

# SYSTEM UTILIZATION AND RELIABILITY MONTHLY REPORT

for the month ending  
**April, 2011**

*Published date:*  
**June 20, 2011**

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## Highlights This Month:

- Starting with the 2009/10 Gas Year, the average actual flow for the dominant flow condition in each of the Alberta design areas will be compared against the corresponding design capability to obtain a measure of pipeline utilization. Consequently, design capability utilization will be measured as Average Actual Flow / Seasonal Design Capability.
- FT Receipt Availability over a 3 month average from February 1, 2011 – April 30, 2011 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 February 1, 2011 – April 30, 2011, were all deemed 100% available.
- New delivery transportation services were introduced on the Alberta System in November 2010. Consequently, the Firm Transportation service contract utilization table (page 3 of this report) has been modified to illustrate the FT and TF + IT utilization of these new services.

**NOVA Gas Transmission Ltd.**

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If you have any questions on the content of this report, contact Bill Chmilar at (403) 920-5309 or via fax at (403) 920-2379.

# FIRM TRANSPORTATION SERVICE<sup>1</sup> CONTRACT UTILIZATION<sup>3</sup>

By NGTL Pipeline Segments  
April 2011

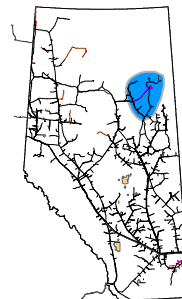
Segment	Receipt Contract	Delivery		Receipt	
		Utilization	Apr CD (TJ/d)	Utilization	Apr CD (MMcf/d)
UPRM	FT	3%	25.4	96%	106
	FT + IT <sup>2</sup>	3%		106%	
LPRM	FT	0%	0.0	98%	12
	FT + IT	0%		113%	
PRL	FT	57%	24.3	96%	139
	FT + IT	71%		117%	
NWML	FT	0%	0.0	96%	366
	FT + IT	0%		104%	
GRDL	FT	100%	0.2	71%	835
	FT + IT	176%		92%	
WRSY	FT	0%	0.0	91%	28
	FT + IT	0%		136%	
WAEX	FT	7%	38.7	83%	262
	FT + IT	16%		158%	
JUDY	FT	32%	3.7	98%	83
	FT + IT	202%		123%	
GPML	FT	27%	23.4	95%	2,484
	FT + IT	117%		110%	
CENT	FT	0%	9.8	94%	945
	FT + IT	0%		119%	
LPOL	FT	12%	12.3	98%	403
	FT + IT	264%		138%	
WGAT	FT	82%	2,366.8	68%	353
	FT + IT	85%		105%	
ALEG	FT	87%	102.1	98%	854
	FT + IT	309%		123%	
SLAT	FT	100%	2.7	97%	244
	FT + IT	360%		116%	
MLAT	FT	80%	211.9	97%	243
	FT + IT	81%		112%	
BLEG	FT	39%	26.7	98%	549
	FT + IT	330%		112%	
EGAT	FT	98%	4,084.9	96%	46
	FT + IT	120%		460%	
MRTN	FT	1%	12.8	72%	105
	FT + IT	27%		111%	
LIEG	FT	81%	668.2	48%	67
	FT + IT	111%		110%	
KIRB	FT	80%	589.3	79%	69
	FT + IT	100%		119%	
SMHI	FT	49%	11.5	80%	57
	FT + IT	49%		162%	
REDL	FT	40%	13.1	77%	48
	FT + IT	142%		164%	
COLD	FT	60%	17.9	75%	28
	FT + IT	212%		150%	
NLAT	FT	61%	123.8	94%	190
	FT + IT	128%		126%	
WAIN	FT	0%	0.0	92%	12
	FT + IT	0%		130%	
ELAT	FT	93%	1.2	94%	116
	FT + IT	5341%		131%	
TOTAL SYSTEM	FT	88%	8,370.7	91%	8,644
	FT + IT	110%		117%	

\*NOTE:

1. FT includes all receipt and delivery Firm Transportation Services: FTR, FTRN,
2. IT includes all receipt and delivery Interruptible Services: ITR, FRO, ITD1, ITD2,
3. Utilization data is based on billed monthly volumes. Percent utilization calculated as billed volumes divided by applicable receipt or delivery Contract level.

