

North Dakota Pipeline Authority
Justin J. Kringstad
July 29, 2011
Pipeline Authority Webinar Series

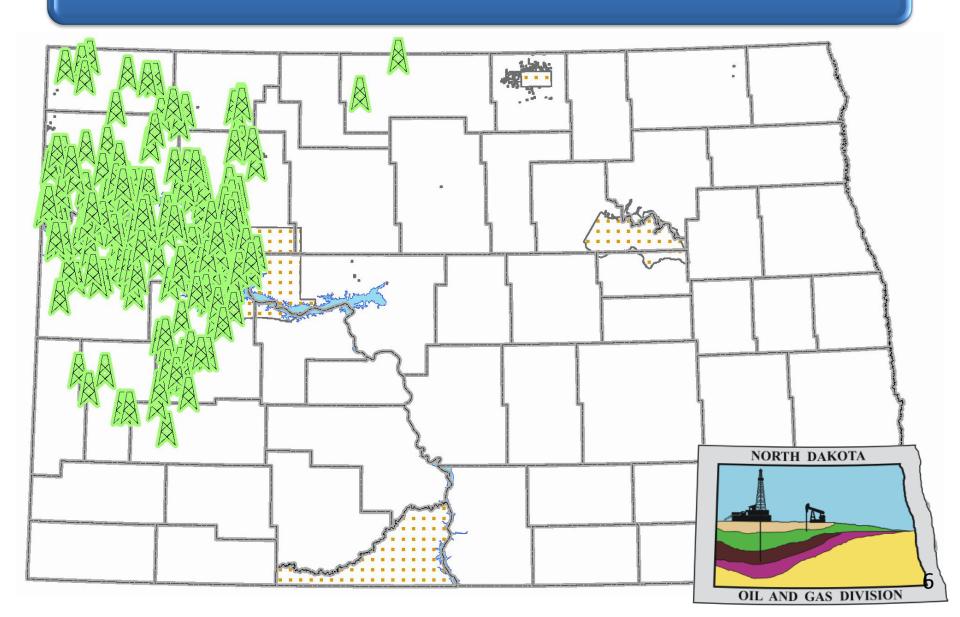
Industry

Policy Makers

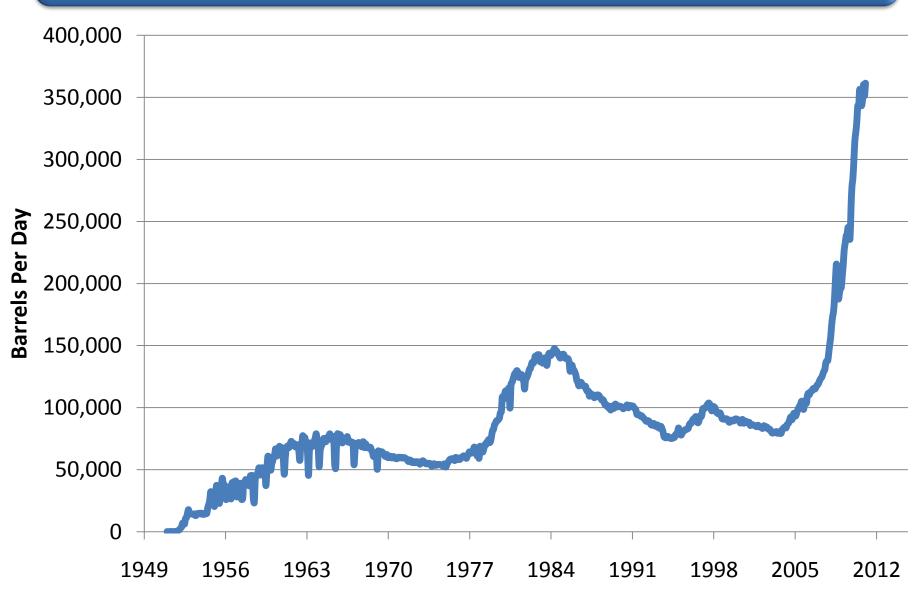
Pipeline Authority Regulators

Public

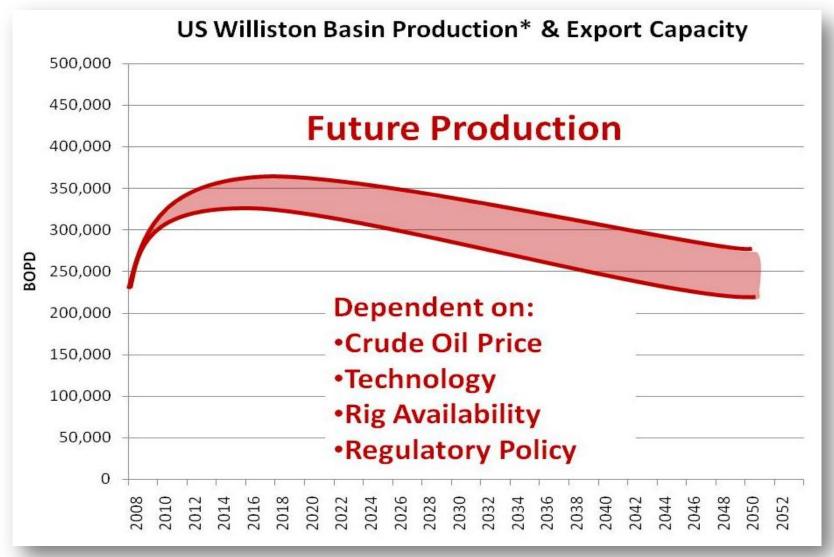
July 29, 2011: 183 Drilling Rigs



North Dakota Crude Oil

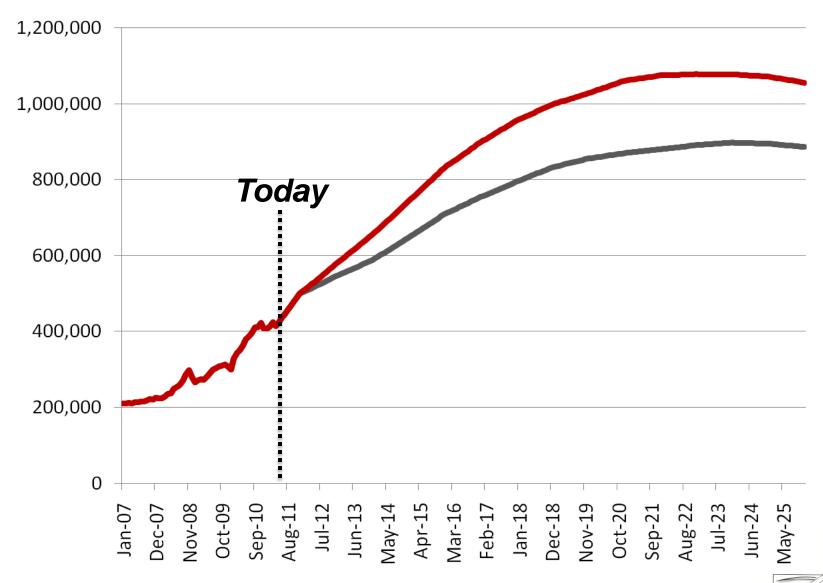


Looking Back to March 2009...



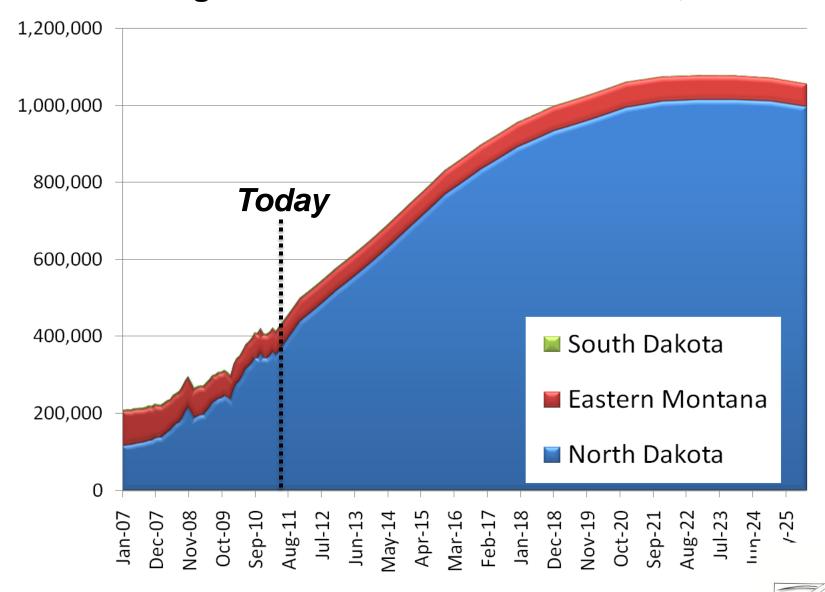
Slide from a presentation given to the ND State Legislature in March 2009.

