

# SYSTEM UTILIZATION AND RELIABILITY MONTHLY REPORT

for the month ending  
July, 2009

*Published date:*  
**October 14, 2009**

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## Highlights This Month:

- Average Load Factors greater than 90% were experienced in a number of design areas during April 2009 – July 2009 [i.e. Upper Peace River, Upper and Central Peace River, Peace River Design, Upstream James River, Eastern Alberta Mainline: James River to Princess, Eastern Alberta Mainline: Princess to Empress/McNeill, and South and Alderson].
- FT Receipt Availability over a 3 month average from May 1, 2009 – July 31, 2009 was deemed to be 100% available in all pipe segments.
- Border Availability at Empress/McNeill, Gordondale and Alberta/BC, over a 3 month average from May 1, 2009 – July 31, 2009, were all deemed 100% available.

**NOVA Gas Transmission Ltd.**

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If you have any questions on the content of this report, contact Bob Haney at (403) 920-5317 or via fax at (403) 920-2380.

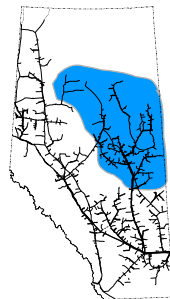
# FIRM TRANSPORTATION SERVICE<sup>1</sup> CONTRACT UTILIZATION<sup>2</sup>

By NGTL Pipeline Segments

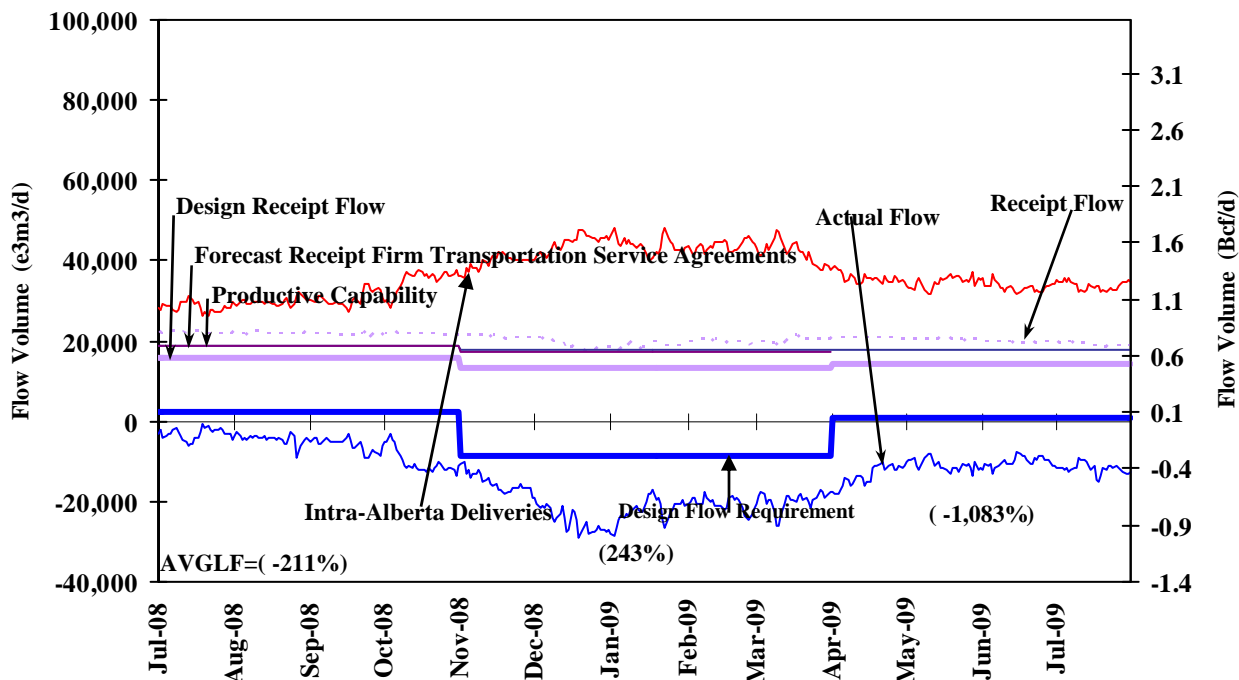
Segment	Receipt Contract	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Jul CD (mmcf/d)
UPRM <sup>4</sup>	FT	86%	92%	91%	85%	82%	84%	121
	FT + IT	105%	112%	117%	105%	103%	97%	
LPRM <sup>4</sup>	FT	95%	95%	98%	92%	93%	92%	18
	FT + IT	128%	127%	127%	119%	143%	116%	
PRLL <sup>4</sup>	FT	95%	96%	98%	95%	98%	97%	177
	FT + IT	119%	118%	118%	118%	123%	119%	
NWML <sup>4</sup>	FT	96%	97%	97%	94%	98%	96%	395
	FT + IT	107%	107%	110%	105%	112%	104%	
GRDL <sup>4</sup>	FT	88%	90%	93%	93%	90%	91%	244
	FT + IT	113%	114%	141%	123%	126%	127%	
WRSY <sup>4</sup>	FT	98%	95%	97%	96%	97%	97%	30
	FT + IT	159%	140%	148%	139%	150%	154%	
WAEX	FT	95%	92%	95%	89%	91%	96%	272
	FT + IT	164%	150%	181%	150%	183%	168%	
JUDY	FT	96%	97%	98%	98%	97%	96%	94
	FT + IT	149%	151%	141%	123%	149%	145%	
GPML	FT	95%	95%	95%	95%	95%	92%	2,103
	FT + IT	109%	109%	116%	111%	111%	106%	
CENT	FT	97%	97%	98%	96%	95%	97%	956
	FT + IT	122%	120%	125%	118%	122%	124%	
LPOL	FT	97%	96%	97%	94%	95%	94%	457
	FT + IT	125%	127%	132%	123%	123%	119%	
WGAT	FT	91%	92%	89%	91%	86%	91%	359
	FT + IT	119%	113%	112%	122%	112%	116%	
ALEG	FT	95%	95%	94%	95%	96%	96%	1,028
	FT + IT	123%	123%	125%	126%	127%	128%	
SLAT	FT	97%	96%	98%	97%	96%	97%	268
	FT + IT	122%	122%	134%	131%	125%	128%	
MLAT	FT	92%	93%	94%	94%	94%	96%	262
	FT + IT	107%	108%	112%	112%	111%	111%	
BLEG	FT	96%	96%	97%	97%	97%	97%	614
	FT + IT	111%	111%	115%	114%	115%	115%	
EGAT	FT	90%	89%	93%	94%	94%	96%	46
	FT + IT	137%	124%	130%	130%	130%	129%	
MRTN	FT	92%	91%	93%	90%	89%	88%	143
	FT + IT	108%	109%	121%	118%	115%	110%	
LIEG	FT	80%	83%	82%	82%	80%	80%	113
	FT + IT	113%	113%	118%	116%	114%	111%	
KIRB	FT	82%	86%	85%	86%	83%	85%	107
	FT + IT	108%	111%	114%	110%	107%	106%	
SMHI	FT	80%	76%	66%	72%	72%	74%	88
	FT + IT	138%	132%	152%	132%	131%	134%	
REDL	FT	84%	84%	83%	78%	84%	86%	67
	FT + IT	155%	146%	149%	148%	147%	155%	
COLD	FT	79%	77%	72%	74%	73%	78%	46
	FT + IT	97%	101%	122%	126%	119%	124%	
NLAT	FT	92%	91%	94%	94%	93%	91%	270
	FT + IT	121%	115%	125%	126%	126%	120%	
WAIN	FT	86%	88%	90%	89%	90%	89%	20
	FT + IT	132%	129%	134%	129%	124%	120%	
ELAT	FT	93%	93%	95%	95%	94%	94%	161
	FT + IT	142%	137%	148%	145%	144%	142%	
TOTAL SYSTEM	FT	94%	94%	94%	94%	94%	93%	8,458
	FT + IT	118%	118%	124%	119%	121%	119%	
Segment	Delivery Contract	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Jul CD (GJ/d)
Empress	FT	97%	97%	96%	96%	95%	95%	3,681,183
	FT + IT	115%	112%	114%	124%	112%	104%	
McNeill	FT	100%	95%	84%	74%	93%	100%	1,143,588
	FT + IT	154%	127%	123%	115%	162%	139%	
ABC	FT	91%	85%	73%	61%	49%	81%	2,454,268
	FT + IT	92%	86%	73%	62%	49%	88%	

\*NOTE:

1. FT includes all receipt and export delivery Firm Transportation Services: FTR, LRS, FTD.
2. IT includes all receipt and border delivery Interruptible Services: ITR, FRO, ITD, FDO.
3. Utilization data is based on billed monthly volumes. Percent utilization calculated as FT and FT + IT billed Volumes divided by applicable receipt or delivery Contract level.



