHER FORECAST:

- Precipitation: 15-25 mm rain expected through to 17:00 18:00 this afternoon.
 Dry this evening and overnight
- Winds & Gusts: Strong SSE winds continue with gusts up to 55-65 km/h tapering off by midnight turning.
- Temperatures: Current 12°C. Snow Levels dropping to 500-400m early Tuesday AM (16th) as winds shift WNW.
- Dry conditions expected Tuesday to Friday.

HIGHWAY IMPACTS:

Priority Locations:

Highway 7 - Seabird Island

- Highway 7 is closed between Walheach Road to Johnson Slough.
- Two debris flows and down powerlines across the highway.
- Currently 175 vehicles, with 250 people stranded between the debris flows. No injuries reported.
- Agassiz EOC is activated and working on the excavation of the stranded individuals.
- Emergency crews and heavy equipment currently staged on either side of the closure.
- An excavator and loader at each end. Additional equipment on route.
- EAM has broken ground, and are actively excavating the east side and west as slides have temporarily stopped.
- ETO: Unknown assessment in progress

Highway 1 - Popkum

- Highway 1 is closed between Popkum and Hope (Highway 9 exit to Flood-Hope Exit).
- Multiple debris flows across all travel lanes in both directions (5 known sites).
- No people trapped.
- Geotech on route. Geotech assessment required prior to any cleanup activities.
- Equipment is currently being deployed to the west and east end of the closure.
- ETO: Unknown assessment in progress

Highway 1 – Fraser Canyon

- Highway 1 closed between Hope and Spences Bridge
- There is a washout at Hells Gate and Alexandra bridge. Water has overtopped the highway and eroding the shoulders and travel lanes.
- No people trapped.
- Excavator and loader on site working.
- ETO: Unknown assessment in progress

Highway 3 – Sunshine Valley

- Highway 3 closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway.
- All stranded individuals have been transported to Manning Park.
- Heavy equipment and responders are on route.
- ETO: Unknown assessment in progress

Hwy 5 – Hope to Merritt

• Othello:

- Both southbound lanes have been washed away. Status of northbound lanes unknown.
- Heavy washout with debris, mud, and water on road.
- Loader on-site, team is organizing excavator to mobilize in the morning for immediate response
- ETO: Unknown assessment in progress
- Dewdney Creek:
 - Debris flow that is covering all the travel lanes.
 - Assessment in progress
- 10 Mile Creek
 - Highway 5 is closed between 10 Mile Creek and Portia Interchange.
 - Two debris flows across travel lanes.
 - Valley Helicopter has evacuated all 19 stranded individuals to Hope.
 - Once flows subside and Geotech assessment takes place crews will begin work on the debris flows.
 - Heavy machinery is at site and additional machinery is on route.
 - ETO: Unknown assessment in progress

Hwy 7 - Mt Woodside

- Highway 7 closed between Highland Blvd to Bodher Road
- Rock fall with debris and water flowing down the hillside onto the roadway.
- Geotech assessment pending. Assessment required prior to initiating cleanup activities.
- 1 loader on site.
- ETO: Unknown assessment in progress

Other Locations:

Highway 7 - Maple Ridge

- Highway 7 is closed between 240th Street to 272nd Street
- Water and debris on the highway.

Highway 11 - Mission

 Highway is closed at Hazelwood Drive and Valley Rd due to flooding across the highway near Willband Creek Park.

Columbia Valley Road - Chilliwack

- Road closed at Lakeshore Drive due to a washed out culvert
- High water flow has overwhelmed culvert and undermined the road
- FVRD has initiated Sleepy Hollow Protocol initiated Detour established through the Soowahlie Reserve, first responders on-scene maintaining the closure.

Rockwell Drive - District of Kent

- Rockwell Drive closed at Lillooet Drive.
- Losing asphalt in 3 places at Green Point Park
- Residents have been evacuated by local RCMP/Fire. Debris flow cleared to support evacuation.
- Excavator and loader on site.

Hatzic Prairie

- Multiple sideroad closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer,
 Sylvester at Kontney and Seux, and many other smaller isolated flows

Hwy 13 - Aldergrove

- Southbound ramp to Hwy 1 eastbound has flooded and ramp is closed
 Hwy 99 Richmond
 - Highway 99 closed between Westminster Hwy and Oak Street Bridge

All lanes flooded.

UBC

Chancellor Blvd closed due to flooding and downed trees.

NEXT UPDATE:

Monday, Nov 15 at 1400 hrs

Regards,

Elena

Elena Farmer (she/her/hers)

DOC Director

P: 236-468-1935

E: Elena.Farmer@gov.bc.ca

From: Farmer, Elena TRAN:EX

Sent: November 15, 2021 10:41 AM

To: Bhatti, Ashok A TRAN:EX (Ashok.Bhatti@gov.bc.ca) < Ashok.Bhatti@gov.bc.ca>;

Staite, Janelle A TRAN:EX (Janelle.Staite@gov.bc.ca;

Richter, Kevin J TRAN:EX <Kevin.Richter@gov.bc.ca>; Pilkington, Ian TRAN:EX

Ludwar, Kenedee TRAN:EX < Kenedee.Ludwar@gov.bc.ca>;

Pearson, Michael TRAN:EX (Michael.Pearson@gov.bc.ca)

< Michael. Pearson@gov.bc.ca>; Crebo, David GCPE: EX < David. Crebo@gov.bc.ca>;

Bowness, Lisanne GCPE:EX < Lisanne.Bowness@gov.bc.ca >; Craig GCPE:EX Chambers

(<u>Craig.Chambers@gov.bc.ca</u>) < <u>Craig.Chambers@gov.bc.ca</u>>; Lolacher, Russel TRAN:EX

<Russel.Lolacher@gov.bc.ca>

Cc: Stevenson, Christie TRAN:EX (Christie.Stevenson@gov.bc.ca)

<<u>Christie.Stevenson@gov.bc.ca</u>>; Bonhomme, Korry TRAN:EX

<Korry.Bonhomme@gov.bc.ca>; Bui, Phu TRAN:EX <Phu.Bui@gov.bc.ca>

Subject: DOC Situation Report #1 - Monday, Nov 15 1030hrs

Good morning,

Find below the Situation Report for the Atmospheric River Event:

KEY INFORMATION:

- LMD DOC activated to support highway closures related to flooding and landslides caused by the Atmospheric River
- Rainfall warning in effect for Metro Vancouver, Fraser Valley, Howe Sound, Sunshine Coast
- Flood Watch in effect for Fraser Valley and tributaries, Fraser Canyon and tributaries and Chilliwack River

WEATHER FORECAST:

- Monday AM Rain at times heavy ending early in the afternoon then cloudy with 60 percent chance of showers. Amount 15 to 25 mm. Wind south 40 km/h gusting to 60 becoming west 30 gusting to 50 near noon. Temperature falling to plus 5 in the afternoon
- Monday PM Mainly cloudy with 40 percent chance of showers in the evening and after midnight. Clearing before morning. Wind west 30 km/h gusting to 50 becoming light in the evening. Low plus 3.

HIGHWAY IMPACTS:

Priority Locations:

Highway 7 - Seabird Island

- Highway 7 is closed between Walheach Road to Johson Slough
- Two debris flows and down powerlines across the highway.
- Emergency crews and heavy equipment currently staged on either side of the closure.

- Currently 175 vehicles, with 250 people stranded between the debris flows. No injuries reported.
- EAM has broken ground, and are actively excavating the east side and west as slides have temporarily stopped.
- ETO: Unknown assessment in progress

Highway 1

- Highway 1 is closed between Popkum and Hope (Highway 9 exit to Flood-Hope Exit).
- Multiple debris flows across all travel lanes in both directions (5 known sites).
- No people trapped.
- Equipment is currently being deployed to the west and east end of the closure.
- Geotech assessment pending.
- ETO: Unknown assessment in progress

Highway 3 – Sunshine Valley

- Highway 3 closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway.
- All stranded individuals have been transported to Manning Park
- Heavy equipment and responders are on route.
- ETO: Unknown assessment in progress

Hwy 5 - Othello

- Both southbound lanes have been washed away.
- · Heavy washout with debris, mud, and water on road
- Loader on-site, team is organizing excavator to mobilize in the morning for immediate response
- ETO: Unknown assessment in progress

Highway 5 – 10 Mile Creek

- Highway 5 is closed between 10 Mile Creek and Portia Interchange.
- Two debris flows across travel lanes.
- Valley Helicopter has evacuated all 20 stranded individuals to Hope.
- Once flows subside and Geotech assessment takes place crews will begin work on the debris flows.
- Heavy machinery is at site and additional machinery is on route.
- ETO: Unknown assessment in progress

Hwy 7 - Mt Woodside

- Highway 7 closed between Highland Blvd to Bodher Road
- Water is flowing down and pooling significantly
- Rocks falling in the vicinity of the water flow, unable to safely operate equipment
- Excavator on route
- ETO: Unknown assessment in progress

Other Locations:

Highway 7 - Maple Ridge

- Highway 7 is closed between 240th Street to 272nd Street
- Water and debris on the highway.

