



# Haynesville History and Activity Update



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# Forward Looking Statements



This presentation includes forward looking statements. Forward looking statements can be identified by the use of forward looking terminology such as the words “expect”, “estimate”, “project”, “forecast”, “anticipate”, “believes”, “should”, “could”, “intend”, “plan”, “probability”, “risk”, “target”, “goal”, “objective”, “may”, “will”, “endeavor”, “outlook”, “optimistic”, “prospects” or by the use of similar expressions or variations on such expressions, by the discussion of strategy or objectives or by the use of budgets and projections for periods after the date hereof. Forward looking statements are based on current plans, estimates and projections and are subject to inherent risks, uncertainties and other factors which could cause actual results to differ materially from the future results expressed or implied by such forward looking statements. Any forward looking statements made in this presentation speak only as of the date hereof. We do not intend to update or revise these forward looking statements to reflect events or circumstances after the date of this presentation and do not assume any responsibility to do so.

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Certain data and other market information used in this presentation are based on independent industry publications, government publications and other published independent sources. Although we believe these third-party sources are reliable as of their respective dates, we have not independently verified the accuracy or completeness of this information. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, which could cause our results to differ materially from those expressed in these third-party publications.



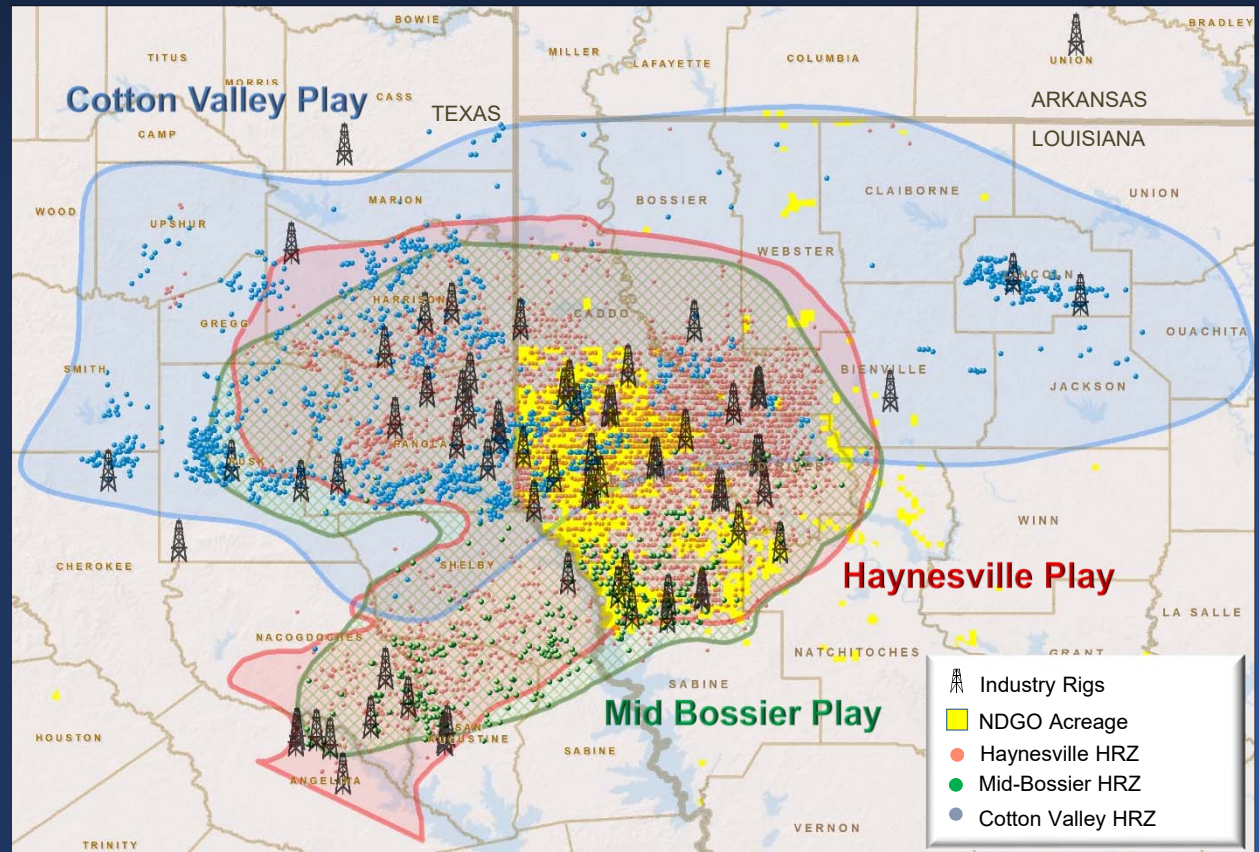
# Haynesville Basin Today



## Today

- ◆ World class resource base attracting public and private operators
- ◆ 58 active rigs in the Haynesville<sup>(1)</sup>
- ◆ 304 Tcf of Mid-Bossier and Haynesville resource per the United States Geological Survey (“USGS”)<sup>(2)</sup>
- ◆ Stacked pay delivering 2+ BCF/1,000’
- ◆ Premium product pricing with proximity to the Gulf Coast and regional demand growth (LNG export, petrochem)