Forecasting Williston Basin Oil Production, BOPD

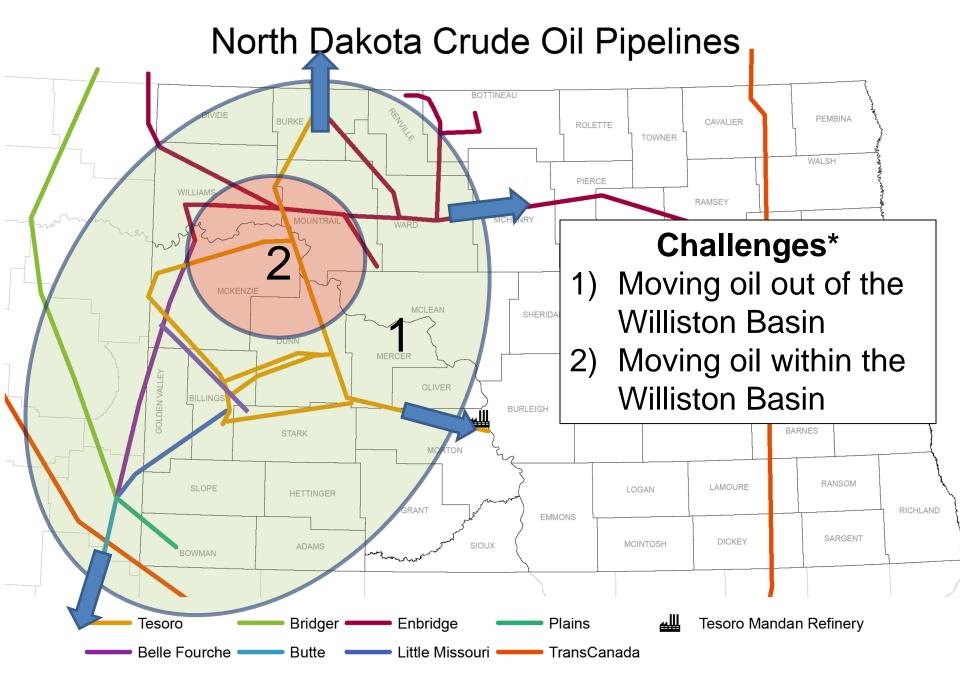


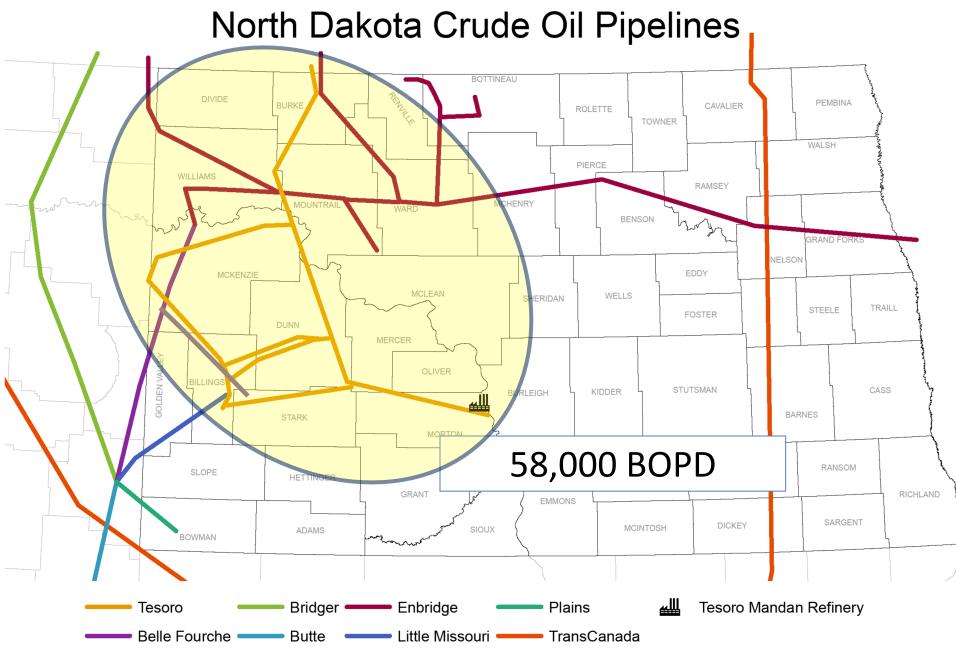
Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning.

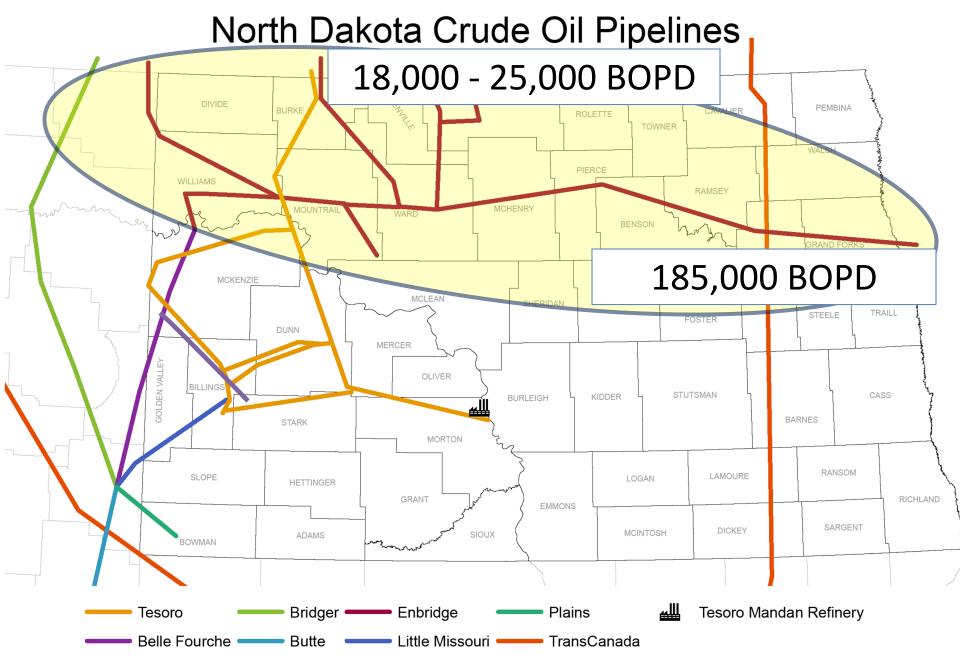
Forecasting Williston Basin Oil Production, BOPD

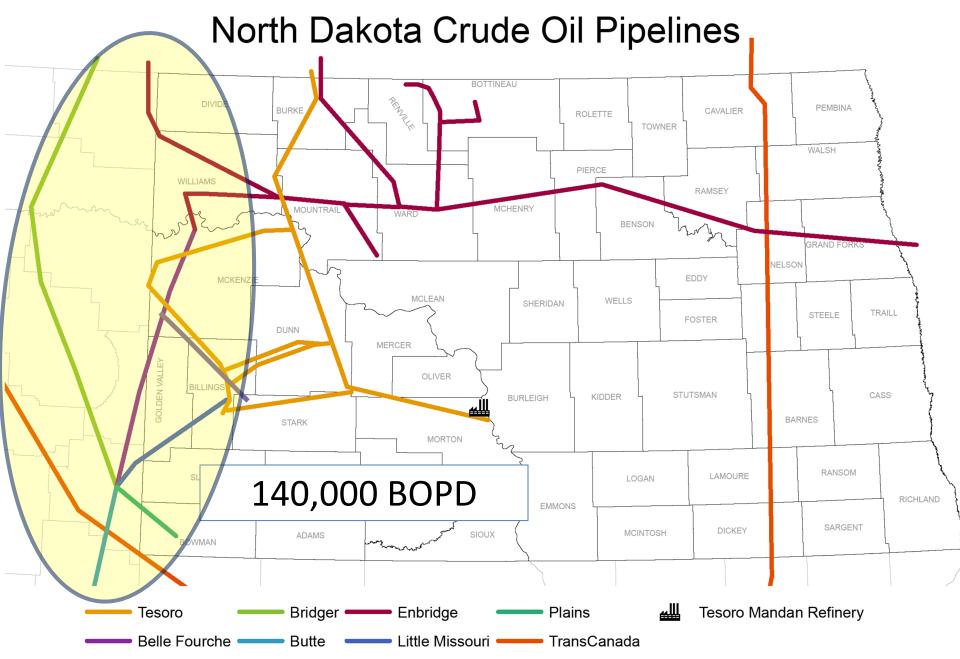


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Current Rail Transportation



Others Include:

Minot

Dore

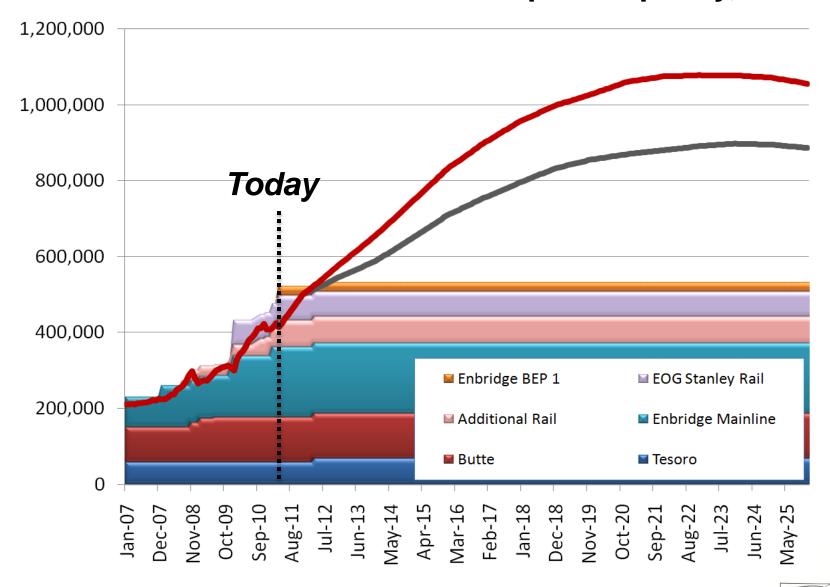
Stampede

Donnybrook

Dakota Transport Solutions - New Town, ND

Images Provided By: Loren Kopseng

Williston Basin Oil Production & Export Capacity, BOPD



Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning.