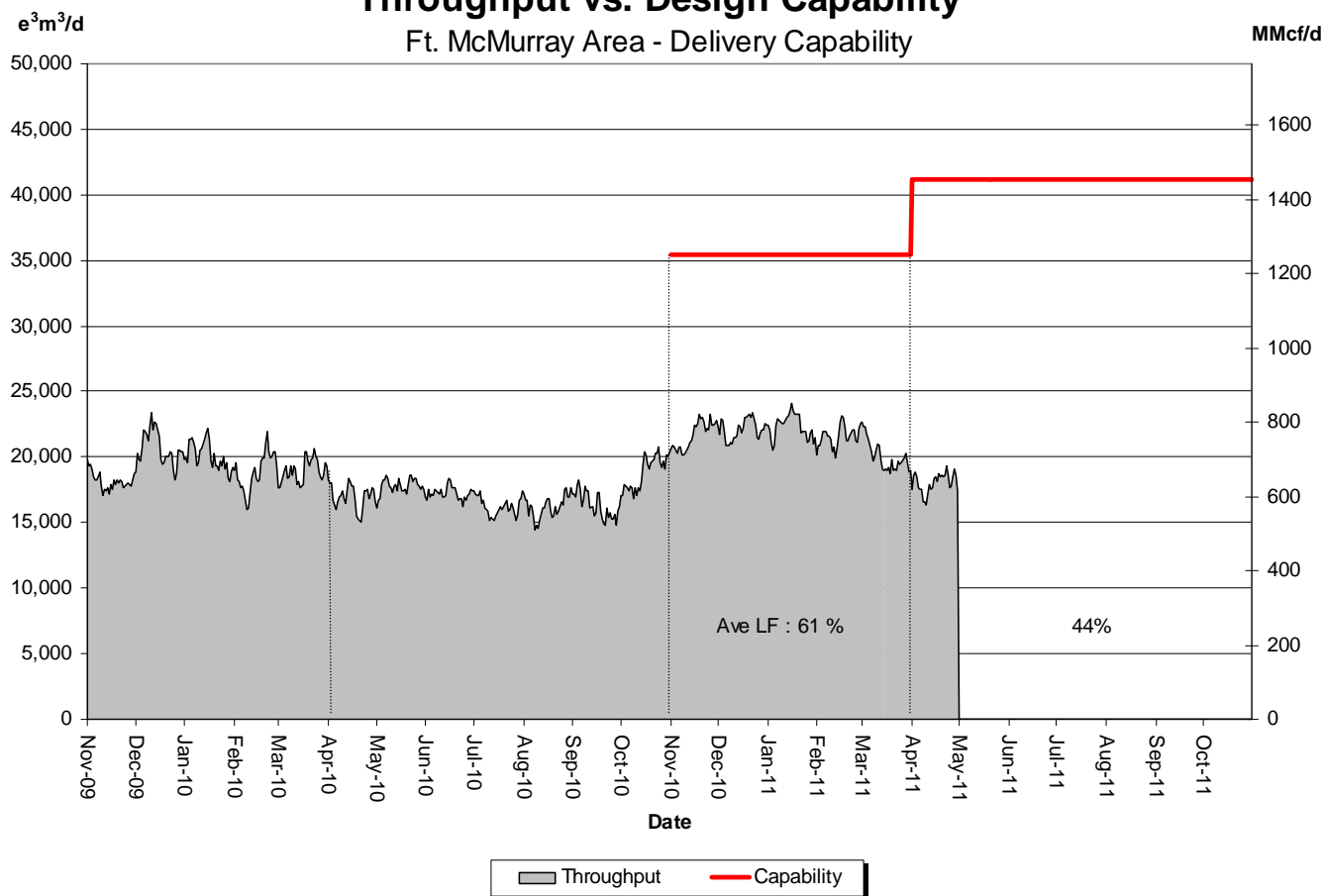
# DESIGN CAPABILITY UTILIZATION

## FT. McMURRAY AREA – FLOW WITHIN



### Throughput vs. Design Capability

Ft. McMurray Area - Delivery Capability



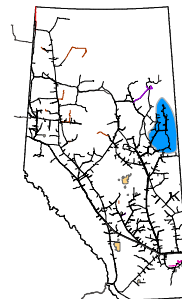
### % Design Capability Utilization

Monthly Average Area Deliveries as a Percentage of Design Capability

Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	61	62	63	61	57	44

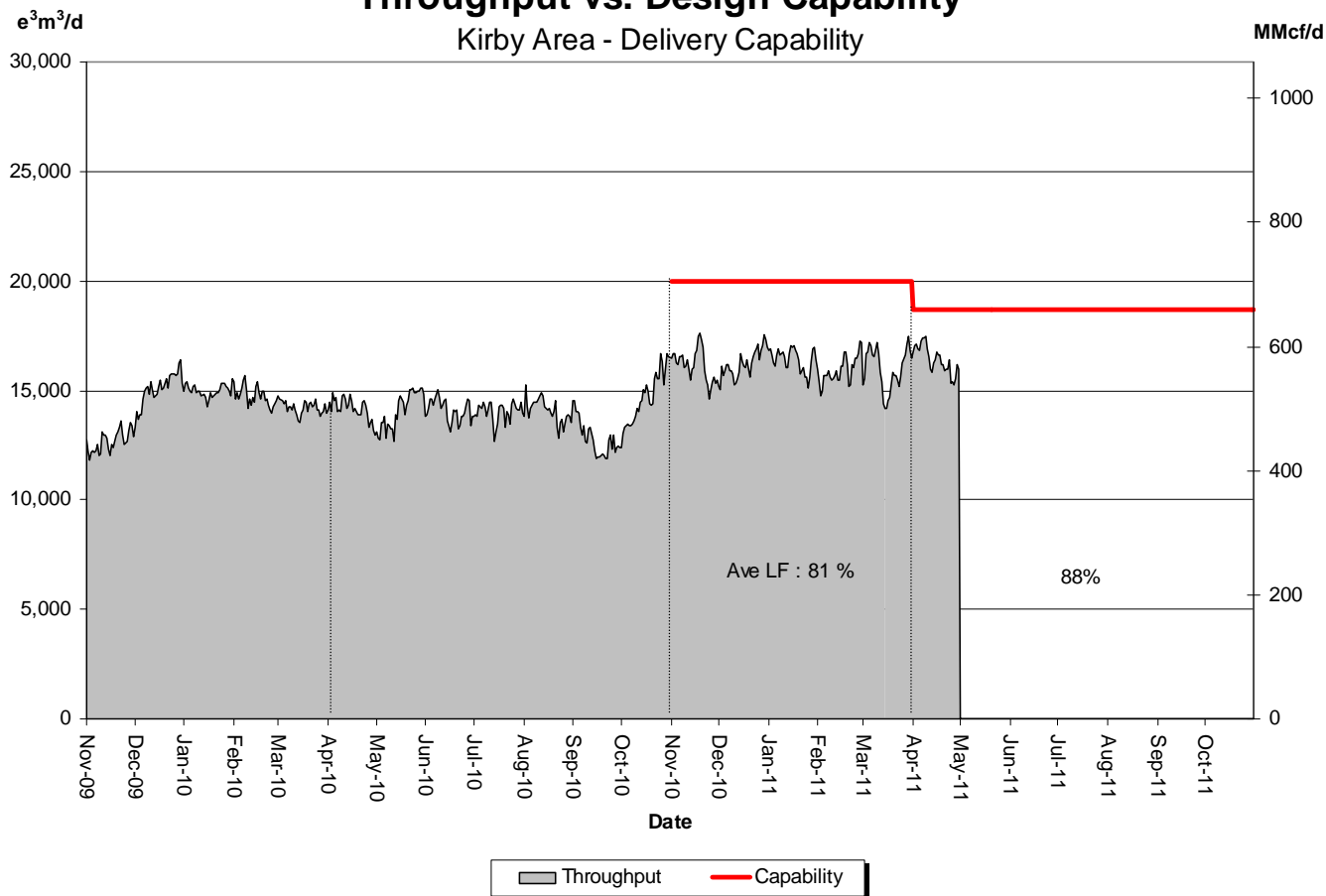
# DESIGN CAPABILITY UTILIZATION

## KIRBY AREA – FLOW WITHIN



### Throughput vs. Design Capability

Kirby Area - Delivery Capability

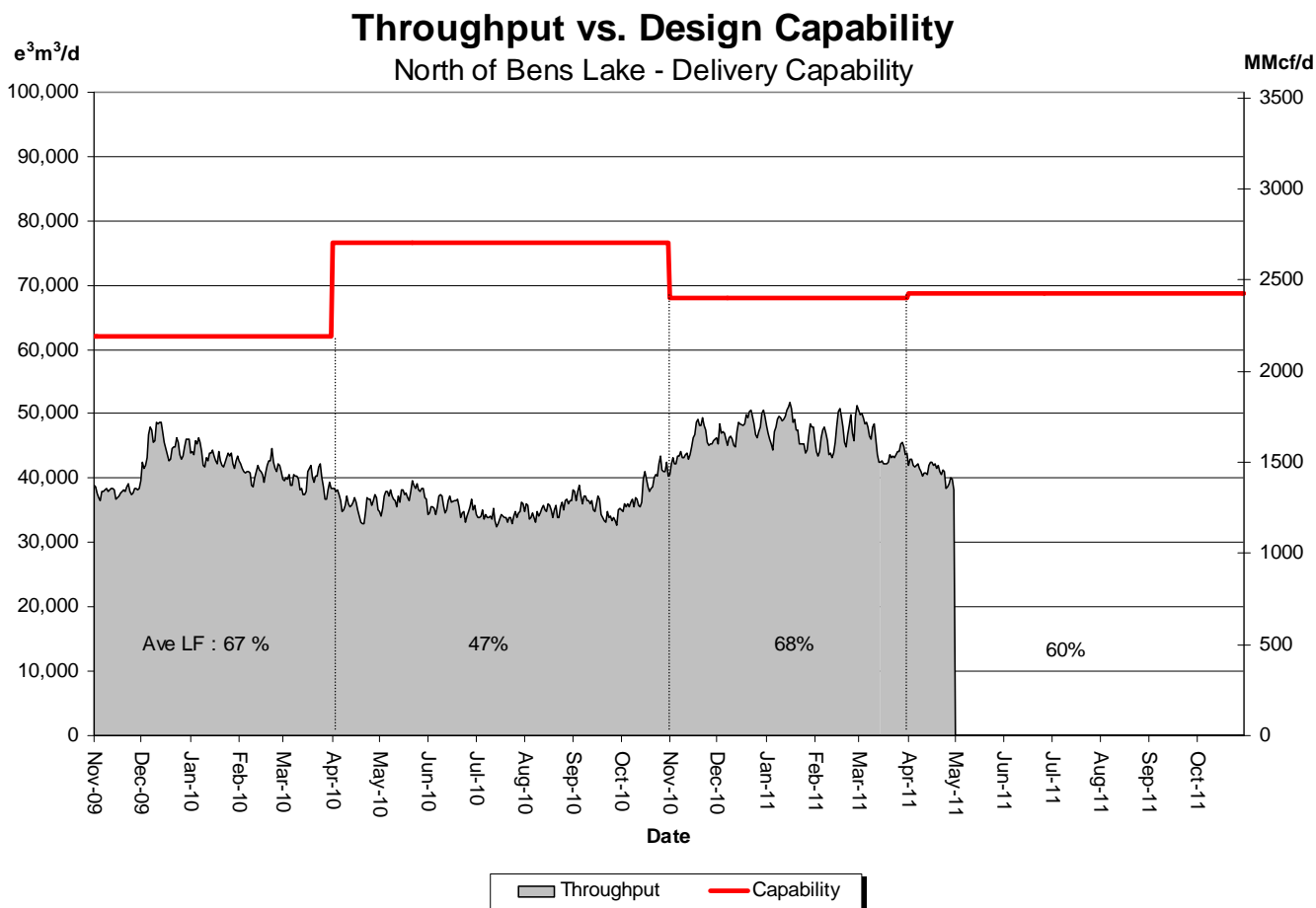
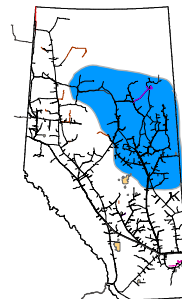


### % Design Capability Utilization

Monthly Average Area Deliveries as a Percentage of Design Capability

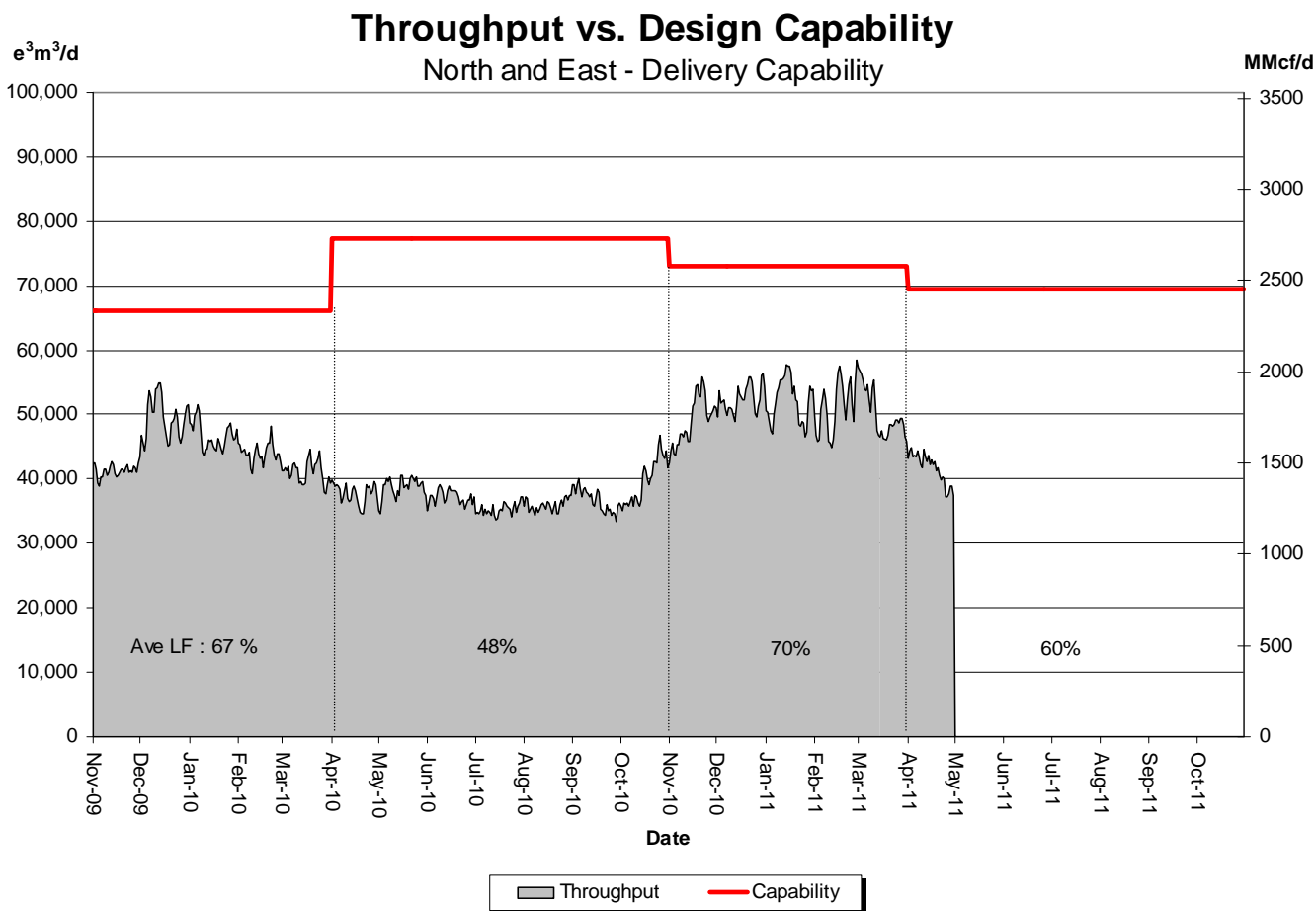
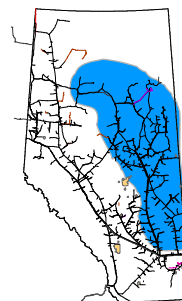
Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	81	81	82	80	80	88

