

# SYSTEM UTILIZATION AND RELIABILITY MONTHLY REPORT

for the month ending  
**January, 2008**

*Published date:*  
**July 4, 2008**

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## Highlights This Month:

- Average Load Factors greater than 90% were experienced in a number of design areas during November, 2007-January 2008 [i.e. Upper Peace River, Upper and Central Peace River, Peace River Design, North of Bens Lake, North and South of Bens Lake, Upstream James River, Eastern Alberta Mainline: James River to Princess, Eastern Alberta Mainline: Princess to Empress/McNeill, Western Alberta Mainline, Rimbey/Nevis, and South and Alderson].
- FT Receipt Availability over a 3 month average from November 1, 2007 – January 31, 2008 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 November 1, 2007 – January 31, 2008, 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. If you wish to address a question at the FLC meeting, call Bob one week prior to the next meeting. Generally, meetings are scheduled for the second Wednesday of every other month (ie. Jan, Mar, May, etc).

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

By NGTL Pipeline Segments

Segment	Receipt Contract	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Jan CD (mmcf/d)
UPRM <sup>4</sup>	FT	94%	89%	92%	91%	89%	88%	165
	FT + IT	101%	92%	95%	96%	92%	92%	
LPRM <sup>4</sup>	FT	95%	92%	92%	92%	90%	91%	27
	FT + IT	132%	123%	128%	109%	104%	104%	
PRLL <sup>4</sup>	FT	92%	92%	91%	91%	90%	92%	231
	FT + IT	115%	115%	113%	110%	109%	108%	
NWML <sup>4</sup>	FT	95%	93%	93%	92%	90%	91%	523
	FT + IT	103%	100%	99%	98%	98%	96%	
GRDL <sup>4</sup>	FT	89%	89%	93%	92%	87%	87%	275
	FT + IT	116%	119%	119%	115%	110%	108%	
WRSY <sup>4</sup>	FT	95%	96%	94%	97%	94%	94%	40
	FT + IT	165%	171%	150%	150%	143%	137%	
WAEX	FT	91%	89%	89%	89%	90%	89%	319
	FT + IT	149%	134%	136%	127%	137%	125%	
JUDY	FT	97%	98%	98%	98%	97%	96%	107
	FT + IT	138%	135%	136%	131%	132%	131%	
GPML	FT	93%	93%	92%	93%	93%	92%	1,964
	FT + IT	106%	106%	104%	103%	104%	104%	
CENT	FT	96%	94%	95%	95%	95%	95%	1,165
	FT + IT	111%	111%	110%	111%	113%	110%	
LPOL	FT	96%	93%	96%	92%	95%	94%	480
	FT + IT	130%	124%	129%	121%	119%	121%	
WGAT	FT	88%	85%	84%	83%	83%	86%	397
	FT + IT	104%	97%	97%	95%	97%	105%	
ALEG	FT	90%	89%	86%	92%	92%	92%	1,176
	FT + IT	114%	113%	108%	110%	109%	109%	
SLAT	FT	93%	93%	94%	86%	84%	85%	337
	FT + IT	118%	112%	109%	105%	106%	106%	
MLAT	FT	93%	93%	93%	93%	93%	93%	312
	FT + IT	105%	103%	105%	106%	104%	104%	
BLEG	FT	95%	95%	96%	96%	96%	96%	677
	FT + IT	108%	107%	109%	107%	106%	104%	
EGAT	FT	95%	95%	93%	92%	92%	91%	66
	FT + IT	112%	111%	114%	115%	108%	108%	
MRTN	FT	89%	91%	89%	92%	88%	90%	177
	FT + IT	101%	102%	101%	100%	94%	98%	
LIEG	FT	81%	80%	82%	80%	80%	75%	110
	FT + IT	125%	119%	121%	119%	118%	111%	
KIRB	FT	93%	90%	92%	89%	89%	89%	117
	FT + IT	148%	134%	123%	115%	107%	109%	
SMHI	FT	93%	94%	94%	92%	89%	90%	108
	FT + IT	130%	138%	133%	123%	126%	125%	
REDL	FT	92%	92%	90%	89%	90%	91%	97
	FT + IT	134%	132%	131%	128%	125%	124%	
COLD	FT	81%	84%	85%	84%	84%	82%	70
	FT + IT	105%	105%	103%	108%	101%	101%	
NLAT	FT	92%	92%	93%	92%	91%	90%	354
	FT + IT	128%	124%	117%	119%	116%	113%	
WAIN	FT	92%	90%	92%	95%	94%	92%	21
	FT + IT	119%	114%	124%	127%	135%	133%	
ELAT	FT	93%	92%	92%	93%	92%	92%	235
	FT + IT	127%	126%	128%	129%	124%	123%	
TOTAL SYSTEM	FT	93%	92%	92%	92%	92%	91%	9,548
	FT + IT	114%	112%	111%	109%	109%	108%	
Segment	Delivery Contract	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Jan CD (GJ/d)
Empress	FT	100%	98%	99%	99%	99%	99%	4,835,293
	FT + IT	110%	105%	106%	121%	108%	104%	
McNeill	FT	98%	98%	92%	80%	95%	97%	1,989,268
	FT + IT	117%	106%	97%	86%	104%	114%	
ABC	FT	91%	90%	92%	86%	95%	92%	2,729,542
	FT + IT	93%	94%	97%	88%	98%	94%	

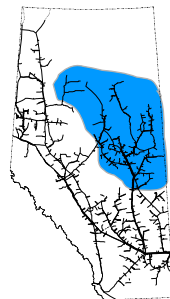
\*NOTE:

1. FT includes all receipt and export delivery Firm Transportation Services: FTR, LRS FTD.

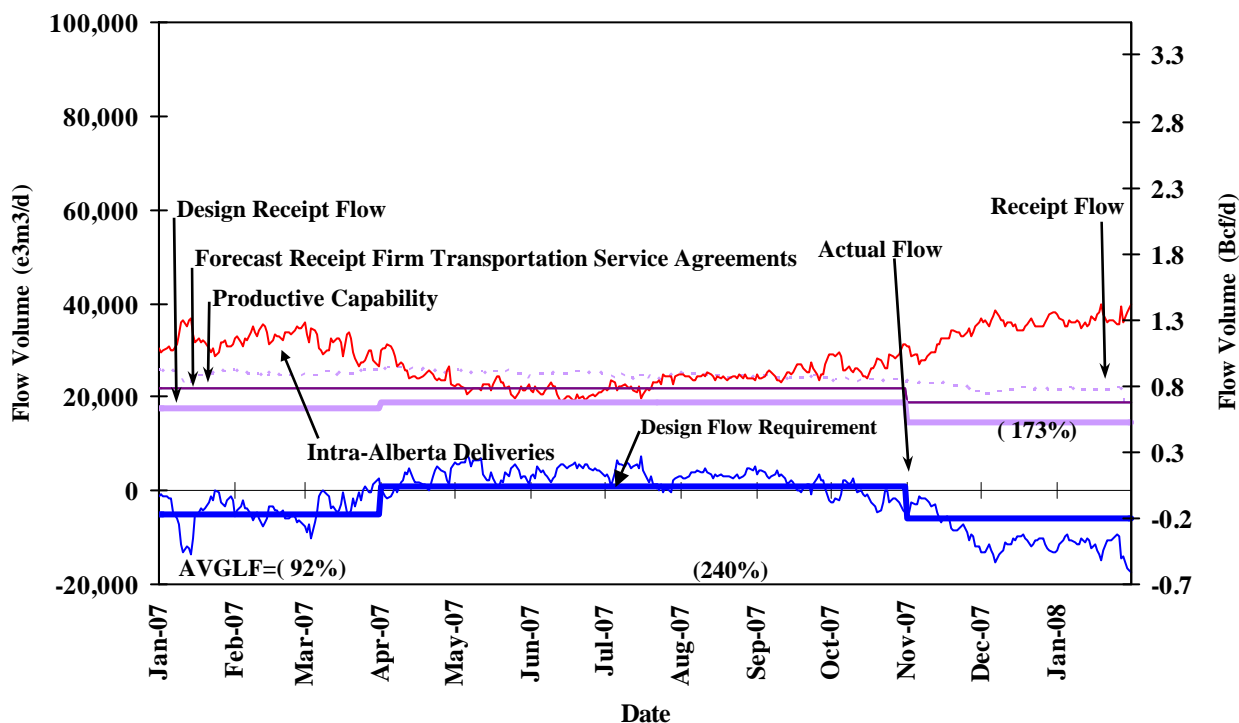
2. IT includes all receipt and border delivery Interruptible Services: ITR, FRO, ITD, FDO.