# DESIGN FLOW REQUIREMENTS UTILIZATION NORTH OF BENS LAKE – FLOW THROUGH

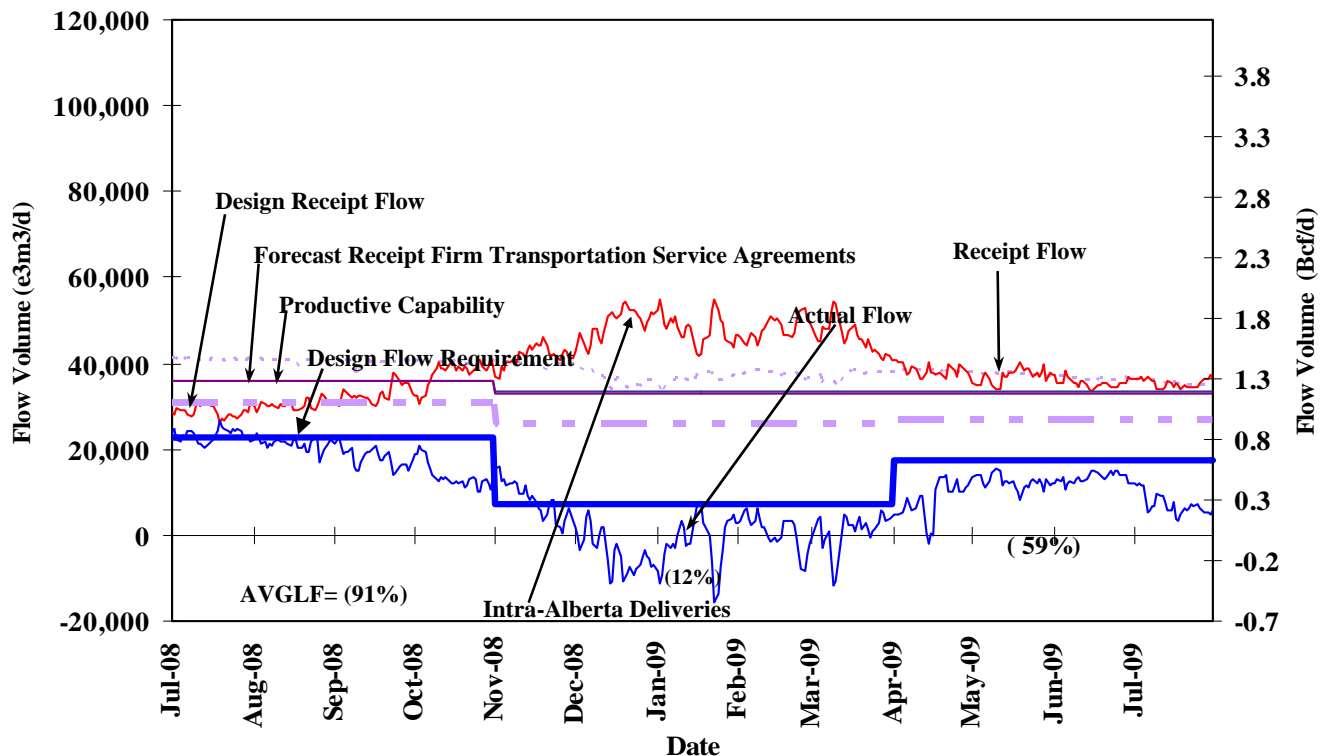
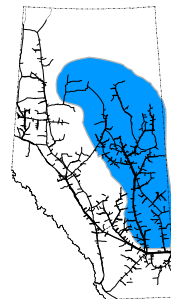


% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Feb	Mar	Apr	May	Jun	Jul
FT-R Volume	106	107	96	97	95	94
FT-R + IT Volume	149	150	148	145	140	137

**NOTE:** Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

% Design Flow Requirements Utilization						
Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/ Design Capacity	Feb	Mar	Apr	May	Jun	Jul
	245	235	-1265	-1020	-940	-1106

# DESIGN FLOW REQUIREMENTS UTILIZATION NORTH & SOUTH OF BENS LAKE – FLOW THROUGH

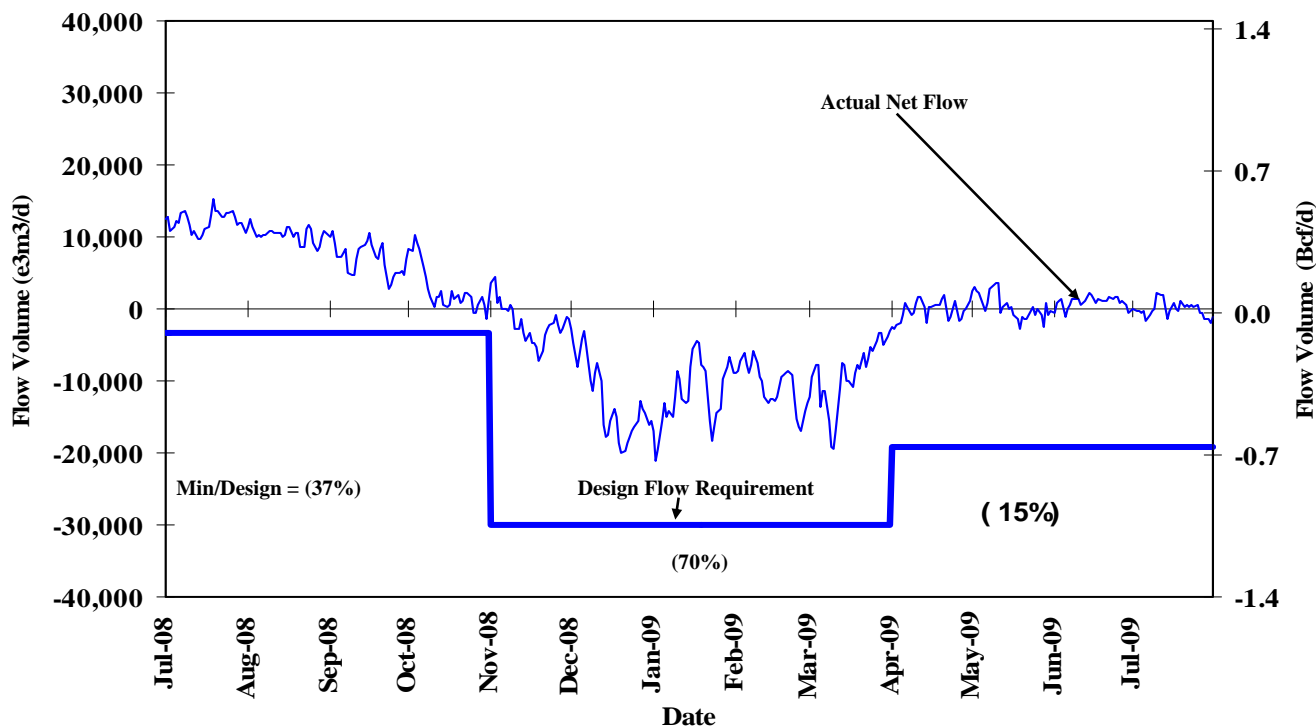
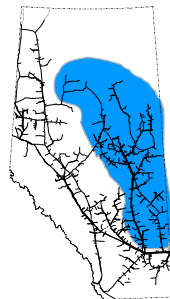


% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Feb	Mar	Apr	May	Jun	Jul
FT Volume	104	105	96	96	94	93
FT-R + IT Volume	147	145	143	140	136	132

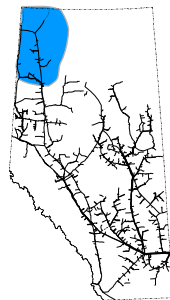
**NOTE:** Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

% Design Flow Requirements Utilization						
Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
	Feb	Mar	Apr	May	Jun	Jul
Average Flow/ Design Capacity	11	12	46	71	76	41