## Haynesville, Bossier and Cotton Valley

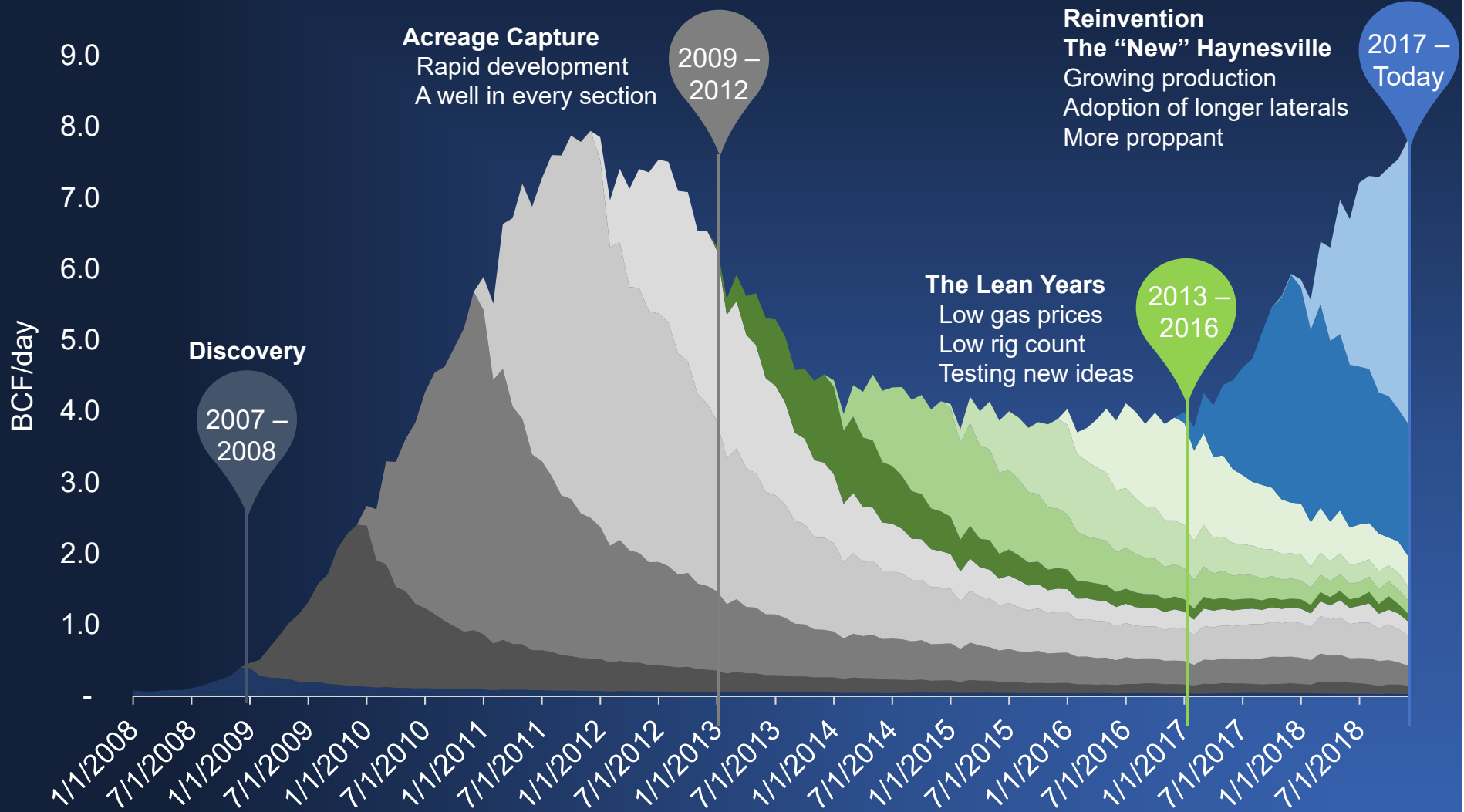


(1) Rig data per Baker Hughes as of 3-15-19.  
(2) Report dated April 2017.  
(3) Data on map per IHS and Drilling Info as of 3-15-2019.