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.

4. Boundaries for pipe segments UPRM, LPRM, PRLL, NWML, GRDL and WRSY changed in November 2000.



# DESIGN FLOW REQUIREMENTS UTILIZATION NORTH OF BENS LAKE

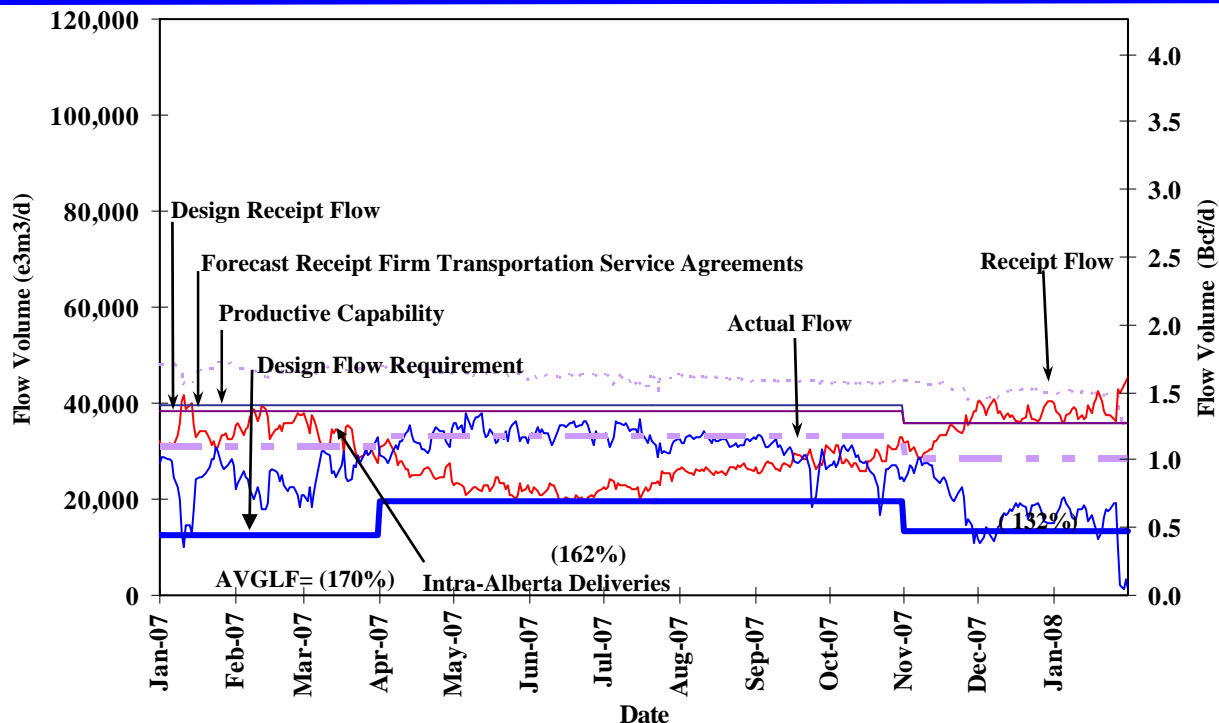
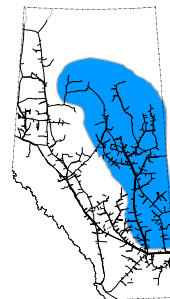


% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Aug	Sep	Oct	Nov	Dec	Jan
FT-R Volume	101	101	102	120	116	115
FT-R + IT Volume	139	137	134	155	147	146

**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	Aug	Sep	Oct	Nov	Dec	Jan
	325	188	117	103	205	208

# DESIGN FLOW REQUIREMENTS UTILIZATION NORTH & SOUTH OF BENS LAKE



## % Design Receipt Utilization

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

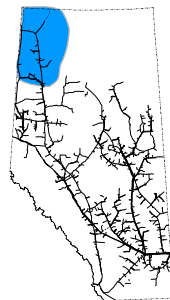
	Aug	Sep	Oct	Nov	Dec	Jan
FT Volume	108	108	109	117	116	114
FT-R + IT Volume	149	146	143	153	149	147

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.

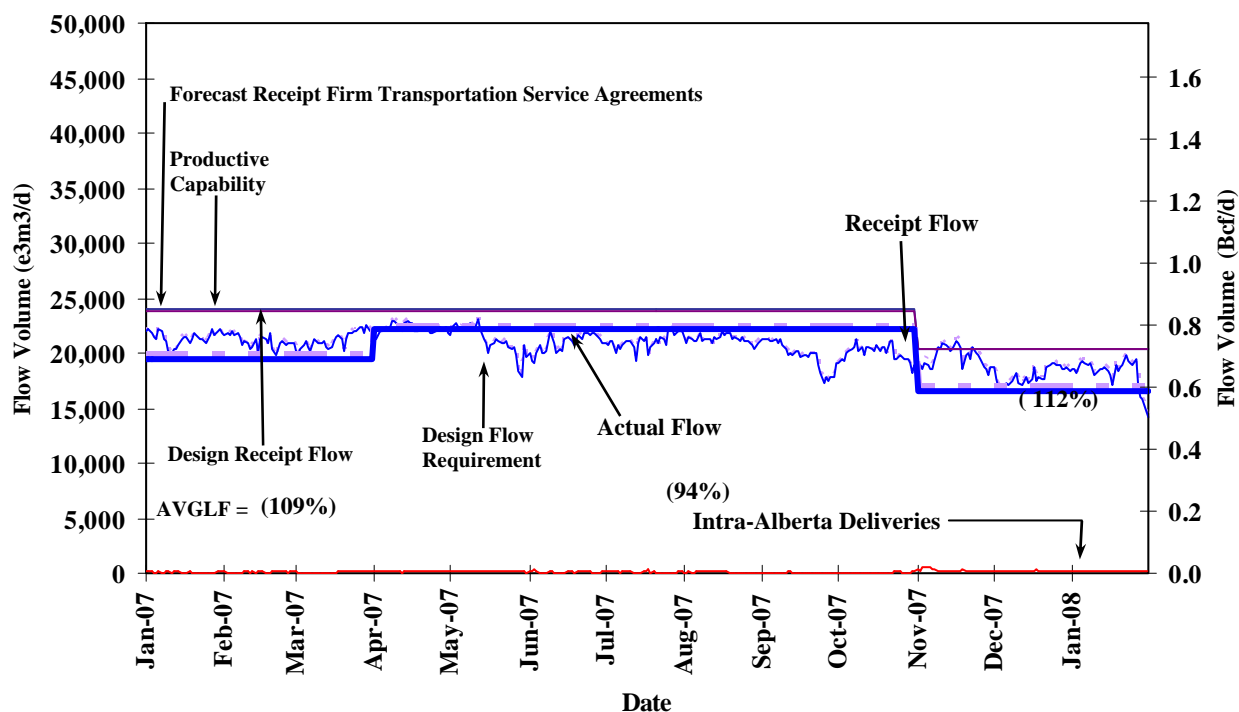
## % Design Flow Requirements Utilization