# DESIGN CAPABILITY UTILIZATION NORTH OF BENS LAKE – FLOW WITHIN



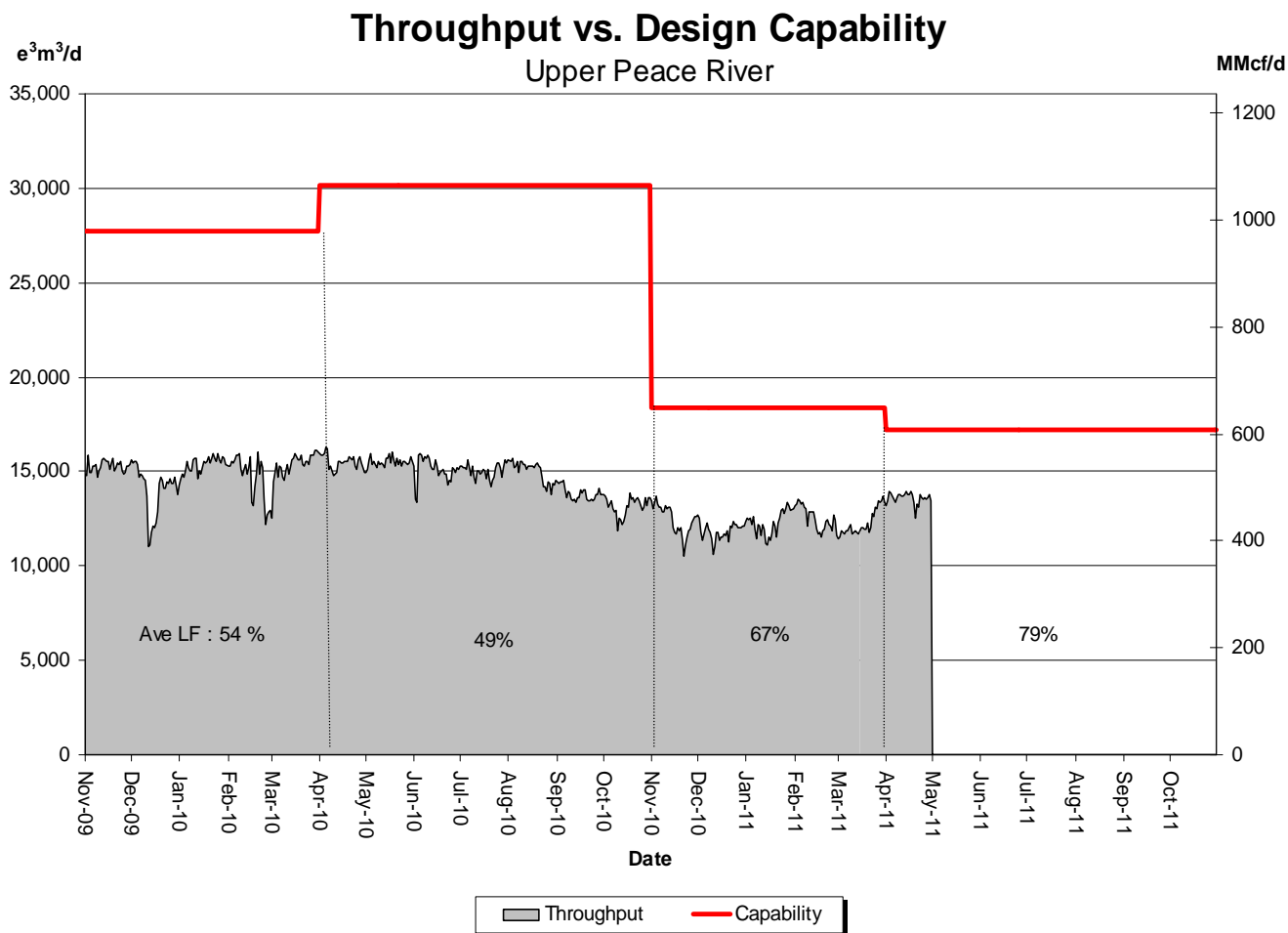
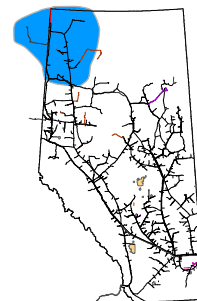
<b>% Design Capability Utilization</b> Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	66	70	70	69	67	60

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



<b>% Design Capability Utilization</b> Monthly Average Actual Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	66	71	72	70	69	60

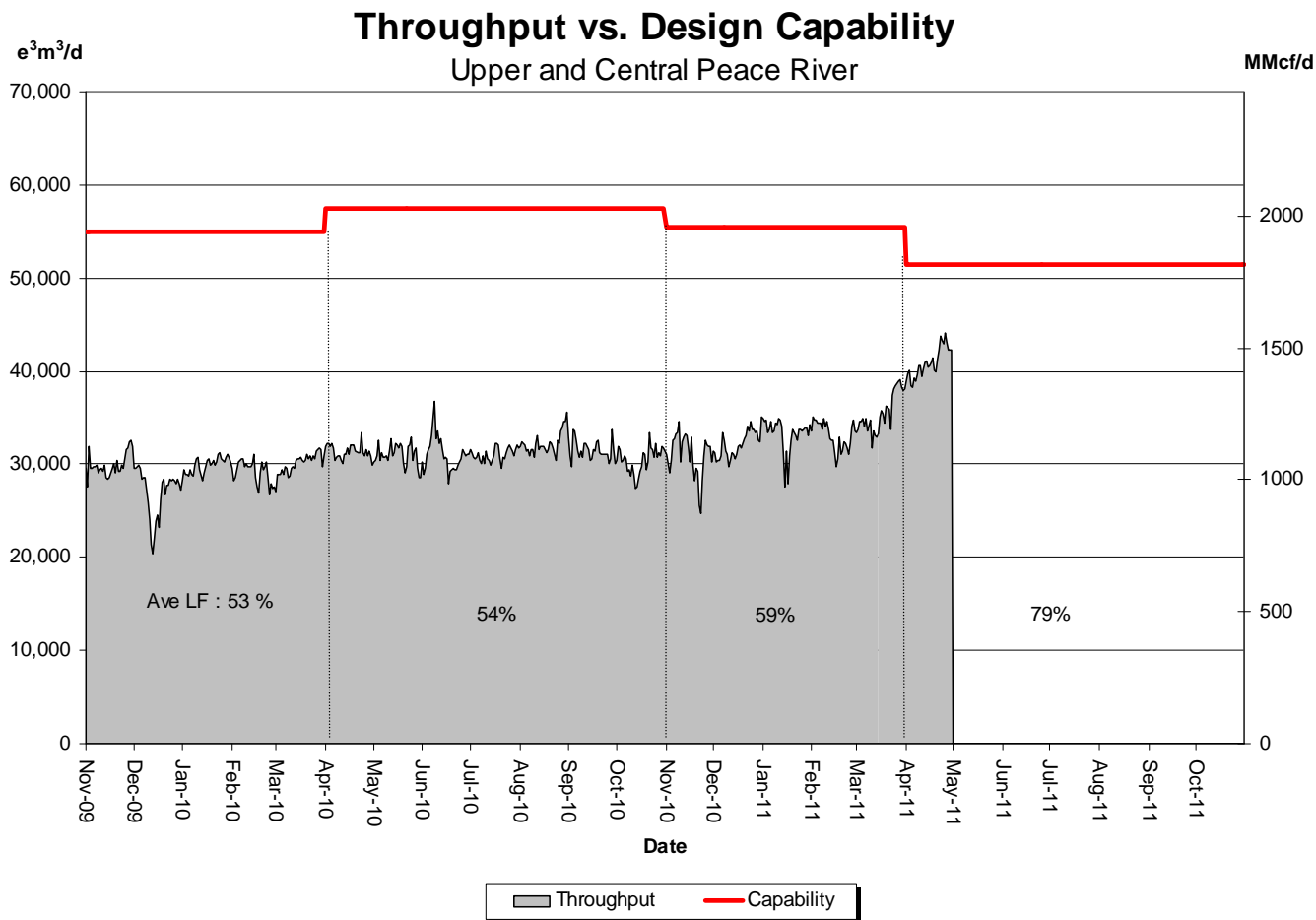
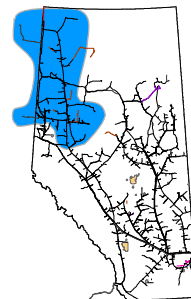
# DESIGN CAPABILITY UTILIZATION UPPER PEACE RIVER