Several Exciting Developments For Post 2010 Crude Oil Transport

Enbridge Bakken Expansion Program

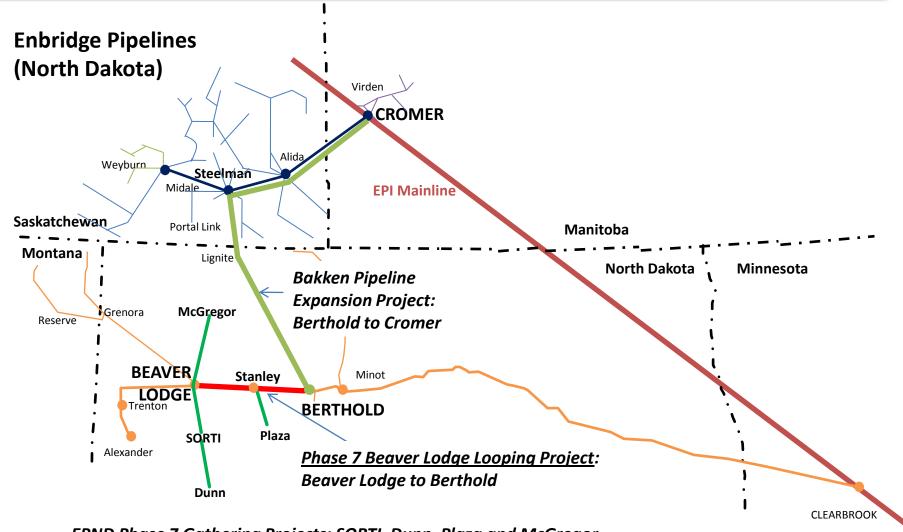
Keystone XL Marketlink

True Co.'s Baker 300

Plains Bakken North

Unit Train Development

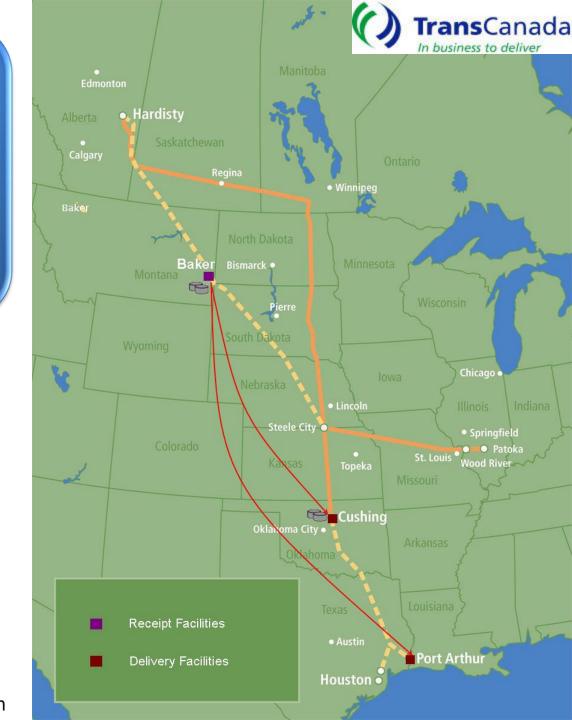
Bakken Pipeline Expansion



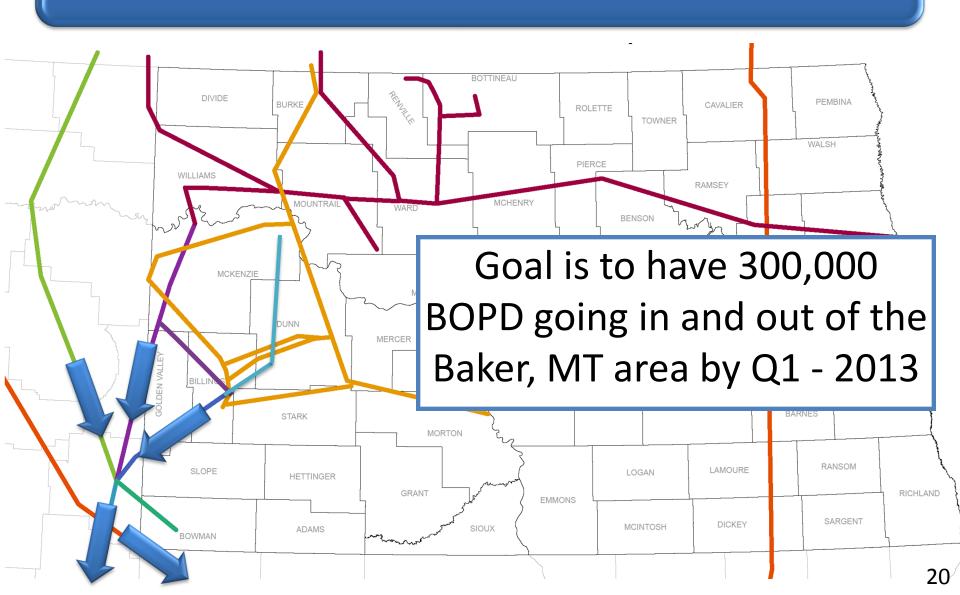
EPND Phase 7 Gathering Projects: SORTI, Dunn, Plaza and McGregor

Proposed TransCanada Marketlink

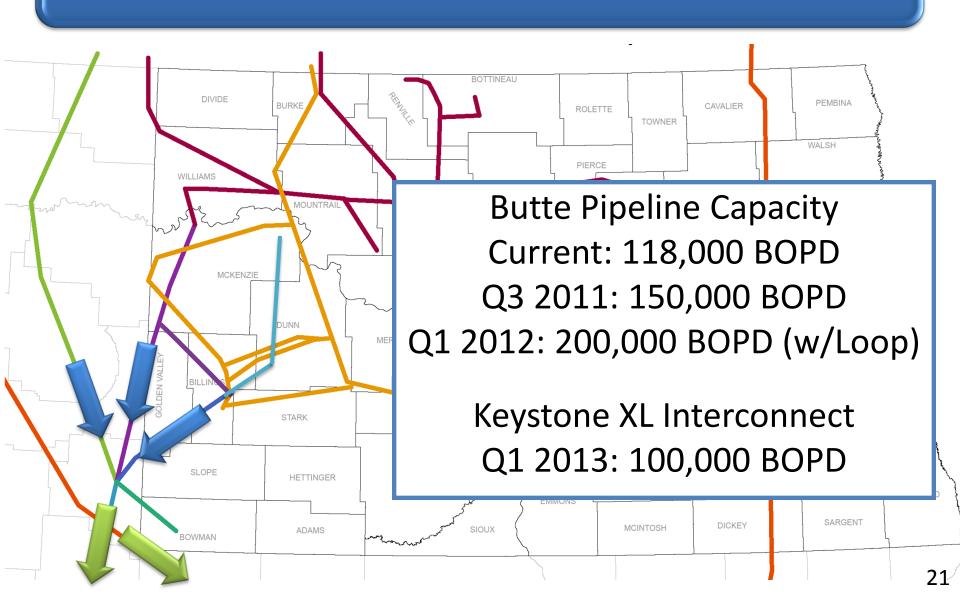
- Successful Open
 Season in 2010
- 2013 Startup
 (Subject to
 Presidential
 Permit)



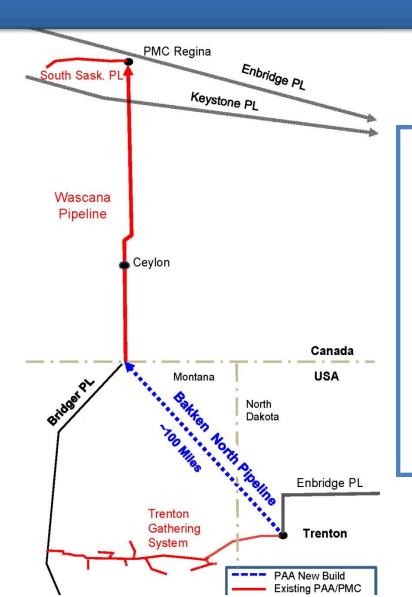
True Co.'s Proposed "Baker 300"



True Co.'s Proposed "Baker 300"



Plains Bakken North Pipeline

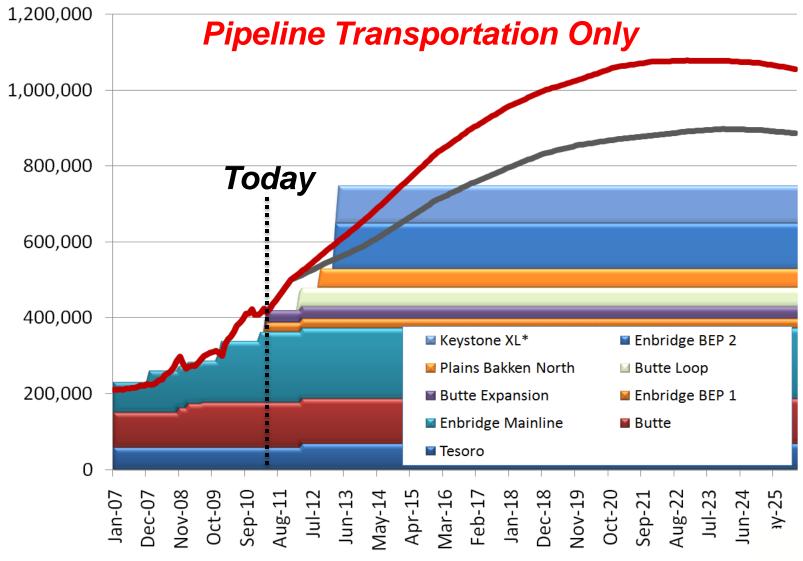


Proposed Capacity 50,000-75,000 BOPD Q4 2012

New 103 Miles, 12" Pipeline Reverse Wascana Pipeline

\$160-\$200 Million

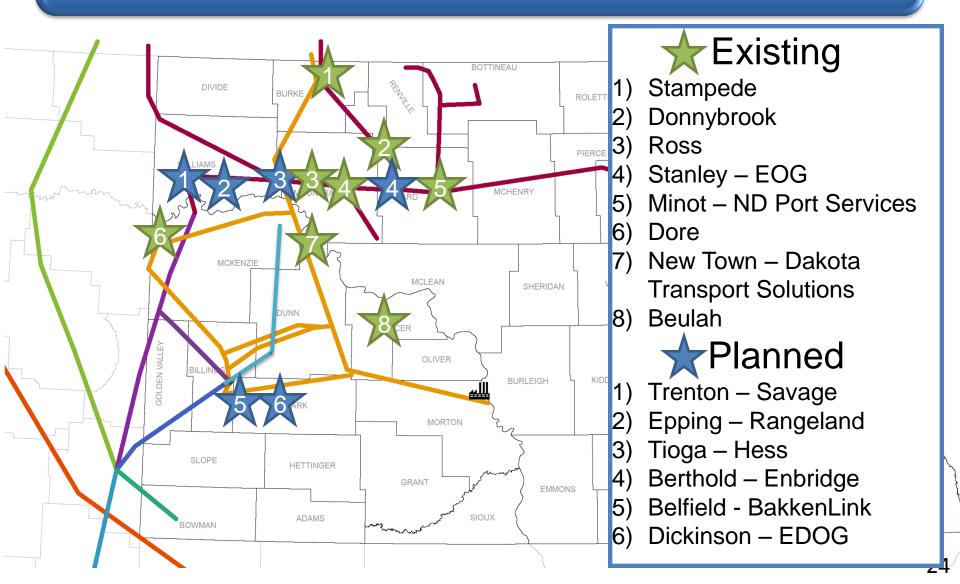
Williston Basin Oil Production & Export Capacity, BOPD



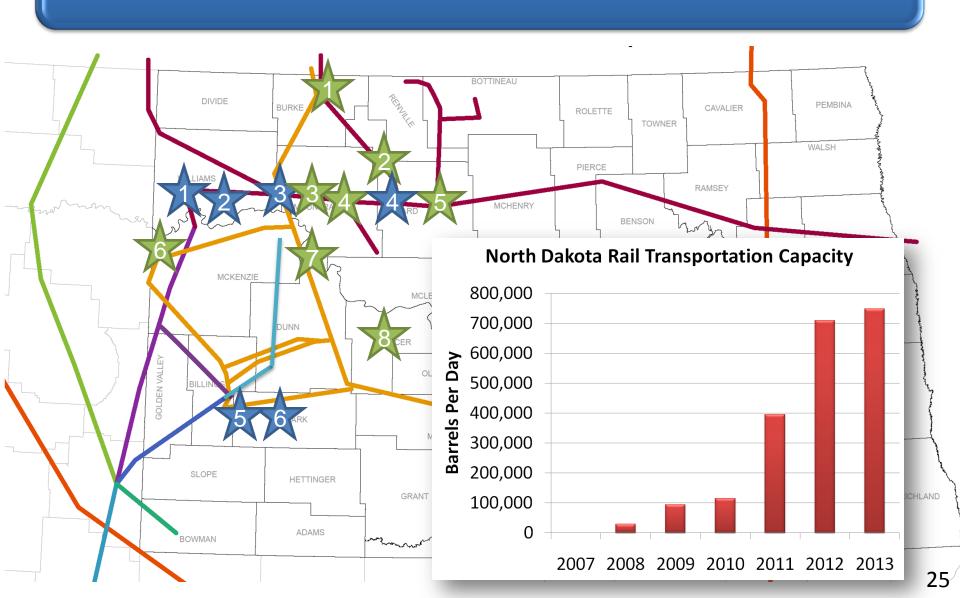
Production forecast is for visual demonstration purposes only and should not be considered accurate for any near or long term planning.

