



# NGTL System and Foothills Pipe Lines Ltd.

## Customer Operations Meeting

February 11, 2021



# Welcome and Thank You for Joining Us

---

## Participating via WebEx:

- Please sign-in through WebEx application including your full name and company
- To reduce background noise and improve audio quality, all WebEx participants will be placed on mute
- Please submit your questions via the chat function and we will answer them at the best possible opportunity

# Forward Looking Information

---

This presentation includes certain forward-looking information. Statements that are forward-looking are based on certain assumptions and on what we know and expect today and generally include words like anticipate, expect, believe, may, will, should, estimate or other similar words.

The information provided is for informational purposes only and is not to be relied upon for any other purpose whatsoever. The information is based upon certain assumptions that may or may not be accurate, and therefore is subject to various risks and uncertainties. TC Energy shall not be liable for damages sustained as a result of any use or reliance on such information.

The outages listed in this presentation are not an exhaustive list. Outage date, duration, and impact may be subject to change. Refer to the Daily Operating Plan (DOP) for all planned outages with potential service impact.

**No  
impact to FT**

Refers to outage periods where FT impact is not expected

**Potential  
impact to FT**

Refers to outage periods where there is potential of FT impact

**Partial  
impact to FT**

Refers to outage periods where FT impact is expected

# Important Notes

---



Outage information in this presentation is NOT applicable beyond the February 11, NGTL/Foothills Customer Operations (WebEx only) meeting



For current outage information, please refer to the most recent Daily Operating Plan (DOP) on my.TC Customer Express



This meeting will only cover operational topics related to the NGTL and Foothills systems. For information on Commercial and Regulatory topics, please contact your Marketing Representative

# Our Focus During COVID-19

---



Protect our teams, partners and communities



Ensure no interruption to our customers



Secure supply of critical equipment and services with our partners

**Notice something is off?**







Please reach out: [Marketing Reps](#) or 403.920.PIPE



## Safety Moment

### Extreme Cold Weather Driving

---

-  Warm and clean your vehicle
-  Be aware of weather forecast
-  Beware icy conditions
-  Emergency kit
-  Have sufficient gas
-  Fully charged phone

# Agenda

---

- ① Review outages in Daily Operating Plan (DOP)
- ② Educational session: Operational Areas and Flow Paths

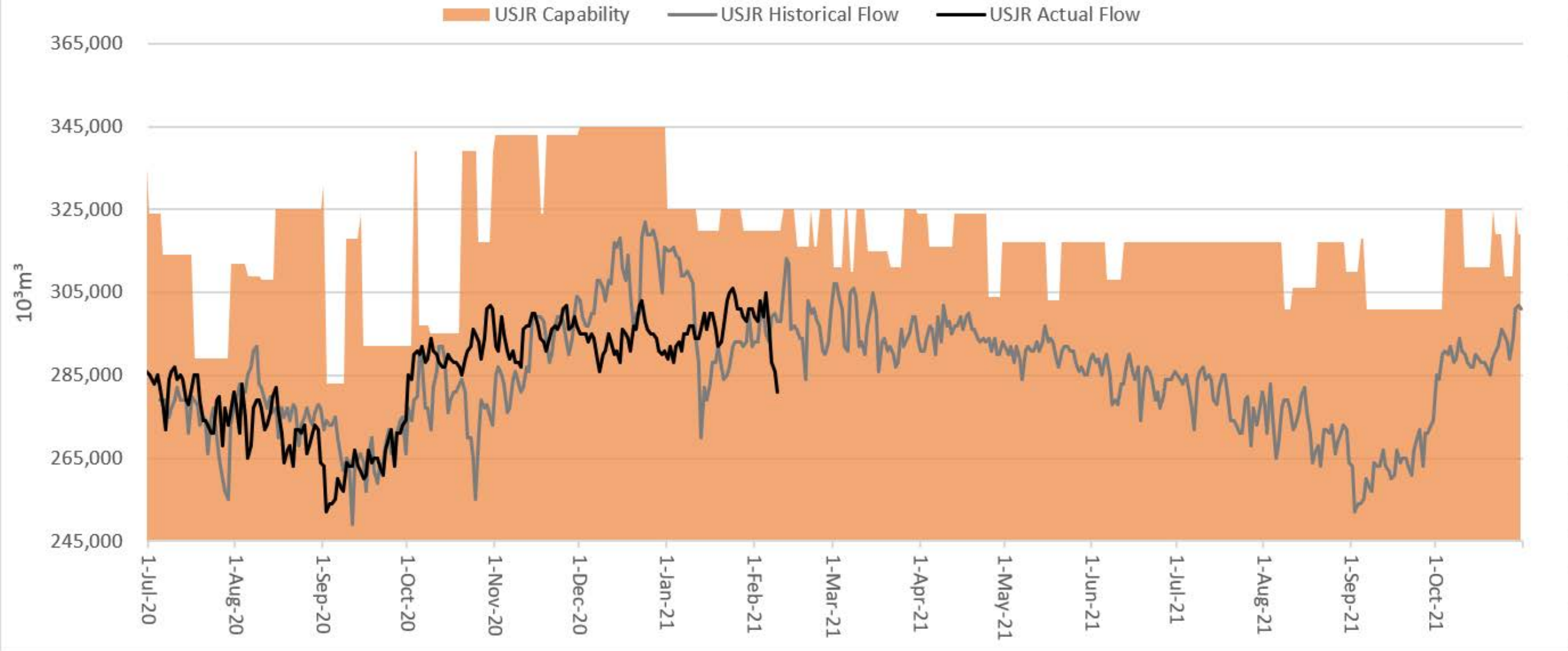


# 2021 Outage Review

From DOP as of Wednesday, February 10<sup>th</sup>



# Upstream James River



This slide is NOT applicable beyond the Feb 11, NGTL/Foothills Customer Operations meeting on WebEx. Please refer to the DOP on TC Customer Express for current outage information