# A Brief Haynesville History: Introduction



## Haynesville Basin Gross Gas Production

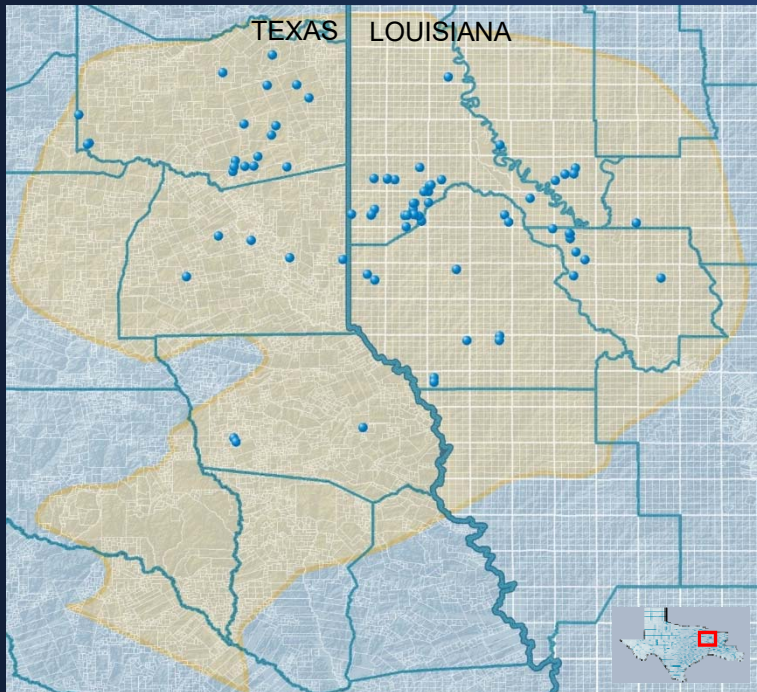


# Discovery: 2008

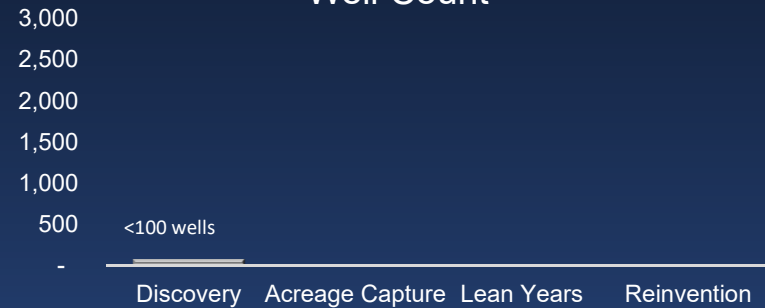


## Initial Testing

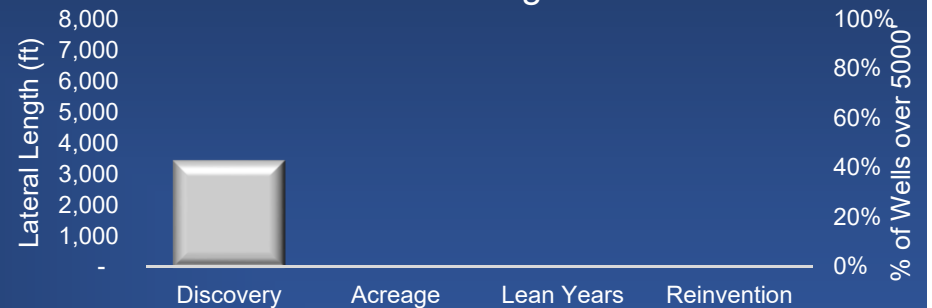
- ◆ Initial drilling scattered across ETX and NLA
- ◆ Testing the viability of the Haynesville
  - Average lateral 3400' with 2 MM lbs. proppant per well
  - No long laterals



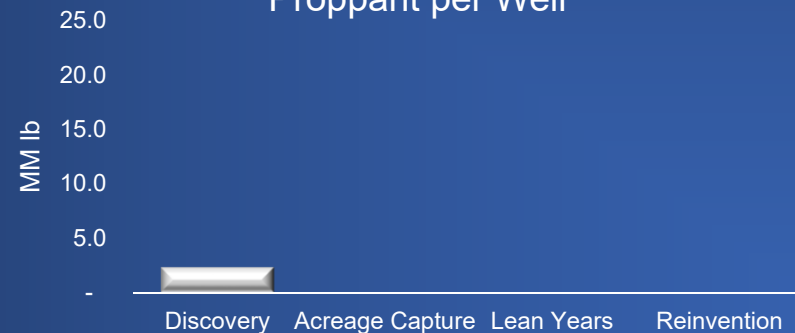
## Well Count



## Lateral Length



## Proppant per Well



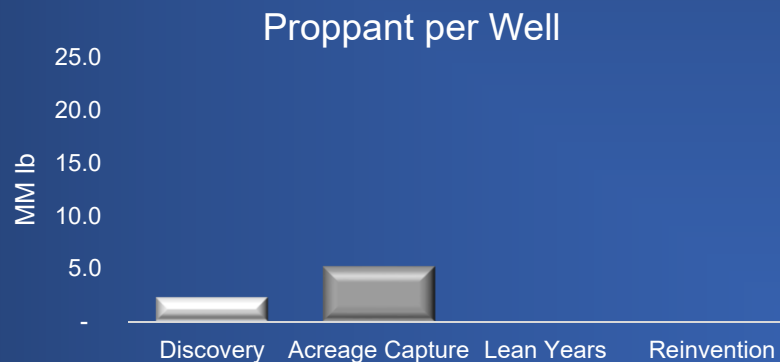
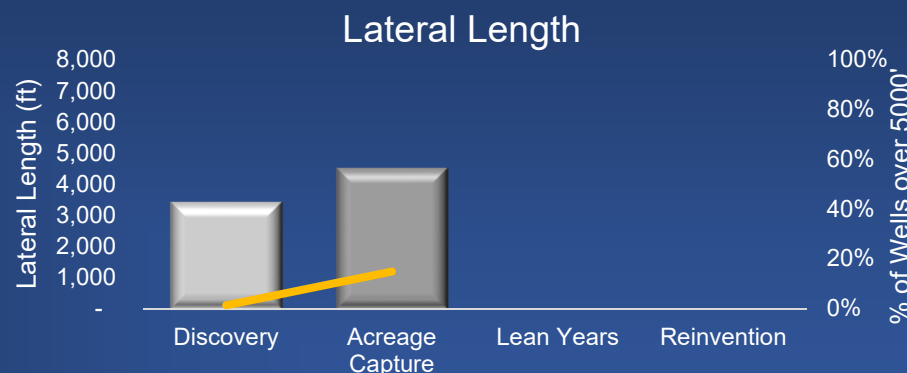
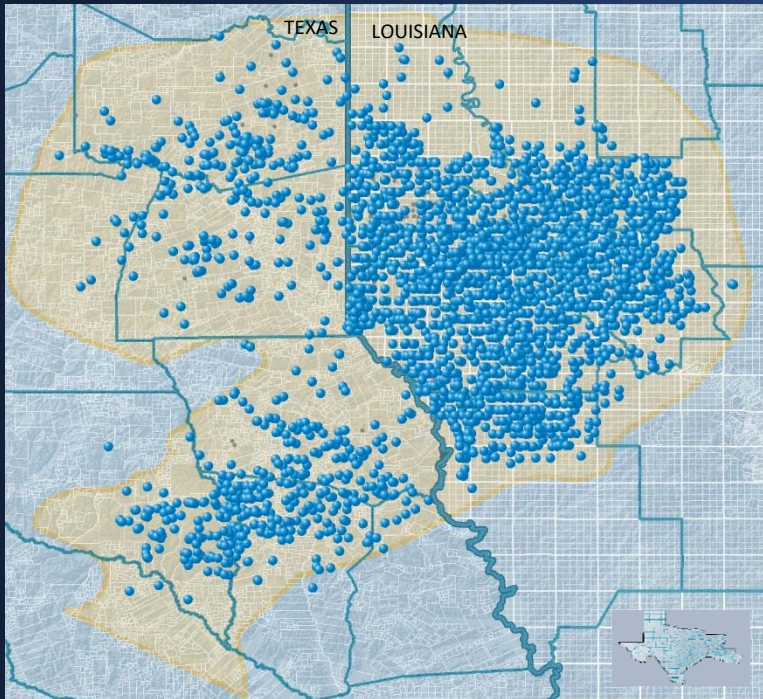