*Projects still in the proposed or internal review process

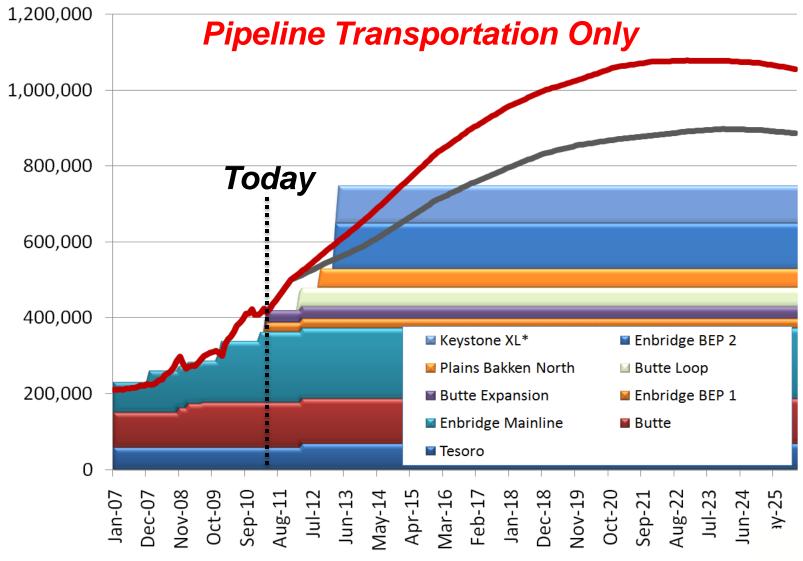
Existing & Planned Rail Locations



Existing & Planned Rail Locations



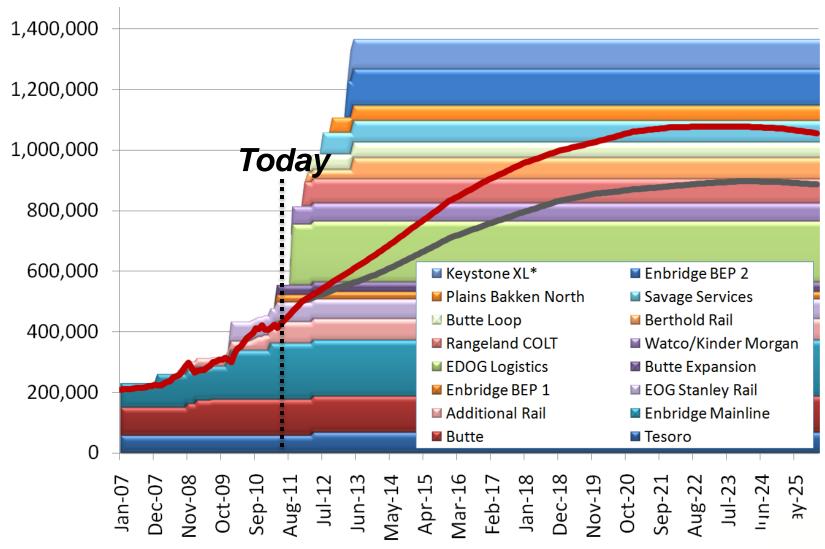
Williston Basin Oil Production & Export Capacity, BOPD



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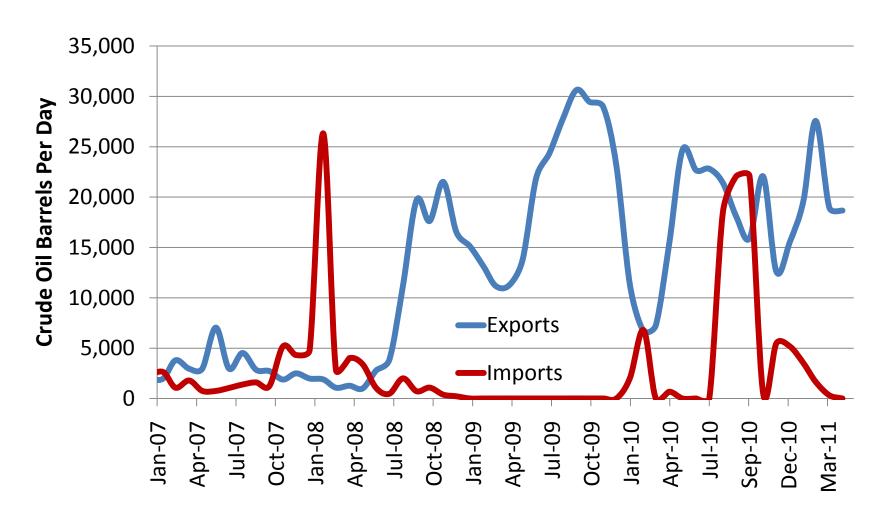
Williston Basin Oil Production & Export Capacity, BOPD

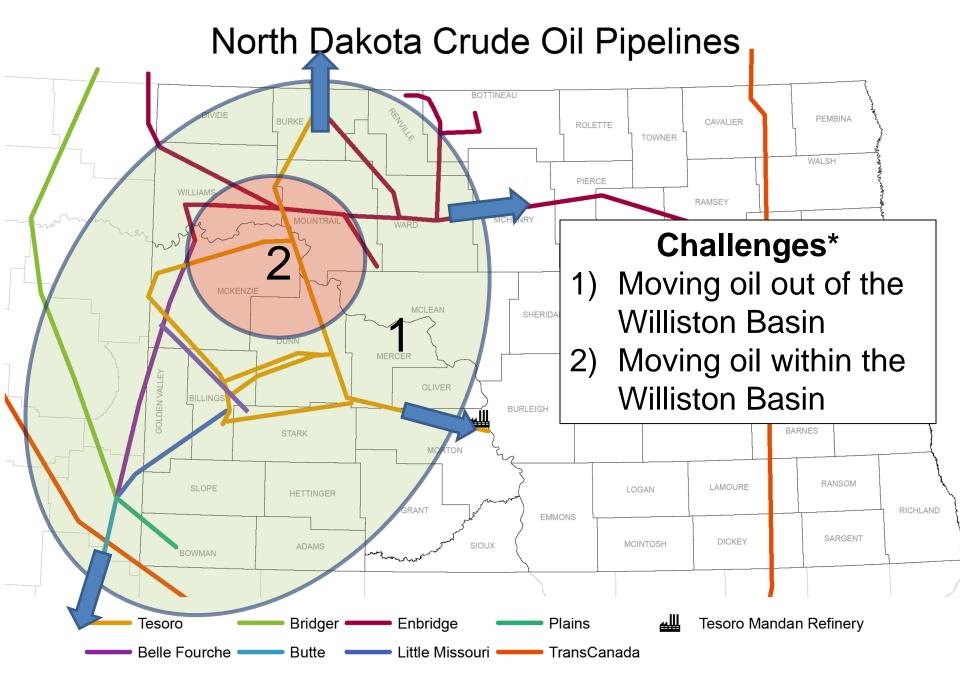


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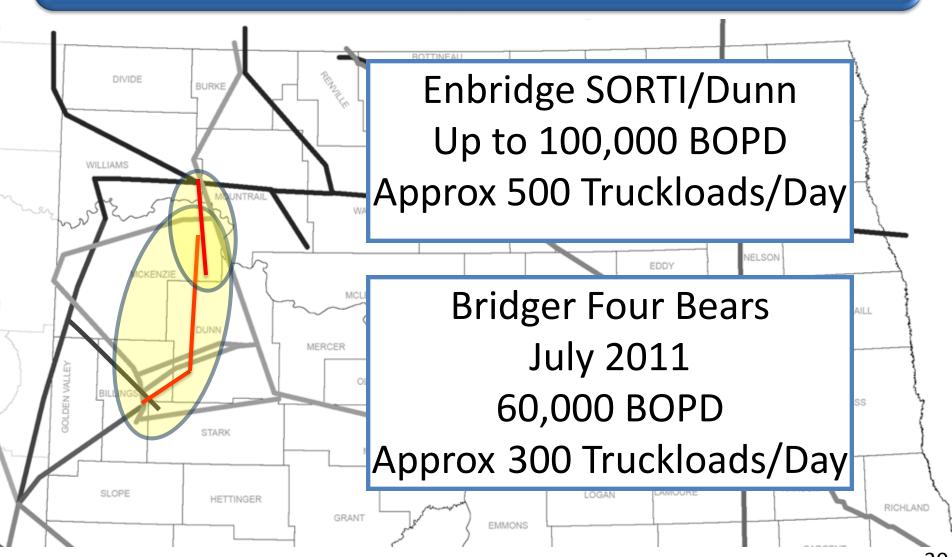
*Projects still in the proposed or internal review process

Williston Basin Truck Imports/Exports

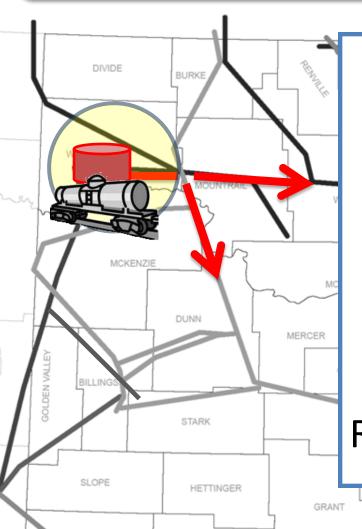




Reducing Truck Traffic



Rangeland COLT Hub and Pipeline



Gathering, Storage, & Transportation

Tie into Enbridge & Tesoro (20 Mile - 8" - 40,000 BOPD)