# Upstream James River Receipt Area (USJR)

No  
impact to FT

Potential  
impact to FT

Partial  
impact to FT

Outage Description	Start	End	USJR Outage Capability (10 <sup>6</sup> m <sup>3</sup> /d)	USJR Impact (10 <sup>6</sup> m <sup>3</sup> /d)	Area Outage Capability (10 <sup>6</sup> m <sup>3</sup> /d)	Typical Outage Area Flows (10 <sup>6</sup> m <sup>3</sup> /d)	Location/Area
Wolf Lake A3 – Compressor Station Maintenance	28-Jan-21	10-Feb-21	320	5	N/A	260-310	Potential impact to FT-R USJR
Berland River B2 – Compressor Station Maintenance	16-Feb-21	20-Feb-21	317	8	N/A	260-310	Potential impact to FT-R USJR
Woodenhouse C3 – Compressor Station Maintenance	22-Feb-21	24-Feb-21	316	9	190	145-180	Potential impact to FT-R Segments 2, 3, 4, and partial 7
Vetchland - Compressor Station Modifications	1-Mar-21	5-Mar-21	311	14	N/A	260-310	Potential impact to FT-R USJR
Otter Lake B2 – Compressor Station Maintenance	8-Mar-21	9-Mar-21	310	15	184	145-180	Potential impact to FT-R Segments 2, 3, 4, and partial 7
Nordegg – Compressor Station Maintenance	13-Mar-21	21-Mar-21	315	10	N/A	260-310	Potential impact to FT-R USJR
Hidden Lake North – Compressor Station Maintenance	22-Mar-21	26-Mar-21	315	10	189	145-180	Potential impact to FT-R Segments 2, 3, 4, and partial 7
Goodfish – Compressor Station Maintenance	22-Mar-21	26-Mar-21	311	14	185	145-180	Potential impact to FT-R Segments 2, 3, 4, and partial 7
Meikle River C – Compressor Station Maintenance	26-Apr-21	30-Apr-21	304	20	N/A	260-310	Potential impact to FT-R USJR
Meikle River D5 - Compressor Station Maintenance	17-May-21	21-May-21	303	14	N/A	260-310	Potential impact to FT-R USJR

This slide is NOT applicable beyond the Feb 11, NGTL/Foothills Customer Operations meeting on WebEx. Please refer to the DOP on TC Customer Express for current outage information

# Upstream James River Receipt Area (USJR)

No  
impact to FT

Potential  
impact to FT

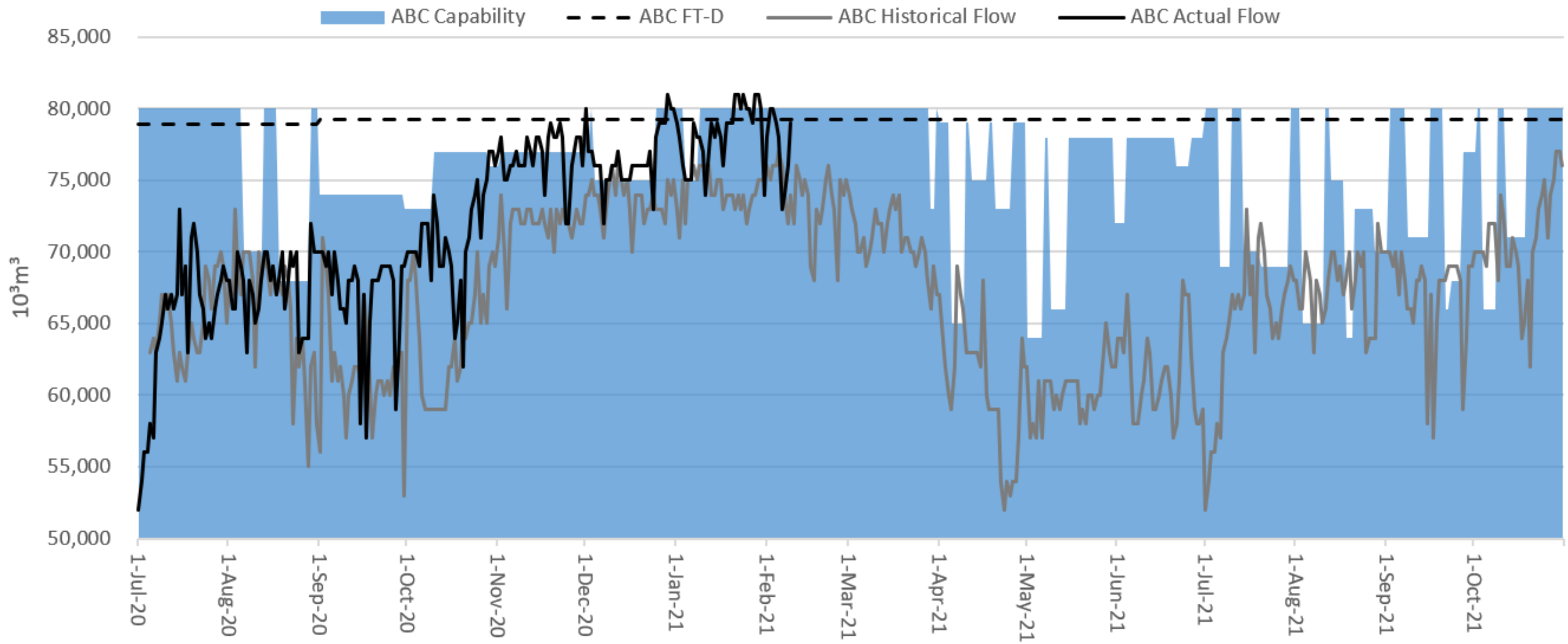
Partial  
impact to FT

Outage Description	Start	End	USJR Outage Capability (10 <sup>6</sup> m <sup>3</sup> /d)	USJR Impact (10 <sup>6</sup> m <sup>3</sup> /d)	Area Outage Capability (10 <sup>6</sup> m <sup>3</sup> /d)	Typical Outage Area Flows (10 <sup>6</sup> m <sup>3</sup> /d)	Location/Area
Wolf Lake A2 - Compressor Station Maintenance	7-Jun-21	12-Jun-21	308	9	N/A	260-310	Potential impact to FT-R USJR
Berland River - Compressor Station Maintenance	9-Aug-21	11-Aug-21	301	16	N/A	260-310	Potential impact to FT-R USJR
Berland River A1 – Compressor Station Maintenance	9-Aug-21	13-Aug-21	306	11	N/A	260-310	Potential impact to FT-R USJR
NPS 36 Edson Mainline Extension - Pipeline Maintenance	14-Aug-21	20-Aug-21	306	11	N/A	260-310	Potential impact to FT-R USJR
Otter Lake - Compressor Station Maintenance	30-Aug-21	3-Sep-21	310	8	191	145-180	Potential impact to FT-R Segments 2, 3, 4, and partial 7
Gold Creek - Compressor Station Modifications	7-Sep-21	4-Oct-21	301	17	175	145-180	Potential impact to FT-R Segments 2, 3, 4, and partial 7
Clearwater - Compressor Station Maintenance	27-Sep-21	1-Oct-21	310	8	N/A	260-310	Potential impact to FT-R USJR
Latornell - Compressor Station Maintenance	12-Oct-21	16-Oct-21	311	14	N/A	260-310	Potential impact to FT-R USJR
Latornell A2 - Compressor Station Maintenance	12-Oct-21	21-Oct-21	311	14	222	170-210	Potential impact to FT-R Segments 2, 3, 4, partial 5, partial 7
Hidden Lake – Compressor Station Maintenance	18-Oct-21	7-Nov-21	319	6	194	145-180	Potential impact to FT-R Segments 2, 3, 4, and partial 7
Alces River - Compressor Station Maintenance	25-Oct-21	29-Oct-21	309	16	N/A	260-310	Potential impact to FT-R USJR