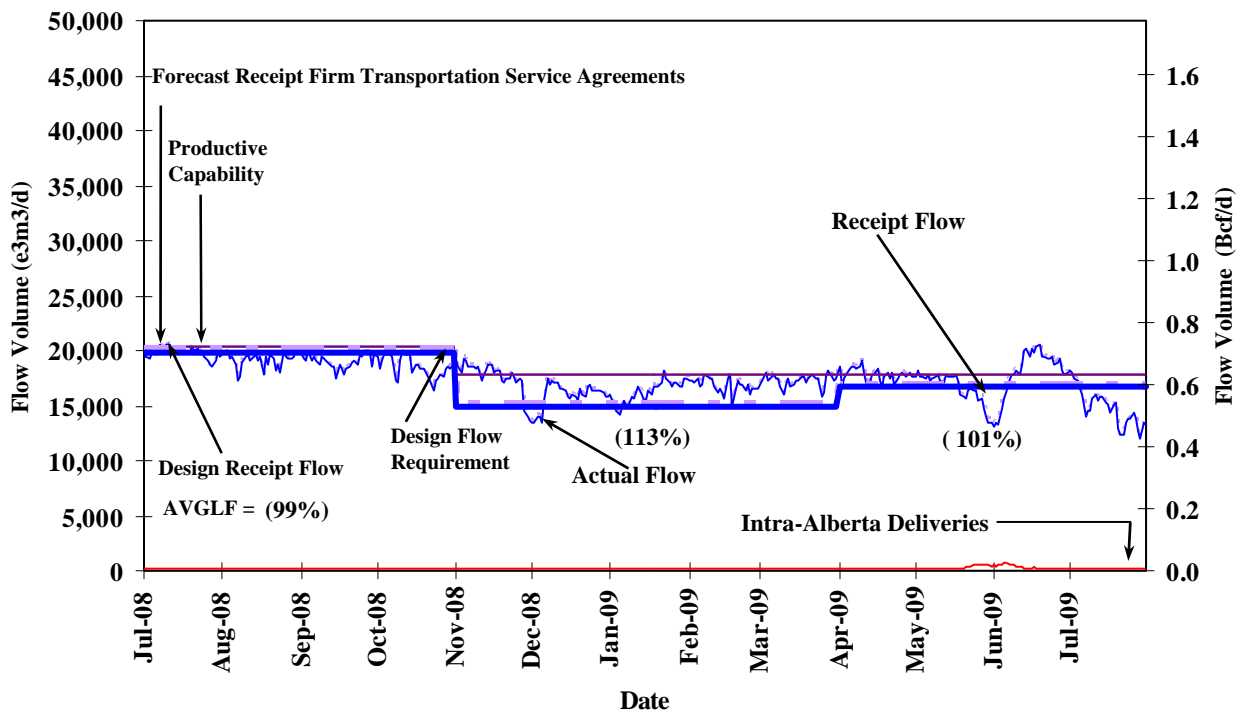
# DESIGN FLOW REQUIREMENTS UTILIZATION NORTH & SOUTH OF BENS LAKE – FLOW WITHIN



<b>% Design Flow Requirements Utilization</b> Monthly Actual Minimum Net Flow as a Percentage of Design Net Flow Design Flow Requirement						
Minimum Flow/ Design Net Flow	Feb 56	Mar 65	Apr 15	May 14	Jun 6	Jul 10



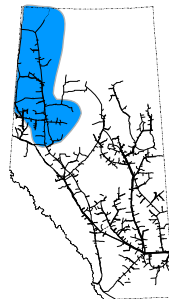
# DESIGN FLOW REQUIREMENTS UTILIZATION UPPER PEACE RIVER



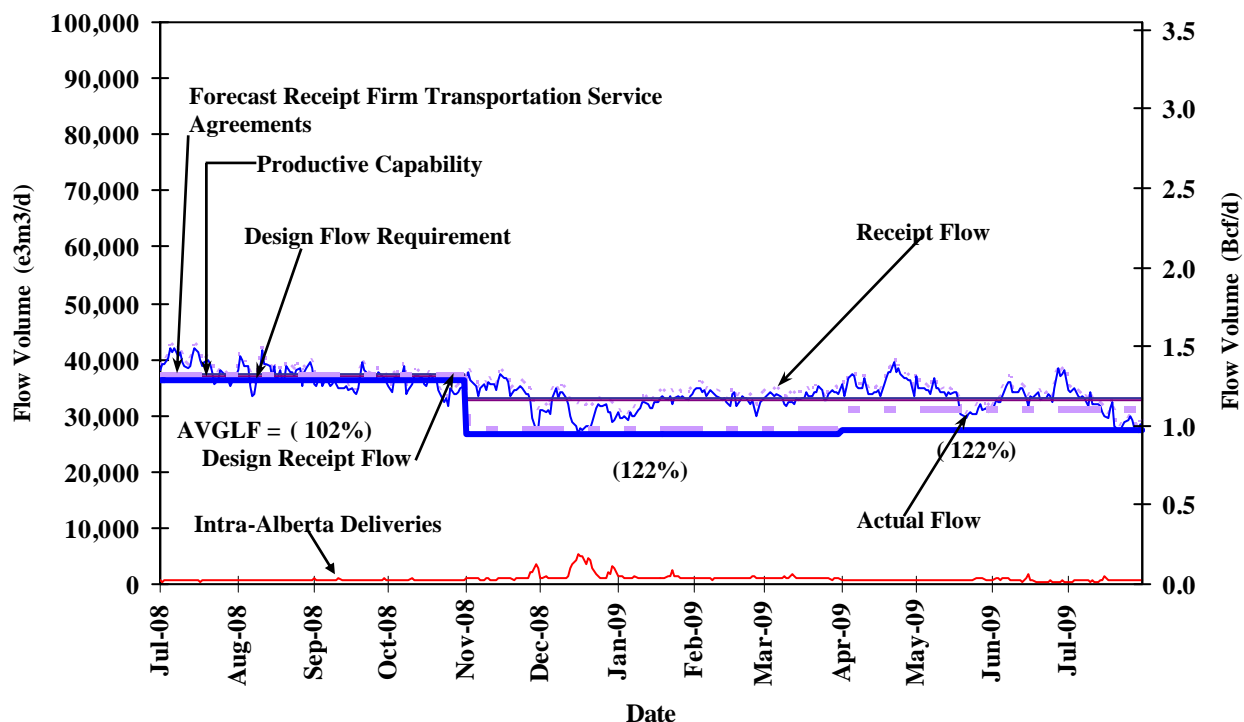
% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Feb	Mar	Apr	May	Jun	Jul
FT Volume	100	102	91	88	94	80
FT-R + IT Volume	113	116	107	101	109	88

**NOTE:** Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

% Design Flow Requirements Utilization						
Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/ Design Capacity	Feb	Mar	Apr	May	Jun	Jul
	113	116	107	100	108	89



# DESIGN FLOW REQUIREMENTS UTILIZATION UPPER and CENTRAL PEACE RIVER



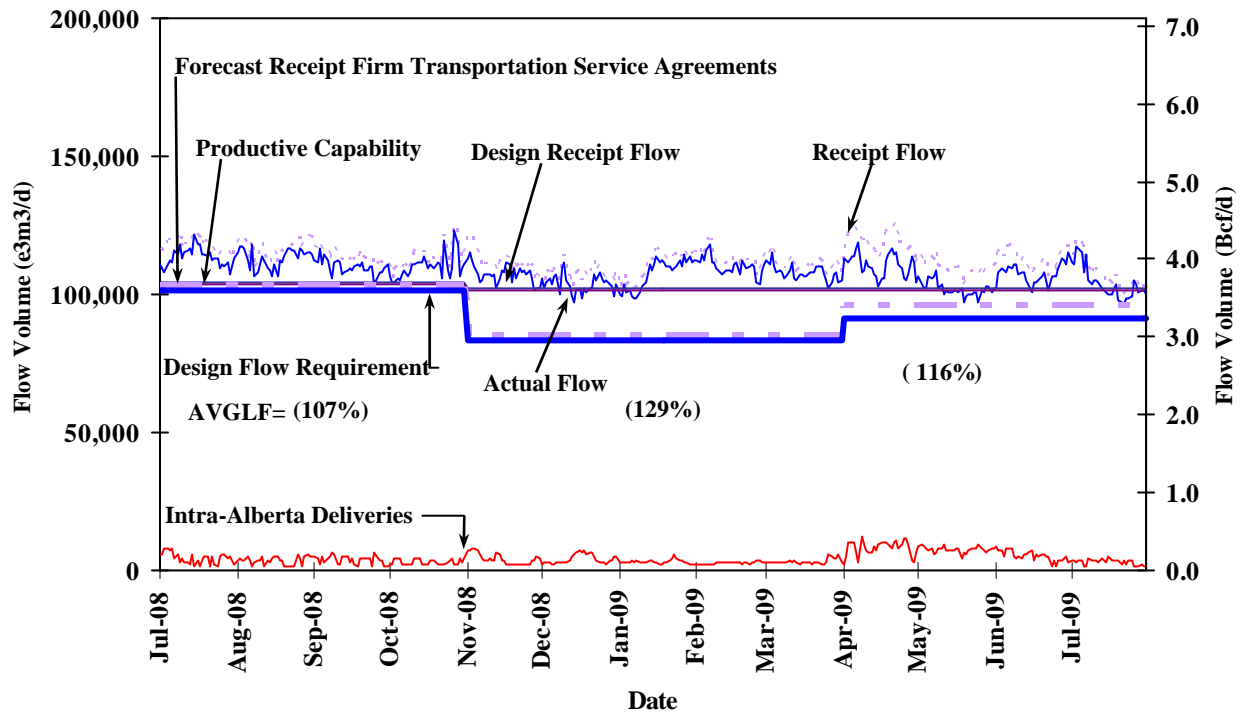
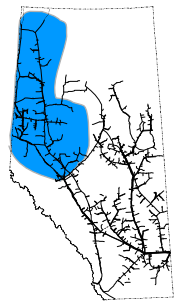
% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Feb	Mar	Apr	May	Jun	Jul
FT Volume	103	105	93	90	90	84
FT-R + IT Volume	125	125	118	109	113	102