Monthly Average Actual Flow as a Percentage of Design Flow Requirements

	Aug	Sep	Oct	Nov	Dec	Jan
Average Flow/ Design Capacity	165	148	137	170	119	111



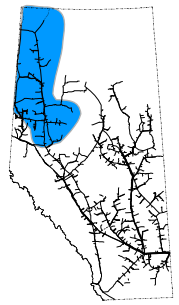
# DESIGN FLOW REQUIREMENTS UTILIZATION UPPER PEACE RIVER



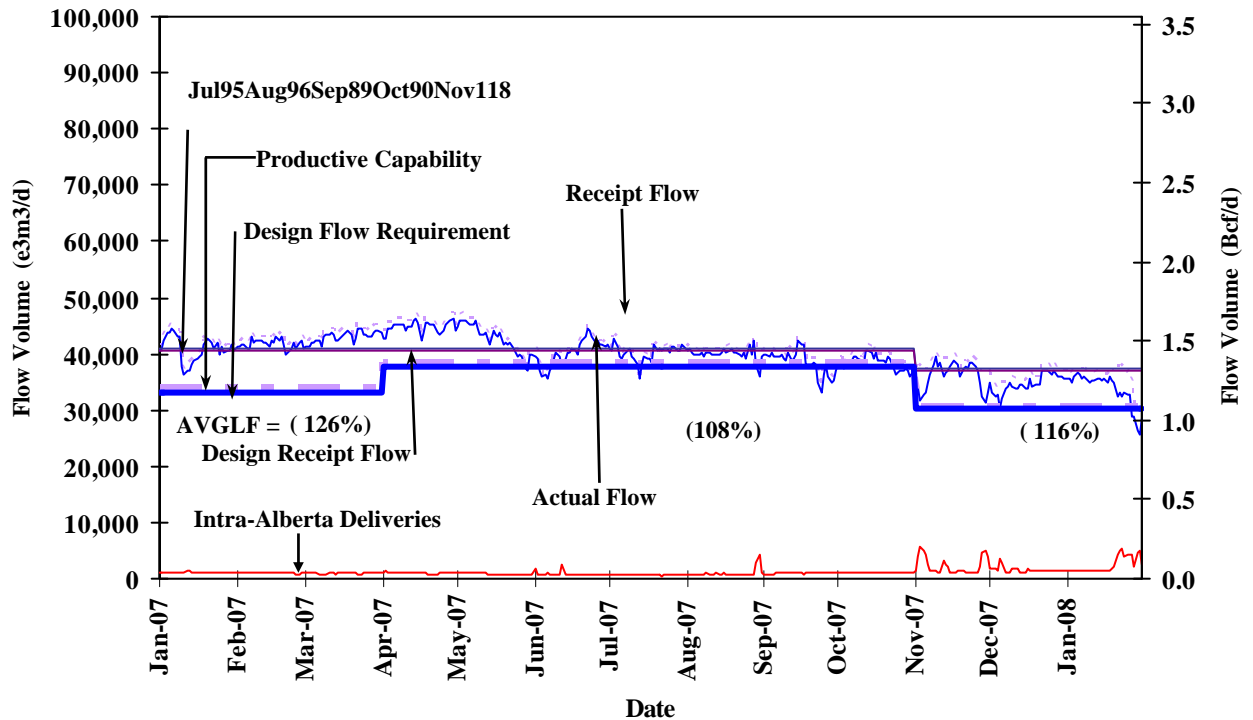
% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Aug	Sep	Oct	Nov	Dec	Jan
FT Volume	100	95	97	111	100	104
FT-R + IT Volume	108	101	102	118	107	109

**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	Aug	Sep	Oct	Nov	Dec	Jan
	96	89	90	118	107	109



# DESIGN FLOW REQUIREMENTS UTILIZATION UPPER and CENTRAL PEACE RIVER

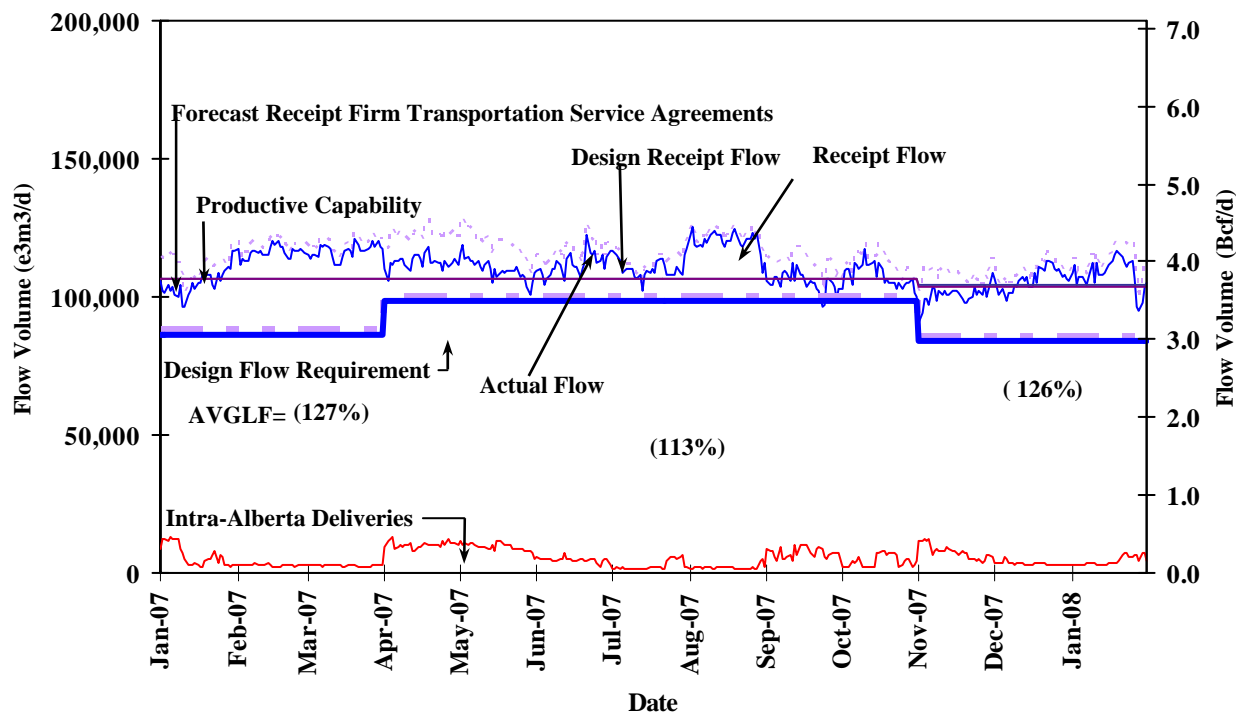
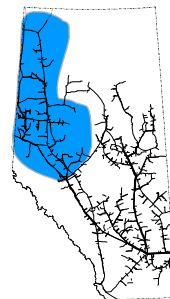


% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Aug	Sep	Oct	Nov	Dec	Jan
FT Volume	103	99	101	109	102	104
FT-R + IT Volume	122	117	117	125	118	118

**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	Aug	Sep	Oct	Nov	Dec	Jan
	106	102	102	120	115	112

# DESIGN FLOW REQUIREMENTS UTILIZATION PEACE RIVER

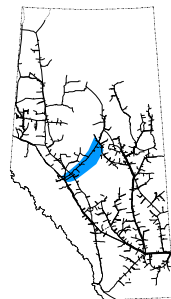


% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Aug	Sep	Oct	Nov	Dec	Jan
FT Volume	109	108	108	109	108	106
FT-R + IT Volume	131	128	127	126	126	123