Highway 11

 Highway is closed at Valley Rd due to flooding across the highway near Willband Creek Park.

Columbia Valley Road at Lakeshore Drive

Road closed at Lakeshore Drive due to a washed out culvert

- Detour established through the Native reserve, first responders on-scene maintaining the closure
- High water flow has overwhelmed culvert and undermined the road

Rockwell Drive

- Losing asphalt in 3 places at Green Point, risk is high around 3380 Rockwell Drive where flow rate is significantly higher than drainage sizing.
- Residents have been evacuated along Green Point and RCMP/Fire are going door-to-door notifying residents of the hazards
- Debris flow cleared at 3380 with loader to allow residents to get away from rapidly deteriorating asphalt
- EAM managing closure until Dynasty Traffic on-site to relieve, ETA 30-60 min
- On 300 street tracked excavator arrival, crews will begin clearing facilitating drainage

Hemlock Valley Road

- Flashing arrow board at Seabird advising of closures further up
- Initial reports indicate drainage appliances working correctly

Farms Road

- Road closed
- Road is under water between Dale Road and Stave Lake Road

Dale Road

- Road is closed
- Road is under water

Various locations

- Isolated pooling into travelled lanes in many locations in Agassiz area
- Significant flow across roads at Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows
- Large concrete box culvert installed on Sylvester last year is beyond capacity and underwater
 - Overflow path maxed out and water pooling on road
 - Flow is leading to Lundgren which may be at risk

Hwy 13

Southbound ramp to Hwy 1 eastbound has flooded and Ramp is closed

Hwy 10

• Eastbound at 177B fast lane blocked with vactor truck parked on sanitary manhole lid, raw sewage floating out Surrey looking after it

Hwv 99

- South and northbound between Shell Rd and Westminster Hwy slow lanes flooded as well as ramps to Hwy 91 closed
- Currently one lane in each direction remain open, plan is to close it in both directions. On site assessing.

Hwy 91

- Westbound ½ km west of Westminster Hwy still need to repair fire hyd and repave shoulder, Richmond doing the work
- Southbound at Cliveden slow lane flooded
- Nordel interchange minor flooding on a few ramps vehicles still getting through

HWY 91A

 Southbound ramp to Howes, right side of ramp flooded vehicles still getting through

NEXT UPDATE:

Monday, Nov 15 at 1200 hrs

Regards,

Elena Elena Farmer (she/her/hers) DOC Director

P: 236-468-1935

E: Elena.Farmer@gov.bc.ca

Shoquist, Sarah TRAN:EX

From: Liu, Ange TRAN:EX

Sent: November 18, 2021 3:16 PM

To: Ma, Bowinn TRAN:EX

Subject: Fwd: SIR Highway Status - 18 Nov 1500

Begin forwarded message:

From: "Liu, Ange TRAN:EX" <Ange.Liu@gov.bc.ca>
Date: November 18, 2021 at 3:12:16 PM PST

To: "Crebo, David GCPE:EX" < David.Crebo@gov.bc.ca>

Subject: Re: SIR Highway Status - 18 Nov 1500

Thanks Dave

On Nov 18, 2021, at 3:09 PM, Crebo, David GCPE:EX <David.Crebo@gov.bc.ca> wrote:

From: Williams, Austin TRAN:EX <Austin.Williams@gov.bc.ca>

Sent: November 18, 2021 3:09 PM

To: TRAN SIR Incidents <SIRINCS@Victoria1.gov.bc.ca>; Newby, Deborah TRAN:EX

<Deborah.Newby@gov.bc.ca>; Prendergast, Peter L TRAN:EX

<Peter.Prendergast@gov.bc.ca>; Sirett, Steve TRAN:EX <Steve.Sirett@gov.bc.ca>;

Cousins, Paula TRAN:EX <Paula.Cousins@gov.bc.ca>

Cc: Bhatti, Ashok A TRAN:EX <Ashok.Bhatti@gov.bc.ca>; Hinze, Dawn TRAN:EX

<Dawn.Hinze@gov.bc.ca>; Halwani, Lina TRAN:EX <Lina.Halwani@gov.bc.ca>; Staite,

Janelle A TRAN:EX <Janelle.Staite@gov.bc.ca>; Porter, Jay C TRAN:EX

<Jay.Porter@gov.bc.ca>; Hayre, Courtney TRAN:EX <Courtney.Hayre@gov.bc.ca>;

Persello, Brent LTRAN:EX <Brent.Persello@gov.bc.ca>

Subject: RE: SIR Highway Status - 18 Nov 1500

Operational Highlights

- Hwy 99 2 lanes open for emergency response. Closed to all traffic. Still RCMP & SAR Response in area.(Sensitive – NOT FOR DISTRIBUTION)
- Tulameen and Coalmont access established
- Hwy 3 in SIR Open (East of Fernie and East of Princeton)
- Details incoming on additional significant washouts on Hwy 8.

Southern Interior

Hwy 5 - Hope to Merritt

- Closed
- Kilometers of highway (numerous locations) impacted with debris on highway and areas where the shoulders and lanes have been eroded. 8 washouts identified between Kingsvale to Portia
- Othello Both SB lanes have been washed away ~1 km.

- · Othello Bridge impacted by debris
- Jessica Bridge 2 bridge jump spans lost
- Caroline Bridge bridge approach fills eroded
- Juliet Bridge 2 bridge jump spans compromised
- Bottletop Bridge 3 bridge jump spans lost and substantial approach fill erosion
- Brodie Bridge bridge abutment compromised
- Hwy 5 Larson Hill SB Mudslide cleared

Highway 1 – Fraser Canyon (South Coast and Southern Interior)

- Closed between Hope and Spences Bridge.
- Significant failures at Nicomen Bridge, Tank Hill and Jackass Mountain.
 - Additional debris and erosion around Tank Hill washout site 3 known sites.
- Other areas with shoulder/lane erosion and debris on road.
- Emergency access available between Hope and Boston Bar.
- Heavy equipment working on debris and erosion areas.
- ETO: plans being developed for significantly impacted areas

Hwy 99 @ 30-42km S of Lillooet

- Closed at 35.5km south of Seton Lake Road
- 3 slides in close vicinity have closed highway in both directions at a location not known for slides
- Geotechnical approval for work in daylight hours received today and work began in coordination with SARS and RCMP.
- RCMP and forensic on site
- 1 excavator, 1 wheel loader, 3 dump trucks on site removing debris and 1 vehicle. Approximately 1000m3 debris removed.
- (Internal) Path through debris established Wednesday evening (Nov 17).
 Intended for emergency vehicles
- Clearing continues today November 18

Princeton sideroads

- Will be removed going forward
- Heavy equipment working to restore access.
- Access to Communities of Tulameen and Colemont have established. There is
 one residence that does not have access that search and rescue is conforming
 status today.

Other Major Highways

Highway 8 @ Merritt to Spences Bridge

- Closed between Merritt and Spences Bridge
- Multiple significant sections of the highway are completely washed out.
- Rattlesnake Bridge washed out. Three Mile Bridge approach washed out.
- Approximately 13 very significant washout sites in addition to bridges.
- Side roads/bridges compromised and Working with local and Indigenous governments to coordinate and support impacted residents
 - Alternate route being established by FLNRORD/contractor in vicinity of Canford bridge.
- Spius FSR FLROROD Bridge in service with 5000kg limit FLNRORD Engineer providing initial access. Need to get MOTI engineer to provide assessment.