<b>% Design Capability Utilization</b> Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	68	64	67	68	67	79



# DESIGN CAPABILITY UTILIZATION UPPER and CENTRAL PEACE RIVER

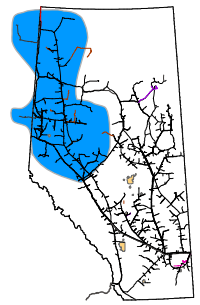


<b>% Design Capability Utilization</b> Monthly Average Actual Flow as a Percentage of Capability						
Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	56	58	60	60	64	79

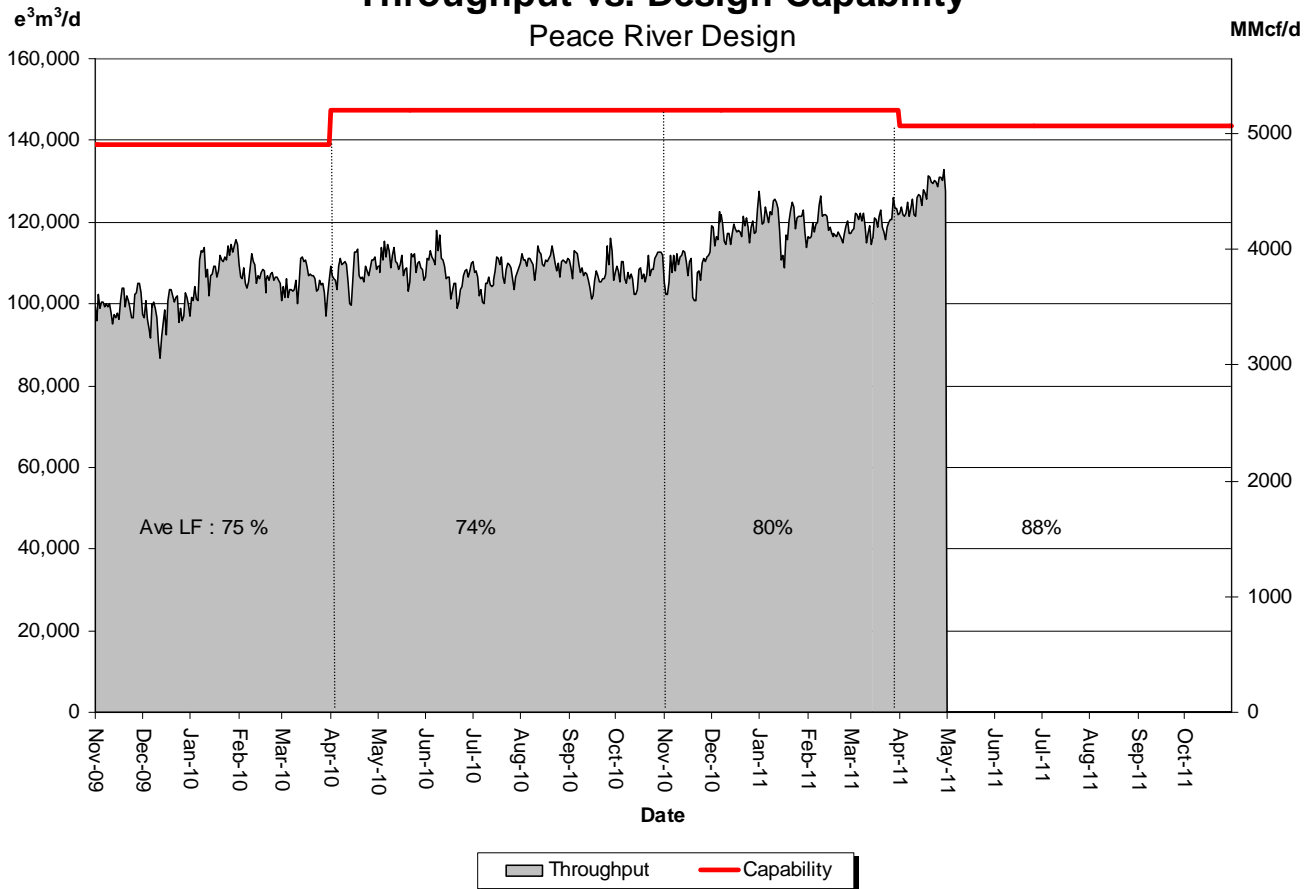
# DESIGN CAPABILITY UTILIZATION

## PEACE RIVER DESIGN

(Upper, Central and Lower Peace River)

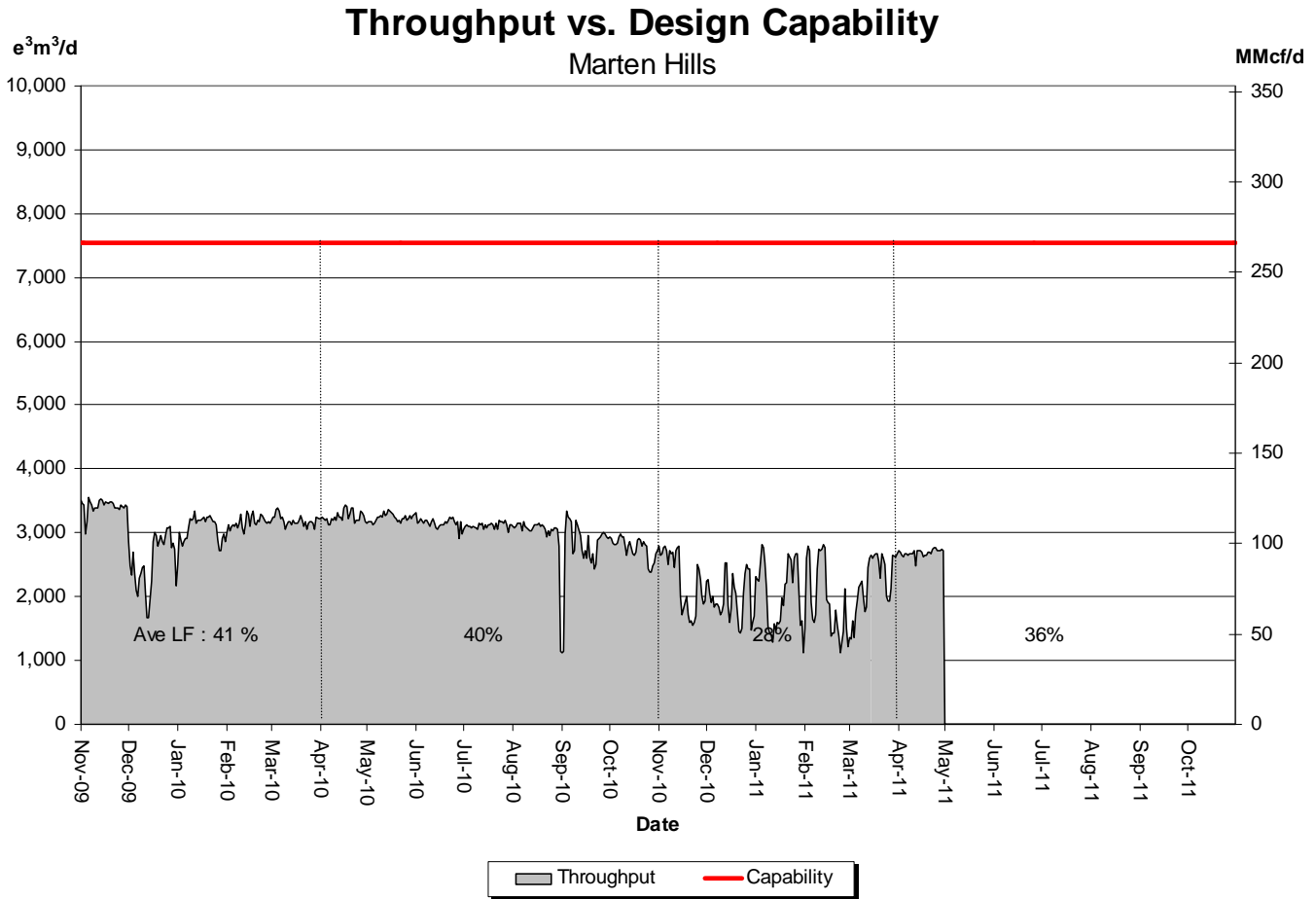
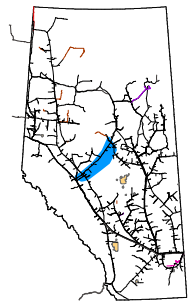


**Throughput vs. Design Capability**  
Peace River Design



% Design Capability Utilization Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Nov 74	Dec 80	Jan 82	Feb 81	Mar 81	Apr 88