# Acreage Capture: 2009 - 2012



## Rapid Development / Hold Leases

- ◆ High gas prices stimulated development
- ◆ Over 160 rigs active in the basin and drilled nearly 3000 wells
- ◆ Production grew to over 7 BCFD
- ◆ Single section development (<5000') with 5 MM lb proppant per well

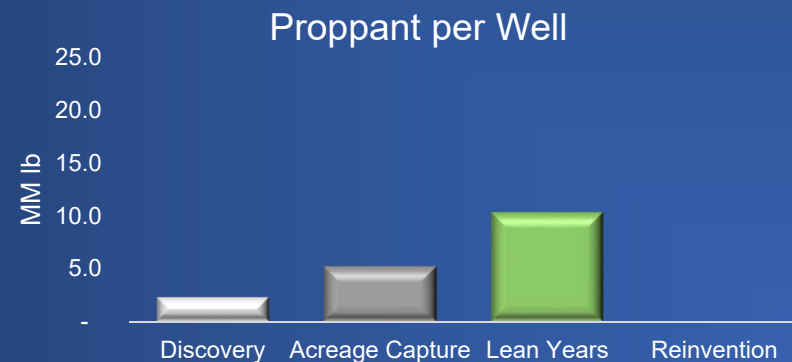
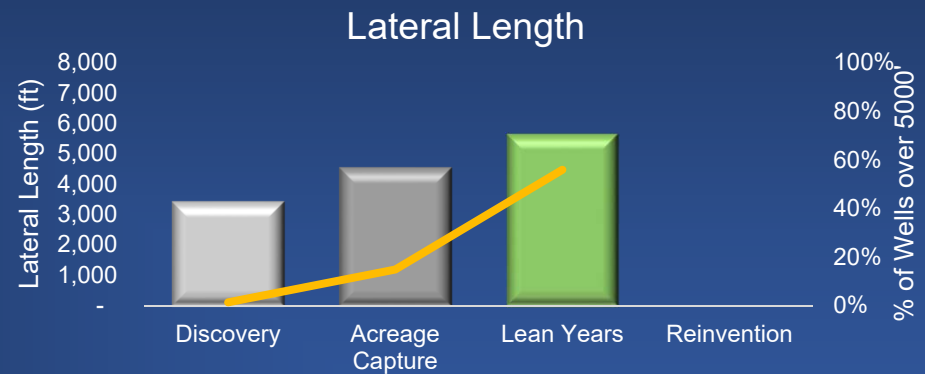
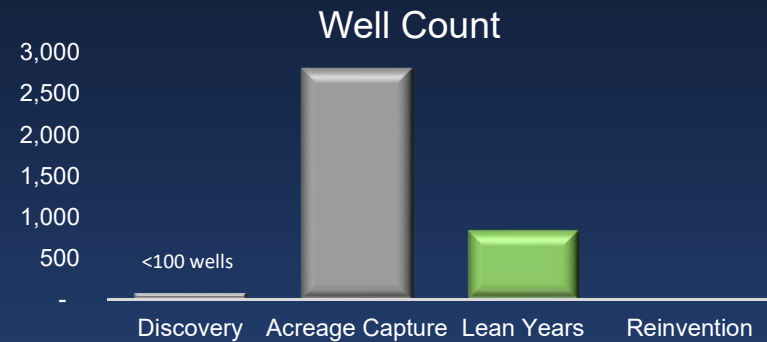
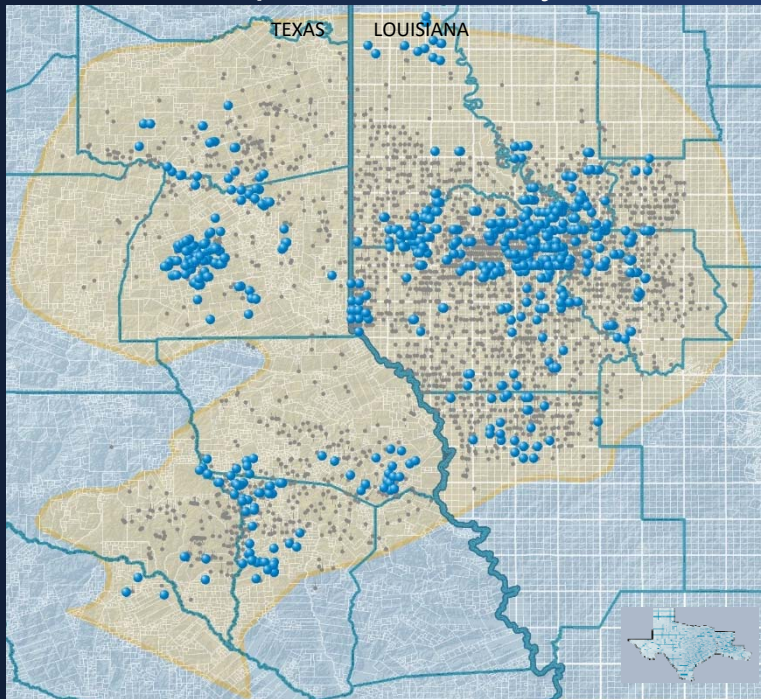


