

# SYSTEM UTILIZATION AND RELIABILITY MONTHLY REPORT

for the month ending  
August, 2011

*Published date:*  
October 6, 2011

---

## 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 June 1, 2011 – August 31, 2011 was deemed to be 100% available in all pipe segments, except for segment UPRM which was deemed 91% available.
- Border Availability at Empress/McNeill, Gordondale and Alberta/BC, over a 3 month average from June 1, 2011 – August 31, 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.

# TABLE OF CONTENTS

---

<b><u>MONTHLY FEATURES</u></b>	<b>PAGE</b>
Firm Transportation Service Contract Utilization .....	3
Design Capability Utilization	
Ft. McMurray Area – Flow Within.....	4
Kirby Area – Flow Within.....	5
North of Bens Lake – Flow Within .....	6
North & South of Bens Lake – Flow Within.....	7
Upper Peace River .....	8
Upper & Central Peace River .....	9
Peace River Design .....	10
Marten Hills .....	11
Upstream James River .....	12
South & Alderson .....	13
Rimbey Nevis – Flow Within .....	14
Eastern Alberta Mainline (James River to Princess) .....	15
Medicine Hat - Flow Within .....	16
Eastern Alberta Mainline (Princess to Empress/McNeill) .....	17
Western Alberta Mainline (AB/BC & AB/Montana Borders) .....	18
Historical Transportation Service Availability (3 Month Average) .....	19
Future Firm Transportation Service Availability.....	20
How to Use This Report .....	21

## **REFERENCES**

NGTL Design Areas Map .....	23
NGTL Pipeline Segments Map .....	24
Definition of Terms .....	25

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>

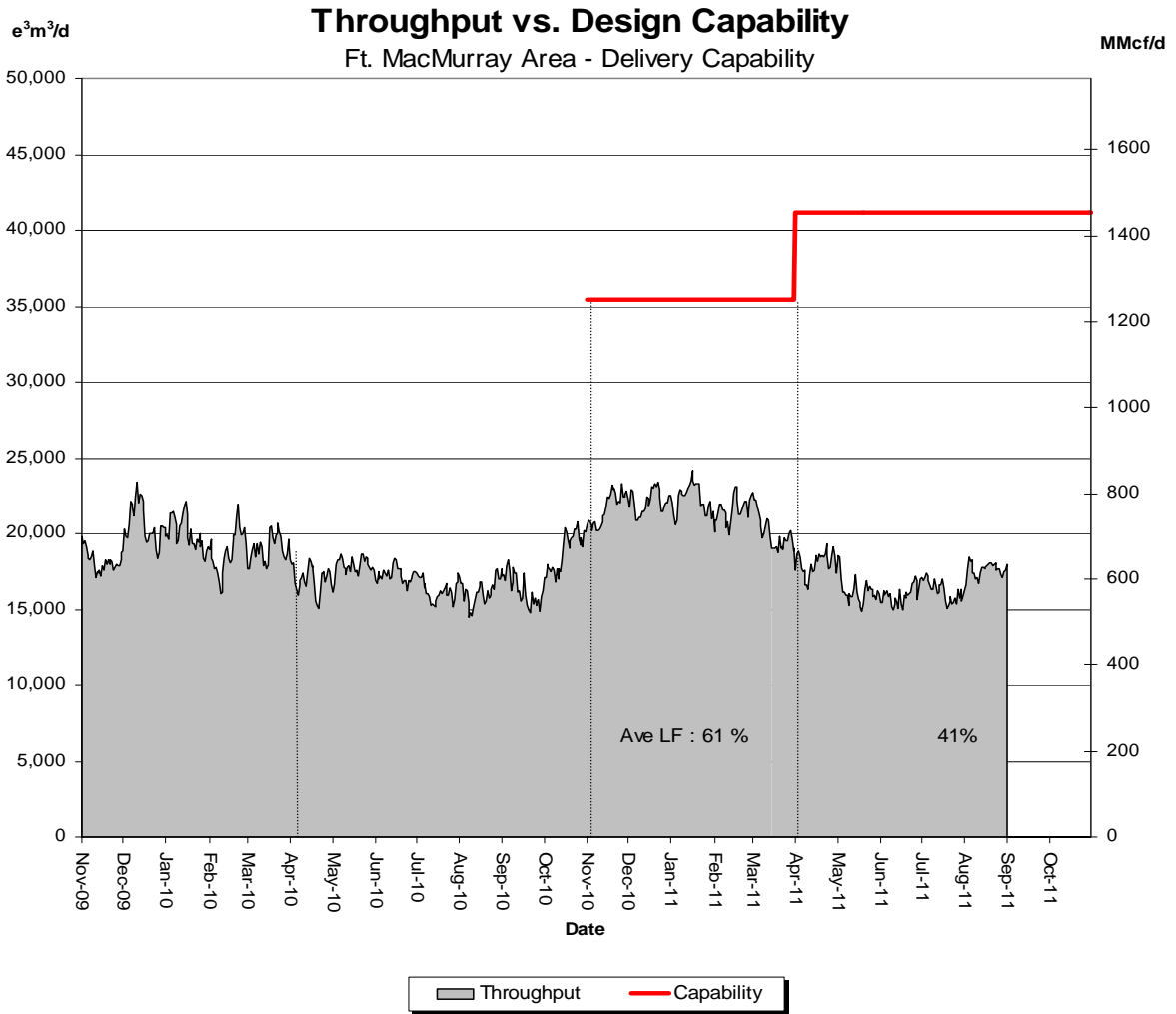
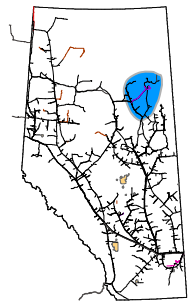
By NGTL Pipeline Segments  
August 2011

Segment	Delivery		Receipt		Aug CD (TJ/d)	Aug CD Utilization MMcf/d)
	Receipt Contract	Utilization	Aug CD (TJ/d)	Utilization		
UPRM	FT	2%	25.4	95%	103	
	FT + IT <sup>2</sup>	4%		110%		
LPRM	FT	0%	0.0	89%	13	
	FT + IT	0%		101%		
PRLL	FT	69%	24.3	97%	141	
	FT + IT	71%		113%		
NWML	FT	0%	0.0	94%	361	
	FT + IT	0%		98%		
GRDL	FT	100%	0.2	81%	927	
	FT + IT	140%		93%		
WRSY	FT	0%	0.0	87%	33	
	FT + IT	0%		105%		
WAEX	FT	18%	38.7	84%	291	
	FT + IT	27%		125%		
JUDY	FT	1%	3.7	95%	80	
	FT + IT	118%		110%		
GPML	FT	39%	23.4	92%	2,578	
	FT + IT	93%		102%		
CENT	FT	0%	9.8	96%	934	
	FT + IT	0%		118%		
LPOL	FT	16%	17.3	93%	421	
	FT + IT	97%		127%		
WGAT	FT	70%	2,370.6	86%	342	
	FT + IT	72%		111%		
ALEG	FT	84%	102.1	98%	842	
	FT + IT	184%		128%		
SLAT	FT	100%	2.7	98%	236	
	FT + IT	110%		134%		
MLAT	FT	81%	211.9	99%	242	
	FT + IT	95%		114%		
BLEG	FT	44%	26.7	99%	563	
	FT + IT	44%		127%		
EGAT	FT	99%	4,193.4	99%	46	
	FT + IT	119%		124%		
MRTN	FT	1%	12.8	88%	86	
	FT + IT	16%		123%		
LIEG	FT	67%	672.7	78%	42	
	FT + IT	107%		141%		
KIRB	FT	74%	667.0	89%	53	
	FT + IT	83%		147%		
SMHI	FT	45%	11.5	84%	54	
	FT + IT	45%		154%		
REDL	FT	29%	13.1	77%	53	
	FT + IT	181%		138%		
COLD	FT	37%	17.9	77%	35	
	FT + IT	316%		122%		
NLAT	FT	67%	123.8	97%	178	
	FT + IT	161%		133%		
WAIN	FT	0%	0.0	83%	13	
	FT + IT	0%		118%		
ELAT	FT	32%	46.2	95%	112	
	FT + IT	66%		137%		
TOTAL SYSTEM	FT	83%	8,615.4	92%	8,778	
	FT + IT	102%		113%		

\*NOTE:

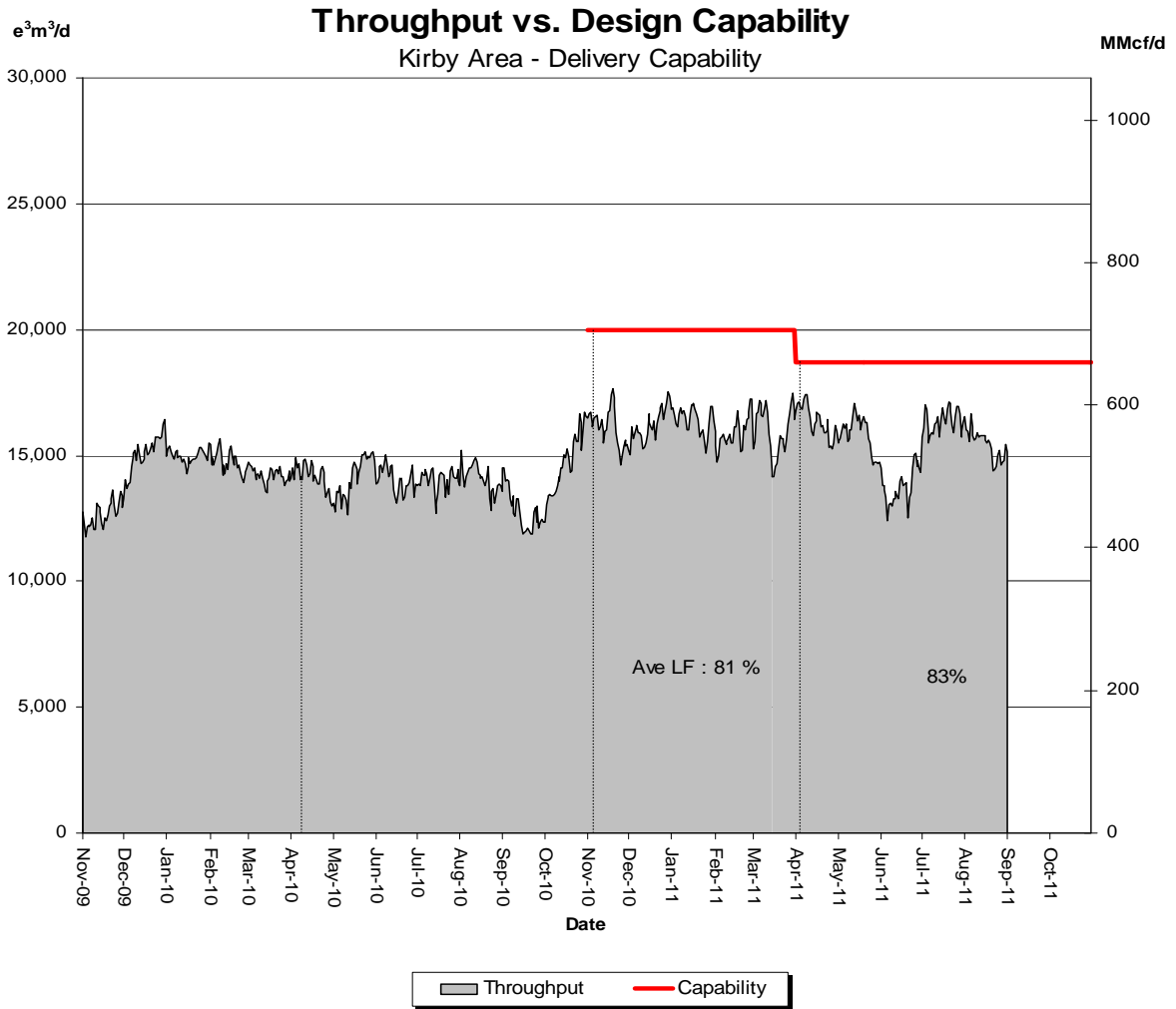
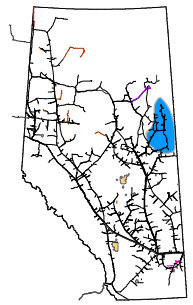
1. FT includes all receipt and delivery Firm Transportation Services: FTR,
2. IT includes all receipt and delivery Interruptible Services: ITR, FRO, ITD1,
3. Utilization data is based on billed monthly volumes. Percent utilization billed volumes divided by applicable receipt or delivery Contract level.

# DESIGN CAPABILITY UTILIZATION FT. McMURRAY AREA – FLOW WITHIN



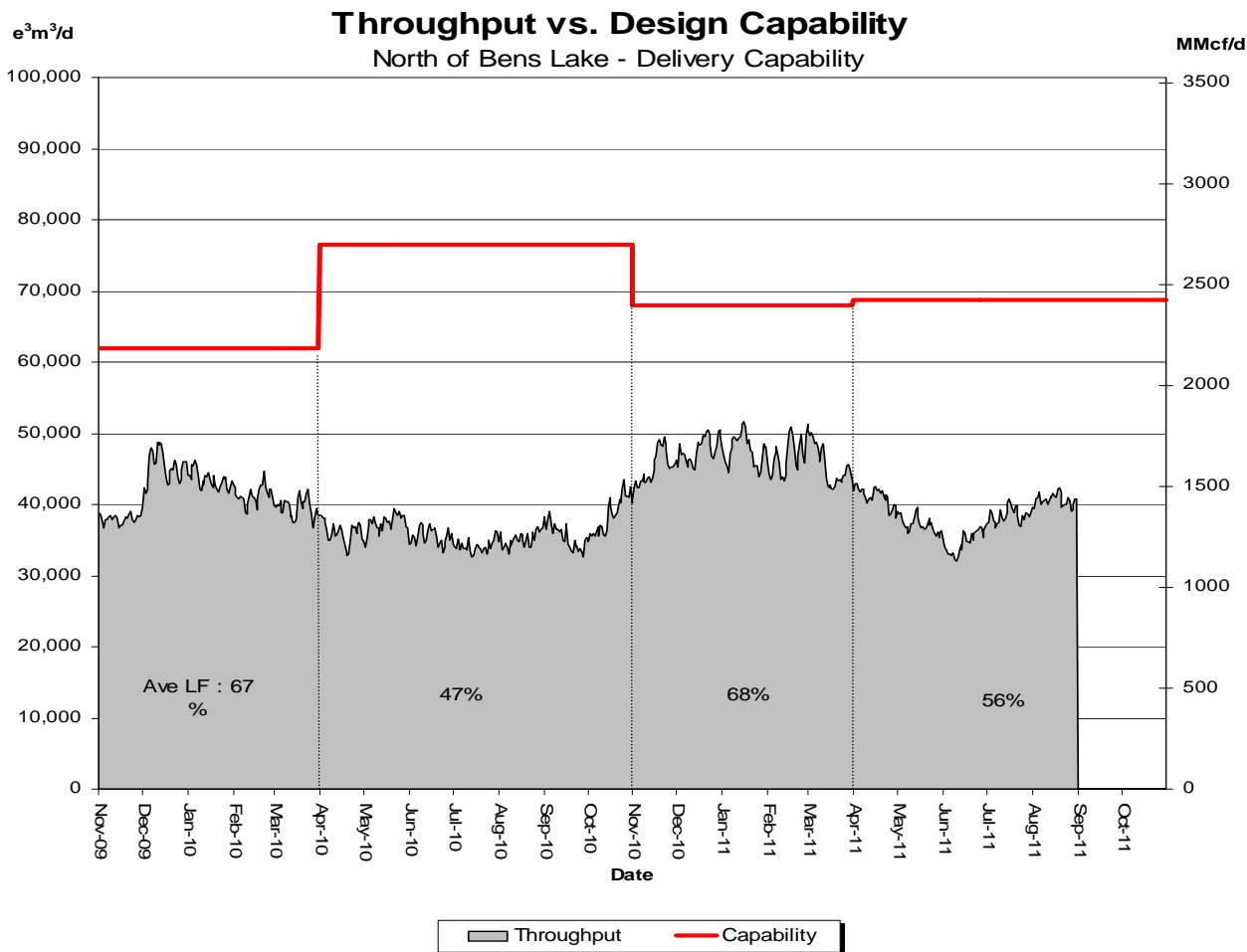
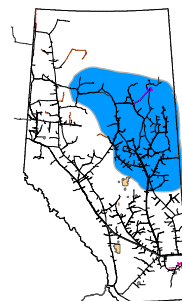
<b>% Design Capability Utilization</b>						
Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Mar	Apr	May	Jun	Jul	Aug
	57	44	39	39	39	43

# DESIGN CAPABILITY UTILIZATION KIRBY AREA – FLOW WITHIN



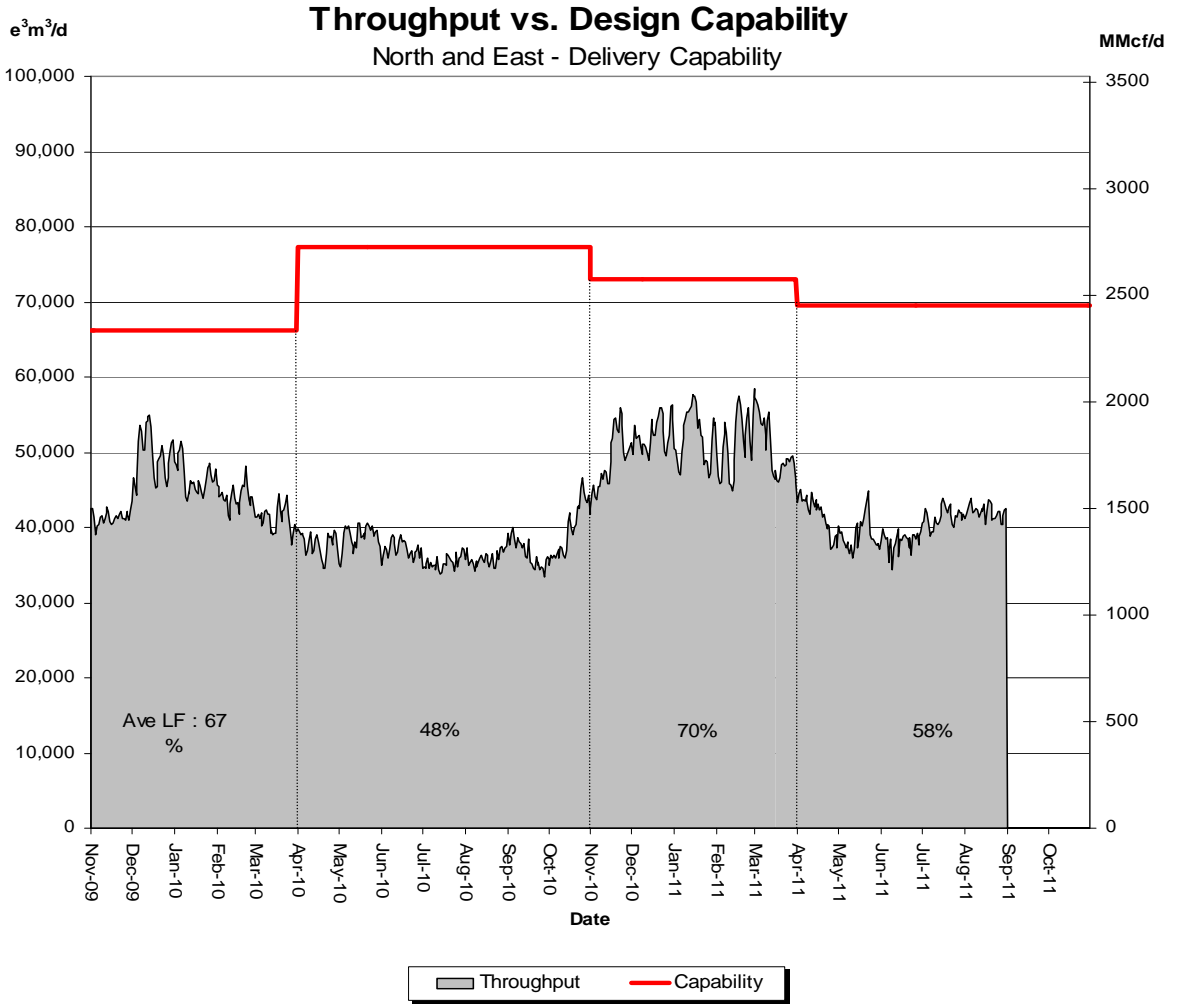
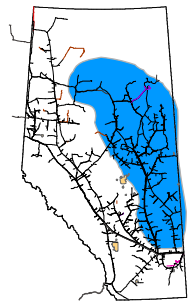
<b>% Design Capability Utilization</b>						
Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Mar	Apr	May	Jun	Jul	Aug
	80	88	84	74	87	83