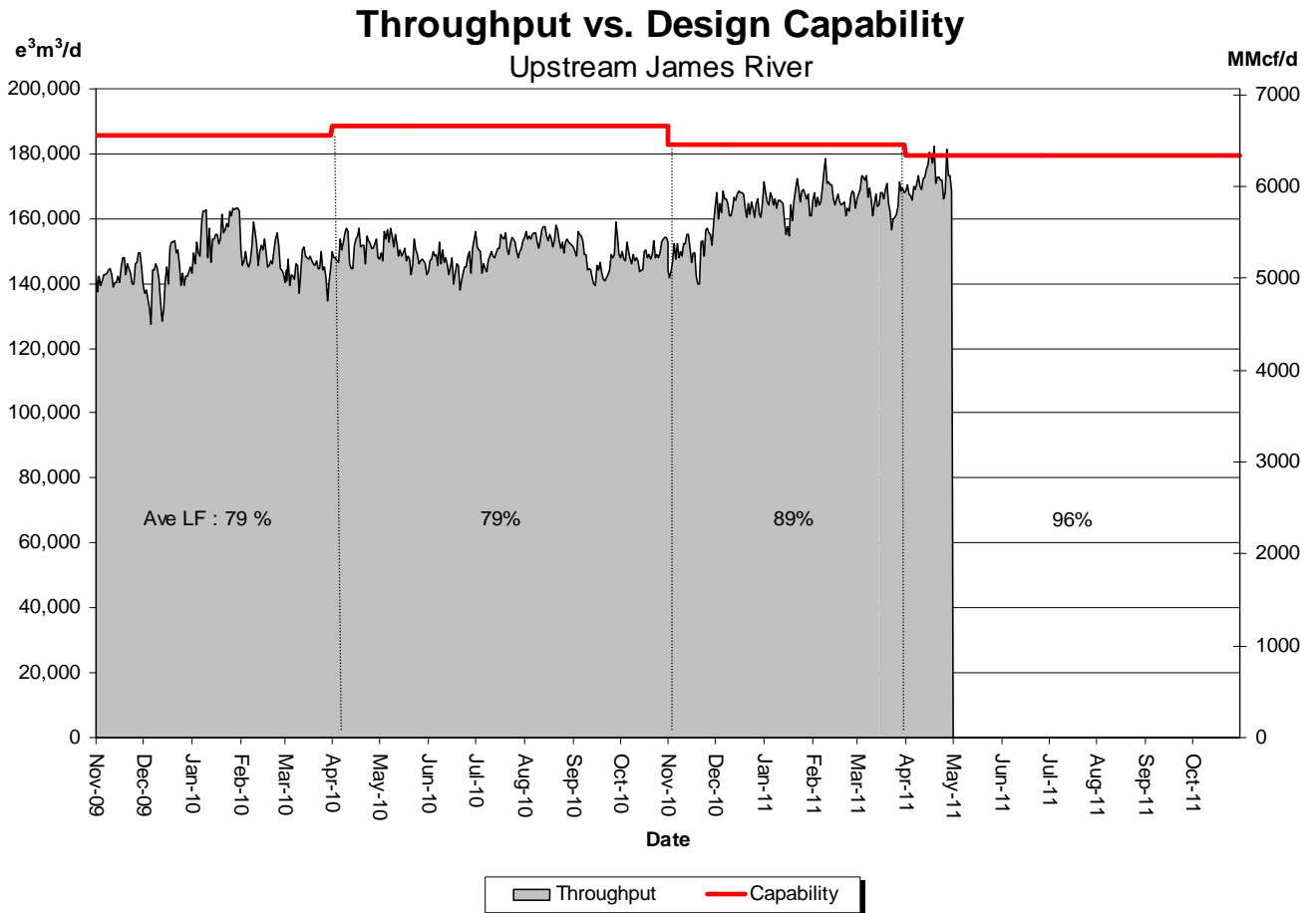
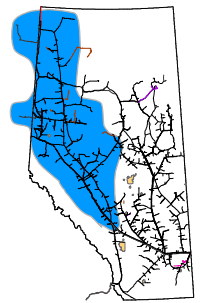
# DESIGN CAPABILITY UTILIZATION MARTEN HILLS



<b>% Design Capability Utilization</b> Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	30	26	27	26	29	36

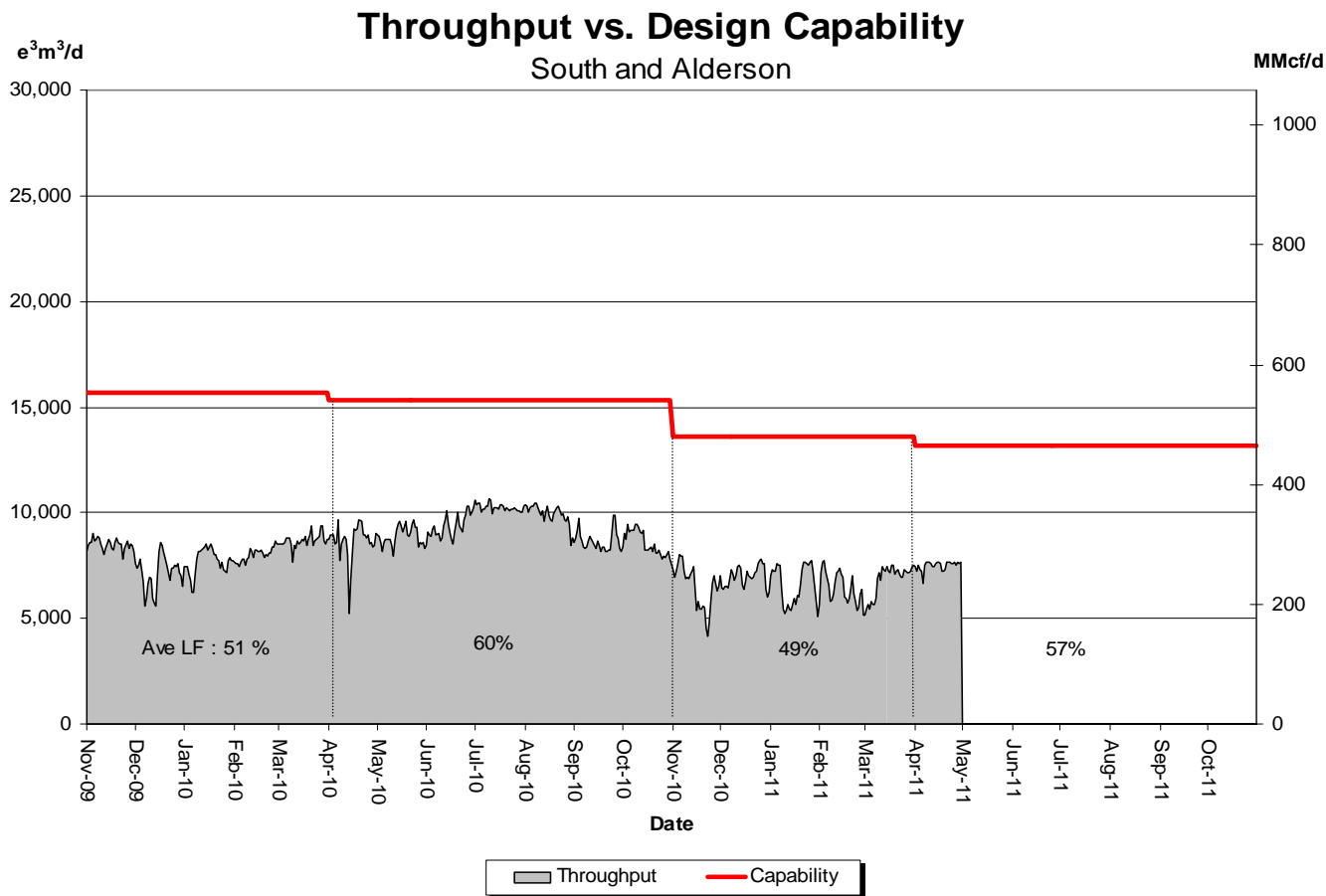
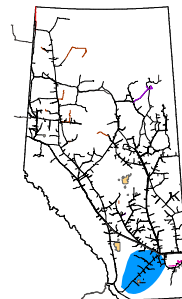
# DESIGN CAPABILITY UTILIZATION UPSTREAM JAMES RIVER

(Edson Mainline, Peace River Design and Marten Hills)



<b>% Design Capability Utilization</b> Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	82	90	90	91	91	96

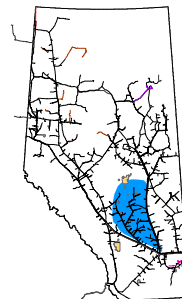
# DESIGN CAPABILITY UTILIZATION SOUTH and ALDERSON



<b>% Design Capability Utilization</b> Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	48	52	48	47	50	57