This slide is NOT applicable beyond the Feb 11, NGTL/Foothills Customer Operations meeting on WebEx. Please refer to the DOP on TC Customer Express for current outage information

# Alberta-B.C. Border

(includes both NGTL and Foothills BC outages)



This slide is NOT applicable beyond the Feb 11, NGTL/Foothills Customer Operations meeting on WebEx. Please refer to the DOP on TC Customer Express for current outage information

# West Gate Delivery Area (WGAT) Foothills Zone 8 (FHBC)

No  
impact to FT

Potential  
impact to FT

Partial  
impact to FT

Outage Description	Start	End	Capability/ Allowable (10 <sup>6</sup> m <sup>3</sup> /day)	Impact (10 <sup>6</sup> m <sup>3</sup> /d)	Pipeline	Service Allowable Location/Area
Crowsnest B - Compressor Station Maintenance	29-Mar-21	30-Mar-21	73	8	FH BC	Potential impact to FT: Alberta/BC Border
Burton Creek - Compressor Station Maintenance	5-Apr-21	9-Apr-21	65	14	NGTL	Potential impact to FT-D: Alberta/BC and Alberta/Montana Borders
NPS 36 Western Alberta System Mainline - Pipeline Maintenance	12-Apr-21	17-Apr-21	75	4	NGTL	Potential impact to FT-D: Alberta/BC and Alberta/Montana Borders
NPS 36 Foothills Pipeline Zone 7 Leg 1C - Pipeline Maintenance	20-Apr-21	25-Apr-21	73	6	NGTL	Potential impact to FT-D: Alberta/BC and Alberta/Montana Borders
NPS 42 Western Alberta System Mainline Loop - Pipeline Maintenance	1-May-21	6-May-21	64	14	NGTL	Potential Impact to FT-D: Alberta/BC and Alberta/Montana Borders
NPS 36 Western Alberta System Mainline - Pipeline Maintenance	9-May-21	14-May-21	66	12	NGTL	Potential impact to FT-D: Alberta/BC and Alberta/Montana Borders
Burton Creek A3 - Compressor Station Maintenance	31-May-21	3-Jun-21	72	6	NGTL	Potential impact to FT-D: Alberta/BC and Alberta/Montana Borders
Turner Valley A3 - Compressor Station Maintenance	21-Jun-21	25-Jun-21	76	2	NGTL	Potential impact to FT-D: Alberta/BC Border
NPS 36 Western Alberta System Mainline Loop - Pipeline Maintenance	6-Jul-21	9-Jul-21	69	11	NGTL	Potential impact to FT-D: Alberta/BC Border
NPS 36 Foothills Pipeline Zone 8 Seg 2 - Pipeline Maintenance	14-Jul-21	19-Jul-21	70	10	FH BC	Potential impact to FT: Alberta/BC Border
NPS 42 Western Alberta System Mainline Loop - Pipeline Modification	20-Jul-21	29-Jul-21	69	11	NGTL	Potential Impact to FT-D: Alberta/BC Border
Winchell Lake - Compressor Station Maintenance	3-Aug-21	7-Aug-21	65	15	NGTL	Potential Impact to FT-D: Alberta/BC Border

This slide is **NOT** applicable beyond the Feb 11, NGTL/Foothills Customer Operations meeting on WebEx.  
Please refer to the DOP on TC Customer Express for current outage information