# DESIGN CAPABILITY UTILIZATION NORTH OF BENS LAKE – FLOW WITHIN



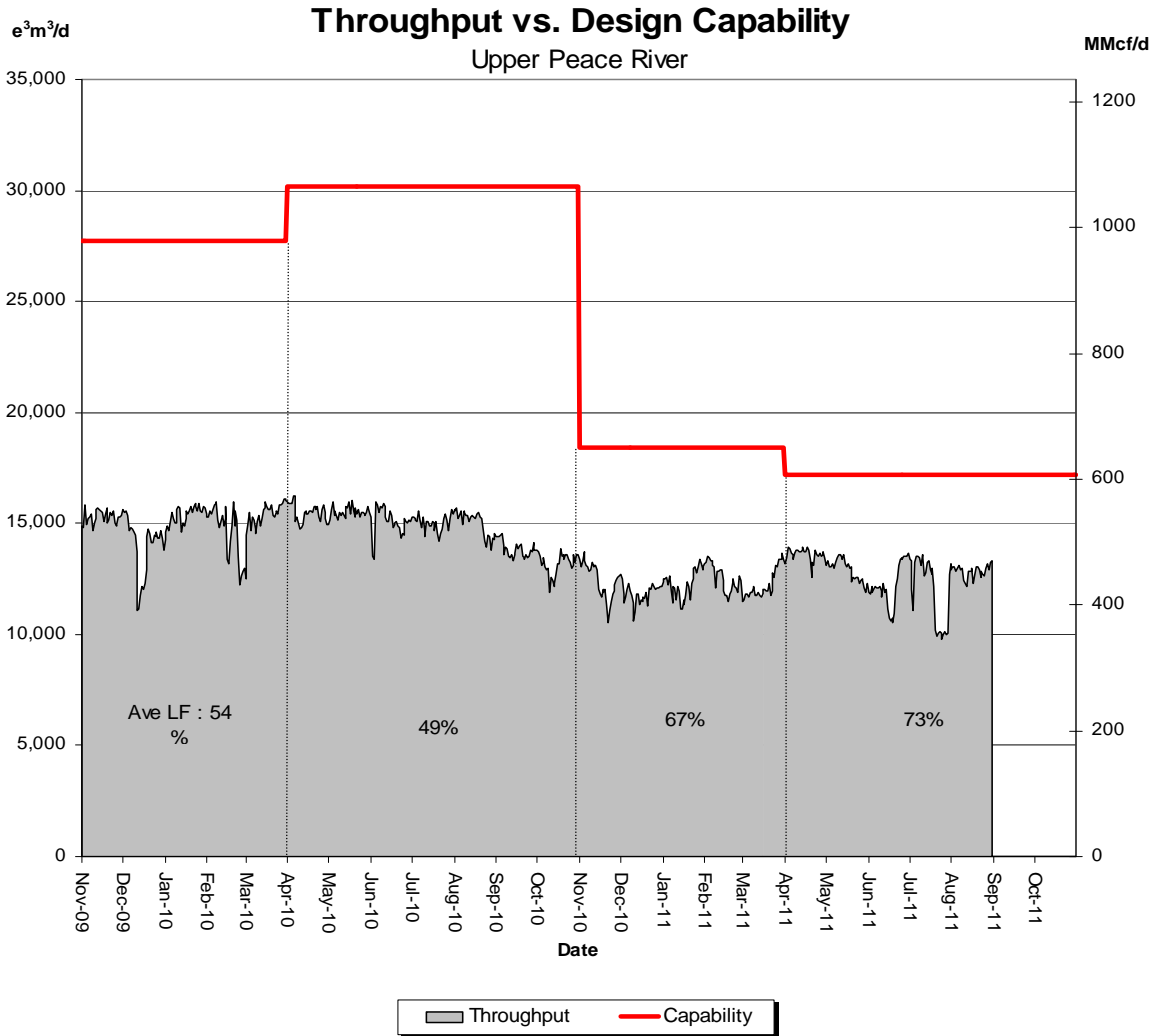
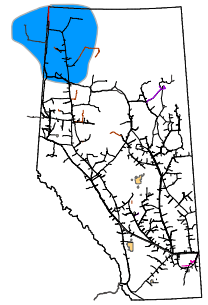
<b>% Design Capability Utilization</b> Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Mar	Apr	May	Jun	Jul	Aug
	67	60	54	51	56	59

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



% Design Capability Utilization						
Monthly Average Actual Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Mar	Apr	May	Jun	Jul	Aug
	69	60	56	55	60	60

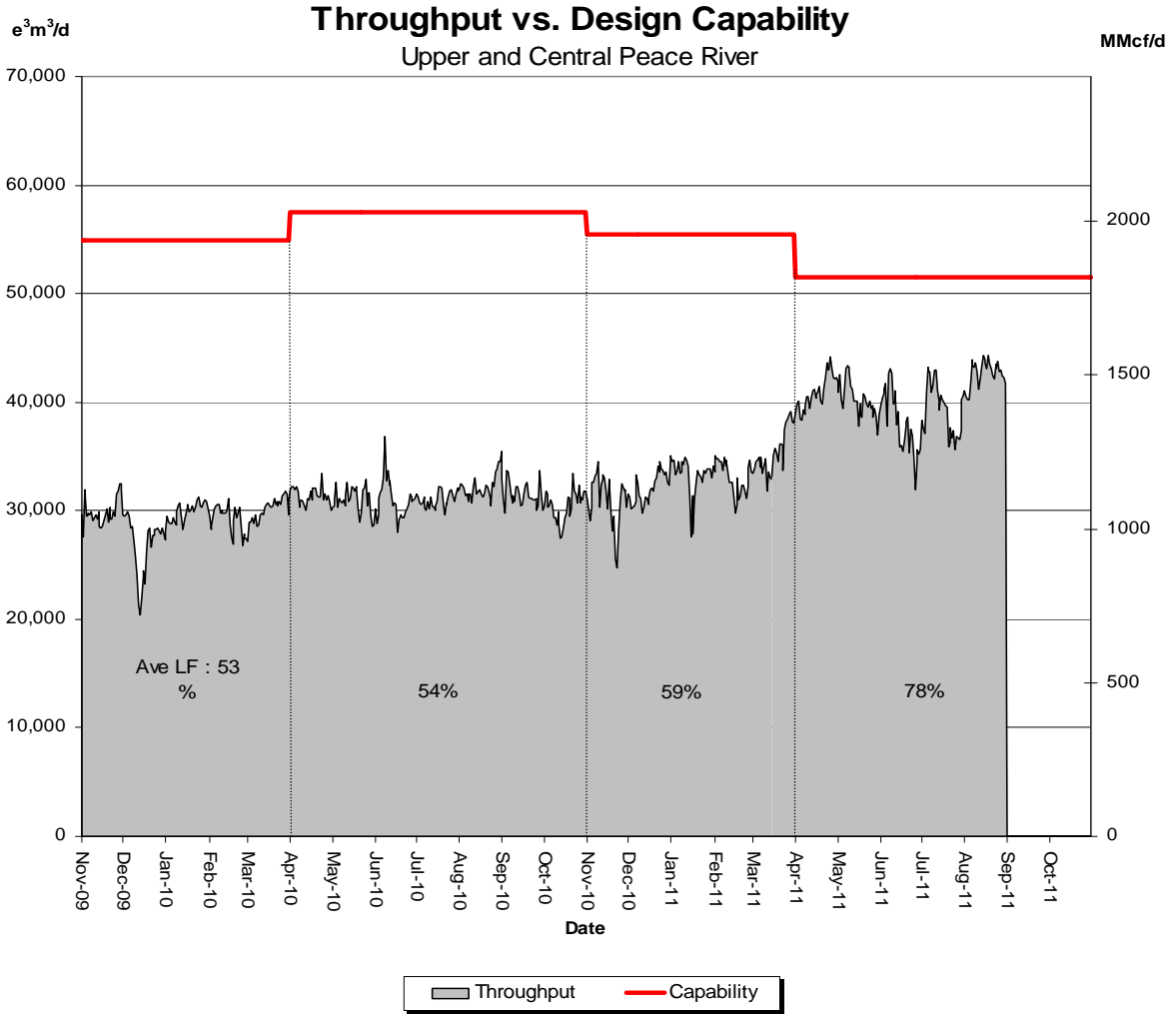
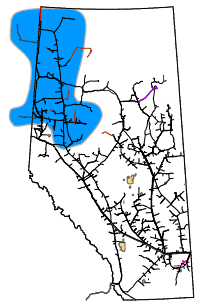
# DESIGN CAPABILITY UTILIZATION UPPER PEACE RIVER