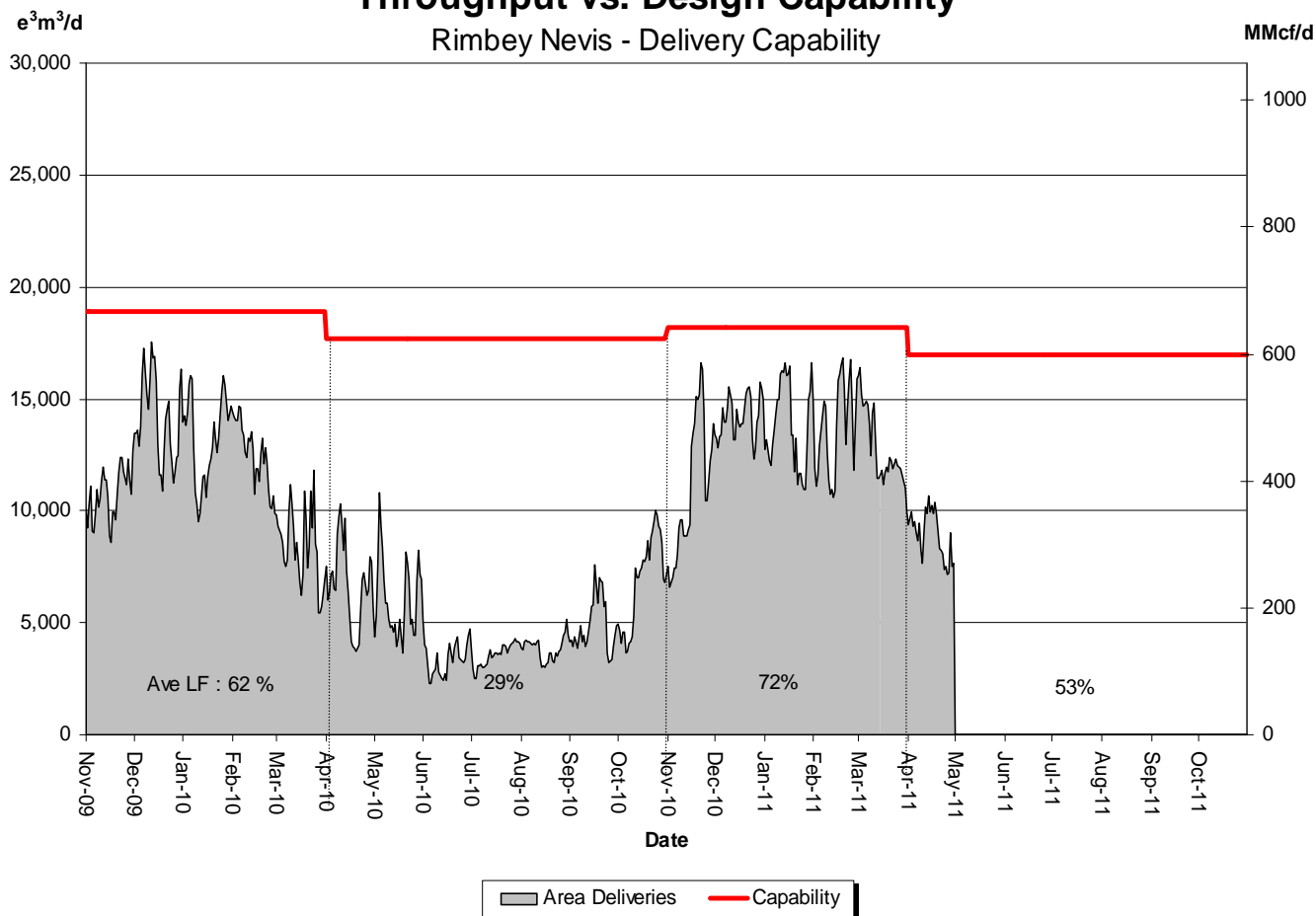
# DESIGN CAPABILITY UTILIZATION

## RIMBEY-NEVIS – FLOW WITHIN



### Throughput vs. Design Capability

Rimbey Nevis - Delivery Capability

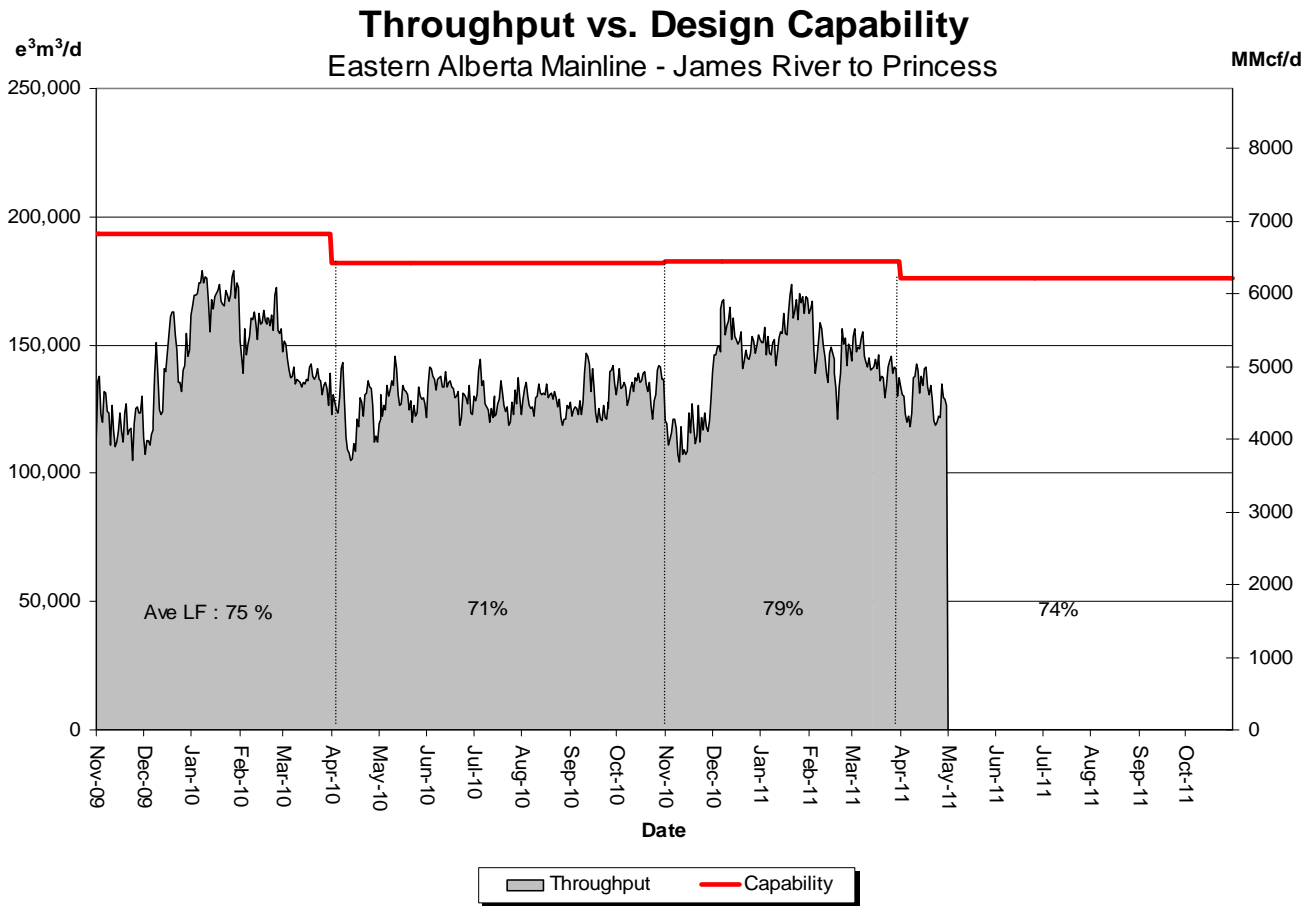
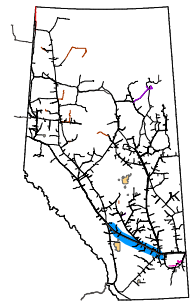


### % Design Capability Utilization

Monthly Average Area Deliveries as a Percentage of Design Capability

Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	60	78	76	75	70	53

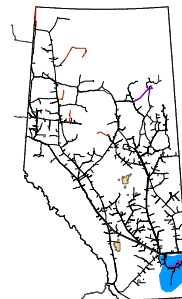
# DESIGN CAPABILITY UTILIZATION EASTERN ALBERTA MAINLINE (James River to Princess)



<b>% Design Capability Utilization</b> Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	64	83	86	80	78	74