# West Gate Delivery Area (WGAT) Foothills Zone 8 (FHBC)

No  
impact to FT

Potential  
impact to FT

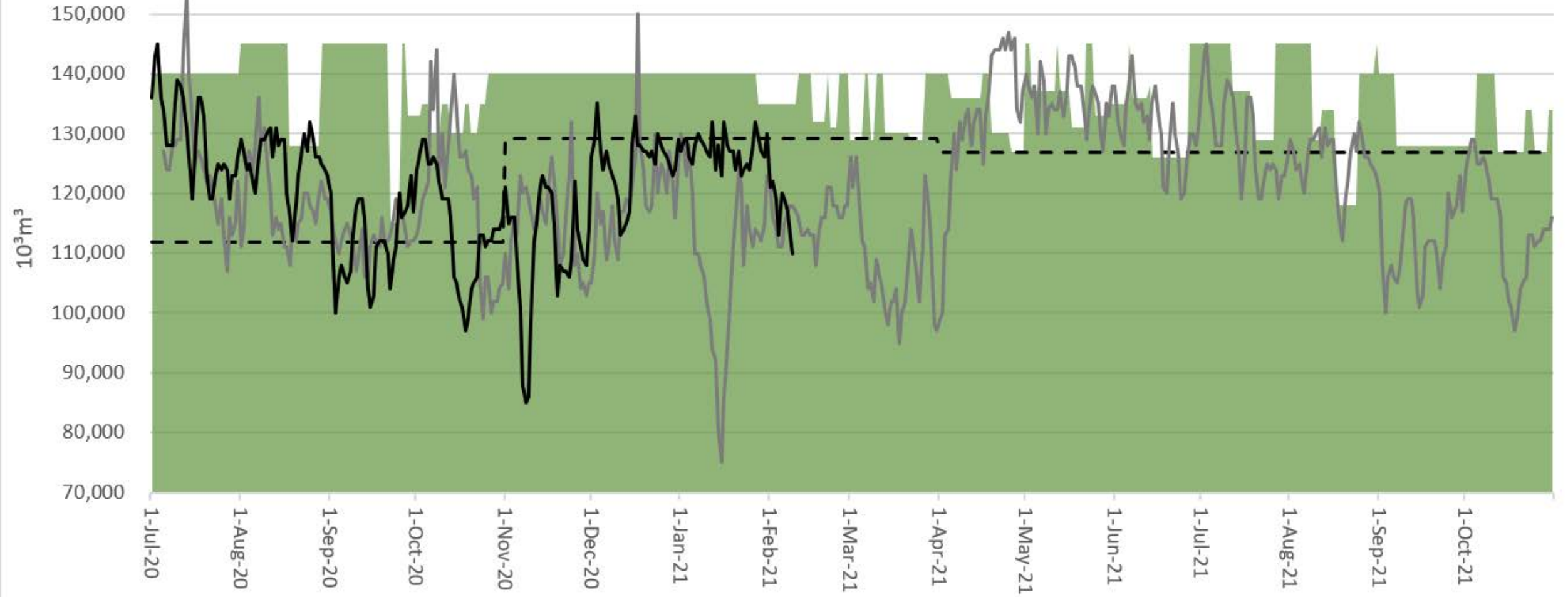
Partial  
impact to FT

Outage Description	Start	End	Capability/ Allowable (10 <sup>6</sup> m <sup>3</sup> /day)	Impact (10 <sup>6</sup> m <sup>3</sup> /d)	Pipeline	Service Allowable Location/Area
NPS 36 BC Mainline - Pipeline Maintenance	4-Aug-21	10-Aug-21	65	15	FH BC	Potential impact to FT: Alberta/BC Border
NPS 36 Foothills Zone 8 Seg 3 - Pipeline Maintenance	13-Aug-21	17-Aug-21	75	5	FH BC	Potential impact to FT: Alberta/BC Border
Crowsnest A – Compressor Station Maintenance	17-Aug-21	20-Aug-21	64	16	FH BC	Potential Impact to FT: Alberta/BC Border
NPS 36 Foothills Zone 8 Seg 4 - Pipeline Maintenance	19-Aug-21	23-Aug-21	73	7	FH BC	Potential impact to FT: Alberta/BC Border
Turner Valley A1 and A2 - Compressor Station Maintenance	23-Aug-21	27-Aug-21	73	7	NGTL	Potential impact to FT-D: Alberta/BC and Alberta/Montana Borders
NPS 36 Foothills Zone 7 Leg 1A – Pipeline Maintenance	1-Sep-21	5-Sep-21	70	10	NGTL	Potential Impact to FT-D: Alberta/BC Border
NPS 42 Western Alberta System Mainline Loop - Pipeline Maintenance	8-Sep-21	15-Sep-21	71	9	NGTL	Potential impact to FT-D: Alberta/BC and Alberta/Montana Borders
NPS 36 Western Alberta System Mainline - Pipeline Modification	21-Sep-21	26-Sep-21	68	12	NGTL	Potential Impact to FT-D: Alberta/BC and Alberta/Montana Borders
Clearwater – Compressor Station Maintenance	27-Sep-21	1-Oct-21	77	3	NGTL	Potential impact to FT: Alberta/BC Border
Elko - Compressor Station Maintenance	21-Sep-21	22-Sep-21	66	14	FH BC	Potential Impact to FT: Alberta/BC Border
Moyie – Compressor Station Maintenance	4-Oct-21	8-Oct-21	66	14	FH BC	Potential impact to FT: Alberta/BC Border
NPS 36 BC Mainline – Pipeline Maintenance	12-Oct-21	18-Oct-21	71	9	FH BC	Potential impact to FT: Alberta/BC Border

This slide is **NOT** applicable beyond the Feb 11, NGTL/Foothills Customer Operations meeting on WebEx.  
Please refer to the DOP on TC Customer Express for current outage information