% Design Capability Utilization						
Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Mar	Apr	May	Jun	Jul	Aug
	67	79	75	71	70	75

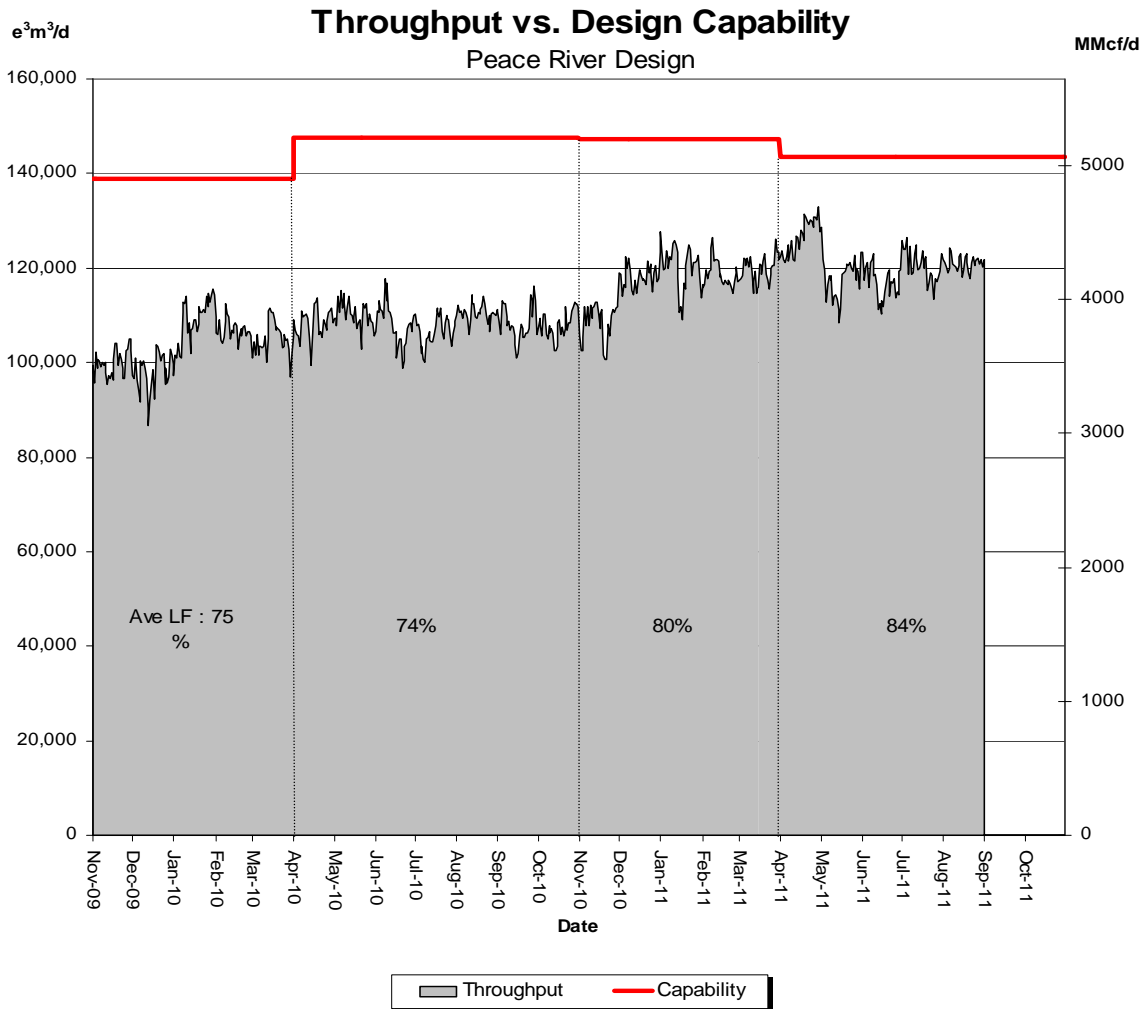
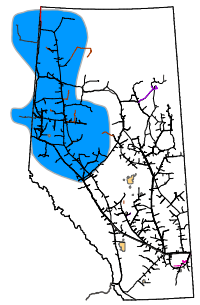


# DESIGN CAPABILITY UTILIZATION UPPER and CENTRAL PEACE RIVER



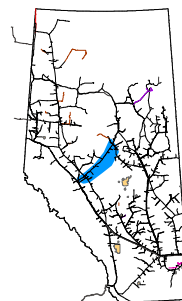
<b>% Design Capability Utilization</b> Monthly Average Actual Flow as a Percentage of Capability						
Average Flow/ Design Capability	Mar	Apr	May	Jun	Jul	Aug
	64	79	78	74	76	83

# DESIGN CAPABILITY UTILIZATION PEACE RIVER DESIGN (Upper, Central and Lower Peace River)



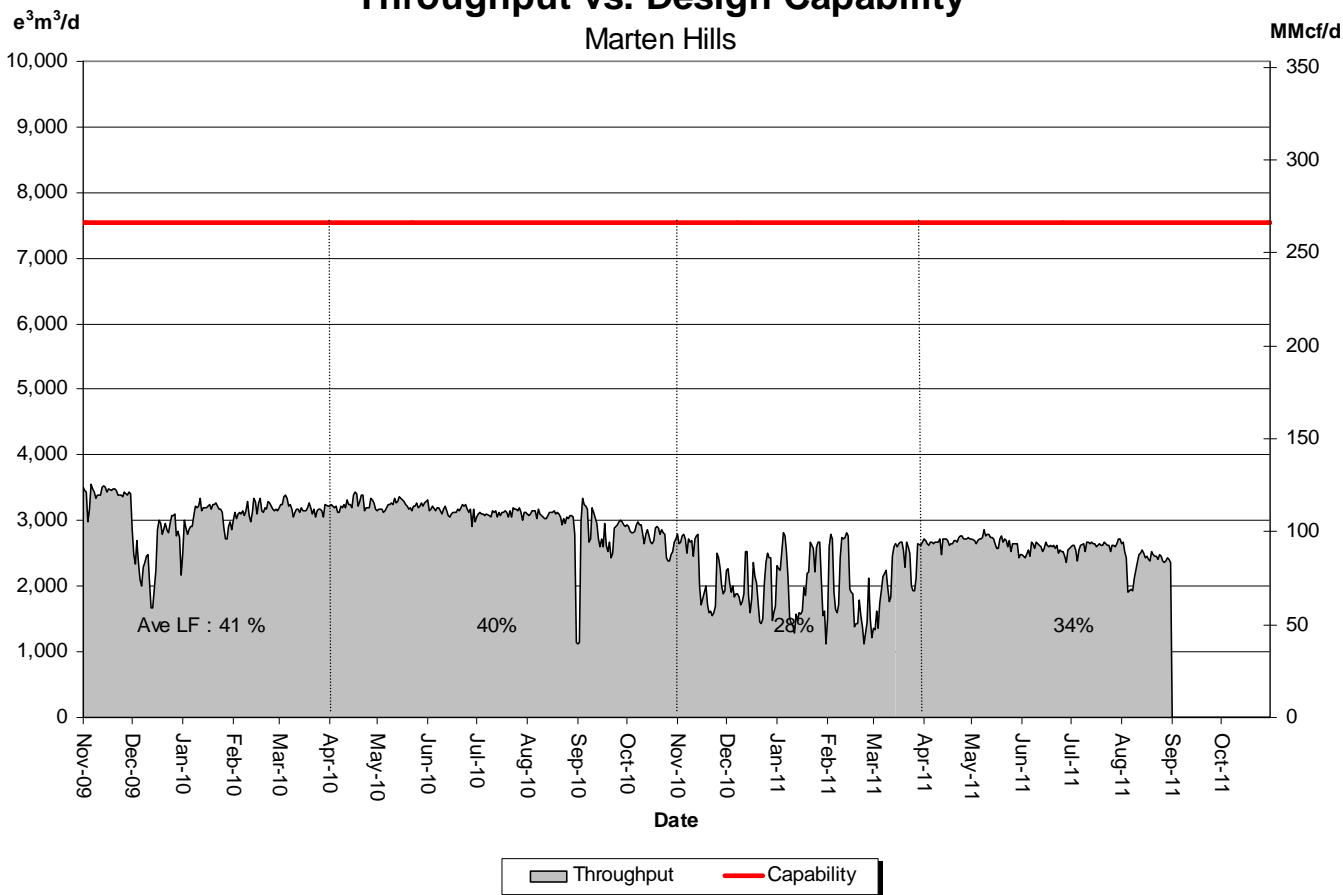
<b>% Design Capability Utilization</b>						
Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Mar	Apr	May	Jun	Jul	Aug
	81	88	82	82	84	84