**NOTE:** Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

% Design Flow Requirements Utilization						
Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/ Design Capacity	Feb	Mar	Apr	May	Jun	Jul
	123	124	131	120	125	113



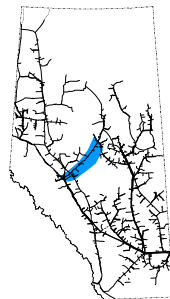
# DESIGN FLOW REQUIREMENTS UTILIZATION PEACE RIVER



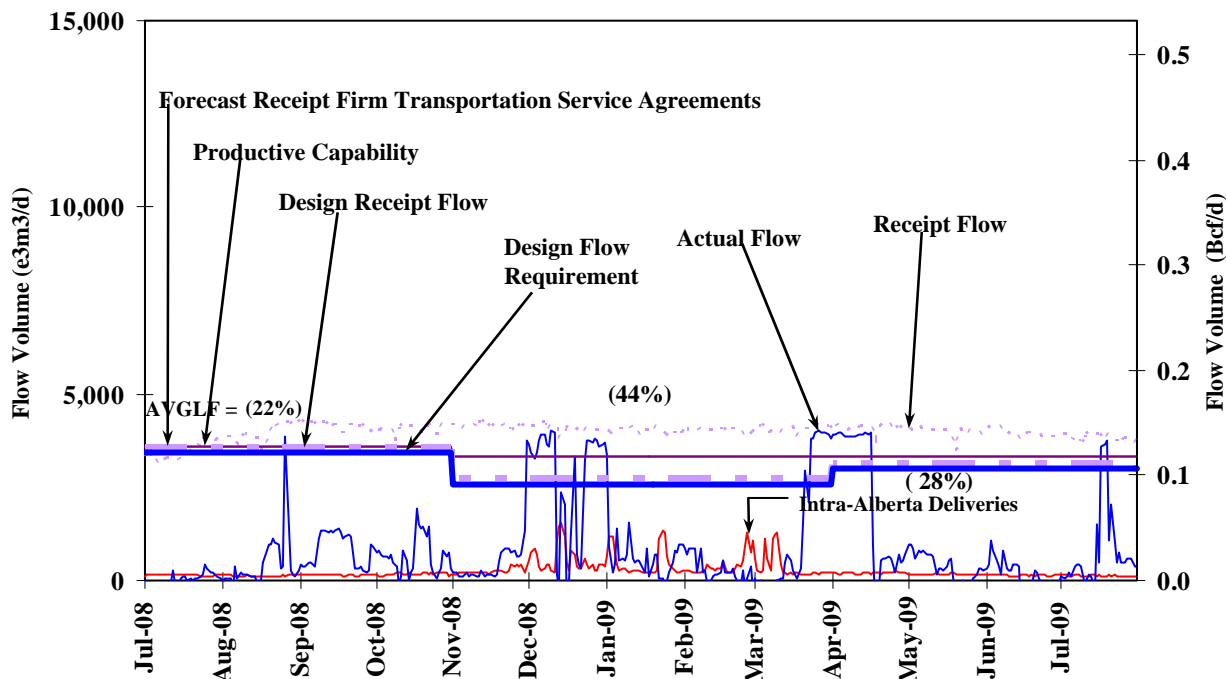
% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Feb	Mar	Apr	May	Jun	Jul
FT Volume	107	107	96	94	93	92
FT-R + IT Volume	130	129	124	115	118	112

**NOTE:** Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

% Design Flow Requirements Utilization						
Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/ Design Capacity	Feb	Mar	Apr	May	Jun	Jul
	132	130	121	112	118	114



# DESIGN FLOW REQUIREMENTS UTILIZATION MARTEN HILLS



## % Design Receipt Utilization

(Notice: The Percentages are not the same as the Contract Utilization Percentages)

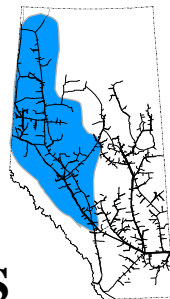
	Feb	Mar	Apr	May	Jun	Jul
FT Volume	94	95	91	101	82	81
FT-R + IT Volume	146	147	131	128	127	123

**NOTE:** Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

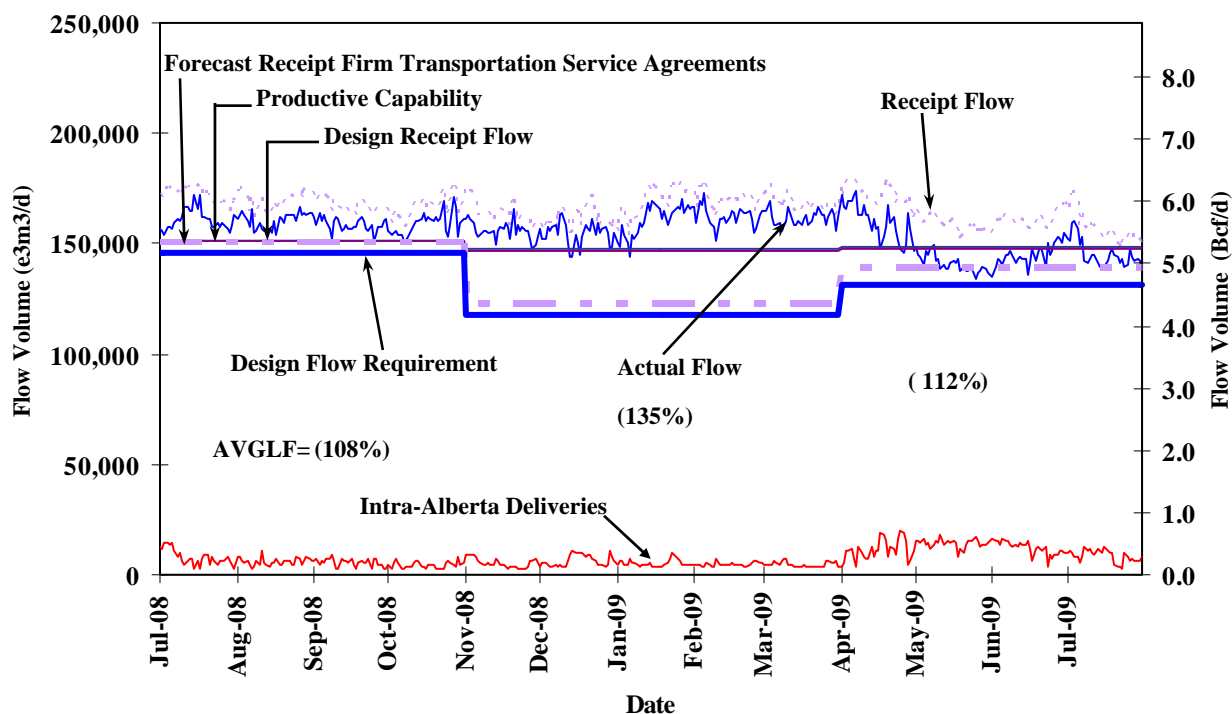
## % Design Flow Requirements Utilization

Monthly Average Actual Flow as a Percentage of Design Flow Requirements

	Feb	Mar	Apr	May	Jun	Jul
Average Flow/ Design Capacity	11	53	76	12	-2	26



# DESIGN FLOW REQUIREMENTS UTILIZATION EDSON M/L, PEACE RIVER, AND MARTEN HILLS

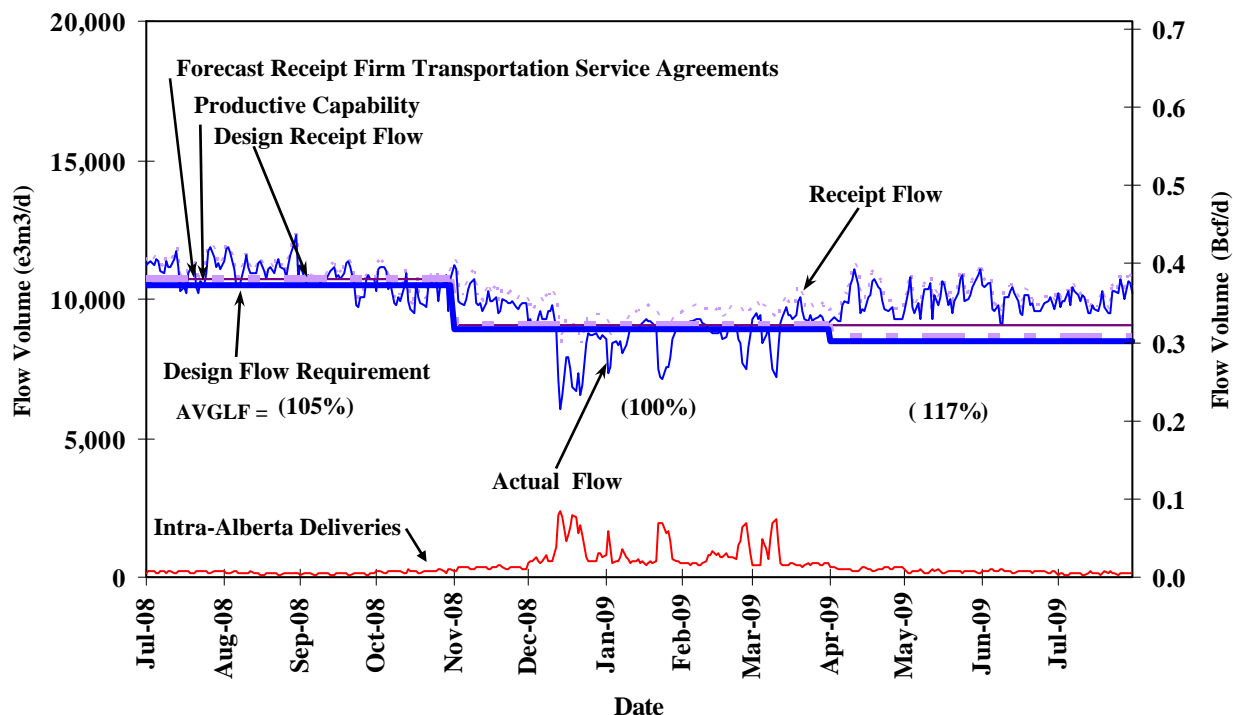
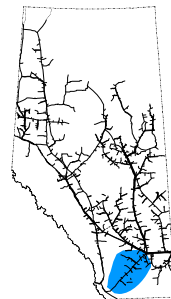


% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Feb	Mar	Apr	May	Jun	Jul
FT Volume	106	106	93	91	89	89
FT-R + IT Volume	131	130	122	113	114	111

**NOTE:** Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

% Design Flow Requirements Utilization						
Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/ Design Capacity	Feb	Mar	Apr	May	Jun	Jul
	138	137	122	107	110	110

# DESIGN FLOW REQUIREMENTS UTILIZATION SOUTH AND ALDERSON

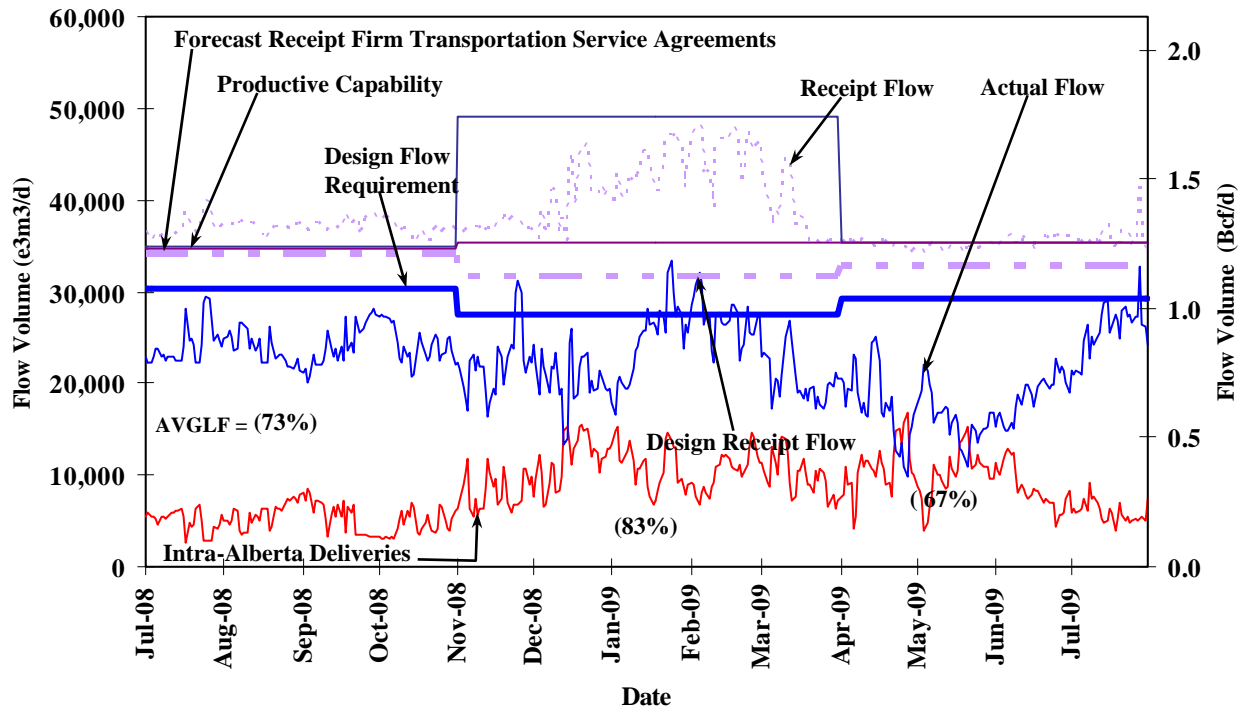
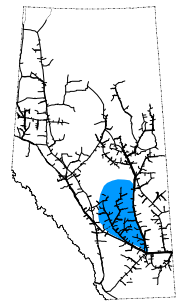


% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Feb	Mar	Apr	May	Jun	Jul
FT Volume	85	86	87	90	90	90
FT-R + IT Volume	106	108	118	120	117	118

**NOTE:** Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

% Design Flow Requirements Utilization						
Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/ Design Capacity	Feb	Mar	Apr	May	Jun	Jul
	99	102	116	119	116	118

# DESIGN FLOW REQUIREMENTS UTILIZATION RIMBEY-NEVIS

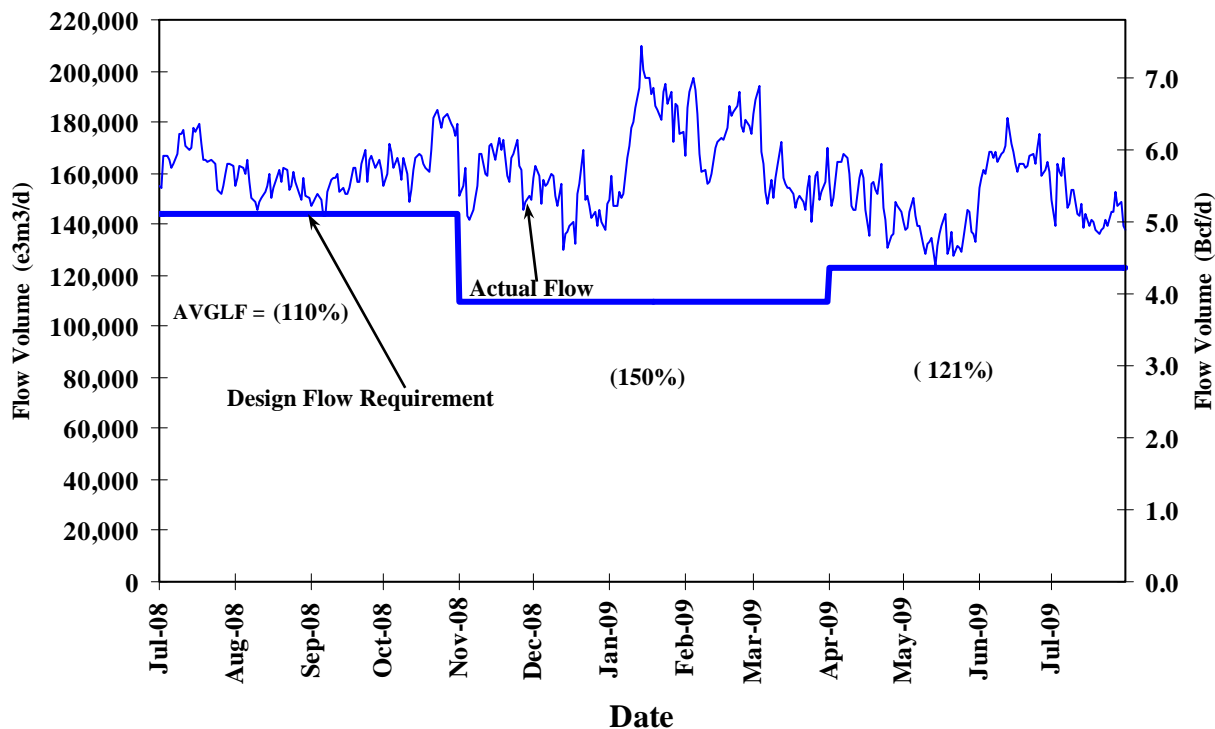
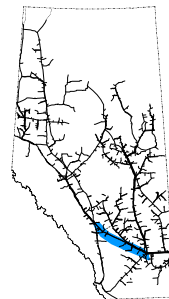


% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Feb	Mar	Apr	May	Jun	Jul
FT Volume	87	86	82	82	85	85
FT-R + IT Volume	113	111	108	109	114	113