# East Gate

EGAT Capability EGAT FT-D EGAT Historical Flow EGAT Actual Flow



# East Gate Delivery Area (EGAT) Foothills Zone 9 (FHSK)

No  
impact to FT

Potential  
impact to FT

Partial  
impact to FT

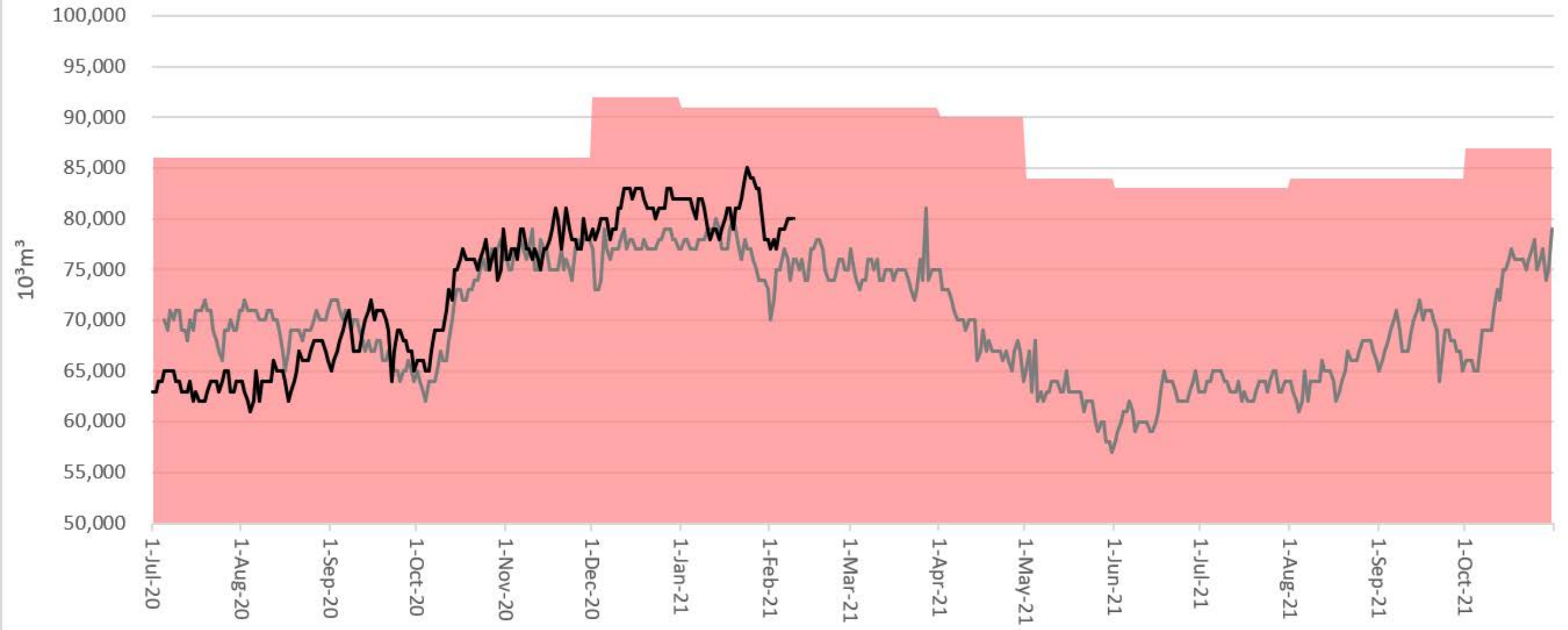
Outage Description	Start	End	Capability (10 <sup>6</sup> m <sup>3</sup> /day)	Impact (10 <sup>6</sup> m <sup>3</sup> /d)	Service Allowable Location/Area
Beiseker – Compressor Station Maintenance	5-Apr-21	15-Apr-21	136	4	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
NPS 48 Central Alberta System Mainline Loop 2 Pipeline Modification	19-Apr-21	30-Apr-21	130	10	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
NPS 48 Central Alberta System Mainline Loop 2 Pipeline Modification	3-May-21	11-May-21	137	8	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
NPS 48 Central Alberta System Mainline Loop 2 Pipeline Modification	13-May-21	21-May-21	137	8	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
Princess - Compressor Station Maintenance	25-May-21	30-May-21	133	12	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
NPS 42 Central Alberta System M/L Lp Pipeline Modification	26-May-21	5-Jun-21	135	10	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
NPS 30 Central Alberta System M/L Pipeline Modification	8-Jun-21	18-Jun-21	138	7	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
NPS 42 Edson and Central Alberta System Mainline Loop* Pipeline Maintenance	14-Jun-21	26-Jun-21	126	19	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
Acme - Compressor Station Maintenance	12-Jul-21	25-Jul-21	137	8	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
NPS 42 Foothills Pipeline Zone 6 Pipeline Maintenance	19-Jul-21	26-Jul-21	129	16	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
Crawling Valley – Compressor Station Maintenance	16-Aug-21	30-Aug-21	140	5	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28
NPS 42 Foothills Pipeline Zone 6* Pipeline Maintenance	17-Aug-21	24-Aug-21	118	27	No impact to FT-D anticipated: Empress/McNeill Borders Segments 15, 16, 17, 18, 19, 20, 23, partial 21, and partial 28

\*Potential to impact Tranche 3 EGAT Firm contracts



# Oil Sands Delivery Area

OSDA Capability    OSDA Historical Flow    OSDA Actual Flow



This slide is NOT applicable beyond the Feb 11, NGTL/Foothills Customer Operations meeting on WebEx. Please refer to the DOP on TC Customer Express for current outage information

# Northeast Delivery Area (NEDA) Oil Sands Delivery Area (OSDA)

No  
impact to FT

Potential  
impact to FT

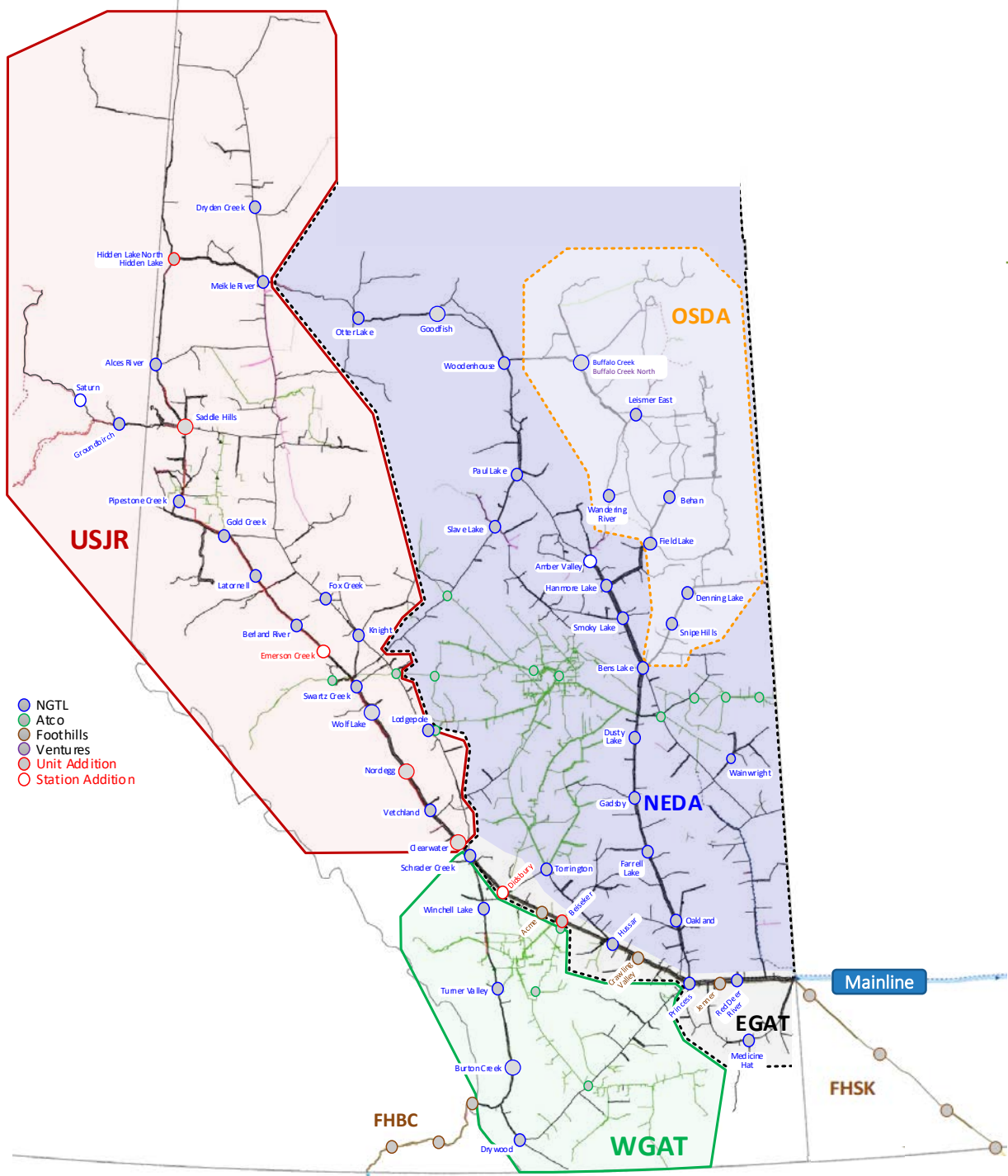
Partial  
impact to FT

Outage Description	Start	End	Capability/ Allowable (10 <sup>6</sup> m <sup>3</sup> /day)	Typical Flow (10 <sup>6</sup> m <sup>3</sup> /d)	Service Allowable Location/Area
Gadsby – Compressor Station Maintenance	15-Mar-21	19-Mar-21	140	120 - 130	No impact to FT-D anticipated NEDA Segments 6, 10, 11, 12, 13, 14, 15, 16, 17, 23, 24, partial 28