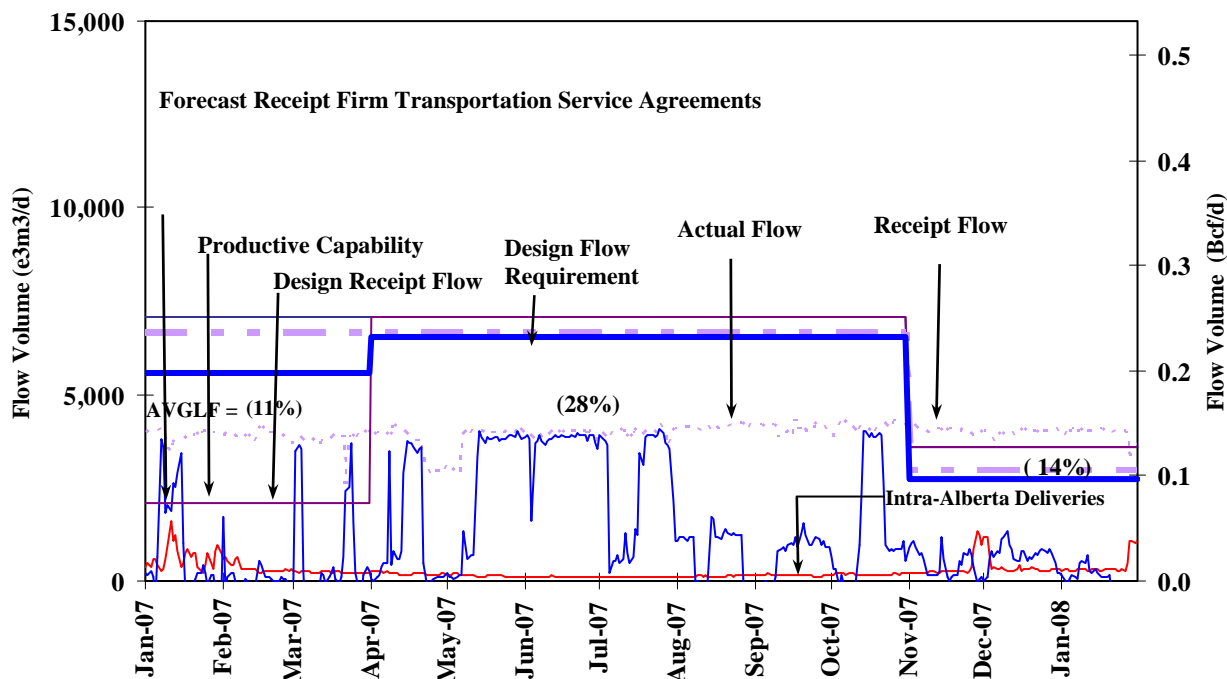
**NOTE:** Utilization data is based upon billed monthly volumes expressed as a percentage of design receipt flow. Design receipt flow is the amount of receipt flow for which the area was designed.

% Design Flow Requirements Utilization						
Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/ Design Capacity	Aug	Sep	Oct	Nov	Dec	Jan
	122	107	109	120	127	130





# DESIGN FLOW REQUIREMENTS UTILIZATION MARTEN HILLS



## % Design Receipt Utilization

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

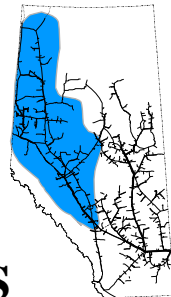
	Aug	Sep	Oct	Nov	Dec	Jan
FT Volume	50	51	51	102	100	99
FT-R + IT Volume	71	70	71	138	136	135

**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.

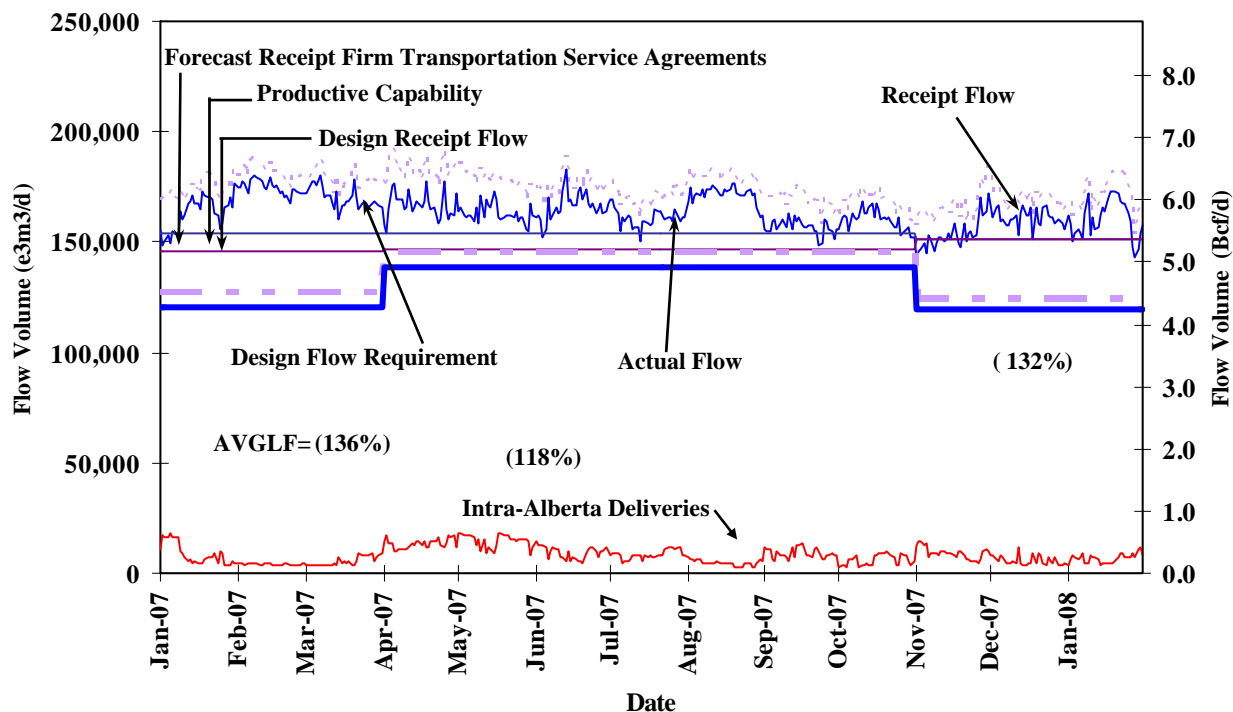
## % Design Flow Requirements Utilization