# DESIGN CAPABILITY UTILIZATION MARTEN HILLS



## Throughput vs. Design Capability

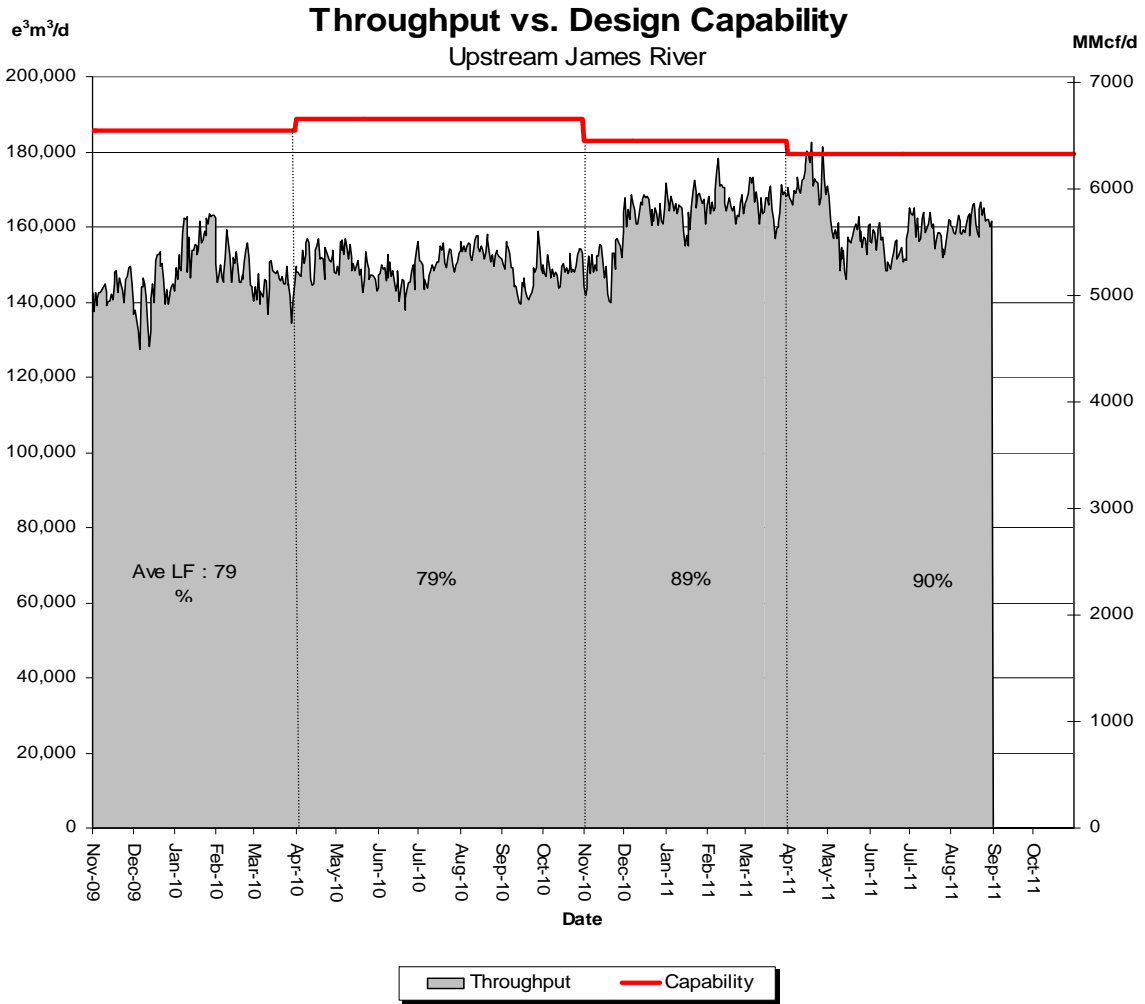
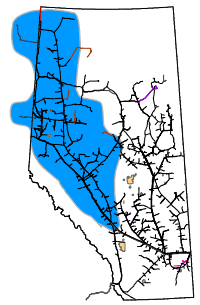
Marten Hills



% Design Capability Utilization						
Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Mar	Apr	May	Jun	Jul	Aug
	29	36	36	34	35	32

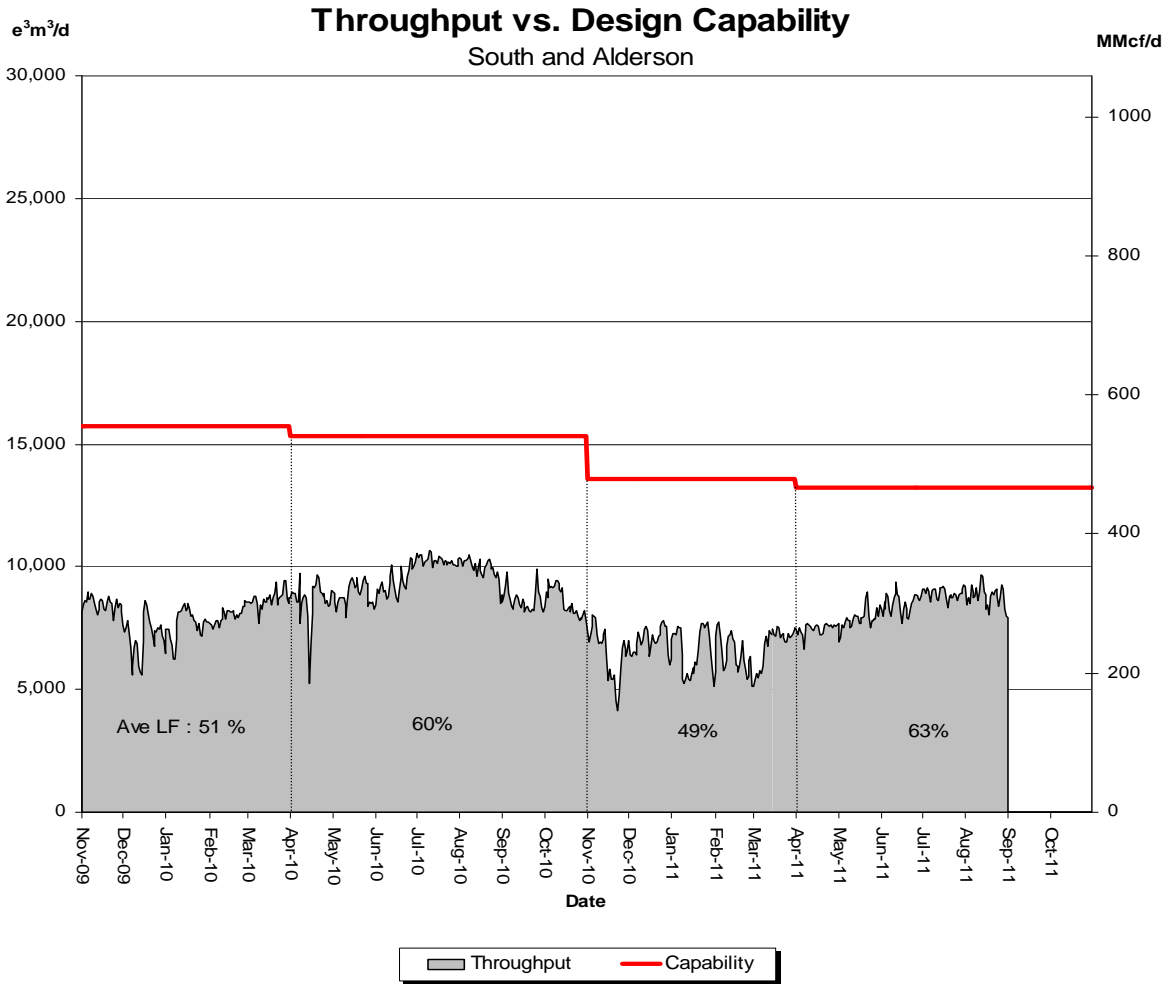
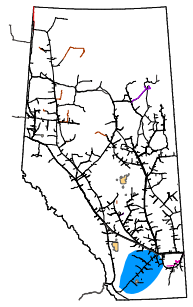
# DESIGN CAPABILITY UTILIZATION UPSTREAM JAMES RIVER

(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	Mar	Apr	May	Jun	Jul	Aug
	91	96	88	86	89	90

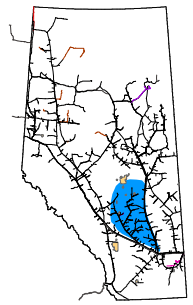
# DESIGN CAPABILITY UTILIZATION SOUTH and ALDERSON



<b>% Design Capability Utilization</b>						
Monthly Average Actual Flow as a Percentage of Design Capability						
Average Flow/ Design Capability	Mar	Apr	May	Jun	Jul	Aug
	50	57	60	64	68	67