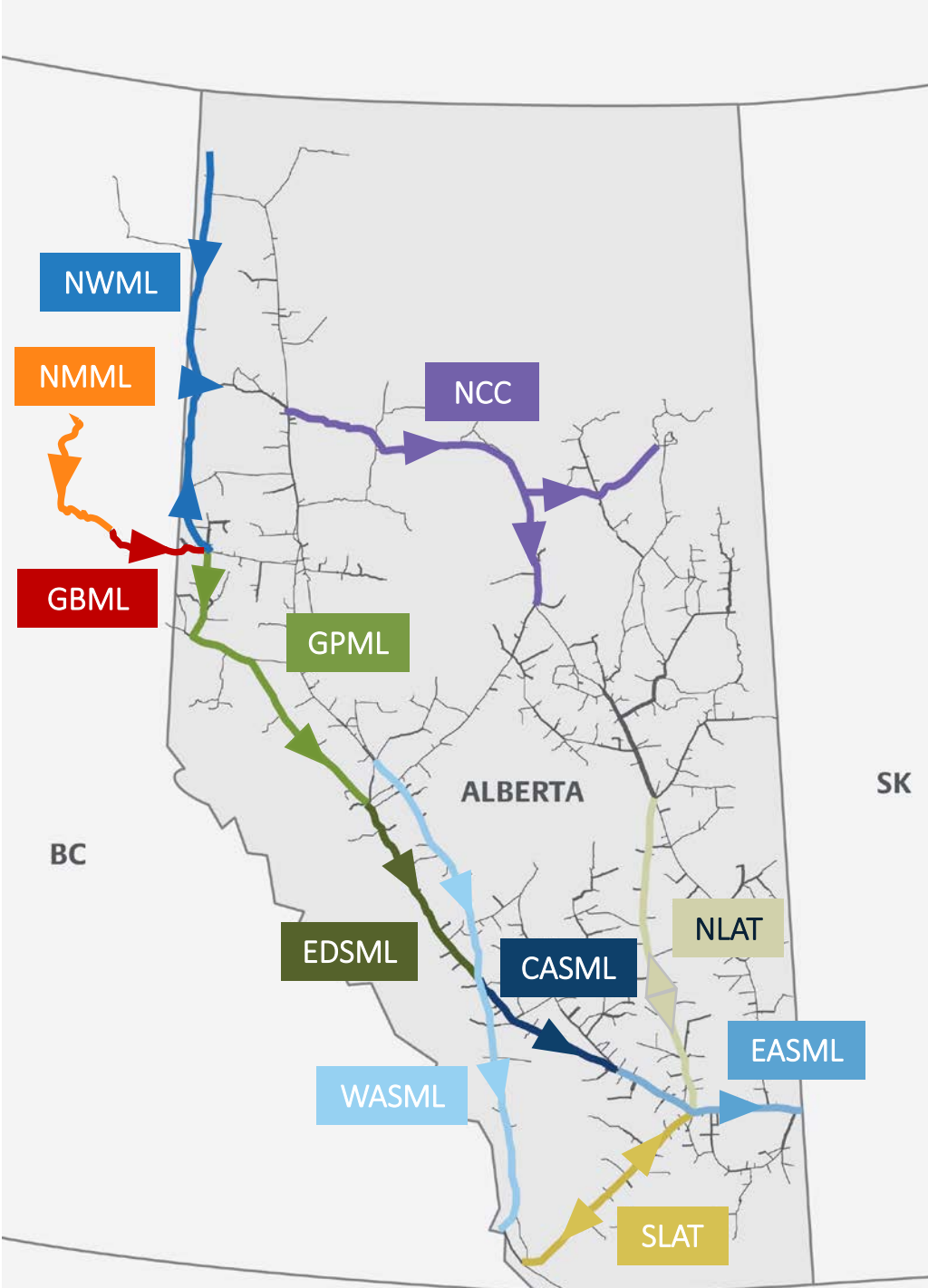
Education Session:  
Operational Areas & Flow Paths