**NOTE:** Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

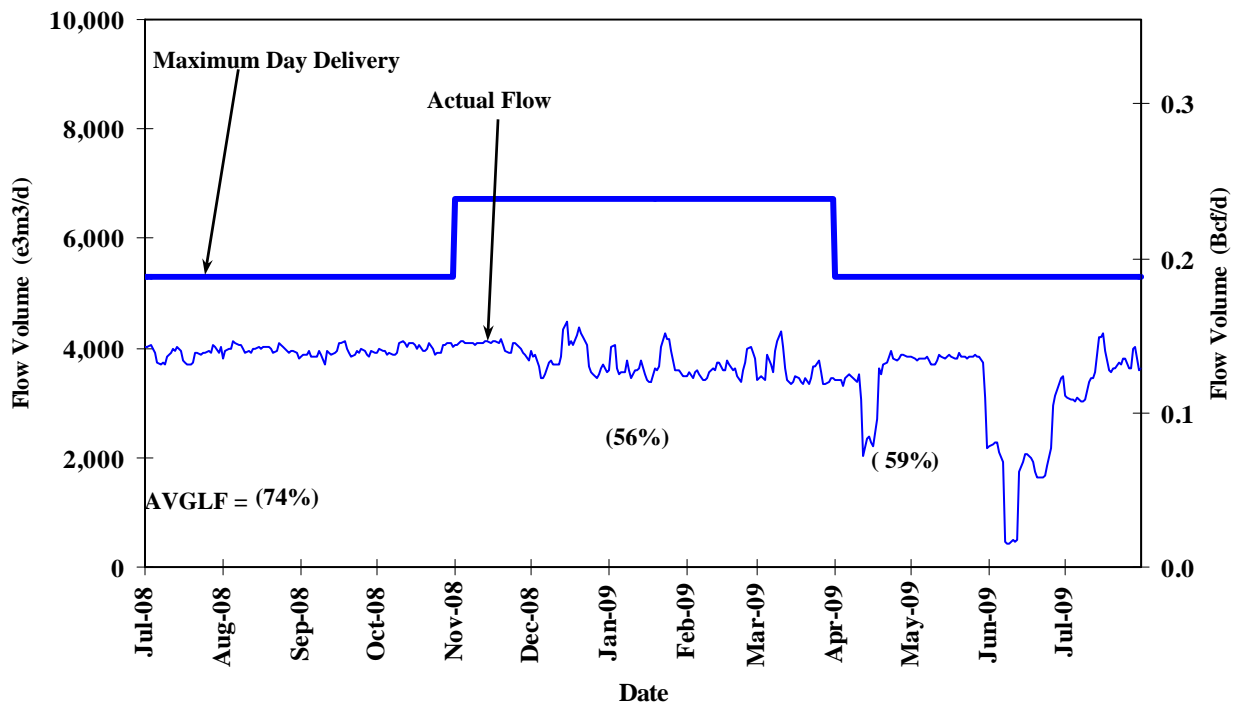
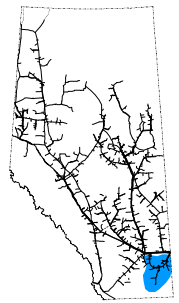
% Design Flow Requirements Utilization						
Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/ Design Capacity	Feb	Mar	Apr	May	Jun	Jul
	98	75	61	55	64	88

# DESIGN FLOW REQUIREMENTS UTILIZATION EASTERN ALBERTA MAINLINE (James River to Princess)



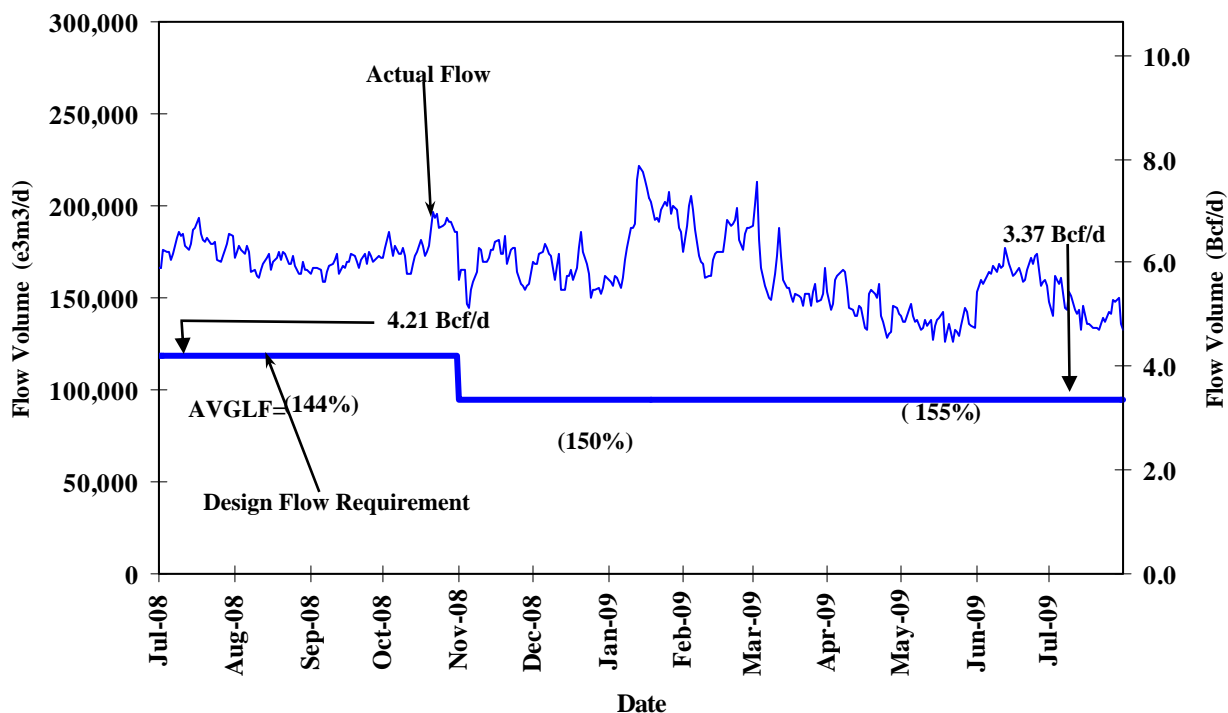
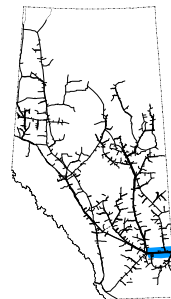
% Design Flow Requirements Utilization						
Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/ Design Capacity	Feb	Mar	Apr	May	Jun	Jul
	161	145	123	110	134	118

# DESIGN FLOW REQUIREMENTS UTILIZATION MEDICINE HAT



Design flow for the Medicine Hat area is the net flow to the area deliveries. Since all deliveries are intra-Alberta deliveries there are no Firm Service Delivery contracts in effect for this area. Consequently, contract utilization values are not available.

# DESIGN FLOW REQUIREMENTS UTILIZATION EASTERN ALBERTA MAINLINE (Princess to Empress / McNeill)



% Design Delivery Utilization (Notice: Average Actual Flow as a Percentage of Design Flow Requirements)						
	Feb	Mar	Apr	May	Jun	Jul
FT <sup>1</sup> Volume	153	143	126	108	133	130
FT <sup>1</sup> + IT Volume	192	170	156	144	172	152

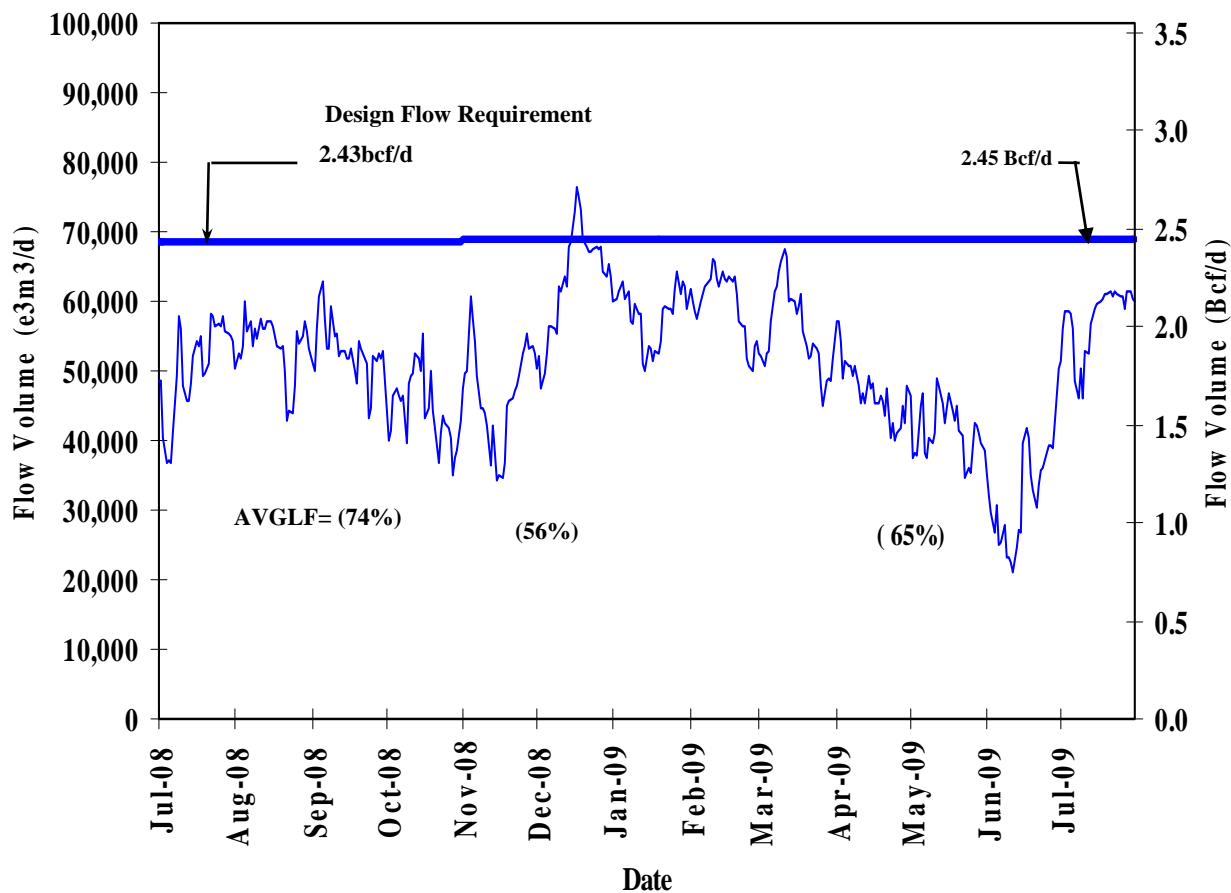
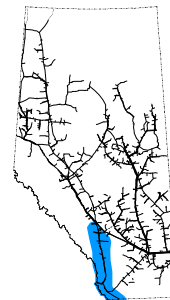
## NOTE:

Utilization data is based upon billed monthly volumes expressed as a percentage of seasonal design delivery flow at Empress and McNeill Export delivery points.

1. FT includes year-round FT-D, STFT and LRS.



# DESIGN FLOW REQUIREMENTS UTILIZATION WESTERN ALBERTA MAINLINE (Alberta/B.C. and Alberta/Montana Borders)



% Design Delivery Utilization (Notice: Average Actual Flow as a Percentage of Design Flow Requirements)						
	Feb	Mar	Apr	May	Jun	Jul
FT <sup>1</sup> Volume	85	79	68	59	46	76
FT <sup>1</sup> + IT Volume	87	81	68	60	47	83

## NOTE:

Utilization data is based upon billed monthly volumes expressed as a percentage of seasonal design delivery flow at Alberta/BC and Alberta/Montana Export delivery points.

# HISTORICAL TRANSPORTATION SERVICE AVAILABILITY

May 1, 2009 to July 31, 2009 (3 Month Average)

Receipt Area		IT-R Service	Firm Service	Firm Service	% CD		Causes
		Available	Available	Restriction	Restricted <sup>(1)</sup>		
	Segment	(% of time)	(% of time)	(% of time)	Max	Average	
Peace River	UPRM 1	100	100	0	0	0	
	PRLL 2	100	100	0	0	0	
	NWML 3	100	100	0	0	0	
	GRDL 4	100	100	0	0	0	
	WAEX 5	100	100	0	0	0	
	JUDY 24	100	100	0	0	0	
	WRSY 26	100	100	0	0	0	
	LPRM 27	100	100	0	0	0	
	GPML 7	100	100	0	0	0	
Central	CENT 8	100	100	0	0	0	
	LPOL 9	100	100	0	0	0	
North & East Upstream of Bens Lake	LIEG 10	100	100	0	0	0	
	KIRB 11	100	100	0	0	0	
	MRTN 6	100	100	0	0	0	
	SMHI 12	100	100	0	0	0	
	REDL 13	100	100	0	0	0	
	COLD 14	100	100	0	0	0	
Downstream of Bens Lake	NLAT 15	100	100	0	0	0	
	ELAT 16	100	100	0	0	0	
	WAIN 23	100	100	0	0	0	
Rimbey/Nevis	ALEG 17	100	100	0	0	0	
Eastern Mainline	BLEG 18	100	100	0	0	0	
	EGAT 19	100	100	0	0	0	
	MLAT 20	100	100	0	0	0	
	SLAT 22	100	100	0	0	0	
Western Mainline	WGAT 21	100	100	0	0	0	

Borders		IT-D Service	Firm Service	Firm Service	% CD Restricted <sup>(1)</sup>		Causes
	Available <sup>(2)</sup>	Available <sup>(2)</sup>	Available	Restriction			
	(% of time)	(% of time)	(% of time)	(% of time)	Max	Average	
Empress/McNeill		100	100	0	0	0	
Alberta-BC		100	100	0	0	0	
Gordondale		100	100	0	0	0	

# FUTURE FIRM TRANSPORTATION SERVICE AVAILABILITY (MAINLINE RESTRICTIONS)

## Export Firm Transportation Guidelines

Firm Transportation Service Type	Authorize Firm Transportation Service By	To Ensure Firm Transportation Service By
Export Delivery	August 1, 2009	November 2011

## Estimated Firm Transportation Service Availability

Please refer to the following web site for  
current FT-R Availability Map:

[http://www.transcanada.com/Customer\\_Express/capacity/external\\_map.pdf](http://www.transcanada.com/Customer_Express/capacity/external_map.pdf)

## Receipt Firm Transportation Guidelines

Firm Transportation Service Type	Authorize Firm Transportation Service By	To Ensure Firm Transportation Service By
Receipt - Summer construction (generally south of Edmonton)	July 1, 2009	November 2010
Receipt - Winter construction (generally north of Edmonton)	November 2009	April 2011

➤ If your needs for firm transportation service arise after the above dates to “Authorize Firm Transportation Service By”, NGTL will evaluate your new receipt firm transportation service or firm service transfer requests on a date-stamped basis.

*Please consult with your Customer Sales Representative to discuss your Firm Transportation Service needs.*

# HOW TO USE THIS REPORT

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## **Overview**

This report contains recent historical information on the level of utilization of firm transportation Service Agreements on the NGTL system, relative usage of interruptible service, level of utilization of design pipeline capacity, and the availability of transportation services as an indication of system reliability.

Data is reported either by *Pipeline Segment* (26 on the system) or *Design Area* (13 on the system). Maps of both are included in the reference section.

## **Firm Transportation Service Contract Utilization**

The Firm Transportation Service Contract Utilization report shows the percent utilization for each of the 26 NGTL pipeline segments and 3 major export delivery points comprising the total system. The utilization data is based on billed monthly volumes. Percent utilization is calculated as firm transportation service and firm transportation service + interruptible service divided by applicable receipt or delivery contract level. Historical Data involving billed volumes lags the current date by approximately two months.

## **Design Flow Requirements Utilization**

The load factor/segment flow graphs show actual flow versus design values for various NGTL system areas. For comparison, the graphs also include design area receipt firm transportation service agreements and productive capability. The graphs also show seasonal (summer/winter) design flows and average load factors for each season. Data used in these reports lags the current date by one month.

Design Flow Requirements utilization is a function of several factors that include:

- Total market demand for Alberta natural gas.
- Seasonal changes in market demand for Alberta natural gas.
- Receipt nominating practices of customers individually and in aggregate to meet that level of demand.
- Effect of scheduled maintenance on actual flow requirement in a design area at any given time.
- Design assumptions used in determining required segment flow requirement.

# HOW TO USE THIS REPORT - continued

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## **Historical Transportation Service Availability**

Transportation Service Availability is a system utilization measure that identifies the degree to which firm and interruptible transportation services are available on the NGTL system. It includes the historical frequency of service restriction experienced by the gas transmission network by service type and by pipeline segment.

The data shows the percentage of a given time period that a service type was available for a given section of the system. Service availability less than 100 percent means that some level of transportation service has been restricted for a portion of the time period.

Priority of transportation service on the NGTL system is firm transportation service, and then interruptible (IT). If transportation is restricted within a segment, all service within that segment of a lower priority will be affected.