Monthly Average Actual Flow as a Percentage of Design Flow Requirements

	Aug	Sep	Oct	Nov	Dec	Jan
Average Flow/ Design Capacity	11	11	23	17	25	-1



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

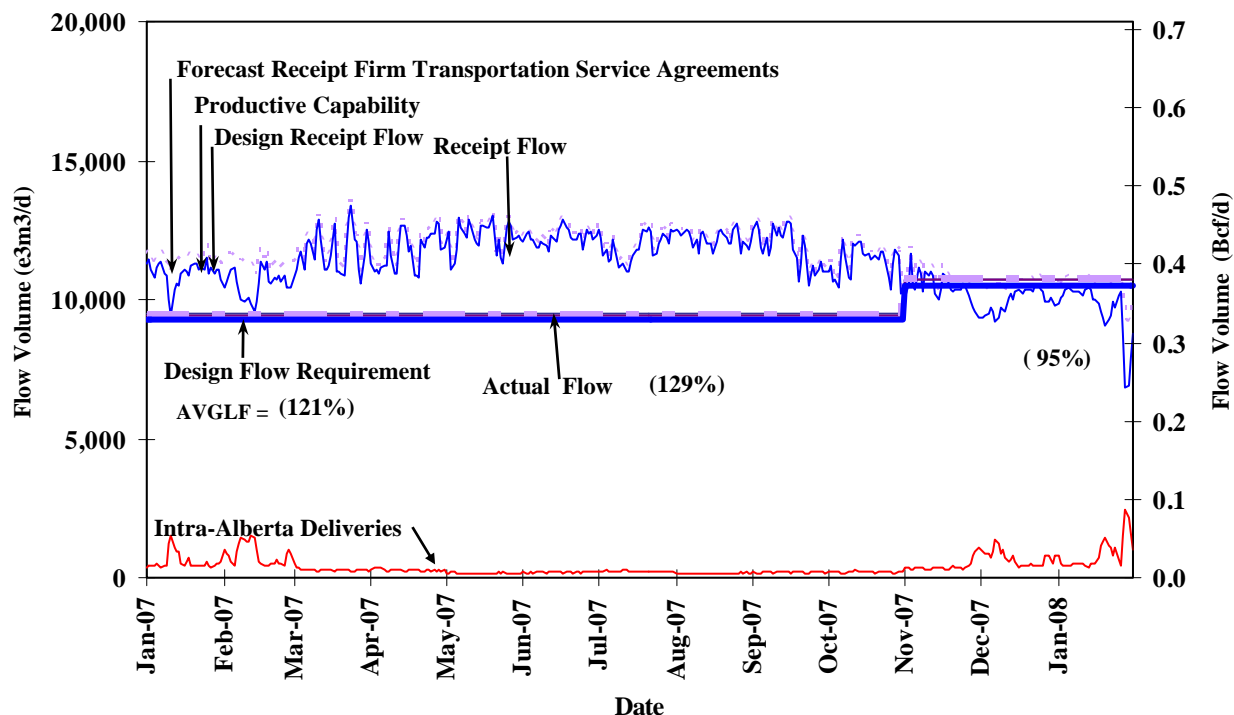
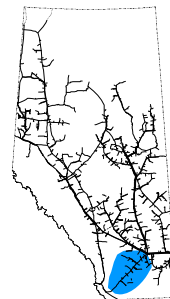


% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Aug	Sep	Oct	Nov	Dec	Jan
FT Volume	110	109	109	109	109	107
FT-R + IT Volume	134	131	130	128	129	126

**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	Aug	Sep	Oct	Nov	Dec	Jan
	124	114	116	128	134	134

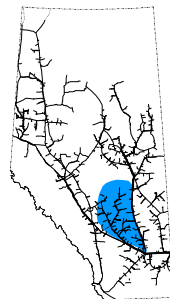
# DESIGN FLOW REQUIREMENTS UTILIZATION SOUTH AND ALDERSON



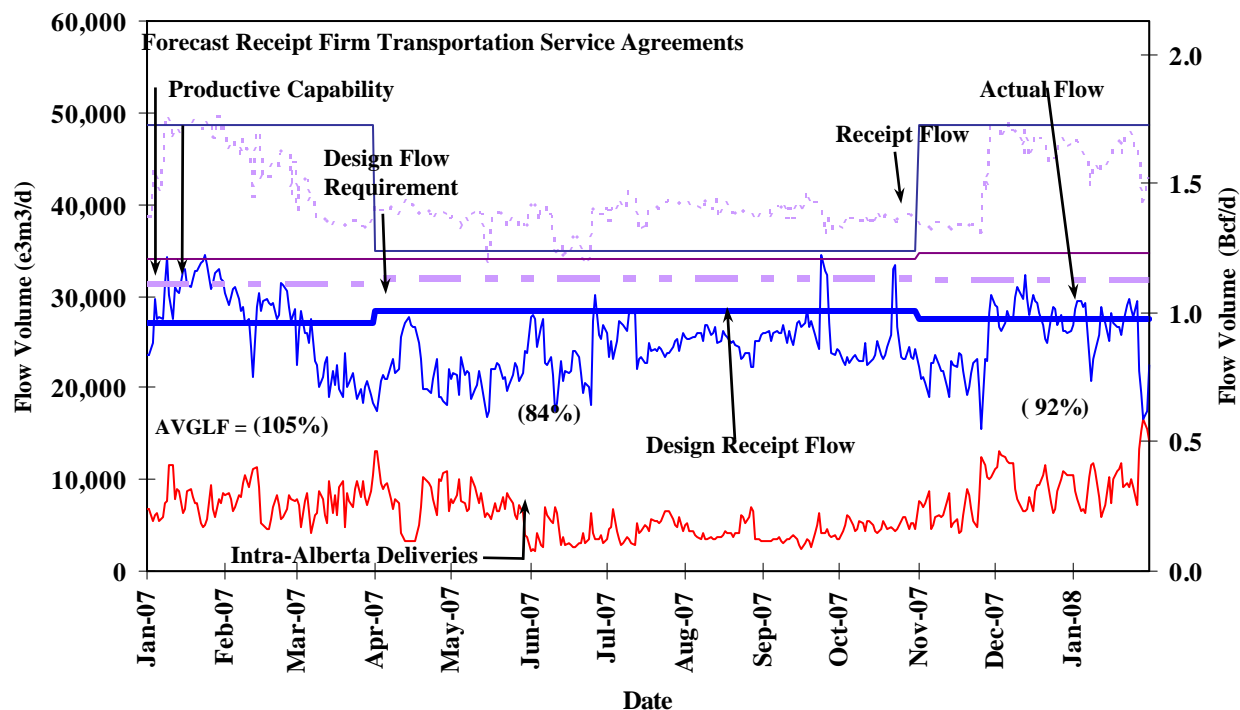
% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Aug	Sep	Oct	Nov	Dec	Jan
FT Volume	104	107	106	84	82	80
FT-R + IT Volume	131	127	122	102	101	99

**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	Aug	Sep	Oct	Nov	Dec	Jan
	131	128	122	99	94	92



# DESIGN FLOW REQUIREMENTS UTILIZATION RIMBEY-NEVIS

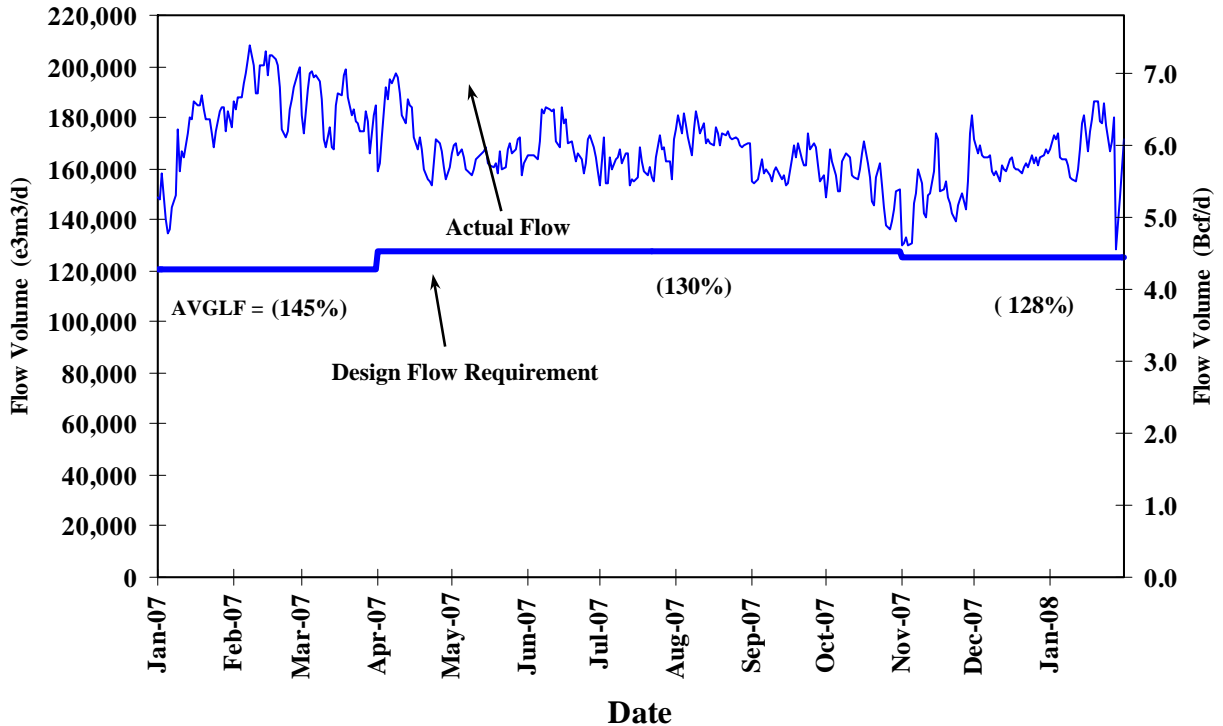
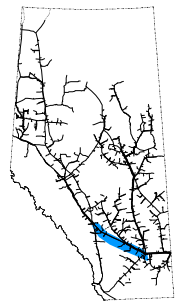