Anticipated Q1 2012

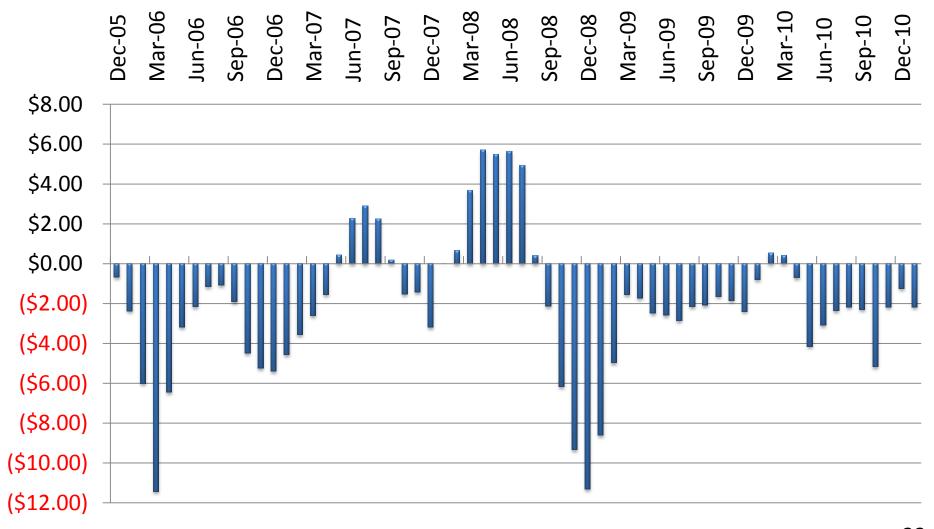
210,000 Barrels of Tankage

Rail up to 80,000 BOPD initially

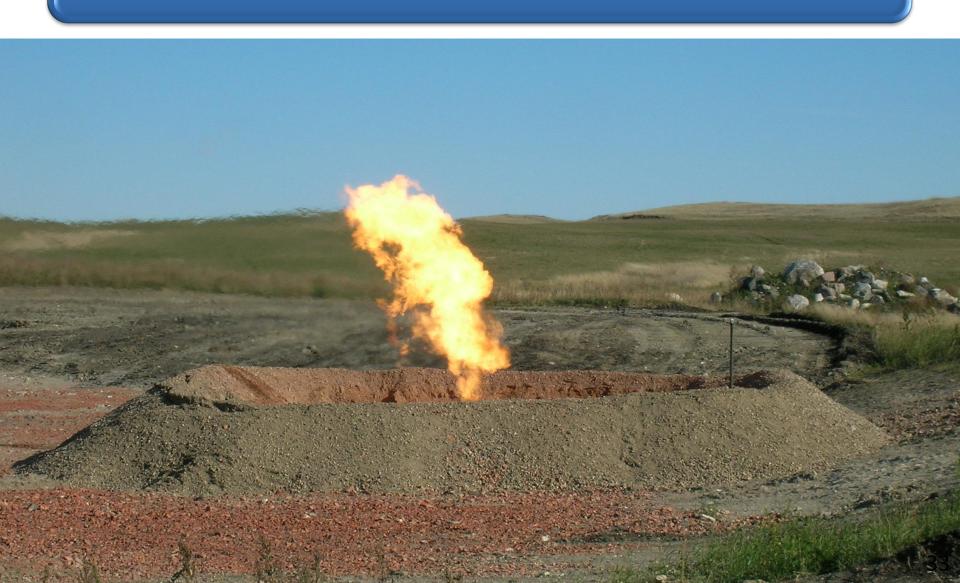
RICHLAND

North Dakota Crude Pricing

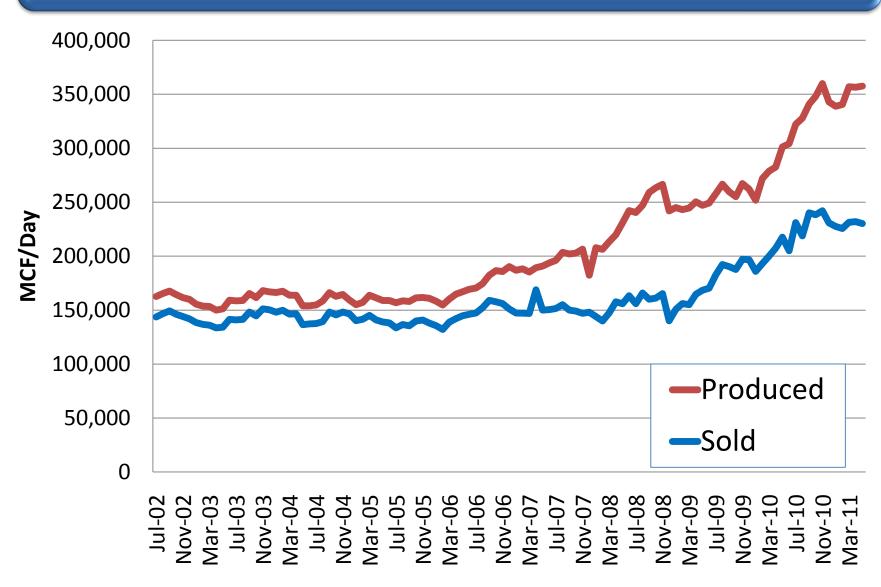
ND Tax Department Average Crude Oil Discounts - 90% NYMEX