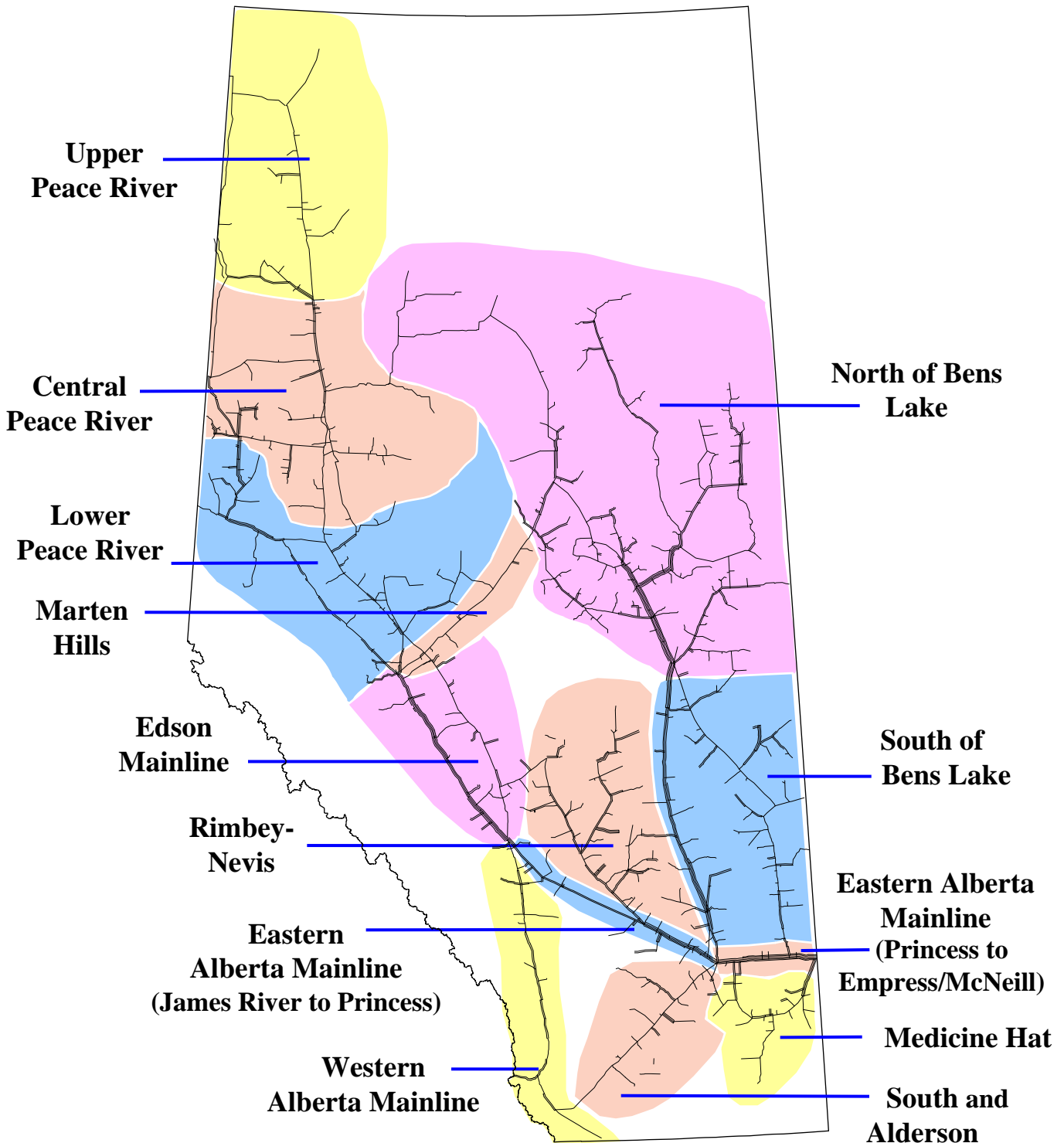
Service availability is affected by a number of factors including scheduled and unscheduled maintenance, construction or other outages.

As a monthly feature the Historical Transportation Service Availability is shown as a three-month rolling average of transportation availability.

## **Future Firm Transportation Service Availability**

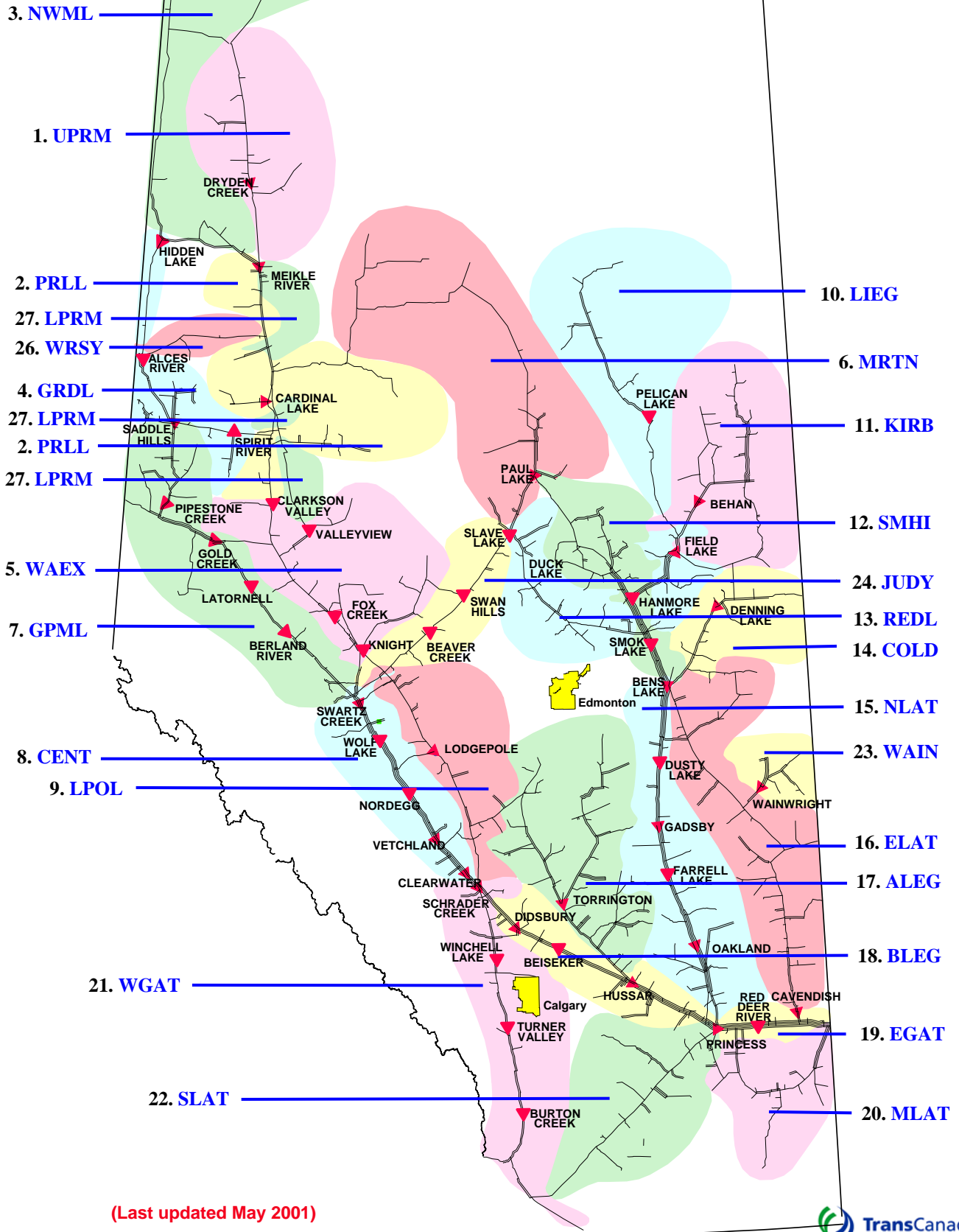
The Future Firm Transportation Service Availability report presents guidelines and timing for all future firm transportation service requests.

# NGTL DESIGN AREAS



(Last updated January 2007)

# NGTL PIPELINE SEGMENTS



(Last updated May 2001)

# DEFINITION OF TERMS

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## *Design Capacity Utilization*

### ***Actual Flow***

The amount of gas flowing out of an area.

### ***AVGLF (Average Load Factor)***

The ratio between average *Actual Flow* and *Design Flow Requirements*. It is calculated for every design season (summer/winter) as shown on the graphs.

### ***Design Flow Requirements***

The forecast of Firm Requirements that is required to be transported in a pipeline system considering design assumptions.

### ***Design Receipt Flow***

The amount of receipt flow for which the area was designed.

### ***Productive Capability***

The lesser of forecast field deliverability and the forecast of aggregate Receipt Contract Demand under Firm Service Agreements held at each receipt point.

### ***Forecast Receipt Firm Transportation Service Agreements***

The forecast sum of all the receipt firm service contracts within and upstream of an area used in mainline facility design.

### ***Intra-Alberta Deliveries***

The amount of sales gas flowing off the system within an area.

### ***Receipt Flow***

Aggregate of actual receipts within an area and the *Actual Flow* of the upstream area.

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## *Historical Transportation Service Availability*

### ***Average % CD Restricted***

The average percentage of the entire segment receipt contract demand restricted during periods of restriction.

### ***Firm Service Available***

The percentage of time that all requested firm transportation service requests were transported within a segment.

### ***Firm Service Restriction***

Percentage of time firm service is restricted.

### ***IT-2 Service Available***

The percentage of time that IT-2 service requests were transported.

### ***Max % CD Restricted***

The maximum percentage to which the entire segment contract demand was restricted.

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## *Other*

### ***System Load Factor***

The volume weighted average of the *Average Load Factor (AVGLF)* of all design areas on the system