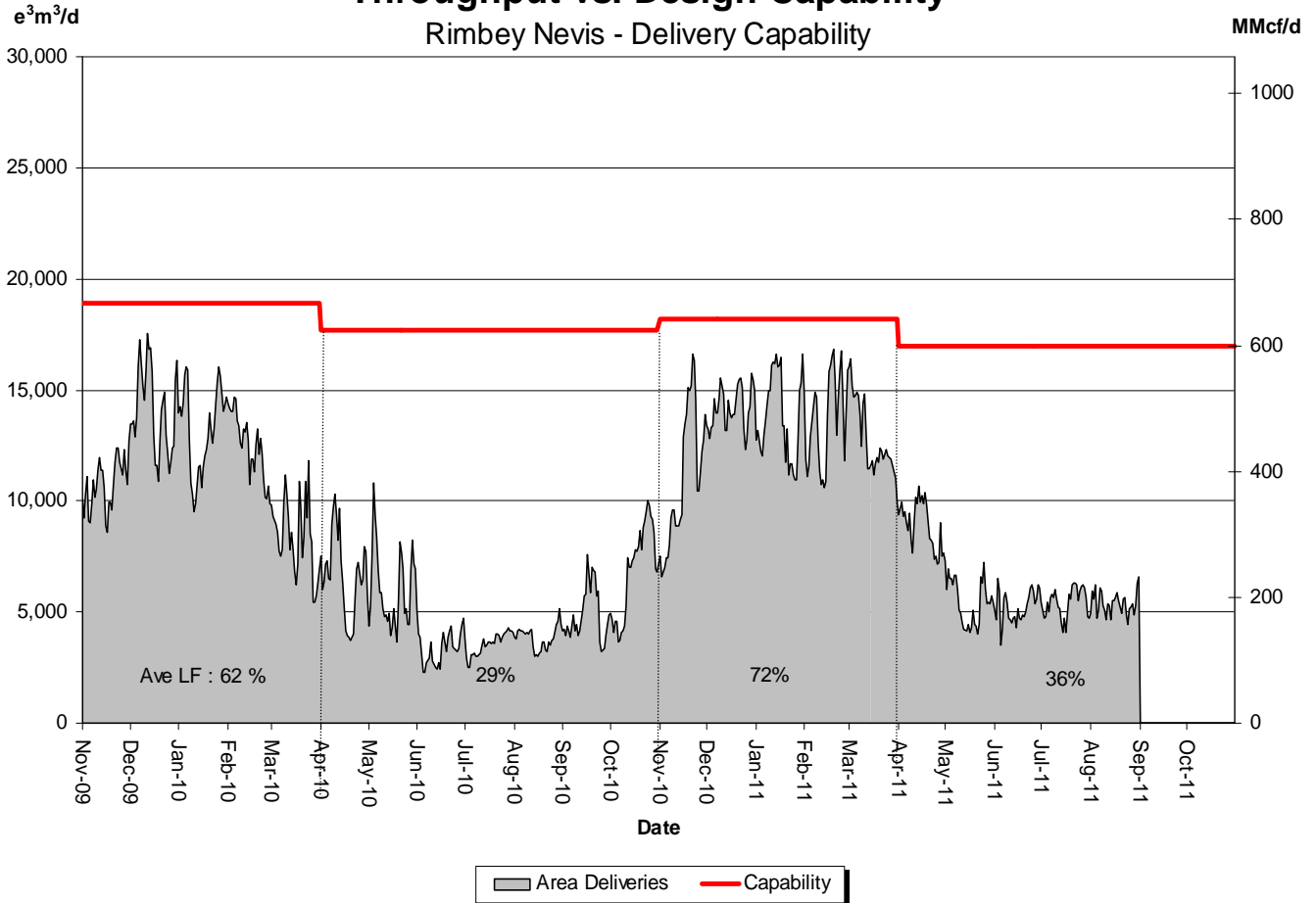
# DESIGN CAPABILITY UTILIZATION

## RIMBEY-NEVIS – FLOW WITHIN



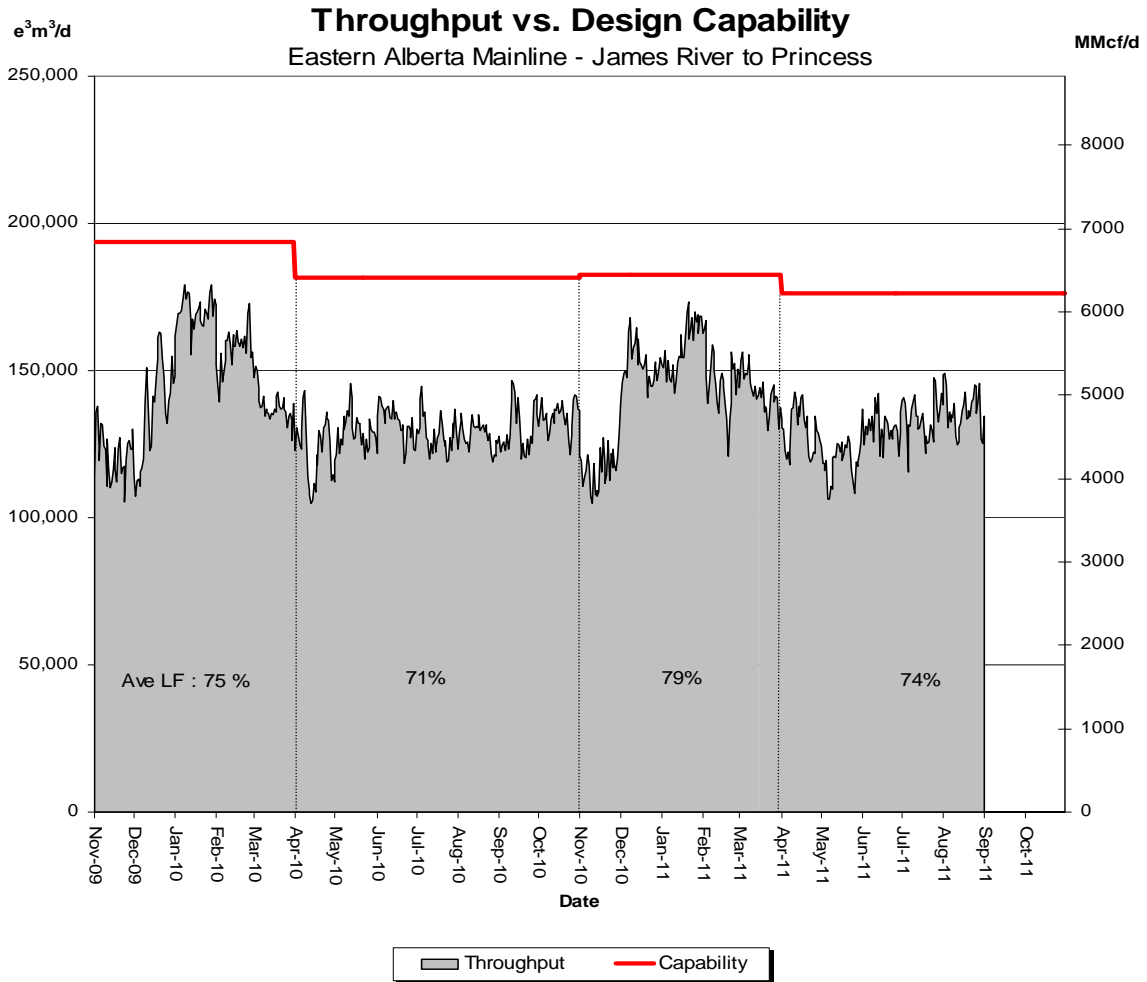
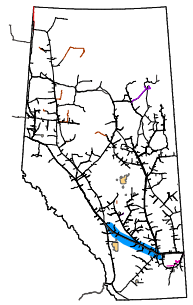
### Throughput vs. Design Capability

Rimbey Nevis - Delivery Capability



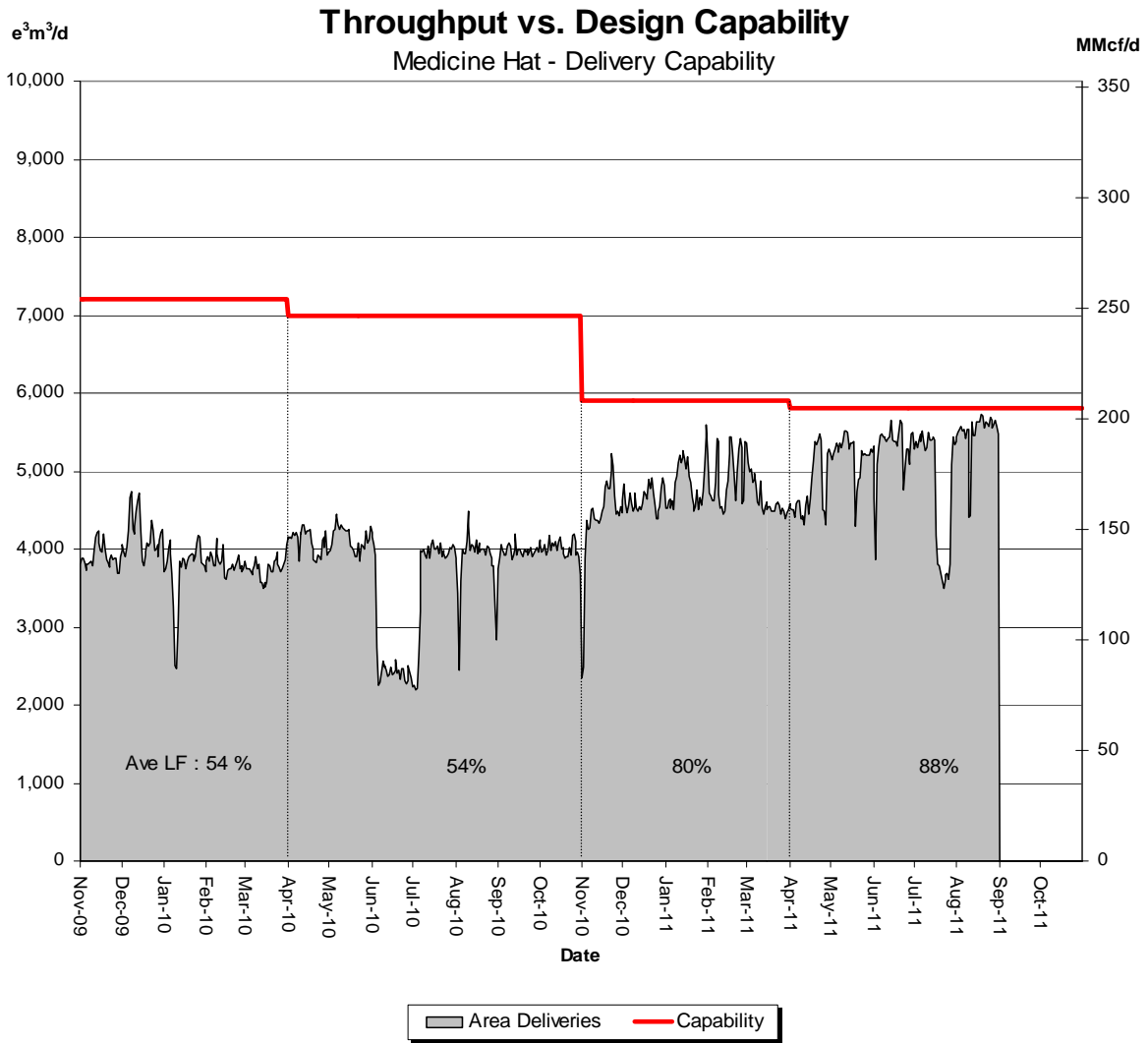
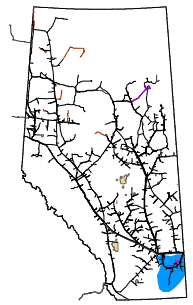
% Design Capability Utilization						
Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Mar	Apr	May	Jun	Jul	Aug
	70	53	32	31	32	32