% Design Receipt Utilization						
(Notice: The Percentages are not the same as the Contract Utilization Percentages)						
	Aug	Sep	Oct	Nov	Dec	Jan
FT Volume	105	103	98	100	98	96
FT-R + IT Volume	134	129	123	119	117	114

**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.

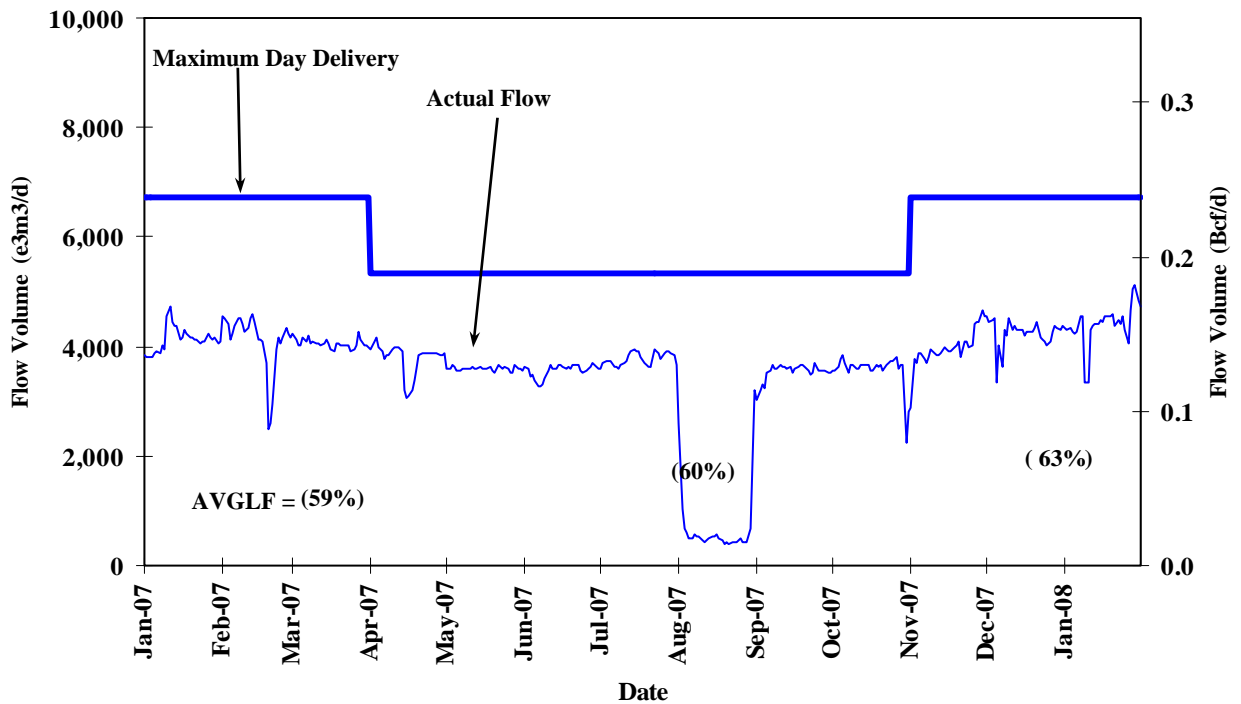
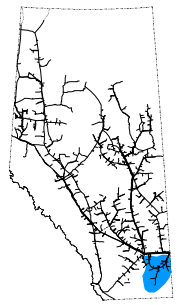
% Design Flow Requirements Utilization						
Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/ Design Capacity	Aug	Sep	Oct	Nov	Dec	Jan
	88	94	85	81	102	94

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



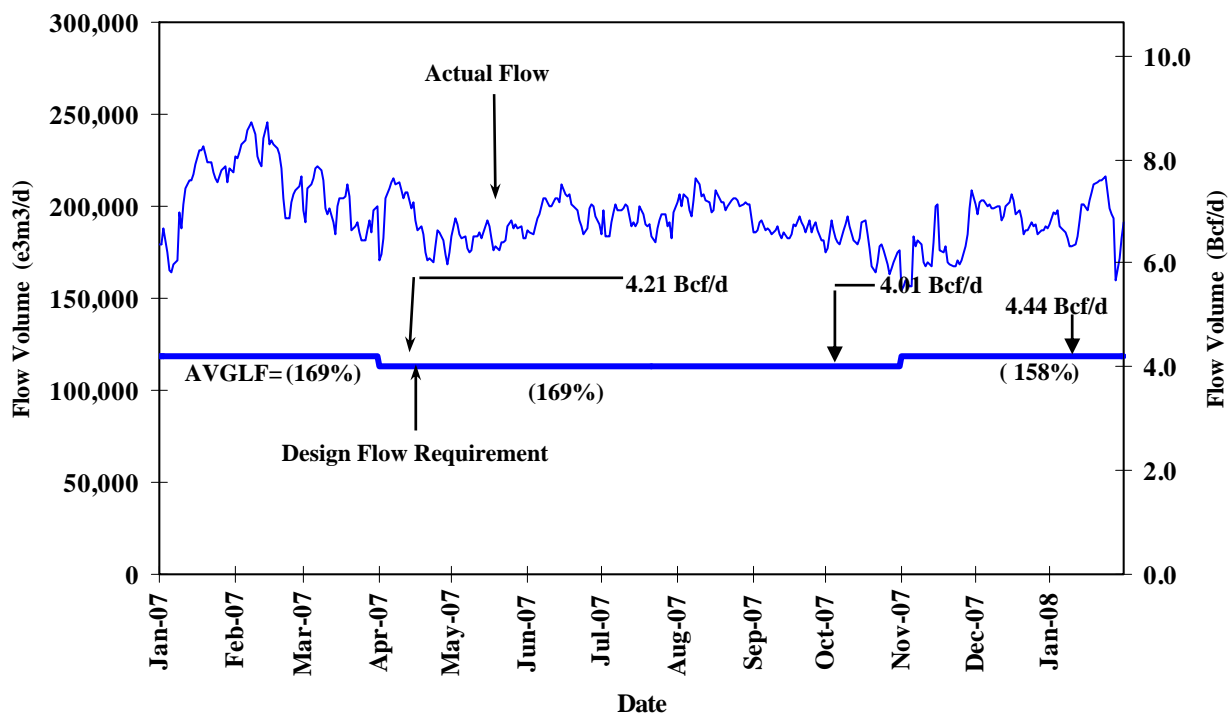
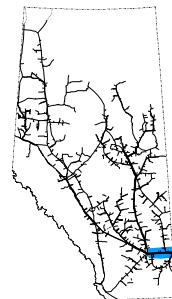
<b>% Design Flow Requirements Utilization</b> Monthly Average Actual Flow as a Percentage of Design Flow Requirements						
Average Flow/ Design Capacity	Aug 136	Sep 126	Oct 122	Nov 119	Dec 130	Jan 135