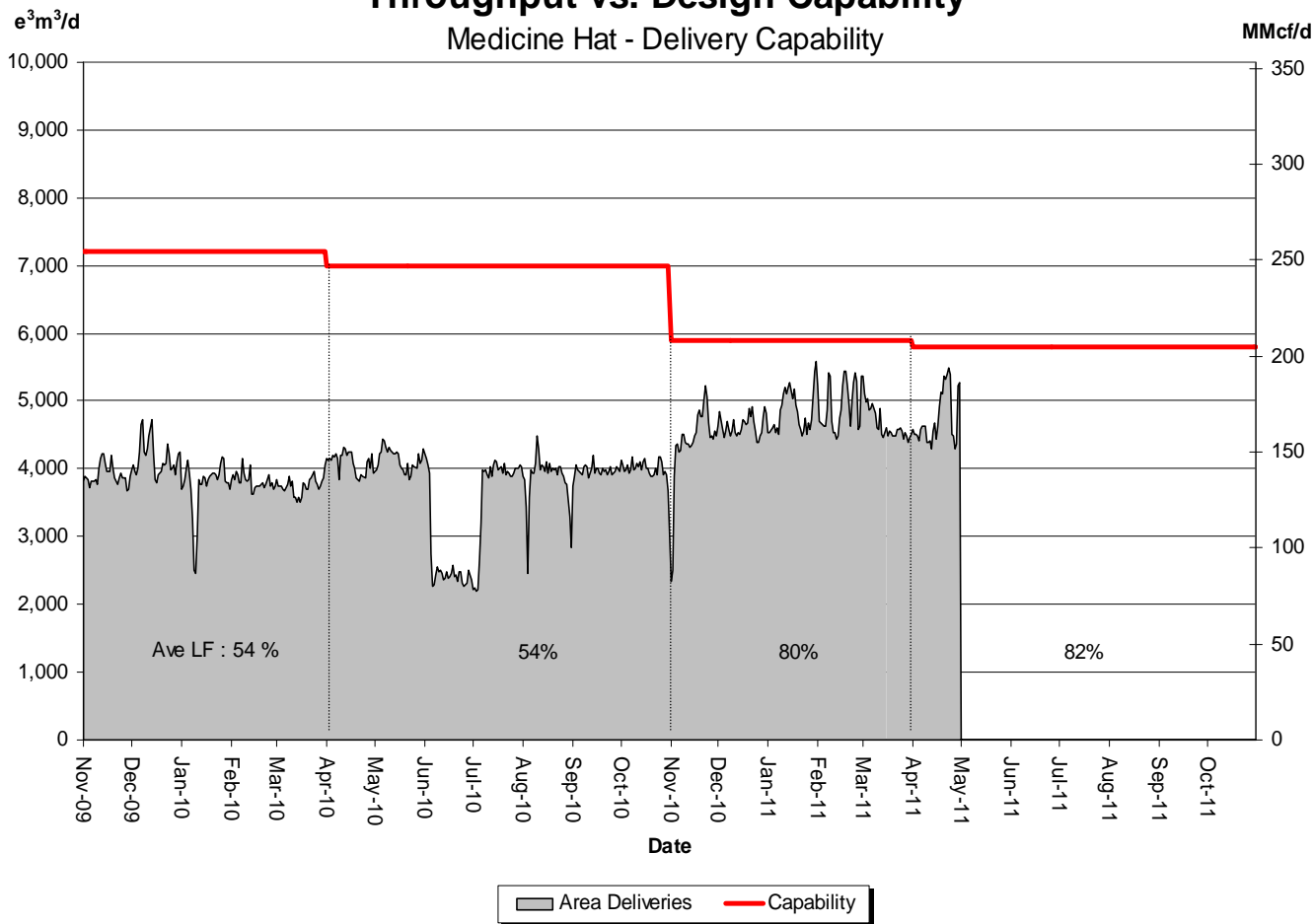
# DESIGN CAPABILITY UTILIZATION

## MEDICINE HAT – FLOW WITHIN



### Throughput vs. Design Capability

Medicine Hat - Delivery Capability

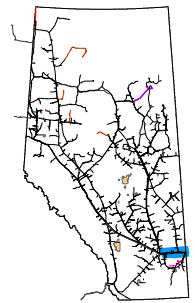


% Design Capability Utilization						
Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	74	78	82	84	79	82

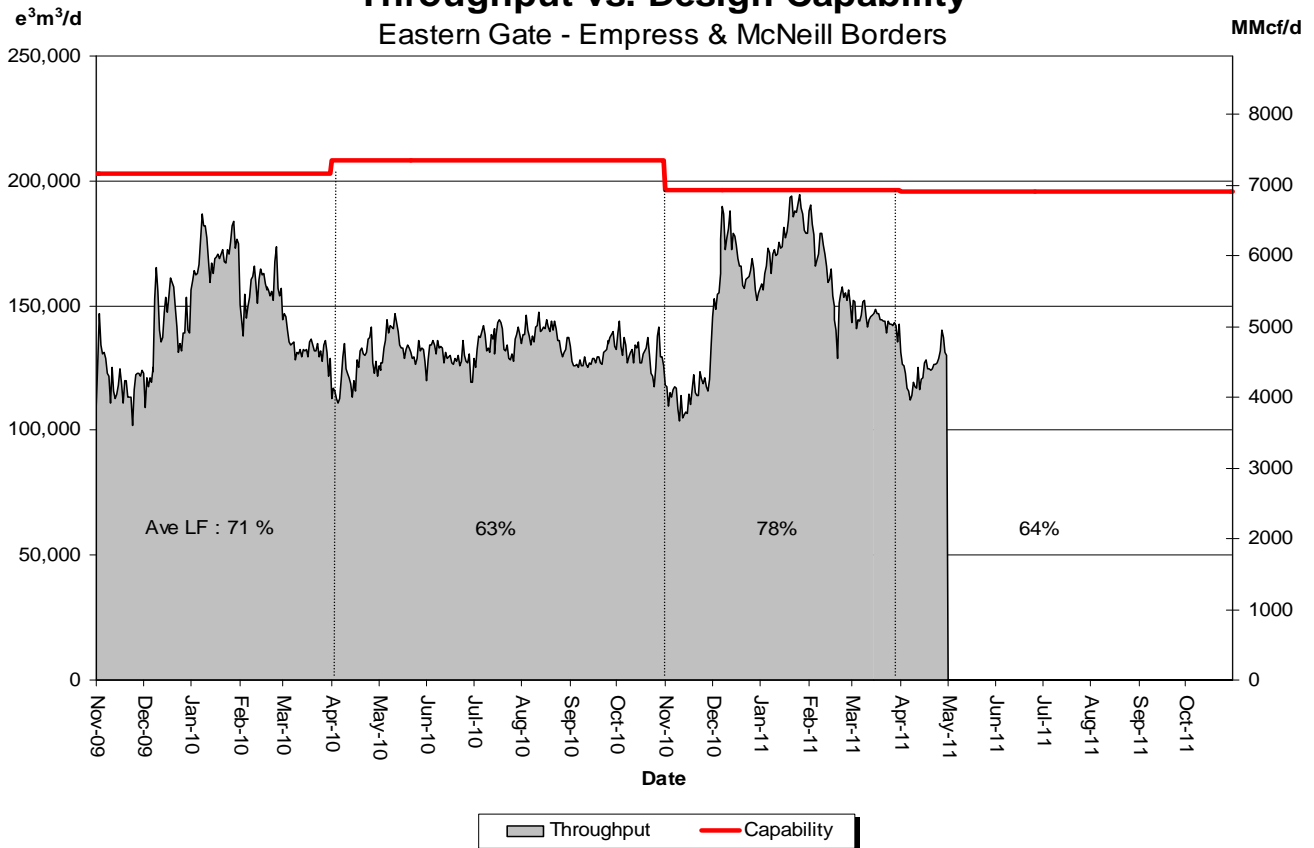


# DESIGN CAPABILITY UTILIZATION EASTERN ALBERTA MAINLINE

(Princess to Empress / McNeill)

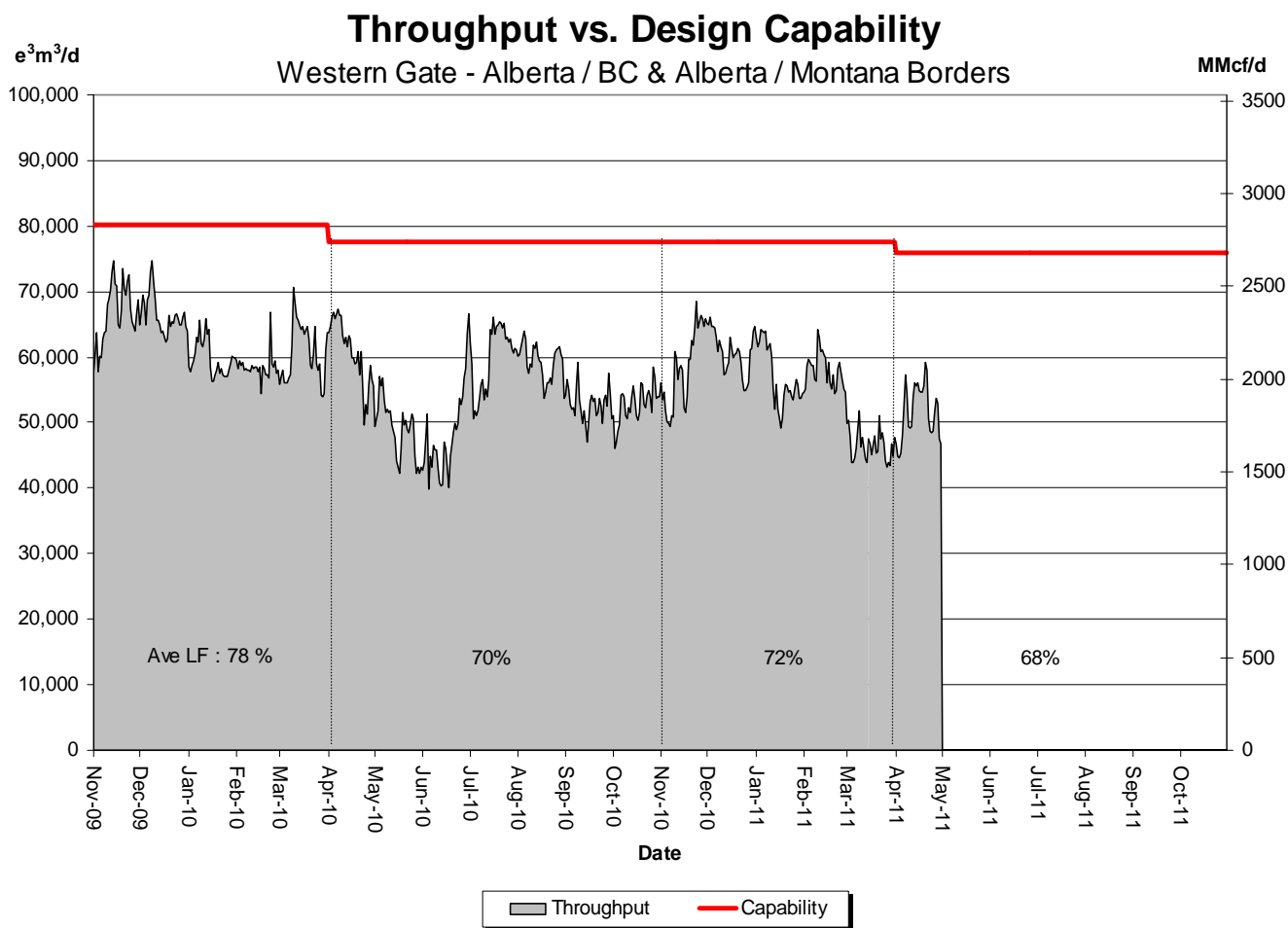
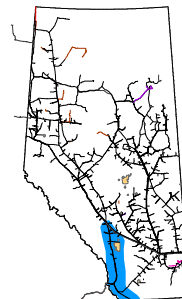


**Throughput vs. Design Capability**  
Eastern Gate - Empress & McNeill Borders



<b>% Design Capability Utilization</b> Average Actual Flow as a Percentage of Design Capability						
Average Flow / Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	59	85	90	83	74	64

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



<b>% Design Capability Utilization</b> Average Actual Flow as a Percentage of Design Capability						
Average Flow / Design Capability	Nov	Dec	Jan	Feb	Mar	Apr
	75	78	73	75	60	68

# **HISTORICAL TRANSPORTATION SERVICE AVAILABILITY**

February1, 2011 to April 30, 2011 (3 Month Average)

Receipt Area		IT-R Service	Firm Service	Firm Service	% CD		Causes/Comments <sup>(3)</sup>
		Available	Available	Restriction	Restricted <sup>(1)</sup>		
		(% 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/Comments <sup>(3)</sup>
	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	November 2011	November 2013

## Estimated Firm Transportation Service Availability

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

[http://www.transcanada.com/customerexpress/docs/ab\\_ftr\\_availability\\_map/external\\_map.pdf](http://www.transcanada.com/customerexpress/docs/ab_ftr_availability_map/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)	November 2011	November 2013
Receipt - Winter construction (generally north of Edmonton)	November 2011	April 2014

➤ 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 Capability Utilization

The load factor/segment flow graphs show actual flow versus design capability values for various NGTL system areas. The graphs also show seasonal (winter/summer) design capability and average load factors for each season. Data used in these reports lags the current date by one month.