# 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	Mar	Apr	May	Jun	Jul	Aug
	78	74	68	74	76	77

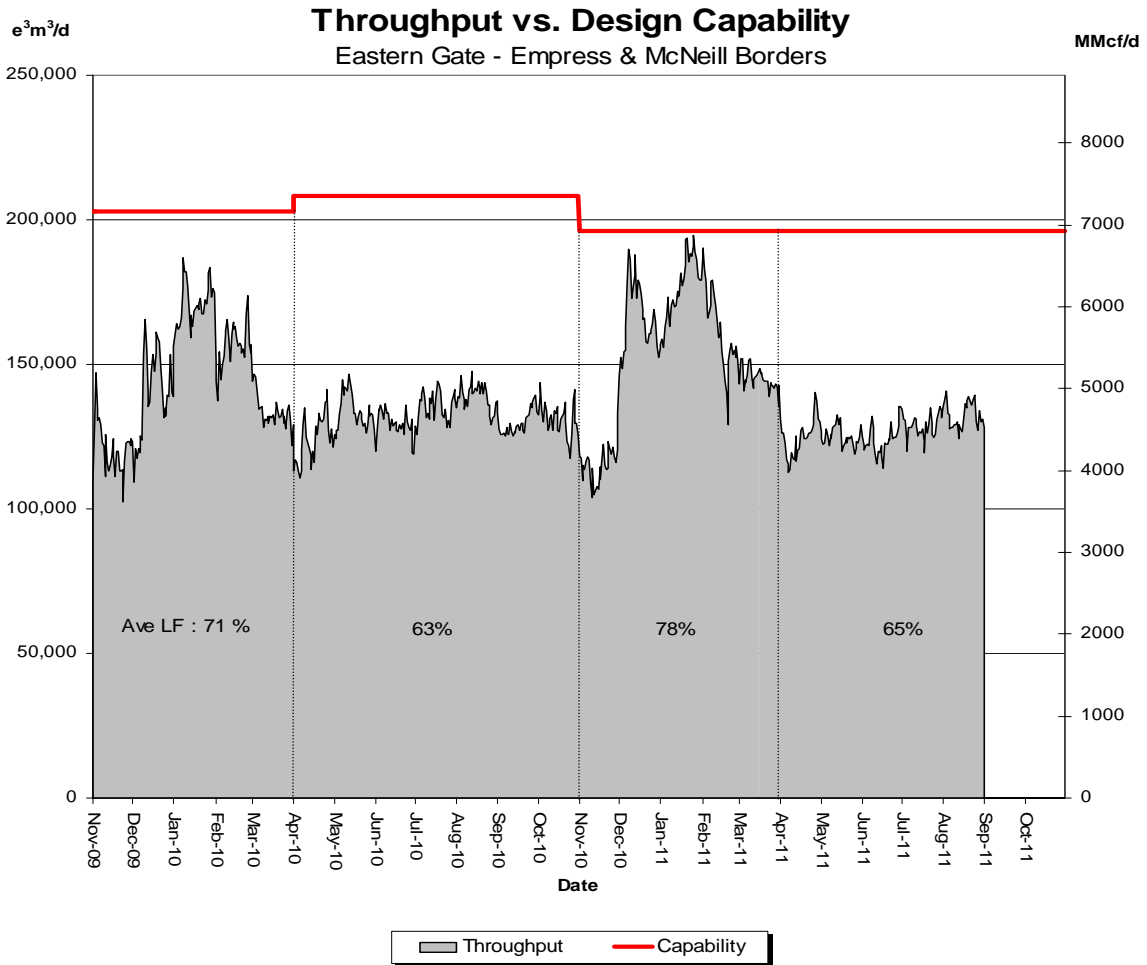
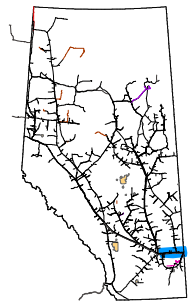
# DESIGN CAPABILITY UTILIZATION MEDICINE HAT – FLOW WITHIN



<b>% Design Capability Utilization</b>						
Monthly Average Area Deliveries as a Percentage of Design Capability						
Average Flow/ Design Capability	Mar	Apr	May	Jun	Jul	Aug
	79	82	90	91	83	95

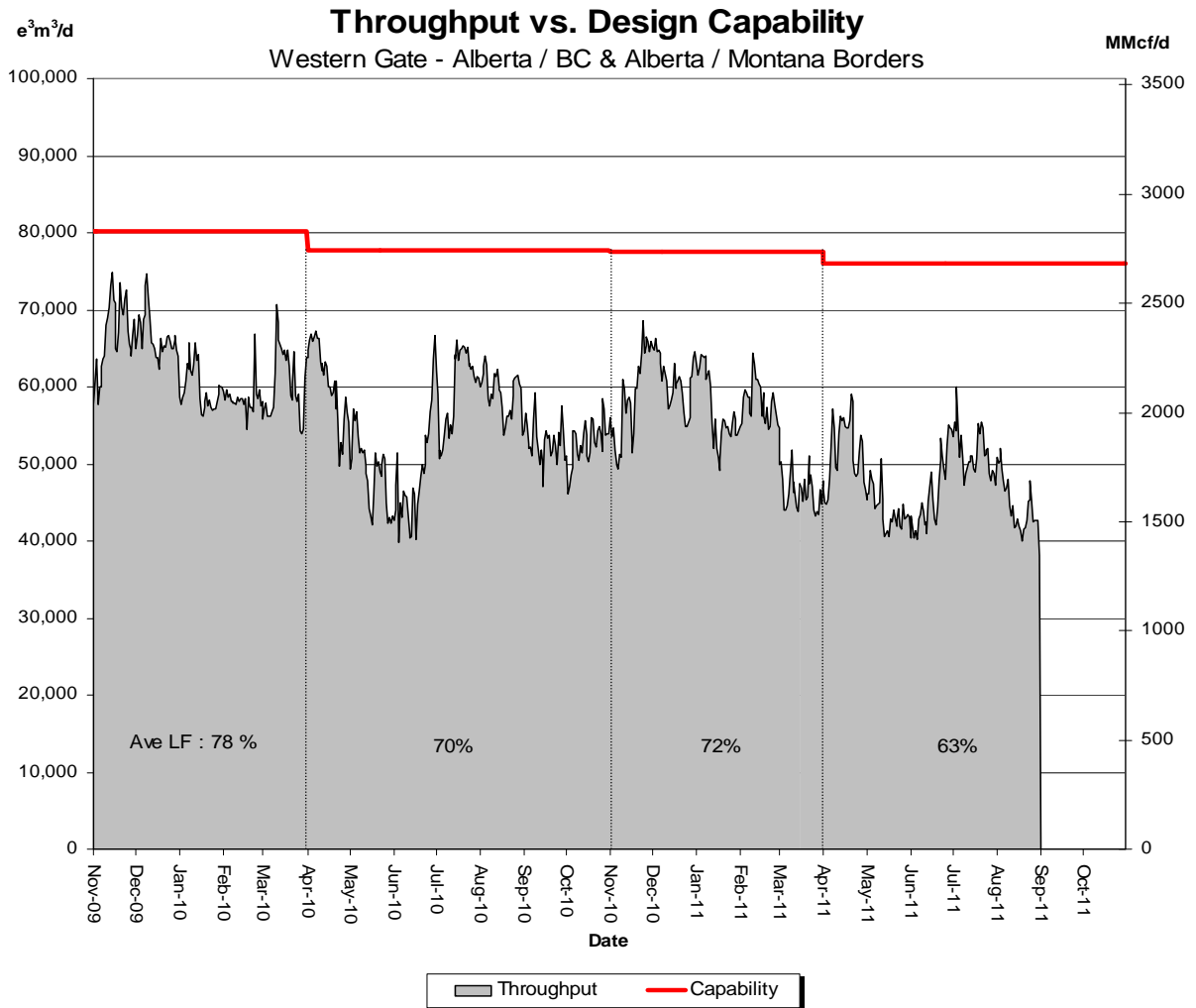
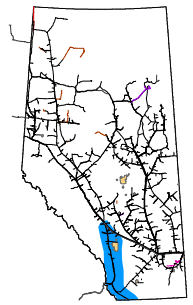