Highway 3 @ Hartley Creek 4km east of Fernie

- OPEN; <u>Expect Minor Delays</u> equipment still working on site. DriveBC updated;
 Social Media Updated. Will be removed going forward.
- Cokado rd access partially restored. All residents have access.

- Equipment on site to control water
- 13 pieces of equipment working

Austin Williams MSM, CD, MBA

MROC Planning Chief | Southern Interior Region Ministry of Transportation and Infrastructure | 447 Columbia St., Kamloops, BC V2C 2T3 Cell: 778-694-1433

From: Richter, Kevin J TRAN:EX
Sent: November 15, 2021 11:14 AM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Sirett, Steve TRAN:EX; Cousins, Paula TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Gedney,

Vanessa R TRAN:EX

Subject: Update: 11:00, Weather Closures on Provincial Highways & Roads

HIGHWAY IMPACTS:

South Coast Region

Highway 7 - Seabird Island

- •Closed between Walheach Road to Johson Slough •Two debris flows and down powerlines across the highway.
- Emergency crews and heavy equipment currently staged on either side of the closure.
- Currently 175 vehicles, with 250 people stranded between the debris flows. No injuries reported.
- Heavy equipment actively excavating the east side and west sides.
- •ETO: Unknown assessment in progress

Highway 1

- •Closed between Popkum and Hope (Highway 9 exit to Flood-Hope Exit).
- Multiple debris flows across all travel lanes in both directions (5 known sites).
- No people trapped.
- Heavy equipment on both sides of closure.
- Geotech assessment pending.
- •ETO: Unknown assessment in progress

Highway 3 – Sunshine Valley

- Closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1) Multiple debris flows across the highway.
- •All stranded individuals have been transported to Manning Park •Heavy equipment on site.
- •ETO: Unknown assessment in progress

Highway 5 - Othello

- Closed.
- Both southbound lanes have been washed away.
- Heavy washout with debris, mud, and water on road Heavy equipment on site.
- •ETO: Unknown assessment in progress

Highway 5 – 10 Mile Creek

- •Closed between 10 Mile Creek and Portia Interchange.
- •Two debris flows across travel lanes.
- Valley Helicopter has evacuated all 20 stranded individuals to Hope.
- •Once flows subside and Geotech assessment takes place crews will begin work on the debris flows.
- Heavy machinery on site.
- •ETO: Unknown assessment in progress

Highway 7 - Mt Woodside

- •Closed between Highland Blvd to Bodher Road •Water is flowing down and pooling significantly •Rocks falling in the vicinity of the water flow, unable to safely operate equipment •Heavy equipment arriving.
- •ETO: Unknown assessment in progress

Other Locations:

Highway 7 - Maple Ridge

•Closed between 240th Street to 272nd Street •Water and debris on the highway.

Highway 11

•Closed at Valley Rd due to flooding across the highway near Willband Creek Park.

Columbia Valley Road at Lakeshore Drive

•Closed at Lakeshore Drive due to a washed out culvert •Detour established through the FN reserve, first responders on-scene maintaining the closure •High water flow has overwhelmed culvert and undermined the road

Rockwell Drive

- •Losing asphalt in 3 places at Green Point, risk is high around 3380 Rockwell Drive where flow rate is significantly higher than drainage sizing.
- •Residents have been evacuated along Green Point and RCMP/Fire are going door-to-door notifying residents of the hazards •Debris flow cleared at 3380 with loader to allow residents to get away from rapidly deteriorating asphalt
- •Managing closure until Dynasty Traffic on-site to relieve, ETA 30-60 min •On 300 street tracked excavator arrival, crews will begin clearing facilitating drainage

Hemlock Valley Road

•Flashing arrow board at Seabird advising of closures further up •Initial reports indicate drainage appliances working correctly

Farms Road

- Road closed
- •Road is under water between Dale Road and Stave Lake Road

Dale Road

- Road closed
- Road is under water

Various locations

•Isolated pooling into travelled lanes in many locations in Agassiz area •Significant flow across roads at Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows •Large concrete box culvert installed on Sylvester last year is beyond capacity and underwater oOverflow path maxed out and water pooling on road oFlow is leading to Lundgren which may be at risk

Highway 13

•SB ramp to Hwy 1 eastbound has flooded and Ramp is closed

Highway 10

•EB at 177B fast lane blocked with vactor truck parked on sanitary manhole lid, raw sewage floating out Surrey looking after it

Highway 99

•SB and NB between Shell Rd and Westminster Hwy slow lanes flooded as well as ramps to Hwy 91 closed •Currently one lane in each direction remain open, plan is to close it in both directions. On site assessing.

Highway 91

•WB ½ km W of Westminster Hwy still need to repair fire hyd and repave shoulder, Richmond doing the work •SB at Cliveden slow lane flooded •Nordel interchange minor flooding on a few ramps vehicles still getting through

Highway 91A

•SB ramp to Howes, right side of ramp flooded vehicles still getting through

Highway 14 - E of Sooke

- •Closed at Impala Road.
- •Flooding over the barrier across both lanes
- •Water level between 1-2 meters deep.
- •No detour available as local roads are flooded.
- •ETO: Unknown assessment in progress

Highway 1 - Duncan

- •Closed at Mt Sicker Road
- Flooding over the barrier across both lanes
- •Water level between 1-1.5 meters deep.
- •No detour available
- •ETO: Unknown assessment in progress

Highway 1 - Malahat

- Closed Tunnel Hill
- Flooding over the barrier across both lanes
- •Water level between 1-1.5 meters deep.
- •No detour available
- •ETO: Unknown assessment in progress

Other Locations:

Briarwood Road (Shawnigan Lake area)

- Road and culvert washed out.
- •High water levels continue and temporary bridge has been requested.
- Residents are trapped.
- •ETO: Unknown assessment in progress

Significant flooding on local side roads however too any to mention.

SIR

Highway 5 Coquihalla

- Closed in both directions between Hope and Merritt
- •Continuing to see heavy rain across corridor, 196mm of rain fell over last 36 hours (as of 6am) at Coquihalla Summit
- •Helicopter flight is on standby due to weather
- •Significant damage to both the highway and structures (Bottle Top Bridge) but not a full picture yet.
- Expecting Coquihalla to be closed for multiple days.

Highway 1 – Fraser Canyon

•Closed at Spences Bridge.

• Debris flows have been identified south of Lytton at Tank Hill and other locations are also seeing mud across the highway.

Highway 1 - Kamloops to Golden

- •One lane open.
- Debris removal in progress.

Highway 3 – Princeton

- Closed
- •Flooding over road.
- •Once water recedes, we will assess the damage.

Highway 3 - Fernie

- Closed
- Flooding with a local detour in place
- •We assess when water levels recede.

Highway 5A – Princeton

- Open
- •Water has receded and safe to open.

Highway 23 north of Nakusp

- Reports of a slide.
- •Staff are on route to investigate.

Highway 99 35 km W of Lillooet

- •Closed in both directions due to a mudslide
- ·Confirming details.

MoTI and MC staff and equipment have been fully deployed during the weekend, day and night.

MEDIA CALLS

- -09:00 call this morning when well with Minister Farnworth: Paula and Janelle provided technical support
- -scheduled 15:00 media call today, GCPE to provide details

From: Richter, Kevin J TRAN:EX
Sent: November 14, 2021 2:33 PM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Cousins, Paula TRAN:EX; Sirett, Steve TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Gedney, Vanessa

R TRAN:EX

Subject: Update 14:20: Closures: Highway 1 (Fraser Canyon) & Highway 5 (Coquihalla) and Highway 1

(Fraser Valley)

Highway 1 between Popkum and Hope also impacted (Fraser valley).

Multiple locations where creeks have jumped their banks and culverts have been filled with debris resulting in water flowing across the highway.

Considering closure of Highway 1 and diverting traffic to Highway 7.

MC and moti staff fully deployed.

Sent from my iPhone

> On Nov 14, 2021, at 1:50 PM, Richter, Kevin J TRAN:EX <Kevin.Richter@gov.bc.ca> wrote:

>

- > Highway 1 closed due to rockfalls.
- > Highway 5 closed due water across the road and earth movement.
- > Areas are experiencing significant precipitation which is triggering multiple events along the corridors.
- > Geotech enroute to assess.
- > Roads closed due to high risk to public and workers.
- > Will update as more information becomes available.
- > Weather and topography negatively impacting communications.
- > Traffic being rerouted to Highway 3 and Highway 99.