# 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)



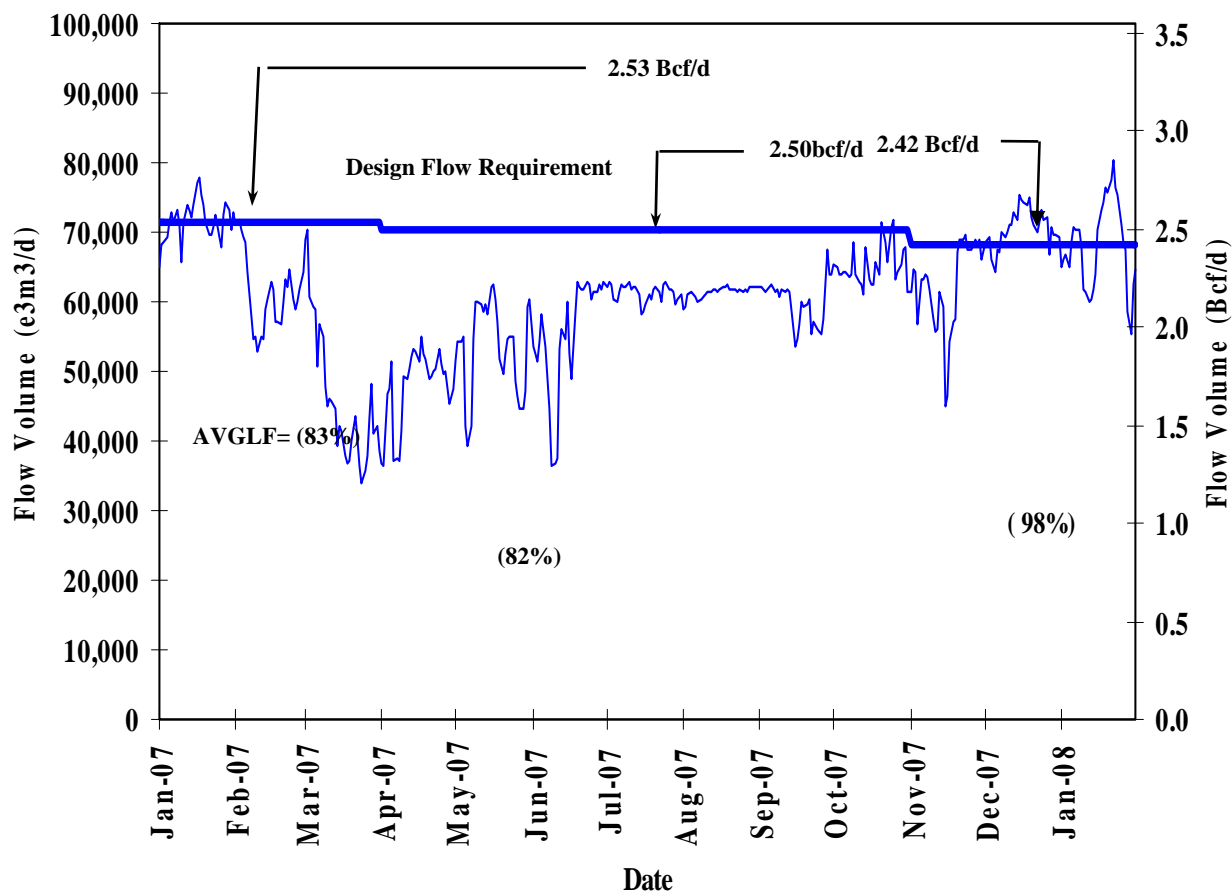
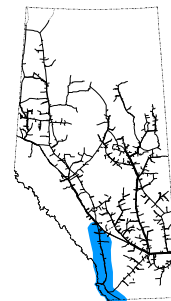
% Design Delivery Utilization (Notice: Average Actual Flow as a Percentage of Design Flow Requirements)						
	Aug	Sep	Oct	Nov	Dec	Jan
FT <sup>1</sup> Volume	151	147	142	124	150	150
FT <sup>1</sup> + IT Volume	171	158	151	147	164	164

## 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)						
	Aug	Sep	Oct	Nov	Dec	Jan
FT <sup>1</sup> Volume	84	83	87	89	100	97
FT <sup>1</sup> + IT Volume	86	86	91	91	103	99

## 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

November 1, 2007 to January 31, 2008 (3 Month Average)

Receipt Area	Segment	IT-R Service	Firm Service	Firm Service	% CD	
		Available (% of time)	Available (% of time)	Restriction (% of time)	Restricted <sup>(1)</sup> Max	Average
Peace River	UPRM 1	100	100	0	0	0
	PRL 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	Available <sup>(2)</sup> (% of time)	IT-D Service	Firm Service	Firm Service	% CD Restricted <sup>(1)</sup>	
		Available <sup>(2)</sup> (% of time)	Available (% of time)	Restriction (% of time)	Max	Average
Empress/McNeill		100	100	0	0	0
Alberta-BC		100	100	0	0	0
Gordondale		100	100	0	0	0

(1) Percentage of CD restricted during periods of restriction.

(2) Represents percent of time full IT-D nominated available, does not include availability during partial restrictions.

(3) Pertains to FS Restrictions.

# 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, 2006 August 1, 2007	November 2007 November 2008

## Receipt Firm Transportation Guidelines

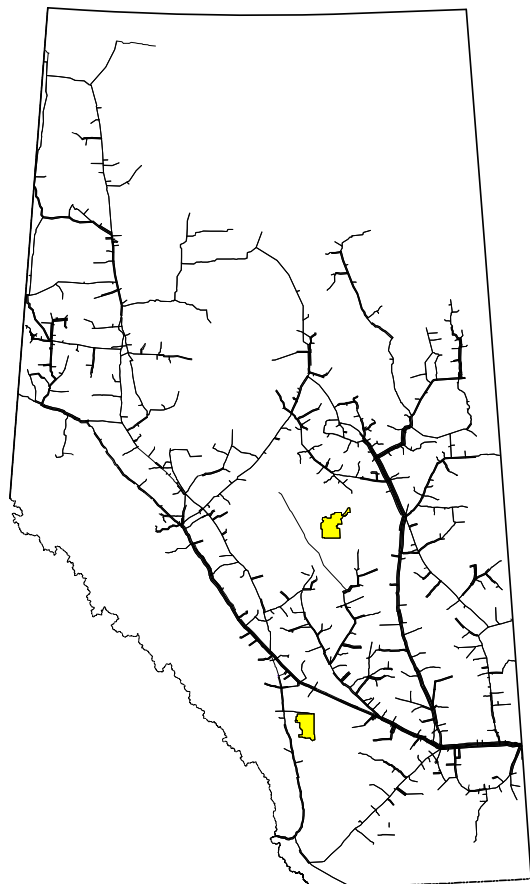
Firm Transportation Service Type	Authorize Firm Transportation Service By	To Ensure Firm Transportation Service By
Receipt - Summer construction (generally south of Edmonton)	November 1, 2006 November 1, 2007	November 2007 November 2008
Receipt - Winter construction (generally north of Edmonton)	April 1, 2006 April 1, 2007	April 2007 April 2008

➤ 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.*

## Estimated Firm Transportation Service Availability as of December, 2006

(last revision November 2005)



Firm Transportation - Receipt Lead Time

# 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* (24 on the system) or *Design Area* (11 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 24 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.