# The Lean Years: 2013 - 2016



## Low Gas Prices / Efficient Development

- ◆ Gas prices dropped below \$2.50/MMBTU
- ◆ As few as 12 rigs in the basin
- ◆ Operators tested longer laterals and larger stimulations
- ◆ Most public companies exit the basin
- ◆ Production drops to 4 BCF/day

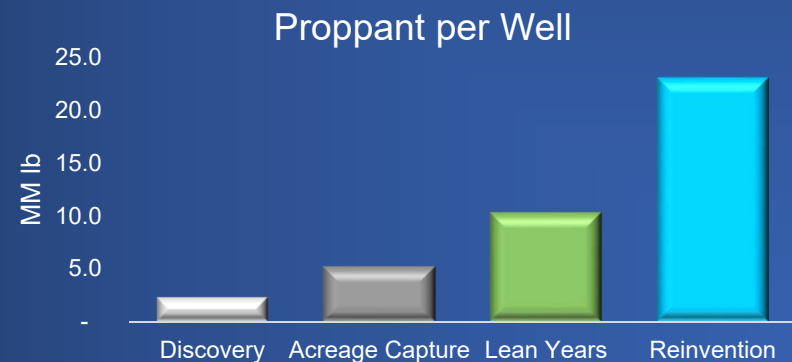
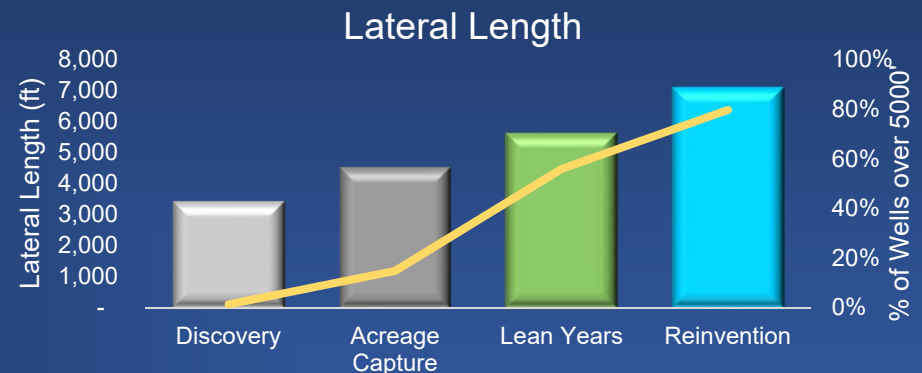
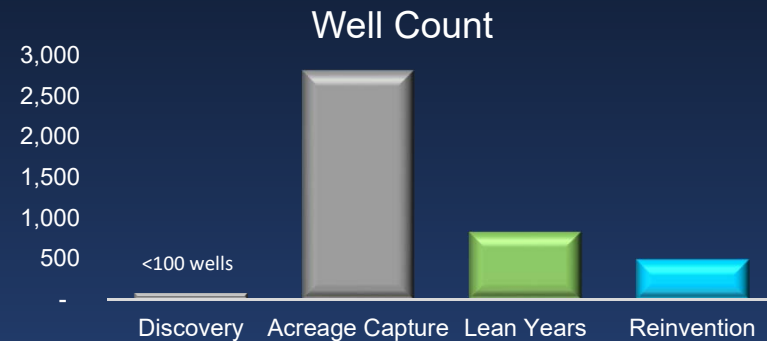
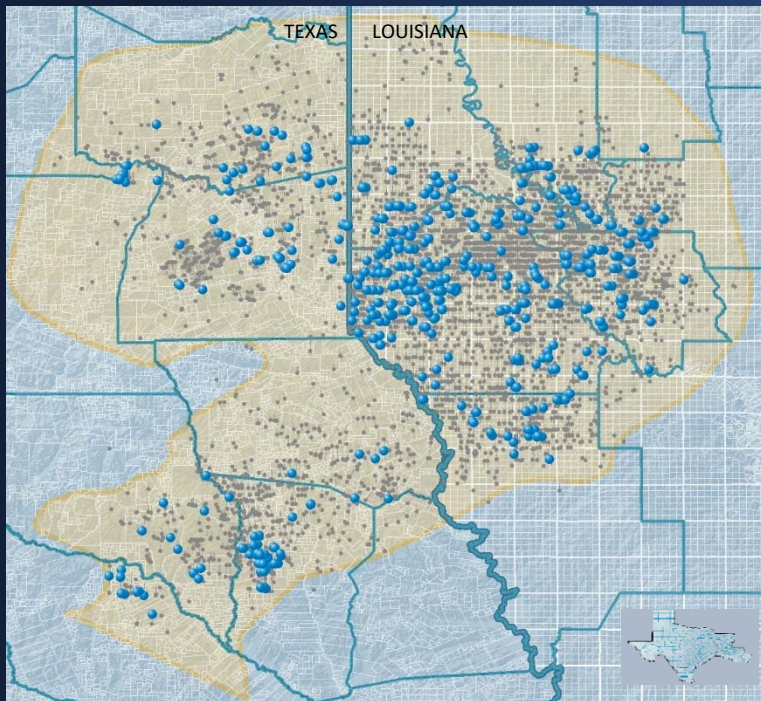


# Reinvention: 2017 - Present



## Long Laterals and Big Proppant Volumes

- ◆ Widespread adoption of long laterals and significantly larger stimulations (25 MM lb/well)
- ◆ “Core” Haynesville has expanded significantly, Bossier horizon economic
- ◆ Basin will pass 2012 peak production in 2019 at over 7 BCF/day