>

> Sent from my iPhone

From: Richter, Kevin J TRAN:EX
Sent: November 15, 2021 4:33 PM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Sirett, Steve TRAN:EX; Cousins, Paula TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Gedney,

Vanessa R TRAN:EX

Subject: Update: 16:00, Nov 15, Weather Closures on Provincial Highways & Roads

South Coast Region Weather Forecast:

• Precipitation: 15-25 mm rain expected this afternoon. Dry this evening and overnight

- Winds & Gusts: Strong SSE winds continue with gusts up to 55-65 km/h tapering off by midnight.
- Temperatures: Current 12°C. Snow Levels dropping to 500-400m early Tuesday AM (16th) as winds shift WNW.
- Dry conditions expected Tuesday to Friday.

HIGHWAY IMPACTS:

Highway 7 - Seabird Island

- Closed between Walheach Road to Johnson Slough.
- Two debris flows and down powerlines across the highway.
- 175 vehicles stranded including approximately 250 people where ~70% have been airlifted out and the remainder will be evacuated tonight.
- No injuries reported.
- EMBC organized the airlift and was looking after the airlifted people.
- Heavy equipment working on the east side.
- West side still on hold till Geotech confirms it is safe.
- ETO: Unknown assessment in progress

Highway 7 – Haig Bluffs

- Closed between Johnson Slough and Haig
- A debris flow that has covered all travel lanes, as well as BC Hydro lines.
- Approximately 700 vehicles are trapped.
- Helicopters were not able to fly until this afternoon.
- BC Hydro have de- energized lines and heavy equipment has commenced debris removal.
- An emergency route will be created to allow travellers to get to Hope tonight.
- EMBC is working on accommodation for the travellers.
- ETO: Unknown assessment in progress

Highway 1 - Popkum

- Closed between Popkum and Hope (Highway 9 exit to Flood-Hope Exit).
- Multiple debris flows across all travel lanes in both directions (5 known sites).
- No people trapped.
- Geotech evaluating prior to cleanup activities.
- Equipment deployed to the west and east end of the closure.
- ETO: Unknown assessment in progress

Highway 1 – Abottsford

- Planning to close from Highway 11 to #3 Road due to flooding of the Sumas and Nooksack Rivers around 19:00.
- Proactive measure.

Highway 1 – Fraser Canyon

- Closed between Hope and Spences Bridge
- Washout at Hells Gate and Alexandra bridge.
- Water has overtopped the highway and eroding the shoulders and travel lanes.
- No people trapped.
- Heavy equipment on site working.
- ETO: Unknown assessment in progress

Highway 3 – Sunshine Valley

- Closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway.
- All stranded individuals have been transported to Manning Park.
- · Heavy equipment on site.
- ETO: Unknown assessment in progress

Hwy 5 – Hope to Merritt

- Othello:
 - Both SB lanes have been washed away.
 - Heavy washout with debris, mud, and water on road.
 - o Heavy equipment on-site.
 - ETO: Unknown assessment in progress
- Sowoqua
 - The SB Sowoqua structure has been washed away.
- Dewdney Creek:
 - Debris flow that is covering all the travel lanes.
 - Assessment in progress
- 10 Mile Creek
 - o Closed between 10 Mile Creek and Portia Interchange.
 - Two debris flows across travel lanes.
 - Valley Helicopter has evacuated all 19 stranded individuals to Hope.
 - Once flows subside and Geotech assessment takes place crews will begin work on the debris flows.
 - Heavy machinery is at site and additional machinery is on route.
 - ETO: Unknown assessment in progress

Hwy 7 - Mt Woodside

- Closed between Highland Blvd to Bodher Road
- Rock fall with debris and water flowing down the hillside onto the roadway.
- Geotech assessment pending. Assessment required prior to initiating cleanup activities.
- 1 loader on site.
- ETO: Unknown assessment in progress

Other Locations:

Highway 7 - Maple Ridge

- Highway 7 is closed between 240th Street to 272nd Street
- Water and debris on the highway.

Highway 11 - Mission

 Highway is closed at Hazelwood Drive and Valley Rd due to flooding across the highway near Willband Creek Park.

Columbia Valley Road - Chilliwack

- Closed at Lakeshore Drive due to a washed out culvert
- · High water flow has overwhelmed culvert and undermined the road
- FVRD has initiated Sleepy Hollow Protocol initiated Detour established through the Soowahlie Reserve, first responders on-scene maintaining the closure.

Rockwell Drive - District of Kent

- Closed at Lillooet Drive.
- Losing asphalt in 3 places at Green Point Park
- Residents have been evacuated by local RCMP/Fire. Debris flow cleared to support evacuation.
- · Heavy equipment on site.

Hatzic Prairie

- Multiple sideroad closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows

Hwy 13 - Aldergrove

• SB ramp to Hwy 1 eastbound has flooded and ramp.

Hwy 99 - Richmond

- Closed between Westminster Hwy and Oak Street Bridge
- All lanes flooded.

Highway 1 Duncan area

- Closed at Mt Sicker Road
- Flooding over the barrier across both lanes
- Water level between 1-1.5 meters deep.
- No detour available
- ETO: Unknown assessment in progress

Highway 1 Malahat

- Closed Tunnel Hill
- Flooding over the barrier across both lanes
- Barrier has been removed to assist with water level.
- Shoulder has eroded and exposed the Bin wall, and reduced the northbound lane by about ½ a lane.
- Scarp crack is forming in the median (unstable landslide).
- Bin wall has failed and has lost almost all fill.
- Road will not be open until further Geotech assessments can be made tomorrow.
- Water level between 1-1.5 meters deep.
- No detour available
- BC Ferries is attempting to increase sails to saltspring and brentwood bay
- ETO: Unknown assessment tomorrow

Highway 14 east of Sooke

- SLAT at Impala road between Gillespie and kangaroo road.
- Flooding across the road
- Water level between 1-2 meters deep. Water levels receding
- No detour available as local roads are flooded.
- ETO: Unknown assessment in progress,

Other Locations:

Briarwood Road (Shawnigan Lake area)

- Road and culvert washed out at approx. 2:30am,
- Temporary bridge is now on site, just waiting for Crane to arrive, work to begin as soon as possible.
- Residents (~3/4) are trapped.
- ETO: Unknown assessment in progress

Pacific marine circle route

- Route closed due to flooding on road at fairy lake currently 1-1.5 meters deep.
- No ETO, further assessment required.

Highway 4 at Kennedy Hill

- Closed due to large rock slide Rock Slide
- ETO 6PM for opening.

Stakeholder notifications

• We have reached out to the Halalt First nations and the Pacheedaht First nation, to see if we can provide any further assistance. Have not received a response as of yet.

Highway 1 - Lytton

- Closed S of Lytton
- Debris flows and substantial washouts have been identified south of Lytton at Tank Hill area.
- Highway requires major reconstruction at Tank Hill
- Nicomen Road has been washed out an cut off access\egress for Nicomen community.
- We are connecting with community to understand impacts and needs.
- EMBC has been informed.

Highway 1 - 3 Valley Gap

- Open to SLAT
- Heavy equipment working.

Highway 1 - Enchanted Forest (W of Revelstoke)

- Closed at enchanted forest
- Mudslide occurred at the Enchanted Forest and several creeks have jumped their banks.
- Assessment is in progress but there is a high likelihood the corridor will be closed overnight.

Highway 3 - Princeton

- Closed 12 km E of Princeton
- Continues to be underwater
- Once water recedes, we will assess the damage and determine ETO
- Communities of Coalmont and Tulameen are currently cut off due to washouts. RDOS is supporting communities.

Highway 3 – Fernie

- Closed 4 km E of Hartley Creek
- Heavy equipment on site working

- Local detour available
- Flooding on Highway 3 in Fernie has now subsided and open.

Highway 5A – Princeton

- Open
- Water has receded and safe to open.
- Will remove from future updates.

Highway 5 Coquihalla - Merritt to Hope

- Closed ~30 km S of Merritt
- Helicopter flight is on standby due to weather
- Bottletop southbound structure abutments have now been washed away.
 - o Bottletop Bridges both NB and SB have lost their abutments.
- SB lanes have been washed into Coldwater River between Juliet and Larson Hill
- Brodie Bridge crews haul rock in an attempt to mitigation erosion to abutment.
- Coldwater road also washed out in multiple locations.
- Significant damage to both the highway and structures between Mine Creek and Britton Creek
- Have not been able to assess area between Britton Creek and Portia.
- Expecting Coquihalla to be closed for multiple days.