Design Flow Capability 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.

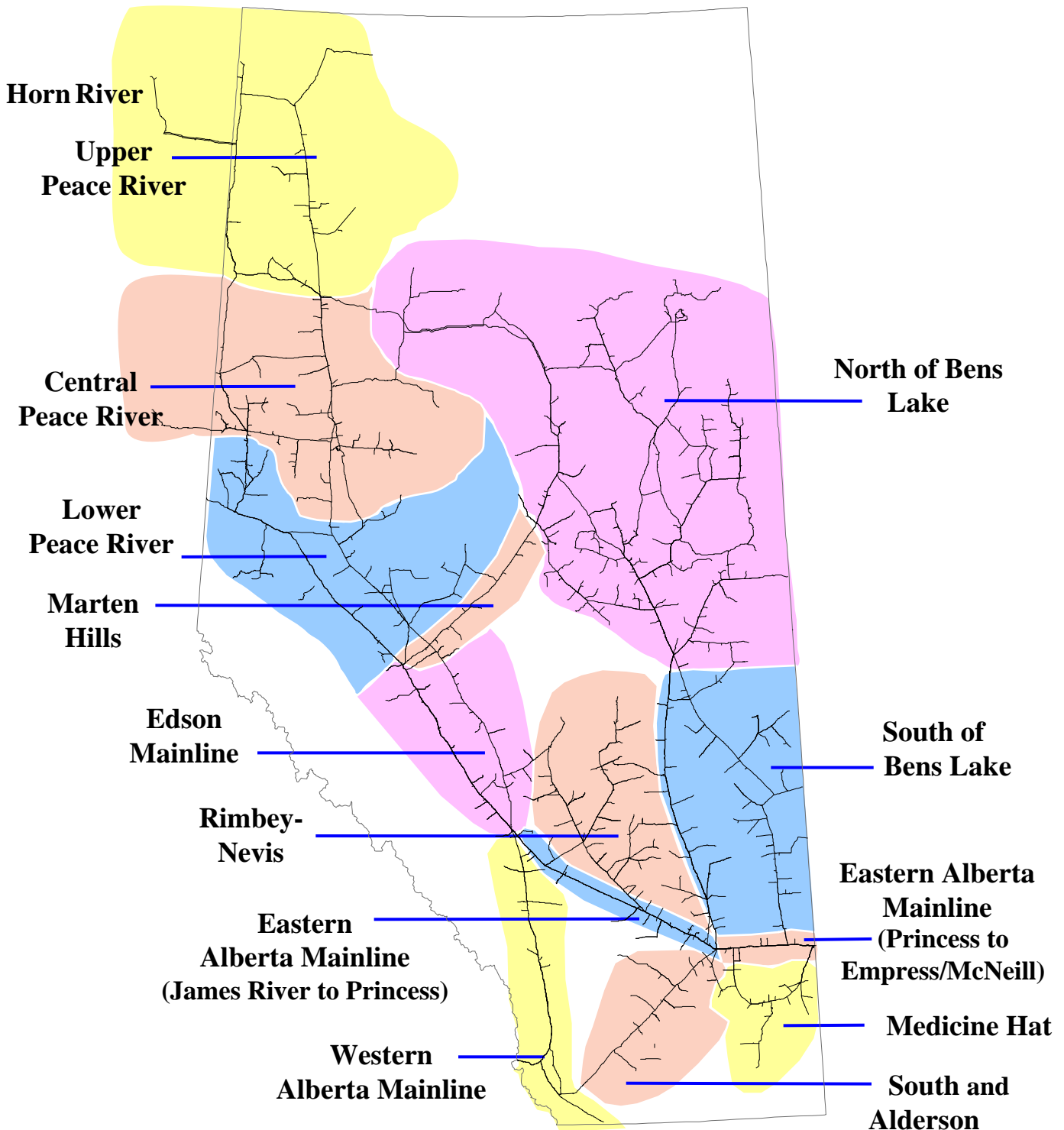
Service availability is affected by a number of factors including scheduled and unscheduled maintenance, construction or other outages.

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**

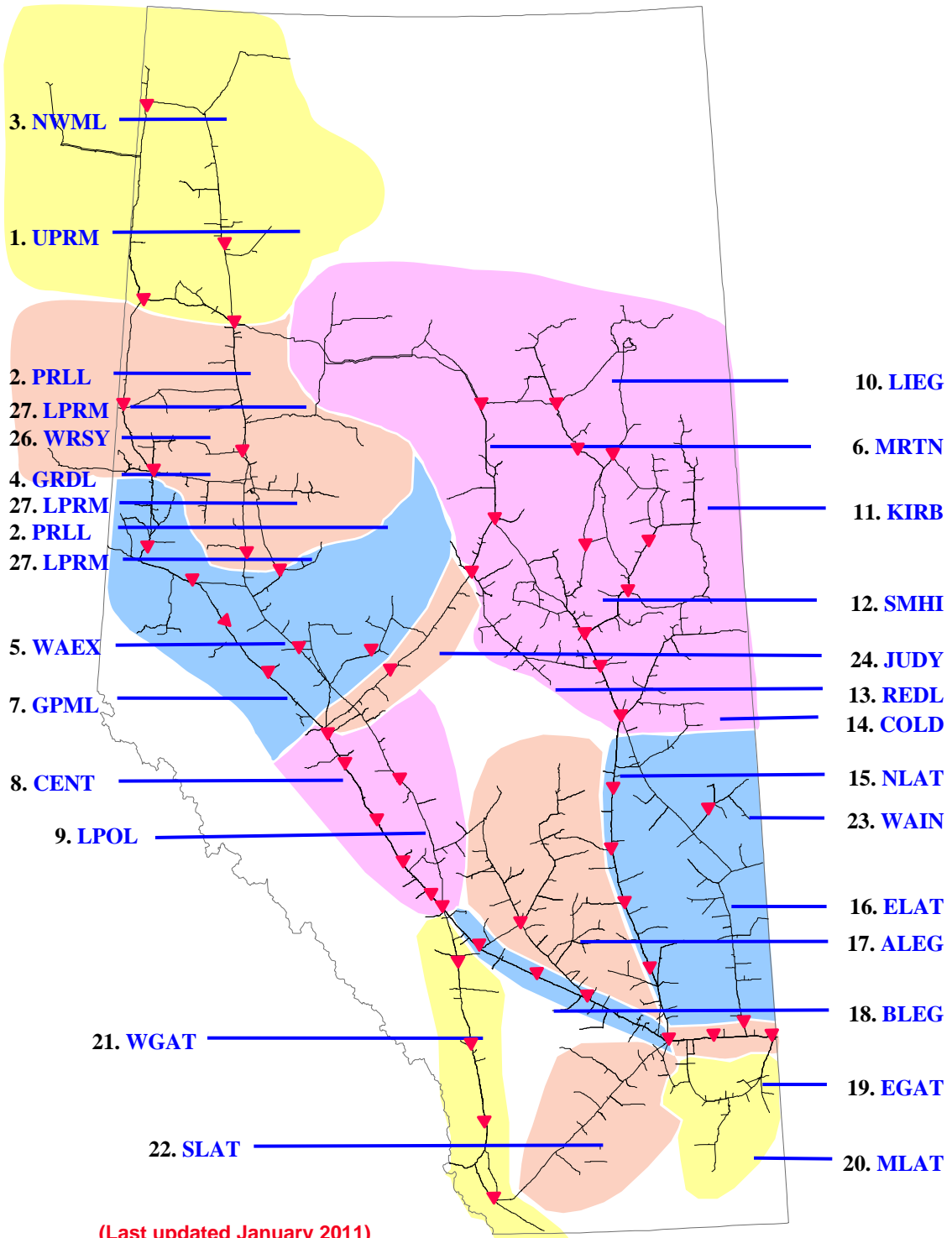
The Future Firm Transportation Service Availability report presents guidelines and timing for all future firm transportation service requests.

# NGTL DESIGN AREAS



(Last updated January 2011)

# NGTL PIPELINE SEGMENTS





# DEFINITION OF TERMS

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## *Design Capability Utilization*

### ***Actual Flow***

The amount of gas flowing within or out of our design area.

### ***Design Capability***

The volume of gas that can be transported at various points on the pipeline system considering design assumptions.

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

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

### ***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