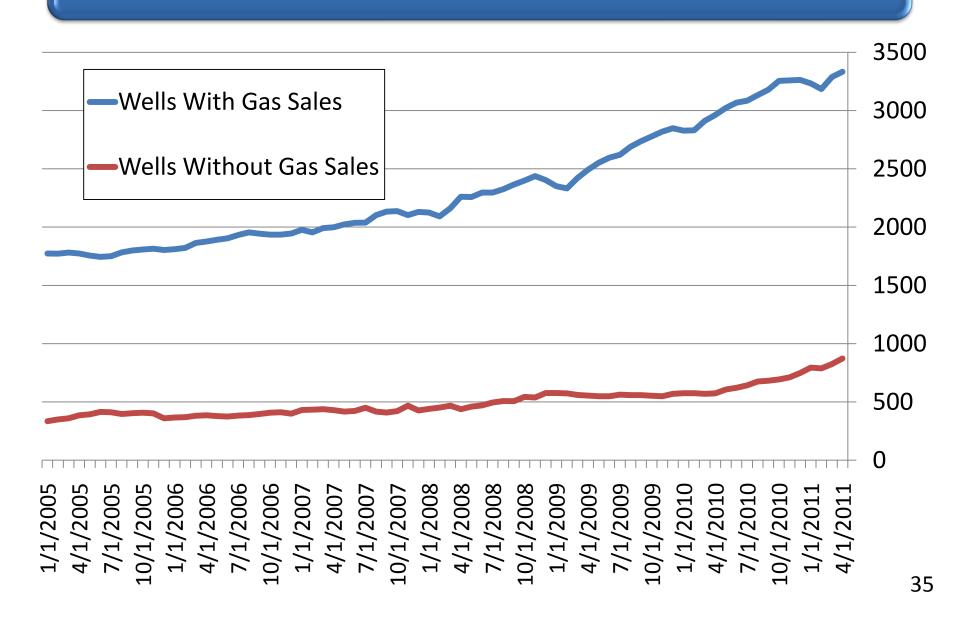
Natural Gas Projects



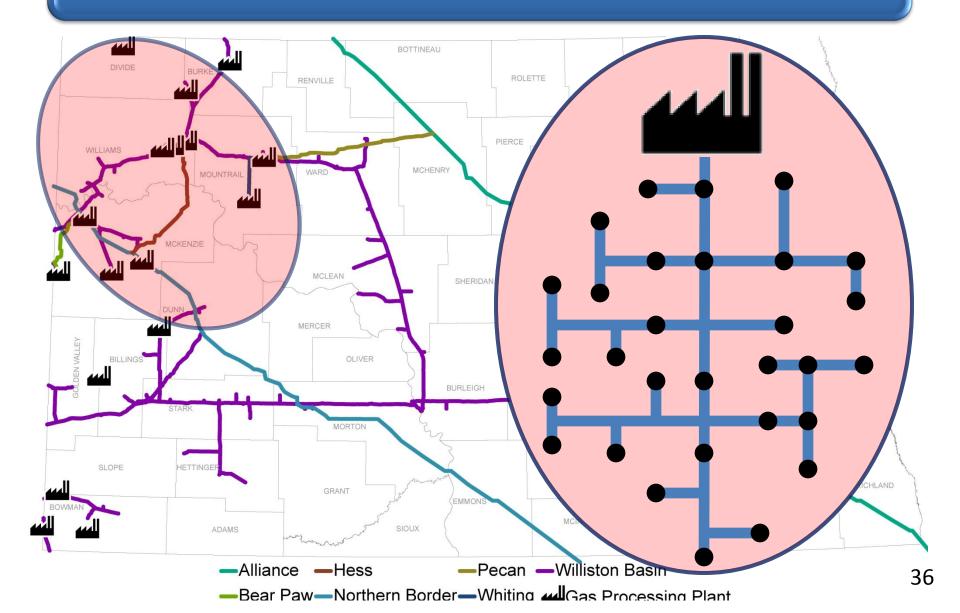
ND Gas Production



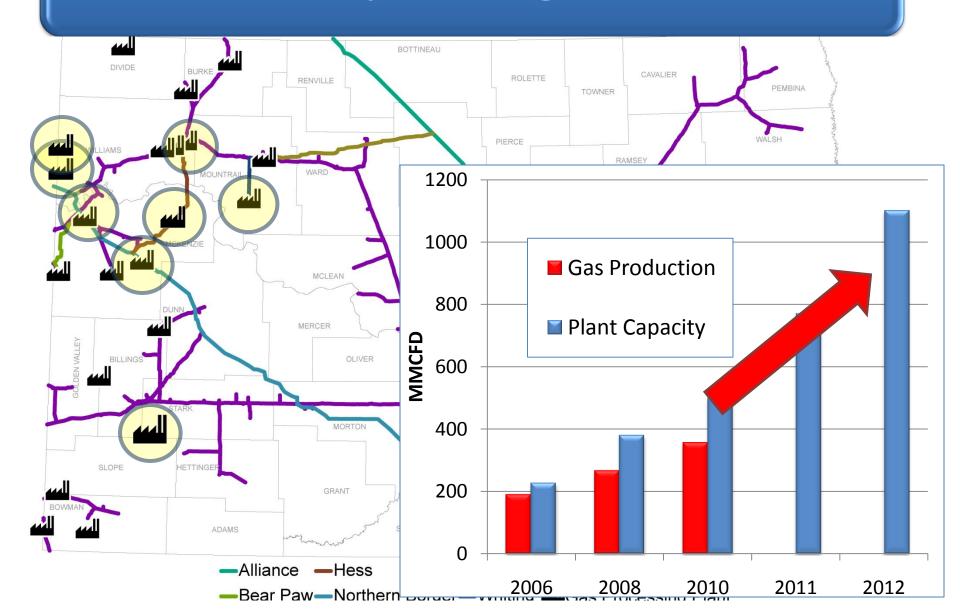
ND Gas Gathering Statistics



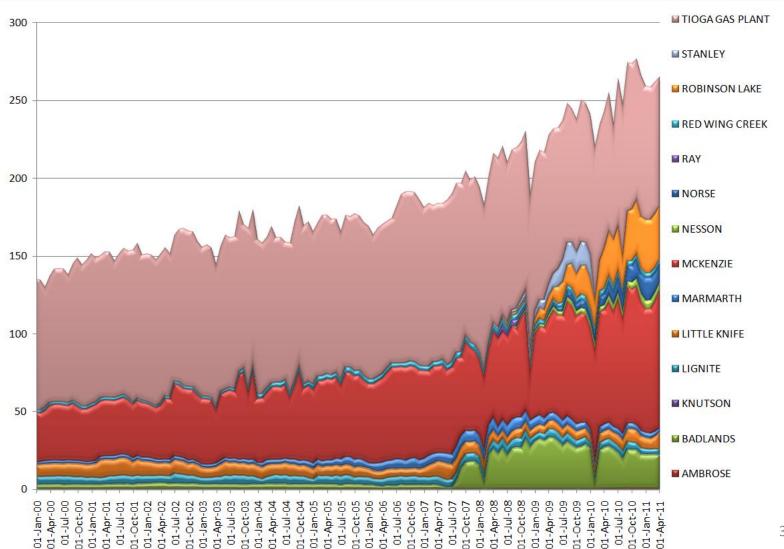
Natural Gas Challenge I



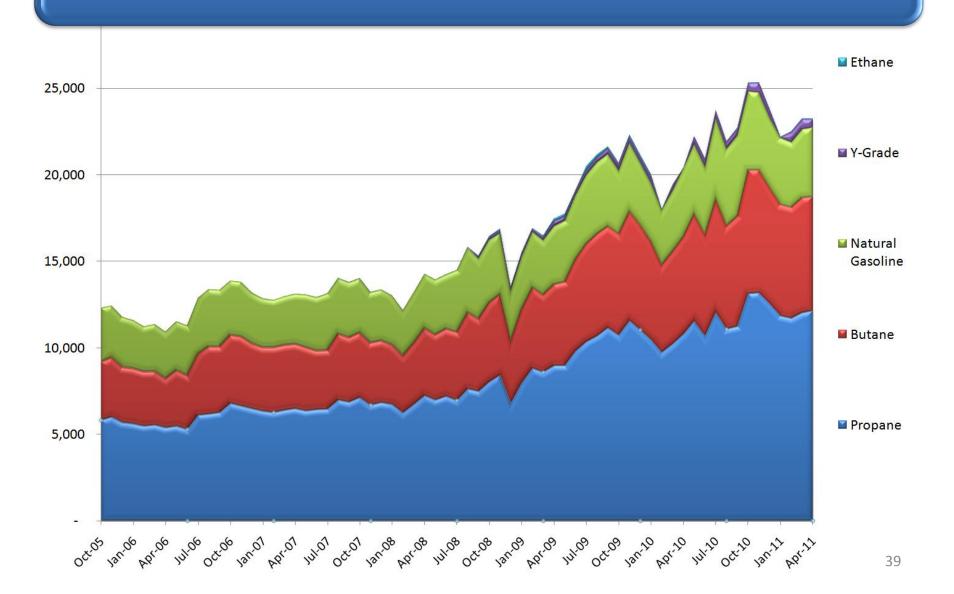
New or Expanding Gas Plants

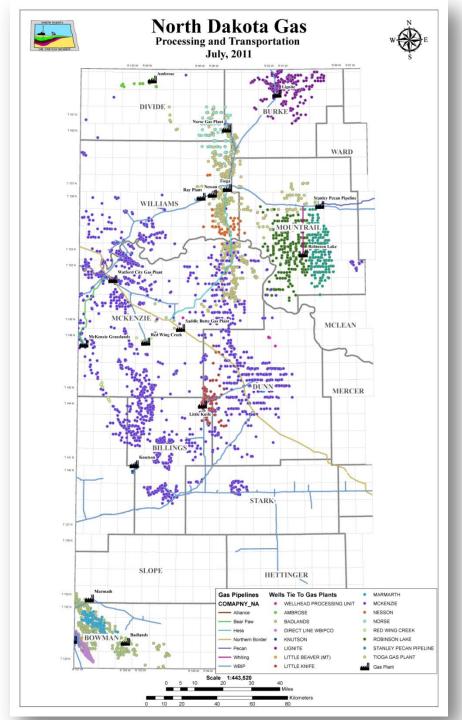


Natural Gas Plant Intake, MMCFD



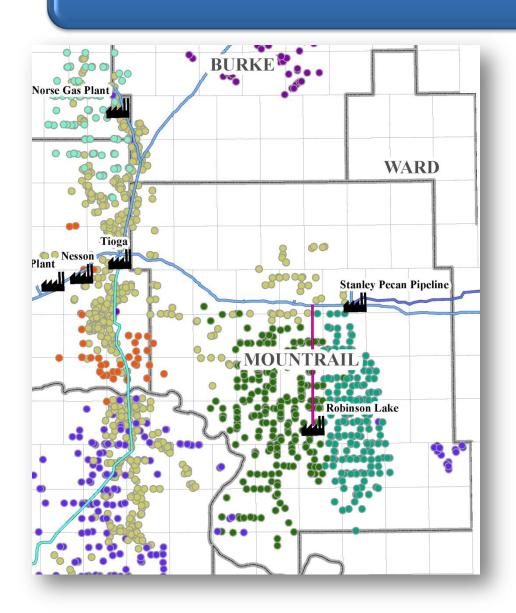
North Dakota Natural Gas Liquids





North Dakota Natural Gas Processing and Gathering

Mountrail/Burke Counties

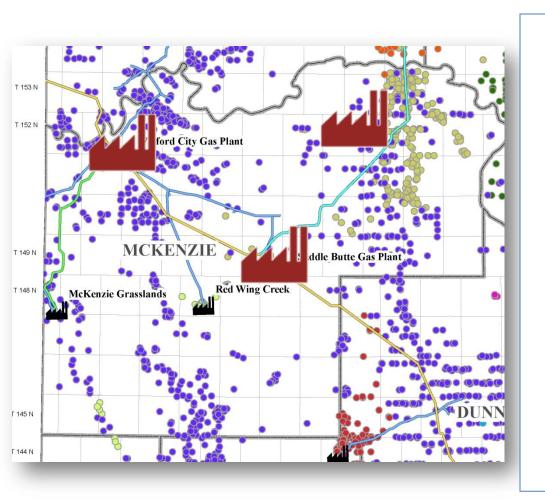


Bear Tracker Energy 150+ Well Connections in 2011

Tie into Pecan's Stanley Facility

Robinson Lake Expansion

McKenzie County



ONEOK Garden Creek Plant

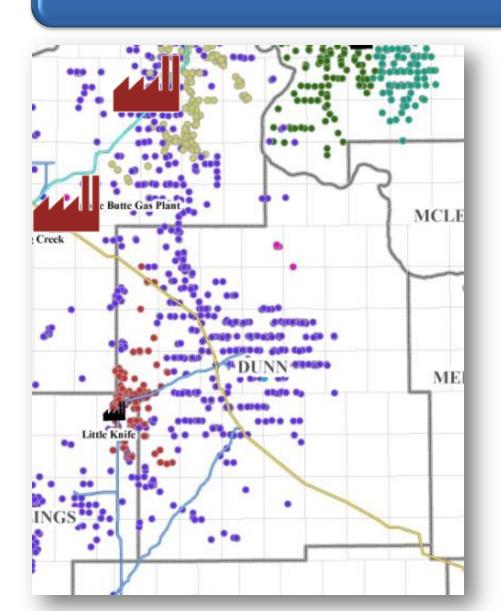
Q4 2011: 100 MMCFD

Hiland Partners Watford City Plant

June 2011: 50 MMCFD

Saddle Butte Pipeline July 2011: 45 MMCFD

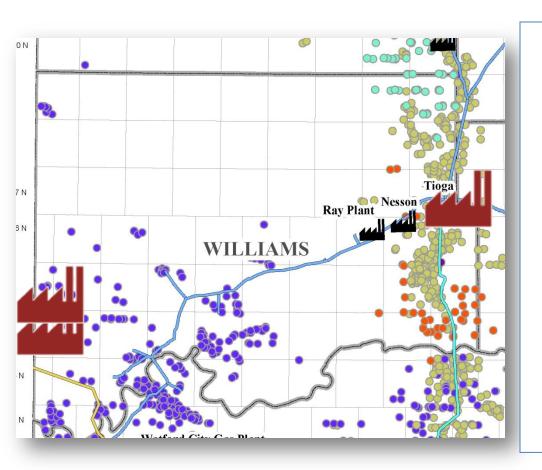
Dunn County



Arrow Pipeline Gathering
System

Saddle Butte Gathering and Processing July 2011: 45 MMCFD

Williams County



ONEOK Stateline I Plant Q3 2012: 100 MMCFD

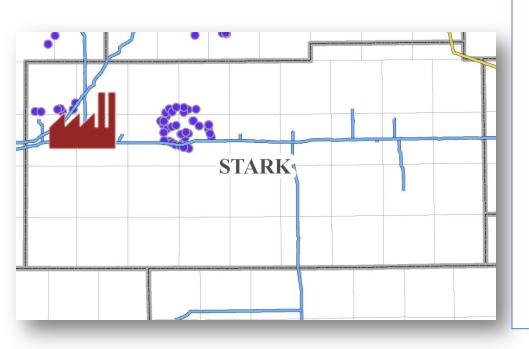
ONEOK Stateline II Plant Q4 2012: 100 MMCFD