Highway 8 - Merritt to Spences Bridge

- Closed W of Merritt
- Two locations of the highway are under significant water, three more locations at risk.
- Several side road structures have been compromised and we are working with local and Indigenous governments to coordinate and support impacted residents
 - o Approach to the Canford Bridge (Petit Creek Road) has washed out
 - Structure accessing Nicomen road has also been impacted
 - o Working with EMBC and local government to assist impacted residents

(NEW) Highway 12 - Lillooet

- Closed 35 km S of Lillooet.
- Debris flow across highway.
- Crews on route to assess.

Highway 93S - Kootenay National Park

- Open
- Travel Advisory still in effect for winter conditions.

Hwy 97A - Sicamous

- SLAT 4 km S of Sicamous
- Minor slide blocking on lane
- Expect to be fully open tonight.

Hwy 99 - Lillooet

- Closed 30 km W of Lillooet
- 3 slides have closed highway in both directions.
- DRM has been able to punch through one slide and all people are now free and heading south to Pemberton.
- One person unaccounted for and one confirmed fatal.
- 4 people on route to hospital with minor injuries.
- Still no ETO for getting Hwy 99 fully open.
- Assessment underway

From: Richter, Kevin J TRAN:EX
Sent: November 14, 2021 5:11 PM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Sirett, Steve TRAN:EX; Cousins, Paula TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Gedney,

Vanessa R TRAN:EX

Subject: Update: 17:00: Closures: Highway 1 - Fraser Valley, Highway 1 - Fraser Canyon, Highway 5 -

Coquihalla

Highway 1 – Fraser canyon – closed Highway 1 – Chilliwack to hope – closed Highway 5 – hope to merritt - closed

Rockfall Sailor Bar Tunnel

Geotech reviewed.

Authorized removal of rock on road.

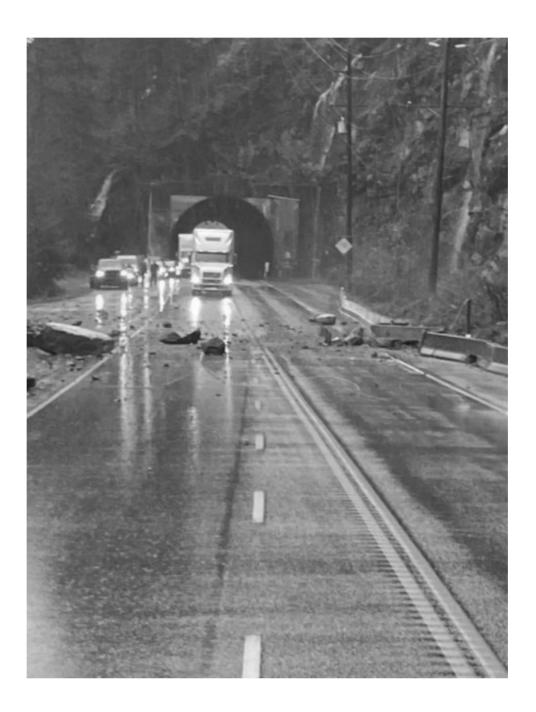
Monitoring.

May open after 18:00.

Will continued to be monitored.

Other areas along Fraser Canyon a concern and will impact opening. Monitoring in ongoing.

Photo: Highway 1, Sailor Bar Tunnel East Side



Highway 1 - Between Popkum and Hope,

Multiple slides across Highway 1.

MC using heavy equipment to clear debris.

Conditions are dynamic.

No estimated time for opening.

Ministry staff estimate approximately 50 vehicles and 65-70 people stuck between slides.

One vehicle attempted to cross over the slide at Site 2-4 and gotten stuck in the slide.

No injury to driver.

Fire department is on scene from Hope.

NO reports of vehicles being impacted by debris.

Photo: Highway 1, Site East of Herrling Island



Photo: Site Near Popkum



Highway 5 site at 10-Mile Creek near portia

Flow is approximately 4m deep and 10 meters wide, covering both lanes. Ministry staff are aware of 20 people trapped between 10-mile and Portia. No injuries reported.

MC heavy equipment in action.

Photo: Highway 5, 10-Mile Creek near Portia



Highway 5 North of Portia

Multiple locations of debris, earth and water across Highway 5.

MC and MoTI staff have successfully turned around all cars and truck.

Some semi's had to leave their trailers.

TCP's at Coldwater Interchange to allow residents access to Brookmere.

High risk of additional slides to occur and all crews will stay clear of area until rain subsides and geotech assessment is complete.

This will not occur until at least tomorrow depending on weather.

From: Richter, Kevin J TRAN:EX
Sent: November 14, 2021 5:51 PM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Sirett, Steve TRAN:EX; Cousins, Paula TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Gedney,

Vanessa R TRAN:EX

Subject: Update: 17:50. Closures: Highway 1 - Fraser Valley, Highway 1 - Fraser Canyon, Highway 5 -

Coquihalla AND NOW Highway 7

Highway 7 in Maple Ridge now being closed to water. Initial reports only in.

Sent from my iPhone

From: Richter, Kevin J TRAN:EX
Sent: November 14, 2021 6:46 PM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Sirett, Steve TRAN:EX; Cousins, Paula TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Gedney,

Vanessa R TRAN:EX

Subject: Update: 18:30, Closures: Highway 1 - Fraser Valley, Highway 1 - Fraser Canyon, NOW Highway 1 -

Three Valley Gap, Highway 5 - Coquihalla, Highway 7 - Maple Ridge, NOW Highway 11 - USA / CAN

border

Highway 11 - north and south of border

-closed due to flooding and issues on the Washington state roads

Highway 1 - Three Valley Gap

-Paths at 3VG are currently waterfalls and dumping debris and rocks onto the inside lane.

Earlier today a vehicle was struck by a rock and a driver suffered a broken arm.

The area is experiencing heavy rain and not forecasted to stop for many hours.

MoTI staff on-site have not seen this before.

Hoping to get geotech assessment at first light depending on staff availability and safe weather to fly.

No response work until area deemed safe to work.

Sent from my iPhone

- > On Nov 14, 2021, at 5:50 PM, Richter, Kevin J TRAN:EX < Kevin.Richter@gov.bc.ca > wrote:
- > Highway 7 in Maple Ridge now being closed to water.
- > Initial reports only in.
- > Sent from my iPhone

From: Richter, Kevin J TRAN:EX
Sent: November 14, 2021 8:26 PM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Sirett, Steve TRAN:EX; Cousins, Paula TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Gedney,

Vanessa R TRAN:EX

Subject: Update: 20:30, Closures: Highway 1 - Fraser Valley, Highway 1 - Three Valley Gap, Highway 5 -

Coquihalla, Highway 7 - Maple Ridge, Highway 11 - USA / CAN border

Highway 1 at Sailor Bar Tunnel

Rockfall debris cleared.

The Highway is open in both directions between Hope and Jackass Summit.

No reported injuries. MoTI and MC on site.

Highway 1 Popkum to Hope

Highway 1 is closed in both directions.

MC in the progress of clearing a temporary access and flushing traffic.

No reported injuries.

MoTI and MC on site.

Highway 5 at 10 Mile Creek, 11 km from Highway 3//5 Junction Highway 5 is closed in both directions and will remain closed all night until Geotech assessment can take place.

20 people stranded and confirmed okay.

No reported injuries.

MoTI and MC on site.

Columbia Valley Rd at Lakeshore Dr (Cultus Lake Area) The side road is closed in both directions due to washout of culvert and pavement.

This site will remain closed all night.

Traffic is detouring through local roads.

No reported injuries.

MoTI and MC attended.

Highway 11 at Huntingdon Border.

Highway 11 is closed in both directions due to flooding.

This site will remain closed all night.

No reported injuries.

MoTI and MC on site.

Rockwell Dr near Rockwell Lane, Kent.

Site of previous slide in Jan 31, 2020.

Side road is closed at Lillooet Ave.

Washout of road and hydro lines down.

No reported injuries.