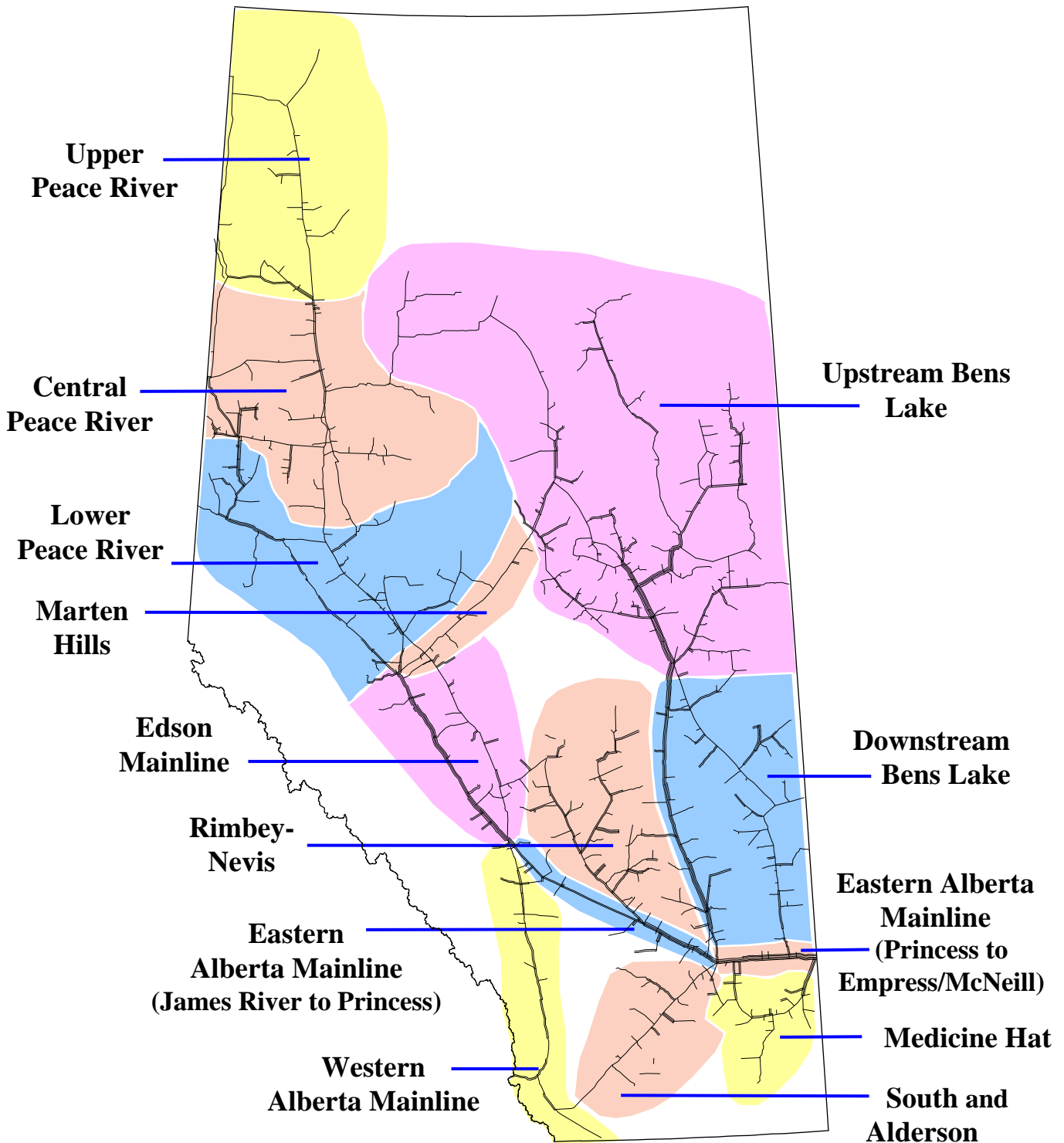
Service availability is affected by a number of factors including scheduled and unscheduled maintenance, construction or other outages.

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**

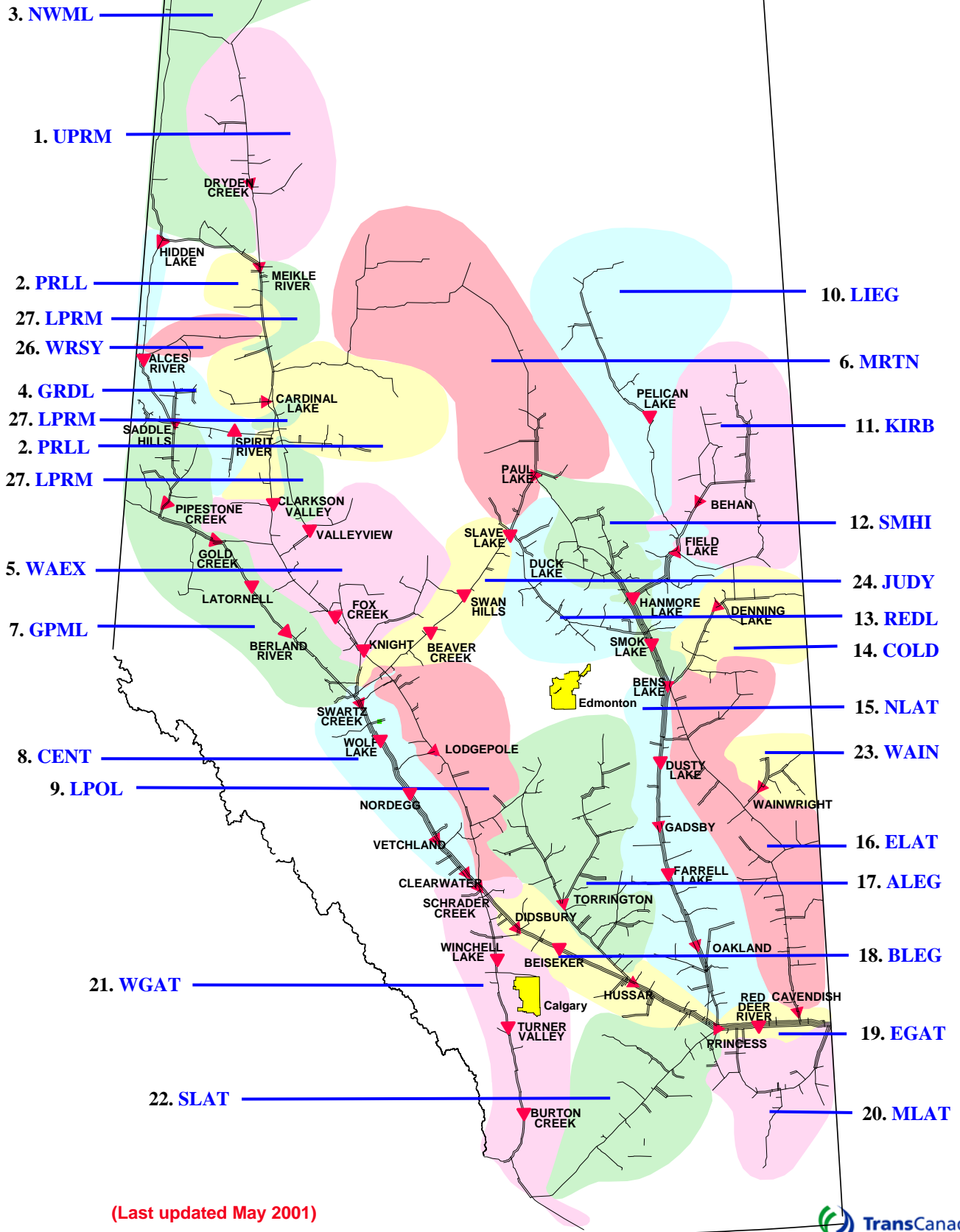
The Future Firm Transportation Service Availability report presents guidelines and timing for all future firm transportation service requests.

# NGTL DESIGN AREAS



(Last updated February 2001)

# 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