# DESIGN CAPABILITY UTILIZATION EASTERN ALBERTA MAINLINE (Princess to Empress / McNeill)



<b>% Design Capability Utilization</b> Average Actual Flow as a Percentage of Design Capability						
Average Flow / Design Capability	Mar 74	Apr 64	May 64	Jun 63	Jul 66	Aug 68

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



% Design Capability Utilization Average Actual Flow as a Percentage of Design Capability						
Average Flow / Design Capability	Mar	Apr	May	Jun	Jul	Aug
	60	68	58	61	68	59

# HISTORICAL TRANSPORTATION SERVICE AVAILABILITY

June 1, 2011 to August 31, 2011 (3 Month Average)

Receipt Area	Segment	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	91	91	9	46	46	Pipeline Maintenance - Inline Inspection June 2011
	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>		Causes/Comments <sup>(3)</sup>
		Available <sup>(2)</sup>	Available	Restriction	Restricted <sup>(1)</sup>		
		(% 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

---

## 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 26NGTL 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

---

## **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.

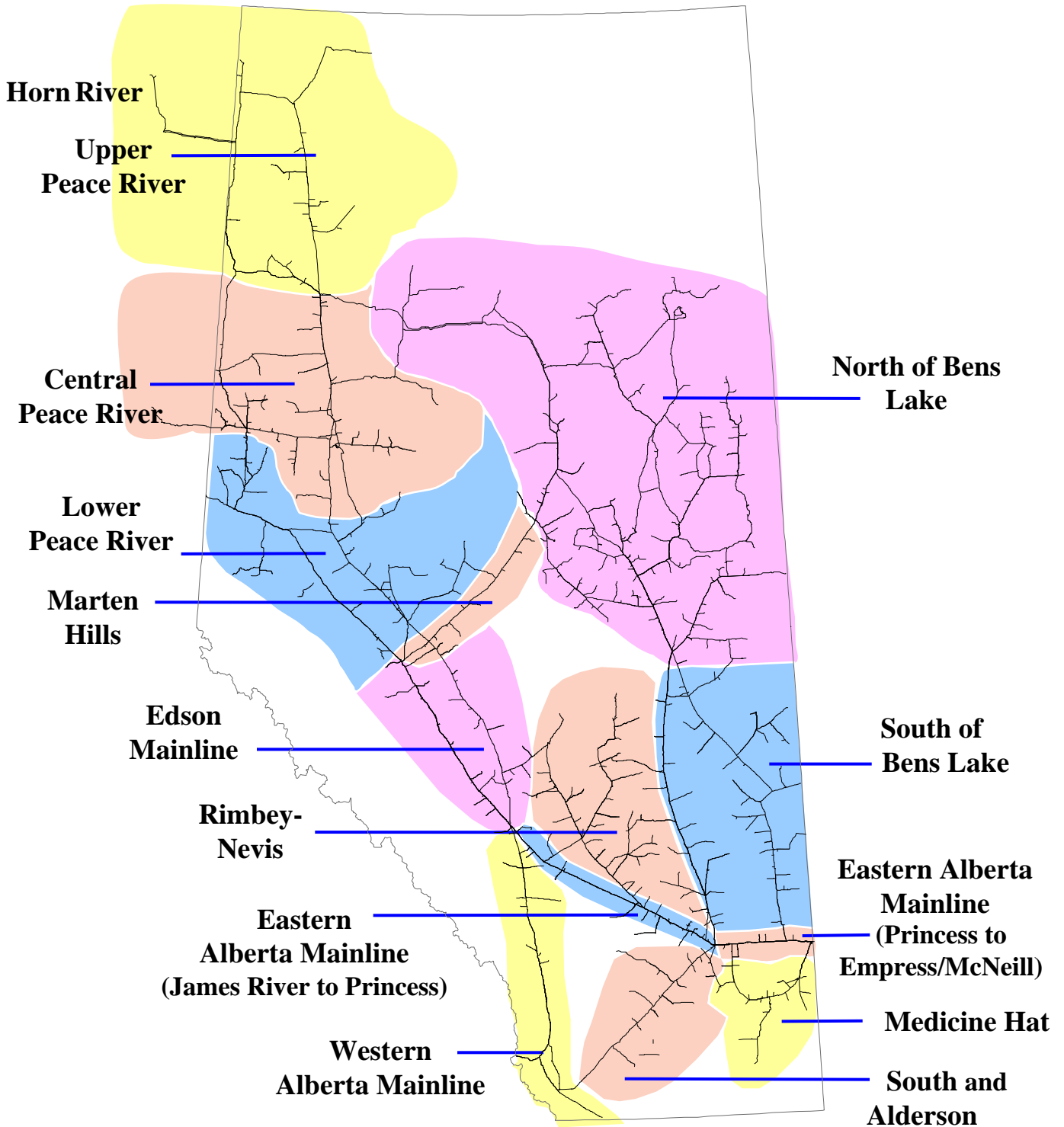
Service availability is affected by a number of factors including scheduled and unscheduled maintenance, construction or other outages.

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**

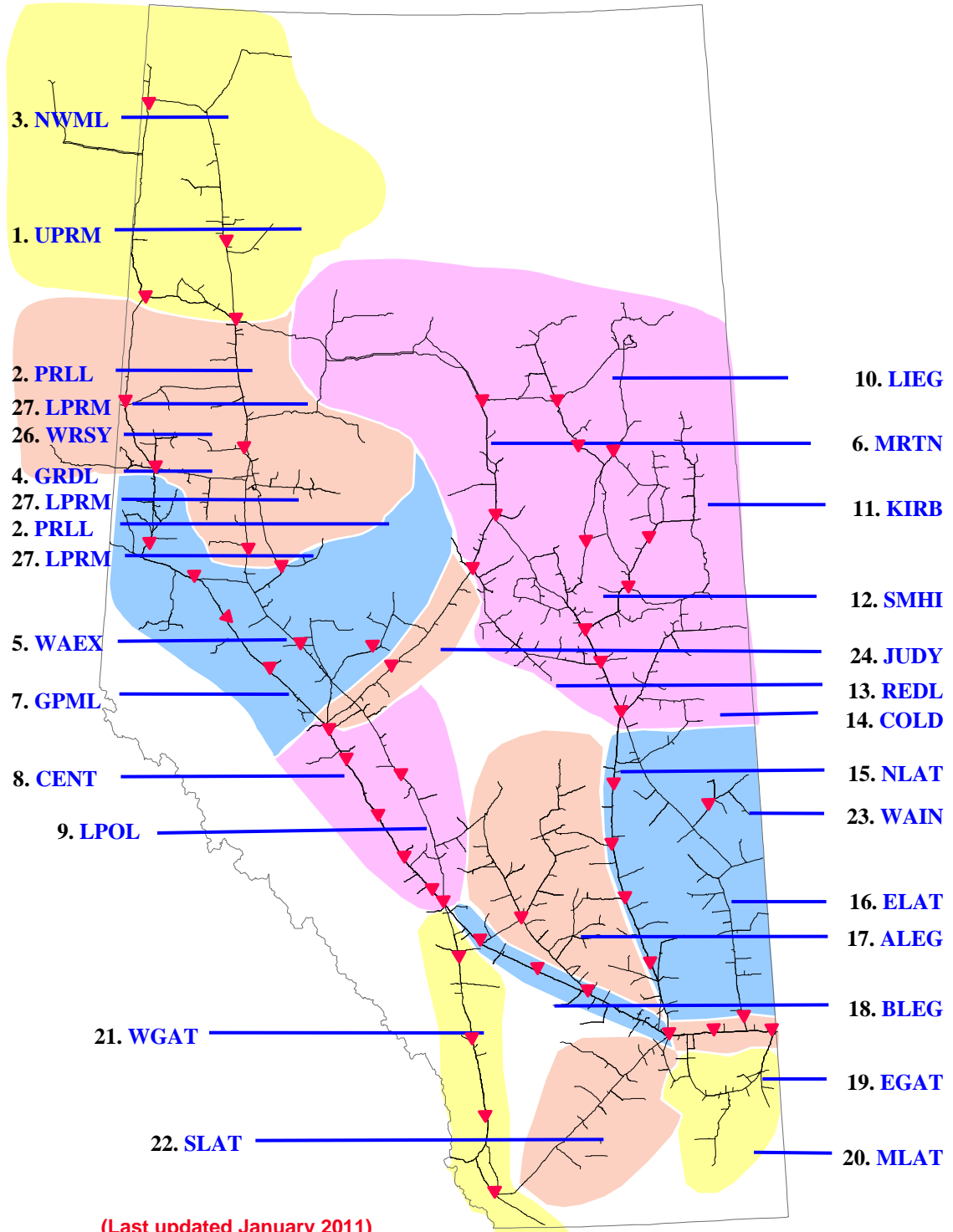
The Future Firm Transportation Service Availability report presents guidelines and timing for all future firm transportation service requests.

# NGTL DESIGN AREAS



(Last updated January 2011)

# NGTL PIPELINE SEGMENTS





# DEFINITION OF TERMS

---

## *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.

---

## *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.

---

## *Other*

### *System Load Factor*

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