Highway 5 - N of 10 mile to merritt

Highway 5 closed in both directions due to multiple water, debris and earth movement events.

Pending Geotech inspection in day light and safe flying conditions. No reported injuries.

MoTI and MC on site.

Highway 1 - Three Valley Gap Highway 1 closed due to falling water, debris and earth. Pending geotech inspection in day light and safe flying conditions. MoTI and MC on site.

From: Richter, Kevin J TRAN:EX
Sent: November 14, 2021 9:58 PM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Sirett, Steve TRAN:EX; Cousins, Paula TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Gedney,

Vanessa R TRAN:EX

Subject: Update: 22:00, Closures: Highway 1 - Fraser Valley, Highway 1 - Three Valley Gap, Highway 5 -

Coquihalla, Highway 7 - Maple Ridge, Highway 11 - USA / CAN border

Highway 1 Popkum to Hope

One WB lane was opened and everyone was flushed towards Hope on the WB lanes.

Slide material continues to flow over road.

There are no other travellers are between Popkum and Herrling Island slides on our highways.

CN Rail are in the area near Popkum trying to access their tracks via rail.

Another slide has closed Highway 7 in both directions near Johnston Slough rest area, approximately 9 km West of Hope.

Slide debris caused an MVI.

Multiple vehicles in the ditch.

No injuries reported at this time.

MoTi, MC, and RCMP are on scene.

Also, District of Hope has lost all grid power.

From: Richter, Kevin J TRAN:EX
Sent: November 18, 2021 7:57 PM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Liu, Ange TRAN:EX; Dhaliwal, Gurveen TRAN:EX; Ma, Bowinn TRAN:EX; Cousins, Paula TRAN:EX; Sirett, Steve TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A

TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Gedney, Vanessa R TRAN:EX

Subject: Update: Nov 18 - 15:00, Weather Closures on Provincial Highways & Roads

SOUTH COAST REGION

Lower Mainland HIGHWAY IMPACTS:

Priority Locations:

Highway 7 - Mission to Agassiz

- Open to two way traffic.
- Heavy equipment continue to work.

Highway 7 – Agassiz to Hope

- Open to essential travel.
- Heavy equipment continue to work
- ETO: open to SLAT

Highway 1 – Popkum to Hope

- Closed between Popkum and Hope.
- Multiple debris flows across all travel lanes in both directions and locations of significant shoulder and lane
 erosion.
- Heavy equipment working.
- ETO: Sunday November 21 for essential access.

Highway 1 – Fraser Canyon (South Coast and Southern Interior)

- Closed between Hope and Spences Bridge.
- Significant failures at Nicomen Bridge, Tank Hill and Jackass Mountain.
- Other areas with shoulder/lane erosion and debris on road.
- Emergency access available between Hope and Boston Bar.
- Heavy equipment working on debris and erosion areas.
- ETO: plans being developed for significantly impacted areas

Highway 1 - Abbotsford

- Closed between McCallum Rd to Yale Rd. (flooding).
- Water is starting to recede.
- ETO: Unknown assessment in progress.

Highway 3 - Sunshine Valley

- Closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway and some shoulder erosion.
- · Heavy equipment working.

ETO: Friday evening for essential access.

Hwy 5 – Hope to Merritt

- Closed
- Kilometers of highway (numerous locations) impacted with debris on highway and areas where the shoulders and lanes have been eroded.
- Othello Both SB lanes have been washed away ~1 km.
- Othello Bridge impacted by debris
- Jessica Bridge 2 bridge jump spans lost
- Caroline Bridge bridge approach fills eroded
- Juliet Bridge 2 bridge jump spans compromised
- Bottletop Bridge 3 bridge jump spans lost and substantial approach fill erosion
- Brodie Bridge bridge abutment compromised

Silver Skagit Road

- Multiple mudslides have closed Silver Skagit Road
- Heavy equipment working.

Highway 11 - Mission

Closed from Hazelwood Drive to Valley Rd and Delair to the USA border (flooding).

Rockwell Drive - District of Kent

- Closed at Lillooet Drive (erosion).
- Heavy equipment working.

Hatzic Prairie

- Multiple sideroads closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows

Vancouver Island

HIGHWAY IMPACTS:

Priority Locations:

Highway 1 (Malahat)

- Malahat is OPEN single lane alternating traffic on a 24 hour basis
- Traffic advisory has been issued and DriveBC updated outlining new Single Lane alternating traffic
- BC ferries offering additional sailings to assist with travel
- Traffic queues were reported as manageable but may increase closer to peak commuter times.

Highway 19 Lantzville

- Reports of a sinkhole on Highway 19 Northbound near Lantzville road
- Maintenance contractor and MoTI Geotech on scene completing assessment.
- Detour currently in place in both directions.

SOUTHERN INTERIOR REGION

HIGHWAY IMPACTS:

Highway 5 – Hope to Merritt

- Closed
- Kilometers of highway (numerous locations) impacted with debris on highway and areas where the shoulders and lanes have been eroded. 8 washouts identified between Kingsvale to Portia
- Othello Both SB lanes have been washed away ~1 km.
- Othello Bridge impacted by debris
- Jessica Bridge 2 bridge jump spans lost
- Caroline Bridge bridge approach fills eroded
- Juliet Bridge 2 bridge jump spans compromised
- Bottletop Bridge 3 bridge jump spans lost and substantial approach fill erosion
- Brodie Bridge bridge abutment compromised
- Hwy 5 Larson Hill SB Mudslide cleared

Highway 1 – Fraser Canyon (South Coast and Southern Interior)

- Closed between Hope and Spences Bridge.
- Significant failures at Nicomen Bridge, Tank Hill and Jackass Mountain.
- Other areas with shoulder/lane erosion and debris on road.
- Emergency access available between Hope and Boston Bar.
- Heavy equipment working on debris and erosion areas.
- ETO: plans being developed for significantly impacted areas

Highway 99 - 30-42km S of Lillooet

- Closed at 35km south of Seton Lake Road
- 3 slides in close vicinity have closed highway in both directions at a location not known for slides
- Geotechnical approval for work in daylight hours received today and work began in coordination with SARS and RCMP.
- · Heavy equipment working.
- Working on safety enhancements
- ETO: weekend opening for essential travel

Other Major Highways

Highway 8 - Merritt to Spences Bridge

- Closed between Merritt and Spences Bridge
- Multiple significant sections of the highway are completely washed out.
- Rattlesnake Bridge washed out. Three Mile Bridge approach washed out.
- Approximately 13 very significant washout sites in addition to bridges.
- Working with local and Indigenous governments to coordinate and support impacted residents
- Alternate route being established by FLNRORD/contractor in vicinity of Canford bridge.

From: Richter, Kevin J TRAN:EX
Sent: November 19, 2021 11:46 AM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Ma, Bowinn TRAN:EX; Liu, Ange TRAN:EX; Dhaliwal, Gurveen TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Cousins, Paula TRAN:EX; Sirett, Steve

TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Gedney, Vanessa R TRAN:EX

Subject: Update: Nov 19 - 09:30, Weather Closures on Provincial Highways & Roads

SOUTH COAST REGION

HIGHWAY IMPACTS:

Lower Mainland

Priority Locations:

Highway 7 – Mission to Agassiz

- Open to two way traffic.
- Heavy equipment continue to work on merge lane.

Highway 7 – Agassiz to Hope

- Open to SLAT for essential travel.
- Heavy equipment continuing to remove debris and repair erosion to open it to 2 lanes this weekend.

Highway 1 - Popkum to Hope

- Closed between Popkum and Hope.
- Multiple debris flows across all travel lanes in both directions and locations of significant shoulder and lane
 erosion.
- Heavy equipment working.
- ETO: Sunday November 21, opening for essential travel.

Highway 1 – Fraser Canyon (South Coast and Southern Interior)

- Closed between Hope and Spences Bridge.
- Significant failures at Nicomen Bridge, Tank Hill and Jackass Mountain.
- Other areas with shoulder/lane erosion and debris on road.
- Emergency access available between Hope and Boston Bar.
- Heavy equipment working on debris and erosion areas.
- ETO: plans being developed for significantly impacted areas.

Highway 1 - Abbotsford

- Closed between McCallum Rd to Yale Rd. (flooding).
- Water is starting to recede.
- ETO: Unknown assessment in progress.