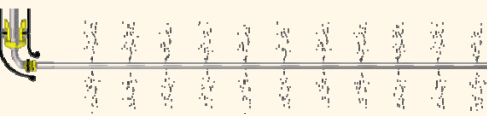
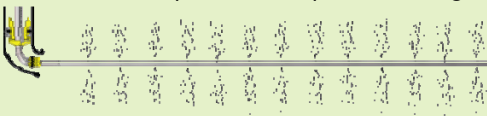
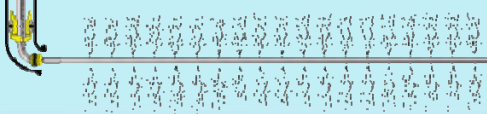
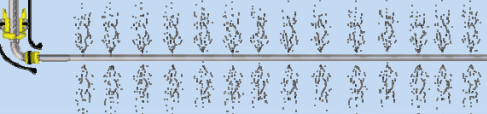
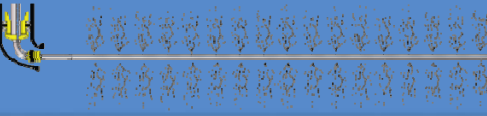




# Drilling and Completion Evolution

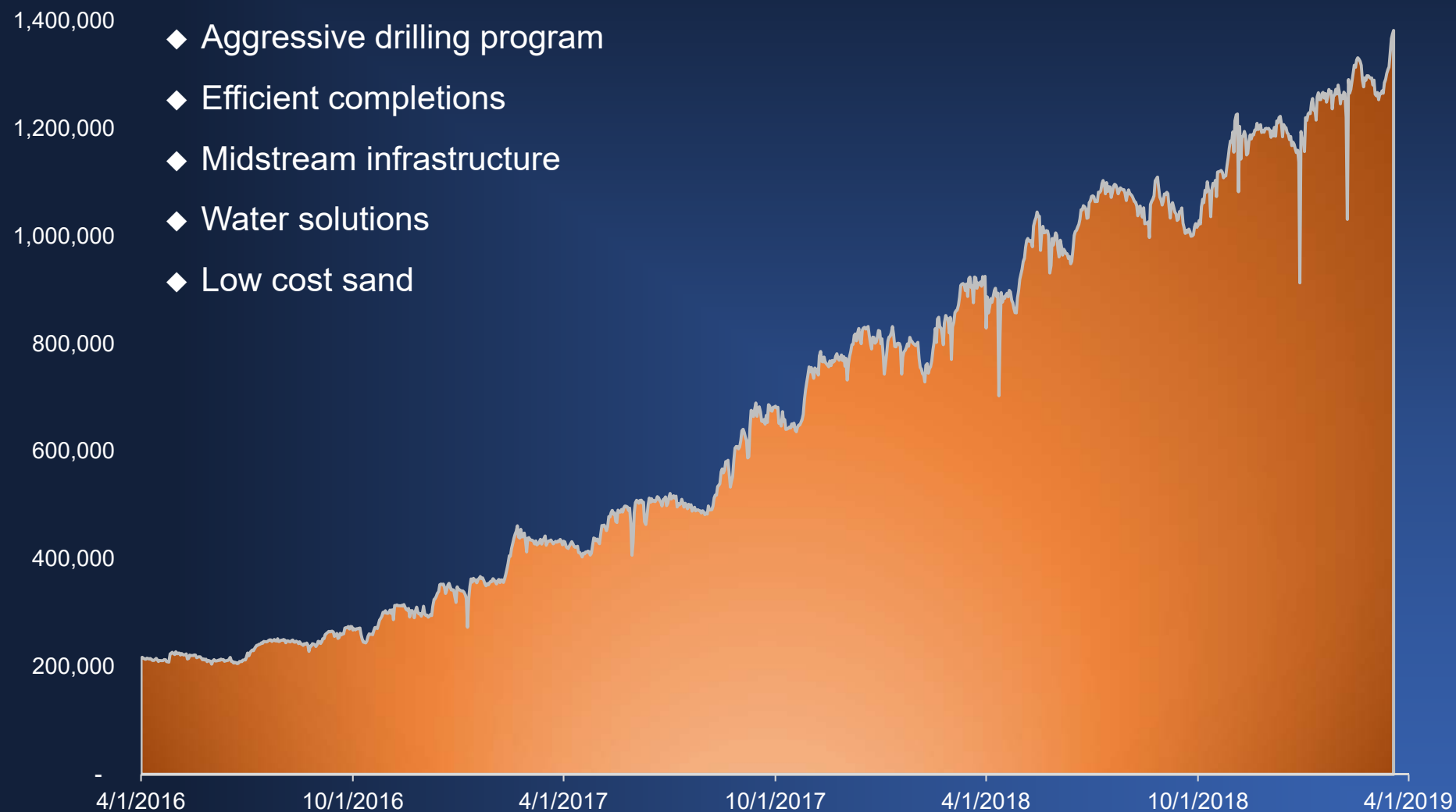


## Longer Laterals and Larger Stimulations Have Transformed the Haynesville

<p><u>Gen 1</u> 4,200' Laterals   700 lb/ft   11 frac stages</p> 	<p><u>2008-2012</u> EUR: 4 BCF BCF/1,000': 1.0 BCF</p>
<p><u>Gen 2</u> 4,200' Laterals   1,200 lb/ft   13 frac stages</p> 	<p><u>2008-2014</u> EUR: 6 BCF BCF/1,000': 1.4 BCF</p>
<p><u>Gen 3</u> 4,500' Laterals   2,700 lb/ft   21 frac stages</p> 	<p><u>2014-2015</u> EUR: 9 BCF BCF/1,000': 2.0 BCF</p>
<p><u>Gen 4</u> 7,500' Laterals   3,100 lb/ft   36 frac stages</p> 	<p><u>2015-2016</u> EUR: 16 BCF BCF/1,000': 2.1 BCF</p>
<p><u>Gen 5</u> 7,500' – 10,000' Laterals   3,800 – 5,000 lb/ft   36 - 100 frac stages</p> 	<p><u>2017 forward</u> EUR: 18+ BCF BCF/1,000': 2.4 BCF</p>

Note: Historical data represents internal estimates for regional EURs.