# Operational Areas



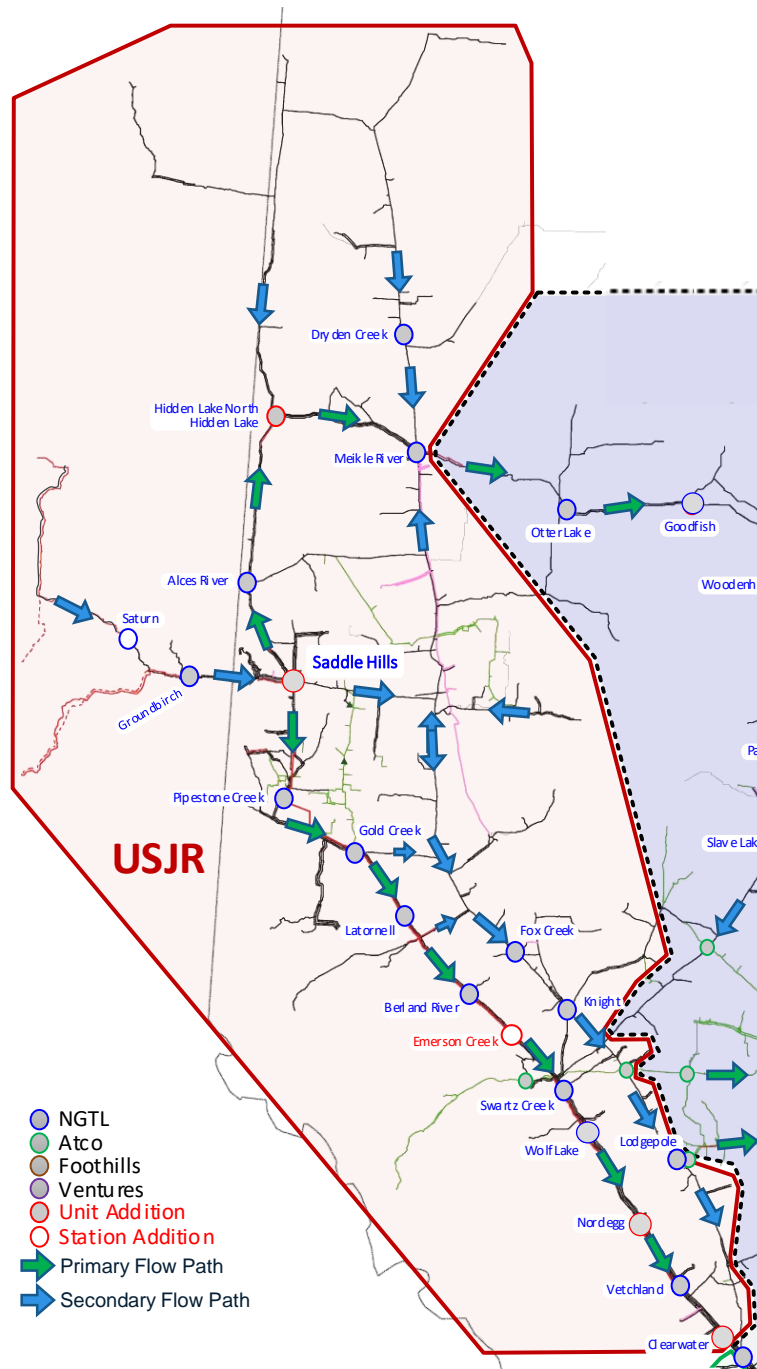
- Upstream James River (USJR) – Receipt
- West Gate (WGAT) – Delivery
- East Gate (EGAT) – Delivery
- North East Delivery Area (NEDA) – Delivery
- Oil Sands Delivery Area (OSDA) – Delivery

# Commonly Referenced Flows Paths



- North Montney Mainline (NMML)
- Groundbirch Mainline (GBML)
- Northwest Mainline (NWML)
- North Central Corridor (NCC)
- Grande Prairie Mainline (GPML)
- Edson Mainline (EDSML)
- Western Alberta System Mainline (WASML)
- Central Alberta System Mainline (CASML)
- Eastern Alberta System Mainline (EASML)
- South Lateral (SLAT)
- North Lateral (NLAT)

# USJR Flow Paths



Gas from the North Montney Mainline (NMML) and Groundbirch Mainline (GBML) is diverted north and south at Saddle Hills Compressor Station

## Northbound from Saddle Hills C/S

- Northwest Mainline (NWML) to North Central Corridor (NCC)
  - Primary supply path for NEDA and OSDA

## Southbound from Saddle Hills C/S

- Grande Prairie Mainline (GPML) to the Edson Mainline (EDSML) or the Western Alberta System Mainline (WASML)
  - Primary supply for WGAT and EGAT
  - Secondary supply for NEDA and OSDA

# Central Flow Paths

Gas from the Edson Mainline (EDSML) is redirected at the James River CV

- Southbound flow is directed to the Western Alberta System Mainline (WASML)
- Eastbound flow is directed to the Central Alberta System Mainline (CASML)