Highway 3 – Sunshine Valley

- Closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway and some shoulder erosion.
- Heavy equipment working.
- ETO: Friday afternoon opening for essential travel with sections of SLAT.

Hwy 5 - Hope to Merritt

- Closed
- Kilometers of highway (numerous locations) impacted with debris on highway and areas where the shoulders and lanes have been eroded.
- Othello Both SB lanes have been washed away ~1 km.
- Othello Bridge impacted by debris
- Jessica Bridge 2 bridge jump spans lost
- Caroline Bridge bridge approach fills eroded
- Juliet Bridge 2 bridge jump spans compromised
- Bottletop Bridge 3 bridge jump spans lost and substantial approach fill erosion
- Brodie Bridge bridge abutment compromised

Silver Skagit Road

- Multiple mudslides have closed Silver Skagit Road
- Heavy equipment working.

Highway 11 - Mission

Closed from Hazelwood Drive to Valley Rd and Delair to the USA border (flooding).

Rockwell Drive - District of Kent

- Closed at Lillooet Drive (erosion).
- Heavy equipment working.

Hatzic Prairie

- Multiple sideroads closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows

Vancouver Island

Priority Locations:

Highway 1 - (Malahat)

- Malahat remains **OPEN** to SLAT on a 24 hour basis.
- Working towards opening, depending upon Geotech test results in the next couple of days.
- If approved, highway restored to a lane in each direction.
- Work will continue in the area on replacing a wall so will have periods of construction required closures or SLAT.

Highway 19 - Lantzville

- Closed while heavy equipment are removing and installing new culverts.
- Detour currently in place.

Southern Interior

Hwy 5 - Hope to Merritt

- Closed
- No major update to overall structure and highway condition
- Maintenance Contractor working to establish access to Bottletop area and maintenance yard
- Preliminary work on Coldwater Road at Kingsvale interchange.

Highway 1 - Fraser Canyon (South Coast and Southern Interior)

- Closed between Hope and Spences Bridge
- No major update to overall structure and highway condition
- Heavy equipment continuing to clear debris
- ETO: plans being developed for significantly impacted areas

Highway 99 - 30-42km S of Lillooet

- Closed 35.5km south of Seton Lake Road
- No major update to overall highway condition

Princeton sideroads

- Multiple sites identified in vicinity of Tulameen and Colemont.
- Access to communities has been temporarily restored.
- Work continuing.

Other Major Highways

Highway 8 @ Merritt to Spences Bridge

- Closed between Merritt and Spences Bridge
- Significant damage to entire highway.
- Working with local and Indigenous governments to coordinate and support impacted residents
 - Alternate route being established by FLNRORD/contractor in vicinity of Canford bridge.

From: Richter, Kevin J TRAN:EX
Sent: November 19, 2021 6:44 PM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Ma, Bowinn TRAN:EX; Liu, Ange TRAN:EX; Dhaliwal, Gurveen TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Cousins, Paula TRAN:EX; Sirett, Steve

TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Gedney, Vanessa R TRAN:EX

Subject: Update: Nov 19 - 15:00, Weather Closures on Provincial Highways & Roads

HIGHWAY IMPACTS:

Lower Mainland Priority Locations:

Highway 7 - Mission to Agassiz

- Open to two way traffic.
- Heavy equipment continue to work open the merge lane.

Highway 7 – Agassiz to Hope

- Open to SLAT for essential travel
- Heavy equipment remove debris and repair erosion to open it to 2 lanes this weekend.

Highway 1 - Popkum to Hope

- Closed between Popkum and Hope.
- Multiple debris flows across all travel lanes in both directions and locations of significant shoulder and lane
 erosion.
- Heavy equipment working.
- ETO: Sunday November 21 for essential travel

Highway 1 – Fraser Canyon (South Coast and Southern Interior)

- Closed between Hope and Spences Bridge.
- Significant failures at Nicomen Bridge, Tank Hill and Jackass Mountain.
- Other areas with shoulder/lane erosion and debris on road.
- Emergency access available between Hope and Boston Bar.
- Heavy equipment working on debris and erosion areas.
- ETO: plans being developed for significantly impacted areas.

Highway 1 – Abbotsford

- Closed between McCallum Rd to Yale Rd. (flooding).
- Water is starting to recede.
- ETO: Unknown assessment in progress.

Highway 3 - Sunshine Valley

- Re-opened to a single lane in each direction with areas of SLAT between Hope and Allison Pass.
- Heavy equipment continue work to clear debris and address areas of erosion.
- Open to essential travel.
- Operating well, no issues

Hwy 5 - Hope to Merritt

- Closed
- Kilometers of highway (numerous locations) impacted with debris on highway and areas where the shoulders and lanes have been eroded.
- Othello Both SB lanes have been washed away ~1 km.
- Othello Bridge impacted by debris
- Jessica Bridge 2 bridge jump spans lost
- Caroline Bridge bridge approach fills eroded
- Juliet Bridge 2 bridge jump spans compromised
- Bottletop Bridge 3 bridge jump spans lost and substantial approach fill erosion
- Brodie Bridge bridge abutment compromised

Silver Skagit Road

- Multiple mudslides have closed Silver Skagit Road
- · Heavy equipment working.

Highway 11 - Mission

Closed from Hazelwood Drive to Valley Rd and Delair to the USA border (flooding).

Rockwell Drive - District of Kent

- Closed at Lillooet Drive (erosion).
- Heavy equipment working.

Hatzic Prairie

- Multiple sideroads closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows

HIGHWAY IMPACTS:

Vancouver Island

Priority Locations:

Highway 1 (Malahat)

- Malahat remains OPEN to SLAT alternating traffic on a 24 hour basis.
- Geotech results were positive and paving underway.
- Anticipate opening to 2 lane traffic very early morning.
- For the next month, there will be temporary SLAT and brief closures to move equipment.

Highway 19 Lantzville

- Closed while heavy equipment are removing and installing new culverts.
- Detour currently in place.
- Opening estimated for Saturday evening.

Southern Interior Region

HIGHWAY IMPACTS:

Hwy 5 - Hope to Merritt

Closed

- No major update to overall structure and highway condition
- Maintenance Contractor working to establish access to Bottletop area and maintenance yard
- Preliminary work on Coldwater Road at Kingsvale interchange.

Highway 1 – Fraser Canyon (South Coast and Southern Interior)

- Closed between Hope and Spences Bridge.
- No major update to overall structure and highway condition.
- Heavy equipment continuing to clear debris.
- ETO: plans being developed for significantly impacted areas.

Highway 99 - 30-42km S of Lillooet

- Closed W of Lillooet.
- RCMP and SAR have ceased operations.
- ETO: Saturday, November 20, noon

Princeton sideroads

- Multiple sites identified in vicinity of Tulameen and Colemont.
- Access to communities has been temporarily restored.
- · Working continuing.

Other Major Highways

Highway 8 - Merritt to Spences Bridge

- Closed between Merritt and Spences Bridge
- Significant damage to entire highway.
- Working with local and Indigenous governments to coordinate and support impacted residents
 - Alternate route being established by FLNRORD/contractor in vicinity of Canford bridge.

From: Richter, Kevin J TRAN:EX
Sent: November 15, 2021 7:29 AM

To: Fleming, Rob TRAN:EX; Harrison, Veronica TRAN:EX; Champion, Ella D TRAN:EX; Crebo, David

GCPE:EX; Krishna, Kaye TRAN:EX; Hayre, Courtney TRAN:EX; Phillips, Holly TRAN:EX; Sirett, Steve TRAN:EX; Cousins, Paula TRAN:EX; Bhatti, Ashok A TRAN:EX; Staite, Janelle A TRAN:EX; Gedney,

Vanessa R TRAN:EX

Subject: Weather Impacts: South Interior Region

Highway 5 Coquihalla

Closed in both directions between Hope and Merritt due to active mudslides and debris flows.

Corridor evacuated yesterday and remains closed.

As soon as safe, we will fly the route to get an initial assessment of the damage.

Until assessment complete will not know magnitude of damage and length of the closure.

Segment is also expecting snow this afternoon, which will hinder the cleanup efforts.

Highway 1 Fraser Canyon

Closed at Spences Bridge to support closures along the segment in SCR.

Highway 1 - Kamloops to Golden

Closed west of Revelstoke at 3 Valley Gap due to excessive water at the bluffs, bringing down rocks and debris. As soon as safe, we will fly the route to get an initial assessment of the conditions.