Hess Tioga Plant

Current: 110 MMCFD

Q4 2012: 250 MMCFD

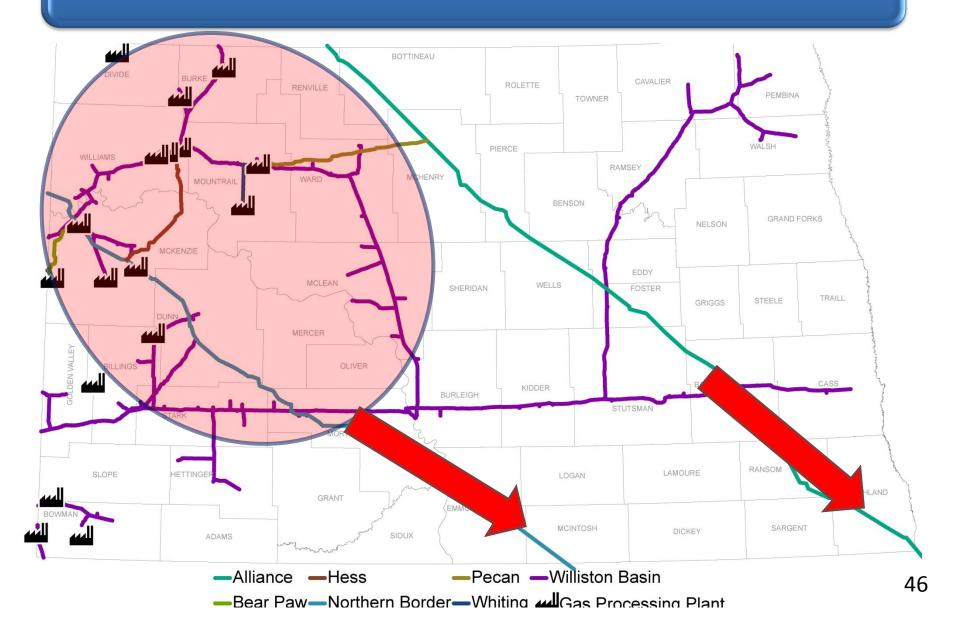
Stark County



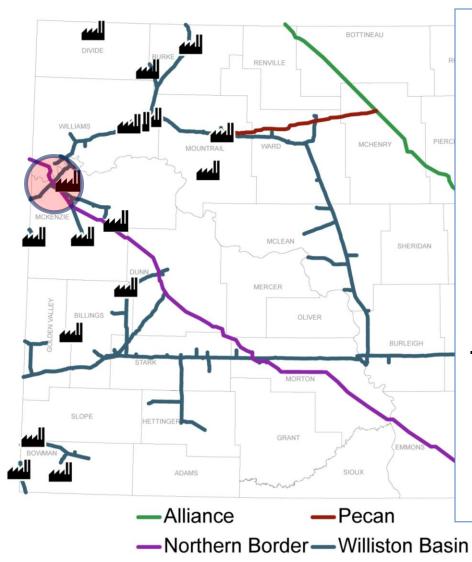
Whiting Pronghorn Plant Nov 2011: 30 MMCFD

Bakken Express
Natural Gas Trucking
Petro Hunt
Little Knife Plant

Natural Gas Challenge II



Williston Basin Interstate Pipeline



<u>Charbonneau Expansion</u>

32 MMCFD

Added in 2008

27 MMCFD

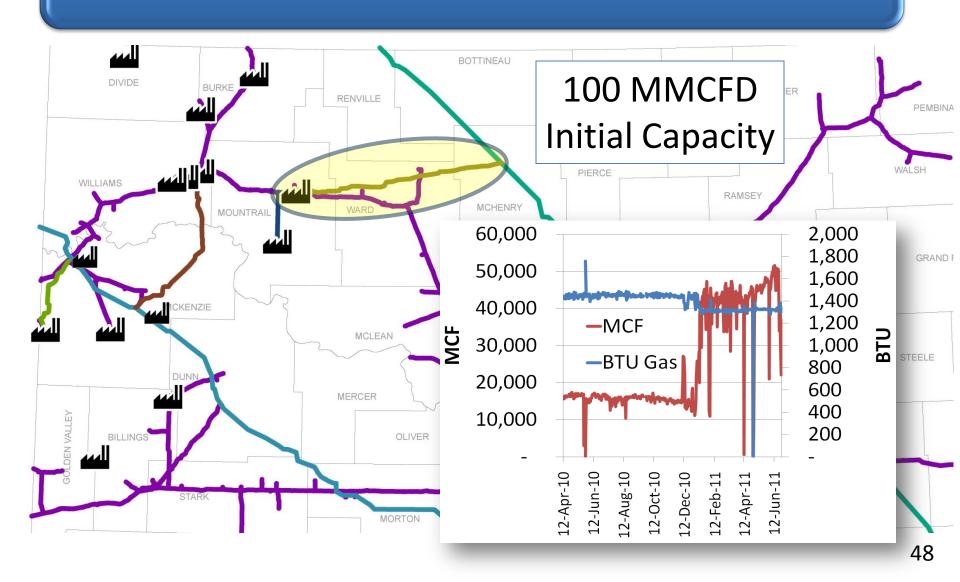
To Added Sep 2011

Baker Storage Expansion

April 2012

Potential Portal Delivery

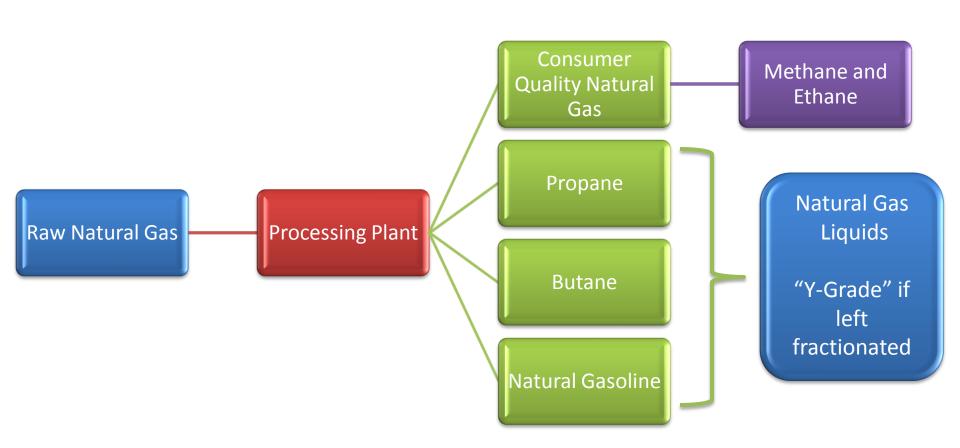
Pecan's Prairie Rose Pipeline



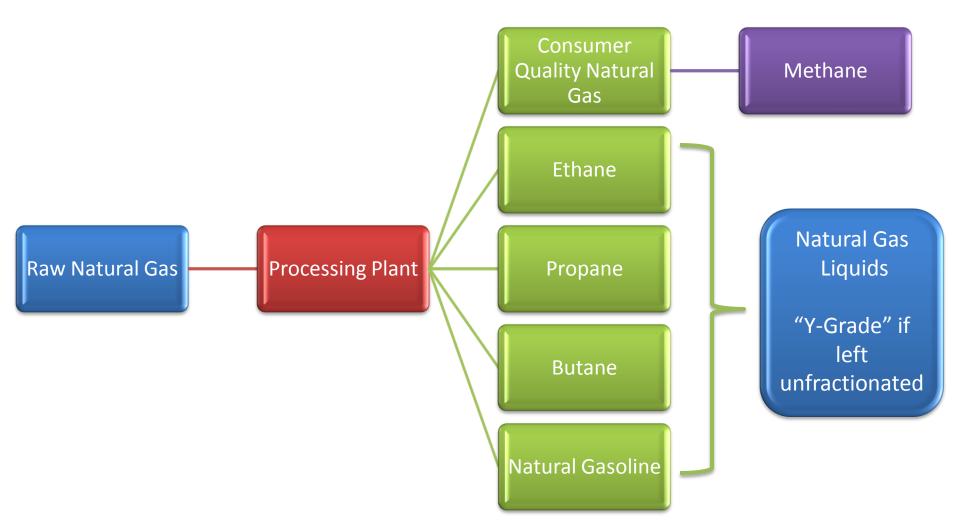
Alliance Tioga Lateral Pipeline



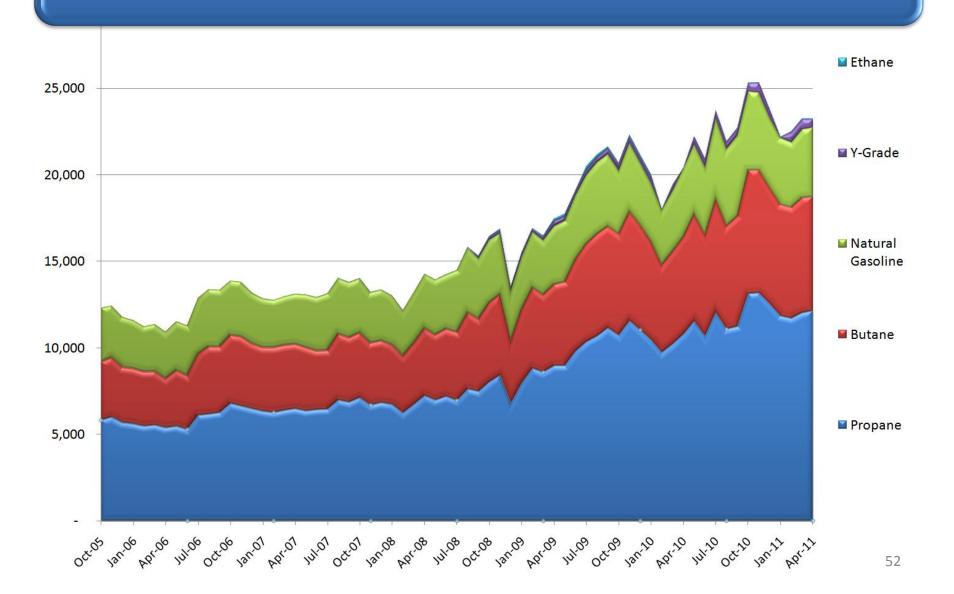
Natural Gas Processing Current Status



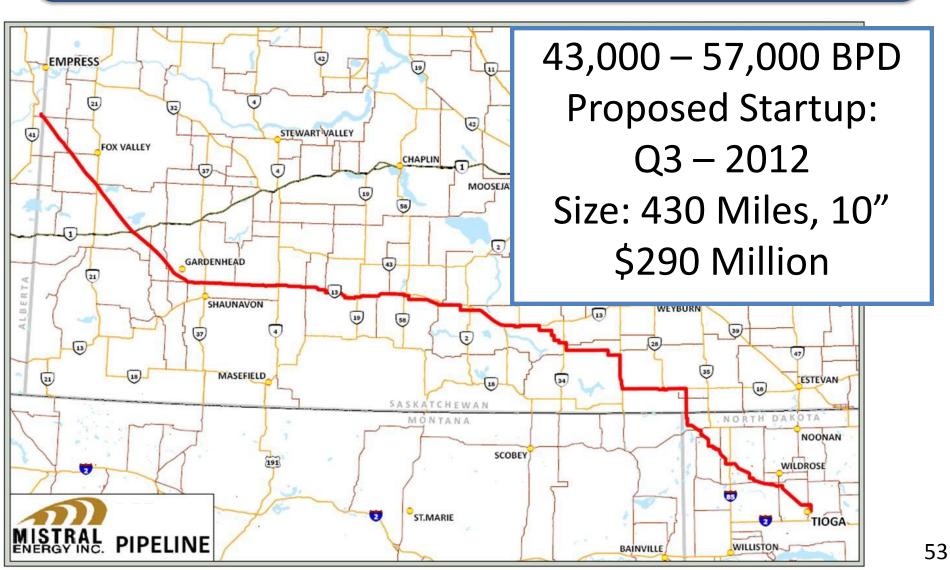
Natural Gas Processing With Ethane Extraction