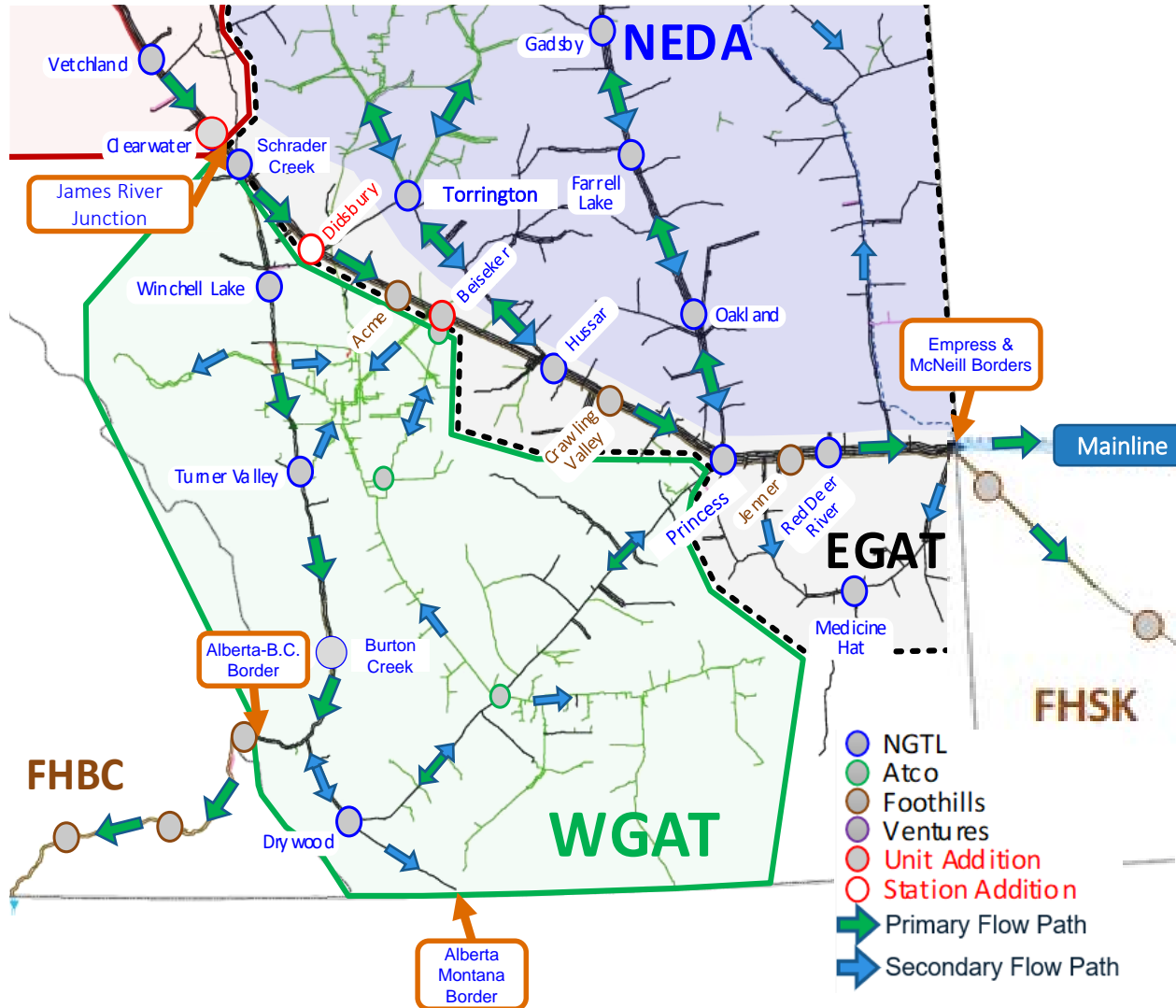
Southbound from James River Junction

- Majority of WGAT gas delivered at Alberta-B.C. Border
- Some deliveries to Calgary/Canmore area, Alberta-Montana Border, and South Lateral (SLAT)

Eastbound from James River Junction

- Majority of gas flows on the CASML to the Eastern Alberta System Mainline (EASML) and is then delivered at Empress or McNeill Border
- Gas from Torrington C/S helps supply the ATCO system
- Flows near Princess C/S flow up the North Lateral (NLAT) to supply NEDA
- Additional deliveries off the EASML to the SLAT and the Medicine Hat area

ATCO South Integrated System supplied via several flow paths



# North East Flow Paths

NEDA and OSDA are supplied by two main paths:

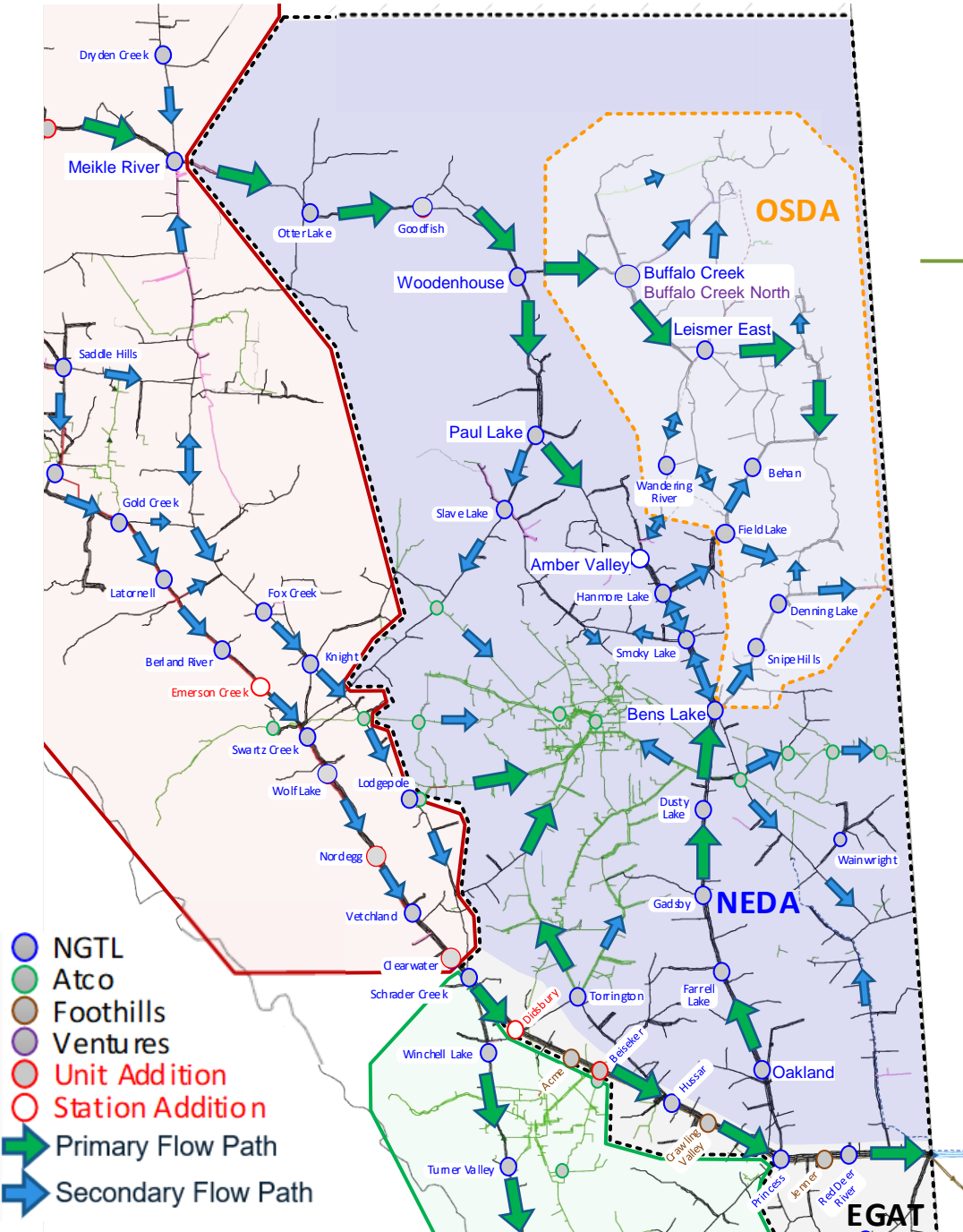
From Meikle River C/S across the North Central Corridor (NCC)

- Flow split at Woodenhouse C/S
  - East: Buffalo Creek C/S to Leismer C/S
  - South: Paul Lake C/S to Amber Valley C/S

From Oakland C/S up the North Lateral (NLAT)

- Bens Lake C/S directs gas flow dependent on need

ATCO North Integrated System supplied via several flow paths





# Contact Information

---

## Jasmine Zhao

Operations Planning - West

[jasmine\\_zhao@tcenergy.com](mailto:jasmine_zhao@tcenergy.com)

587-933-0914

## Kevin D'Souza

Chair, NGTL/Foothills Customer Operations meetings

403-920-7915

[kevin\\_dsouza@tcenergy.com](mailto:kevin_dsouza@tcenergy.com)

## Cullen Dancy

Operations Planning - West

[cullen\\_dancy@tcenergy.com](mailto:cullen_dancy@tcenergy.com)

587-933-0785