Highway 3

Closed at Princeton due to flooding.

Once water recedes, we will assess the damage.

Highway 3 is also closed at Fernie due to flooding with a local detour in place; crews continue to bail out the culvert and we will assess when water levels recede.

Highway 93S (Kootenay National Park)

Closed SB between Banff and Radium due to extreme winter conditions and a jack knifed commercial vehicle on the Alberta section.

Highway 23 north of Nakusp

Reports of a slide.

Staff are on route to investigate.

No people are trapped in SIR, based on available information.

Many commercial vehicles staged across the region.

MoTI and MC staff are fully deployed throughout.

Staff have been working through the night.

Coordinating with emergency services.

Hartley, Rachelle TRAN:EX

From: Kubisheski, Carlee TRAN:EX

Sent: November 18, 2021 11:36 AM

To: Shoquist, Sarah TRAN:EX

Subject: FW: Update: Nov 18 - 09:30, Weather Closures on Provincial Highways & Roads

Can you please upload Kevin Richter's email to the LAN, folders for both mayor calls and the IET meeting at 4:30?

Thank you!

Carlee Kubisheski | A/Executive Coordinator Ministry of Transportation and Infrastructure

From: Richter, Kevin J TRAN:EX <Kevin.Richter@gov.bc.ca>

Sent: November 18, 2021 10:24 AM

To: Fleming, Rob TRAN:EX <Rob.Fleming@gov.bc.ca>; Harrison, Veronica TRAN:EX <Veronica.Harrison@gov.bc.ca>; Champion, Ella D TRAN:EX <Ella.D.Champion@gov.bc.ca>; Crebo, David GCPE:EX <David.Crebo@gov.bc.ca>; Krishna, Kaye TRAN:EX <Kaye.Krishna@gov.bc.ca>; Cousins, Paula TRAN:EX <Paula.Cousins@gov.bc.ca>; Sirett, Steve TRAN:EX <Steve.Sirett@gov.bc.ca>; Bhatti, Ashok A TRAN:EX <Ashok.Bhatti@gov.bc.ca>; Staite, Janelle A TRAN:EX <Janelle.Staite@gov.bc.ca>; Hayre, Courtney TRAN:EX <Courtney.Hayre@gov.bc.ca>; Phillips, Holly TRAN:EX <Holly.Phillips@gov.bc.ca>; Gedney, Vanessa R TRAN:EX <Vanessa.Gedney@gov.bc.ca>; Liu, Ange TRAN:EX <Ange.Liu@gov.bc.ca>; Dhaliwal, Gurveen TRAN:EX <Gurveen.Dhaliwal@gov.bc.ca> Subject: Update: Nov 18 - 09:30, Weather Closures on Provincial Highways & Roads

SOUTH COAST REGION HIGHWAY IMPACTS:

Priority Locations:

Highway 7 – Mission to Agassiz

- Open SLAT.
- Heavy equipment continue to work to fully open.

Highway 7 – Agassiz to Hope

- Open to emergency vehicles.
- 1000+ passenger vehicles piloted out of Hope yesterday between 1700 hrs and 2030 hrs
- Commercial vehicles will be piloted out of Hope at 1000 hrs
- Heavy equipment removing debris and repairing erosion
- ETO: SLAT opening expected at 1500 hrs

Highway 1 – Popkum to Hope

- Closed between Popkum and Hope.
- Multiple debris flows across all travel lanes in both directions and locations of significant shoulder and lane
 erosion.
- Heavy equipment working.
- ETO: Sunday November 21 for emergency access.

Highway 1 – Fraser Canyon (South Coast and Southern Interior)

Closed between Hope and Spences Bridge.

- Significant failures at Nicomen Bridge, Tank Hill and Jackass Mountain.
- Other areas with shoulder/lane erosion and debris on road.
- Emergency access available between Hope and Boston Bar.
- Heavy equipment working on debris and erosion areas.
- ETO: plans being developed for significantly impacted areas

Highway 1 – Abbotsford

- Closed between McCallum Rd to Yale Rd. (flooding).
- Water is starting to recede.
- ETO: Unknown assessment in progress.

Highway 3 – Sunshine Valley

- Closed between Hope Slide and Sunshine Valley and at Engineers Rd (Mile 1)
- Multiple debris flows across the highway and some shoulder erosion.
- Heavy equipment working.
- ETO: Friday evening for emergency access.

Hwy 5 – Hope to Merritt

- Closed
- Kilometers of highway (numerous locations) impacted with debris on highway and areas where the shoulders and lanes have been eroded.
- Othello Both SB lanes have been washed away ~1 km.
- Othello Bridge impacted by debris
- Jessica Bridge 2 bridge jump spans lost
- Caroline Bridge bridge approach fills eroded
- Juliet Bridge 2 bridge jump spans compromised
- Bottletop Bridge 3 bridge jump spans lost and substantial approach fill erosion
- Brodie Bridge bridge abutment compromised

Silver Skagit Road

- Multiple mudslides have closed Silver Skagit Road
- · Heavy equipment working.

Highway 11 - Mission

Closed from Hazelwood Drive to Valley Rd and Delair to the USA border (flooding).

Rockwell Drive - District of Kent

- Closed at Lillooet Drive (erosion).
- Heavy equipment working.

Hatzic Prairie

- Multiple sideroads closed north of highway 7 due to flooding.
- Significant flow across roads at Farms, Dale, Stave Lake, Lundgren, Beyer, Sylvester at Kontney and Seux, and many other smaller isolated flows

Vancouver Island

Priority Locations:

Highway 1 (Malahat)

- Malahat is OPEN to single lane alternating traffic on a 24 hour basis as of 5:30 AM
- Traffic advisory has been issued and DriveBC updated outlining new SLAT.

- MoTI has coordinated with emergency services and Health authority for access through the site. Fuel tankers are
 getting through, CVSE is assisting in convoying fuel tankers through the site
- BC ferries offering additional sailings to assist with travel
- Traffic queues were reported as light in the southbound direction.

SOUTHERN INTERIOR REGION

HIGHWAY IMPACTS:

Priority Locations:

Hwy 5 – Hope to Merritt

- Closed
- Kilometers of highway (numerous locations) impacted with debris on highway and areas where the shoulders and lanes have been eroded.
- Othello Both SB lanes have been washed away ~1 km.
- Othello Bridge impacted by debris
- Jessica Bridge 2 bridge jump spans lost
- Caroline Bridge bridge approach fills eroded
- Juliet Bridge 2 bridge jump spans compromised
- Bottletop Bridge 3 bridge jump spans lost and substantial approach fill erosion
- Brodie Bridge bridge abutment compromised

Highway 1 – Fraser Canyon (South Coast and Southern Interior)

- Closed between Hope and Spences Bridge.
- Significant failures at Nicomen Bridge, Tank Hill and Jackass Mountain.
- Other areas with shoulder/lane erosion and debris on road.
- Emergency access available between Hope and Boston Bar.
- Heavy equipment working on debris and erosion areas.
- ETO: plans being developed for significantly impacted areas

Hwy 99 - 30-42km S of Lillooet

- Closed at 35.5km south of Seton Lake Road
- 3 slides in close vicinity have closed highway in both directions at a location not known for slides
- Geotechnical approval for work in daylight hours received today and work began in coordination with SARS and RCMP.
- · RCMP and forensic on site
- Heavy equipment continue to remove debris.
- Working on enhanced safety measures for the corridor.
- Opening anticipated in the next days.

Princeton sideroads

- Heavy equipment working to restore access.
- Access to Communities of Tulameen and Colemont have been established.
- One residence that does not have access is being attended to by search and rescue.

Other Major Highways

Highway 8 - Merritt to Spences Bridge

- Closed between Merritt and Spences Bridge
- Multiple significant sections of the highway are completely washed out.
- Bridge washed out.

- Side roads/bridges compromised and working with local and Indigenous governments to coordinate and support impacted residents
 - Alternate route being established by FLNRORD/contractor in vicinity of Canford bridge.

Highway 3 - Hartley Creek 4km east of Fernie

- OPEN; Expect Minor Delays equipment still working on site. DriveBC updated; Social Media Updated
- Cokado rd access partially restored.
- All residents have access.
- Heavy equipment continue to work.