## Indigo's gross production growth tells our North Louisiana story



# Active & Efficient Drilling Program

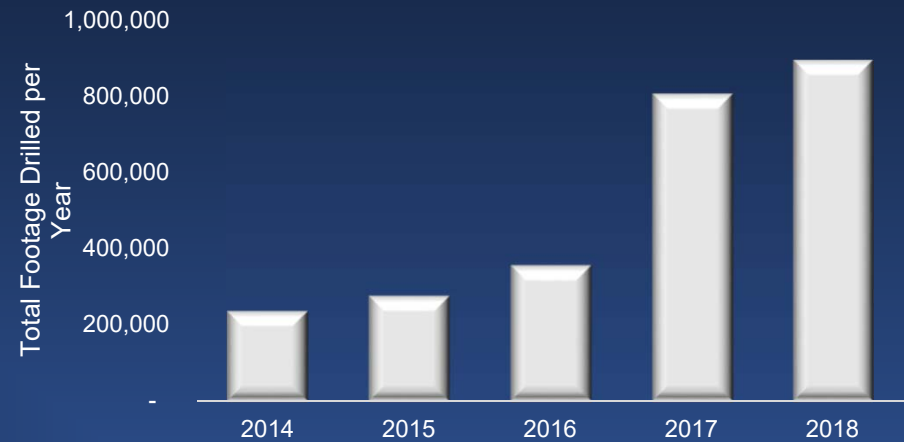


## Grow with the drill bit

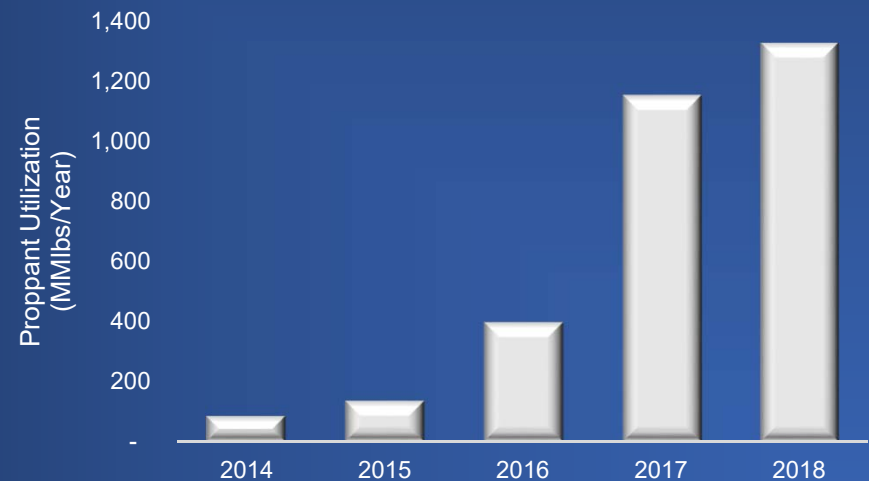
- ◆ Most active driller in North Louisiana
  - Running 7 rigs and 2 stimulation crews
- ◆ Drilled 13 wells with over 8,000' of lateral
  - Average lateral 7,250' in 2018
- ◆ Placed 3,275 stages in 2018
  - Utilized 1.3 bln lbs. of proppant in 2018
- ◆ Current net production approx. 1.0 Bcfe/d
  - Proved reserves over 4.7 TCFe



## Drilling More Total Footage



## Increasing Proppant Usage





# Building Midstream Infrastructure



## Greenfield gathering system provides runway for growth

- ◆ Gathering system currently provides lean gas and rich gas services
- ◆ ~370 miles of primarily large diameter pipelines
- ◆ Multiple centralized amine treating facilities
- ◆ System designed to accommodate Indigo's future growth and 3<sup>rd</sup> party producers



# Integrated Business



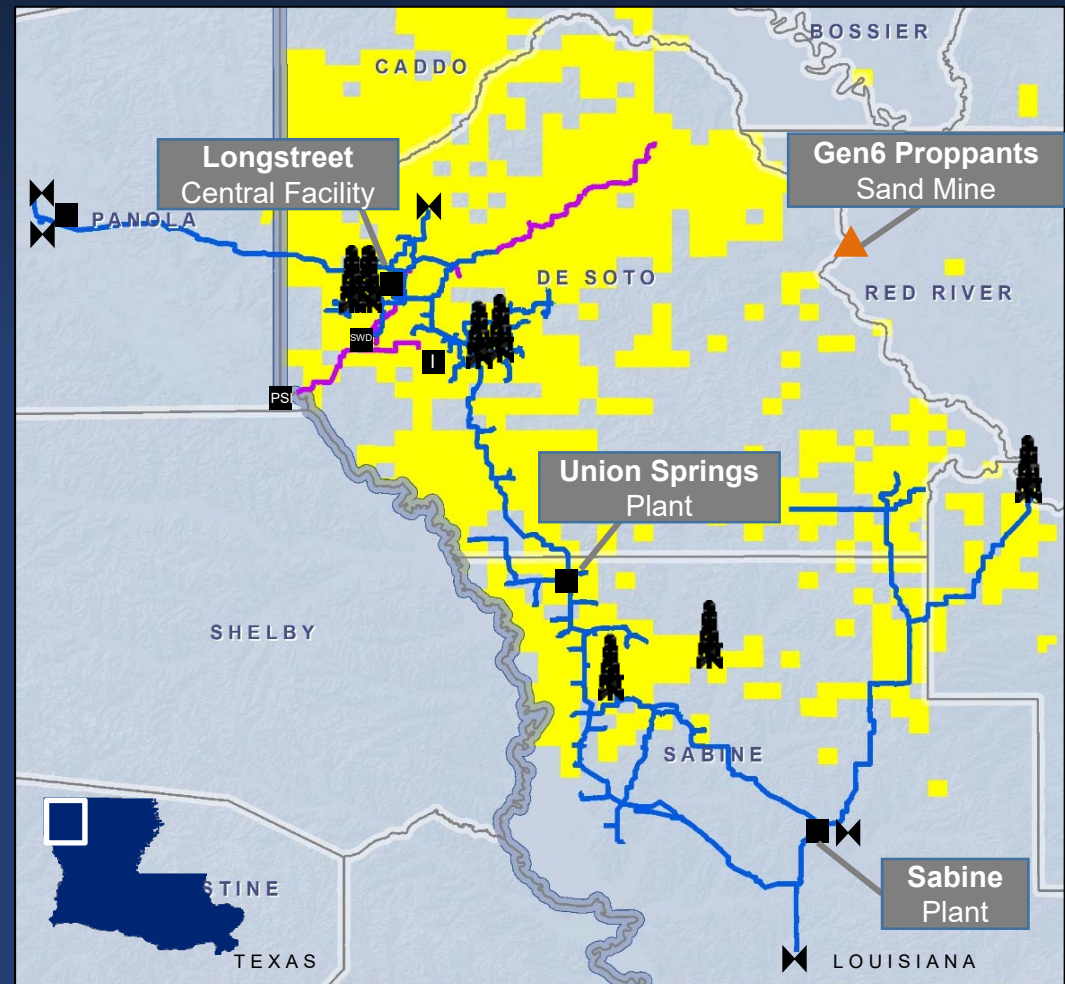
## Indigo and Momentum integrated footprint