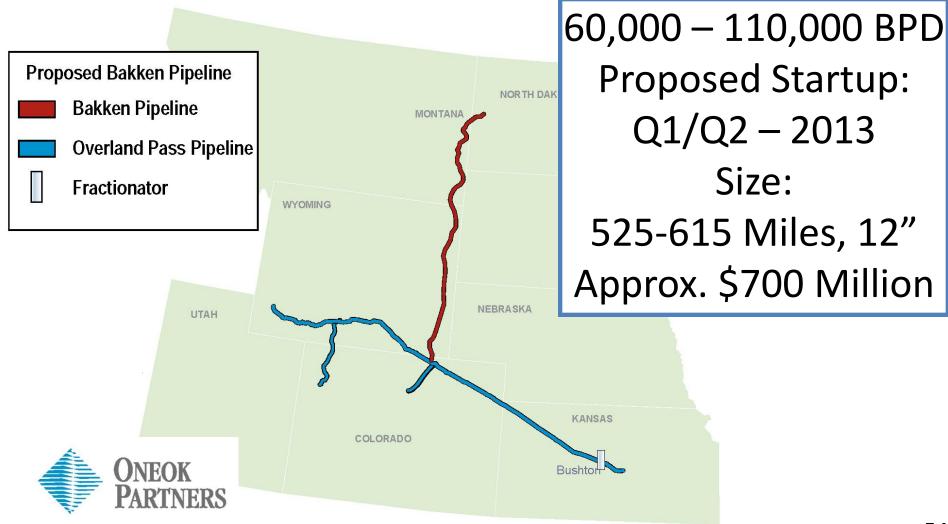
North Dakota Natural Gas Liquids



Vantage Pipeline: Ethane

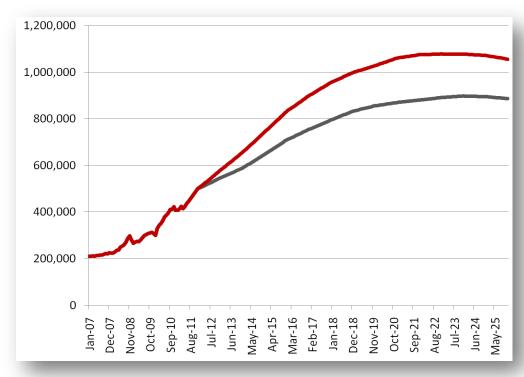


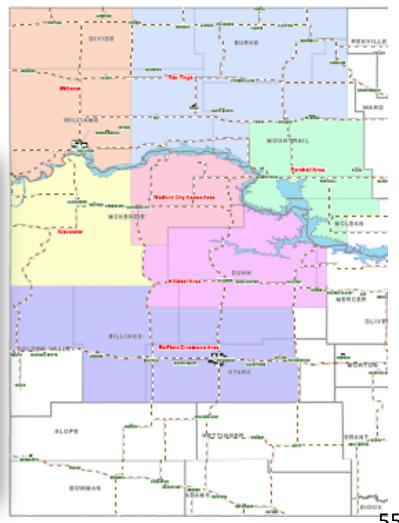
ONEOK Bakken Pipeline: Y-Grade



What's Next for the NDPA...

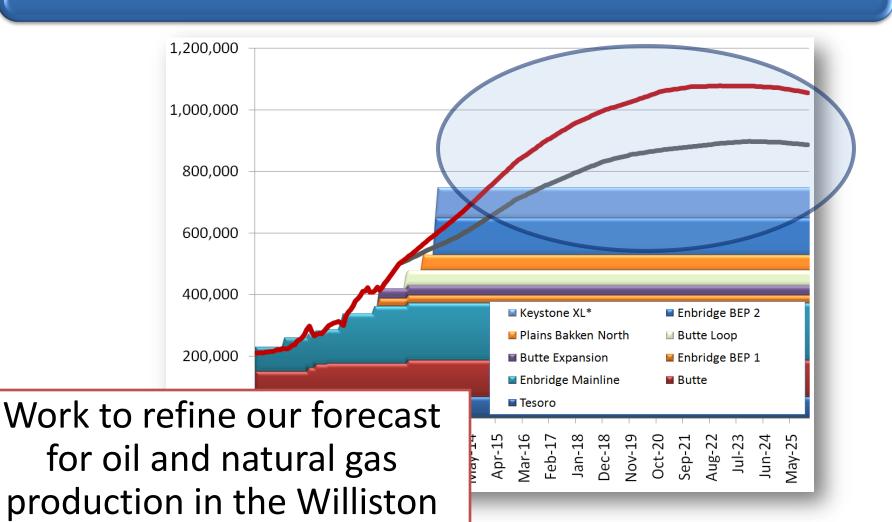
Enhanced Regional Forecasting



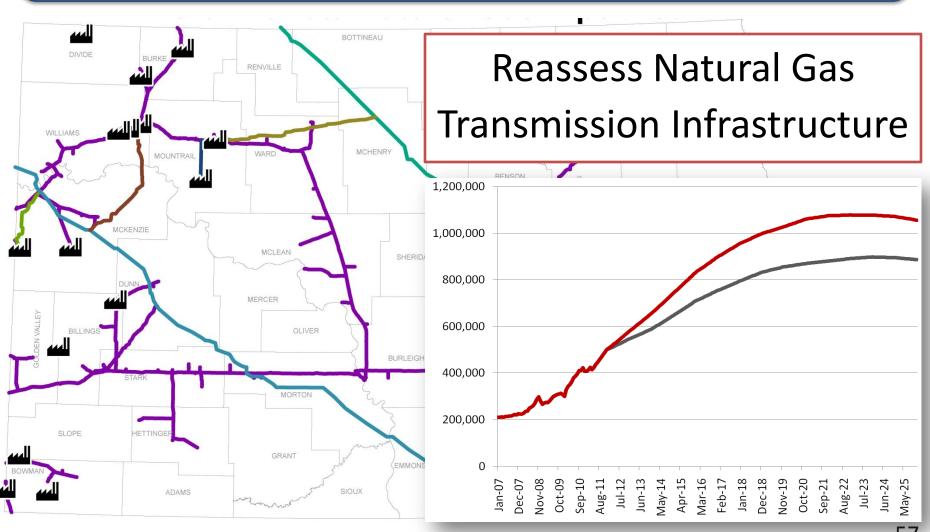


What's Next for the NDPA...

Basin post 2013



What's Next for the NDPA...



Public Presence



NDPA Monthly Webinars

• Past Slides and Video Available Online

Industry **Experts**

 New Topics **Each Month** Audience Interaction



INDUSTRIAL COMMISSION OF NORTH DAKOTA

NORTH DAKOTA PIPELINE AUTHORITY Governor John Hoeven Attorney General Wayne Stenehjem Agriculture Commissioner Doug Goehring Director Justin J. Kringstad

Pipeline Publication

Volume II Issue IV - December 2009

Greetings

Season's Greetings from the North Dakota Pipeline Authority! While the temperature in North Dakota is dropping fast, the activity in North Dakota's oilfields is heating up. With more rigs moving into the basin, improved well completion techniques, and quicker spud to spud times, North Dakota petroleum production is expected to grow for many years to come. Along with the growing crude oil production, several exciting transportation expansion projects are very near completion, with many more in the works. For additional project information, past newsletters, maps, reports, and more please visit the Pipeline Authority website, www.pipeline.nd.gov.

Enbridge Phase VI Expansion Update

The much anticipated Enbridge Phase VI Expansion is nearly complete. Scheduled to be in service on January 1, 2010, the expansion will increase Enbridge's mainline capacity to Clearbrook, MN from 110,000 barrels per day (BOPD) to 161,600 BOPD. Once complete, Enbridge North Dakota will have more than doubled its 2007 system capacity of 80,000 BOPD.

More good news is that Enbridge has no intentions of stopping at 161,600 BOPD and is actively working to gain support from interested shippers for the proposed Portal Reversal Expansion Project or PREP. As proposed, PREP would allow Enbridge to transport an additional 30,000 BOPD by 2011 and up to an additional 115,000 BOPD by 2013.



Details of Enbridge's Phase VI Expansion. Source: Enbridge Pipelines LLC - www.enbridge-expansion.com

tatistic North Dakota Statis

	Aug-09	Sept-09	Oct-09
Average Daily Oil Production, BOPD	232,355	238,265	239,067
Average Daily Gas Production, MMCFD	266.66	259.76	253.04
Wells Producing	4,545	4,579	4,606
Average Rig Count	45	51	56

As of December 16, 2009, there are 77 active rigs in North Dakota

www.pipeline.nd.gov

Prairie Rose Pipeline Nears Completion

An unexpected construction specification change has delayed the startup of the Pecan Prairie Rose Pipeline until Mid-January, 2010. The new 75 mile, 12 inch pipeline is designed to transport up to 80 million cubic feet of unprocessed natural gas per day from Mountrail County to an interconnect with the Alliance Pipeline near Towner, ND.

Proposed Baker Storage Enhancement

Williston Basin Interstate Pipeline Company is developing a project to increase firm deliverability from its Baker gas storage field in eastern Montana. With current firm storage withdrawal rates of 115 million cubic feet per day (MMCFD), Williston Basin sees an opportunity to add an additional 125 MMCFD of firm withdrawal capacity, which would more than double the firm withdrawal rate from Baker. Along with the gas storage field upgrades, Williston

Basin is planning a pipeline expansion to transport the increased, firm storage volumes to an interconnect with the Northern Border Pipeline in North Dakota. The project has a proposed in-service date of 2012 and an open season is expected in January 2010.

Natural Gas Storage Explained

During the mid 1900's, natural gas grew in popularity as a winter heating fuel. As a result, natural gas markets began experiencing seasonal demand swings that needed be managed using underground storage operations. Depleted natural gas fields are most often targeted for storage due to existing infrastructure and reservoir knowledge. During the summer months when demand is low, natural gas is injected into storage and when demand increases in the winter months, natural gas is withdrawn for consumer use.



Source: Williston Basin Interstate Pipeline Co.

ND Pipeline Authority

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lorth Dakota Pipeline Authority



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