- ◆ **Largest Haynesville operator per PLS**
  - 950 net / 1,250 gross MMcfe/d
- ◆ **Most active driller with 8 rigs running**
  - 435,000 effective net acres
- ◆ 168 employees



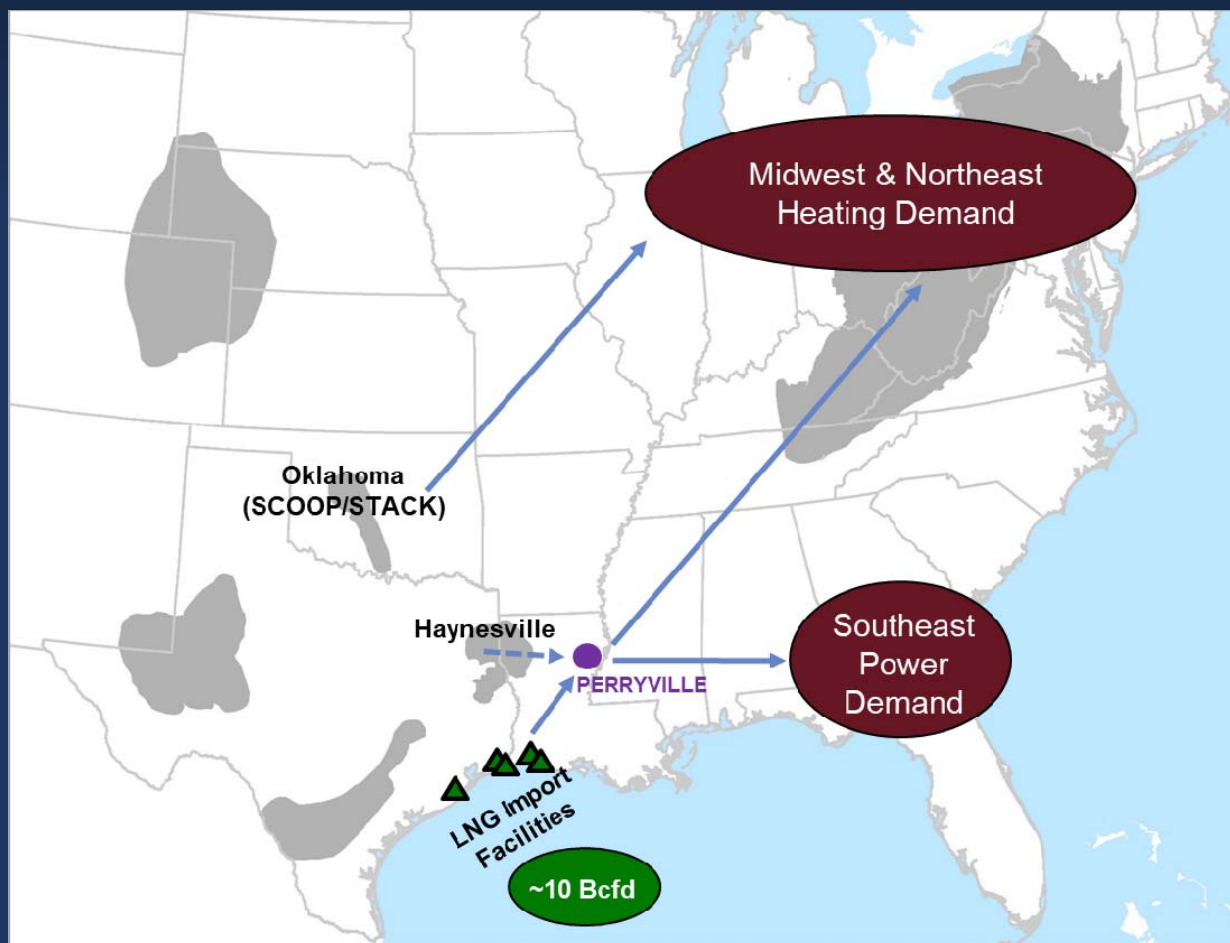
- ◆ **Integrated midstream joint venture**
  - Large scale midstream system in service
  - Sand mine online late 2019
  - Fresh and produced water services
- ◆ 80 employees





## Haynesville gas initially flowed east and north to access traditional demand centers

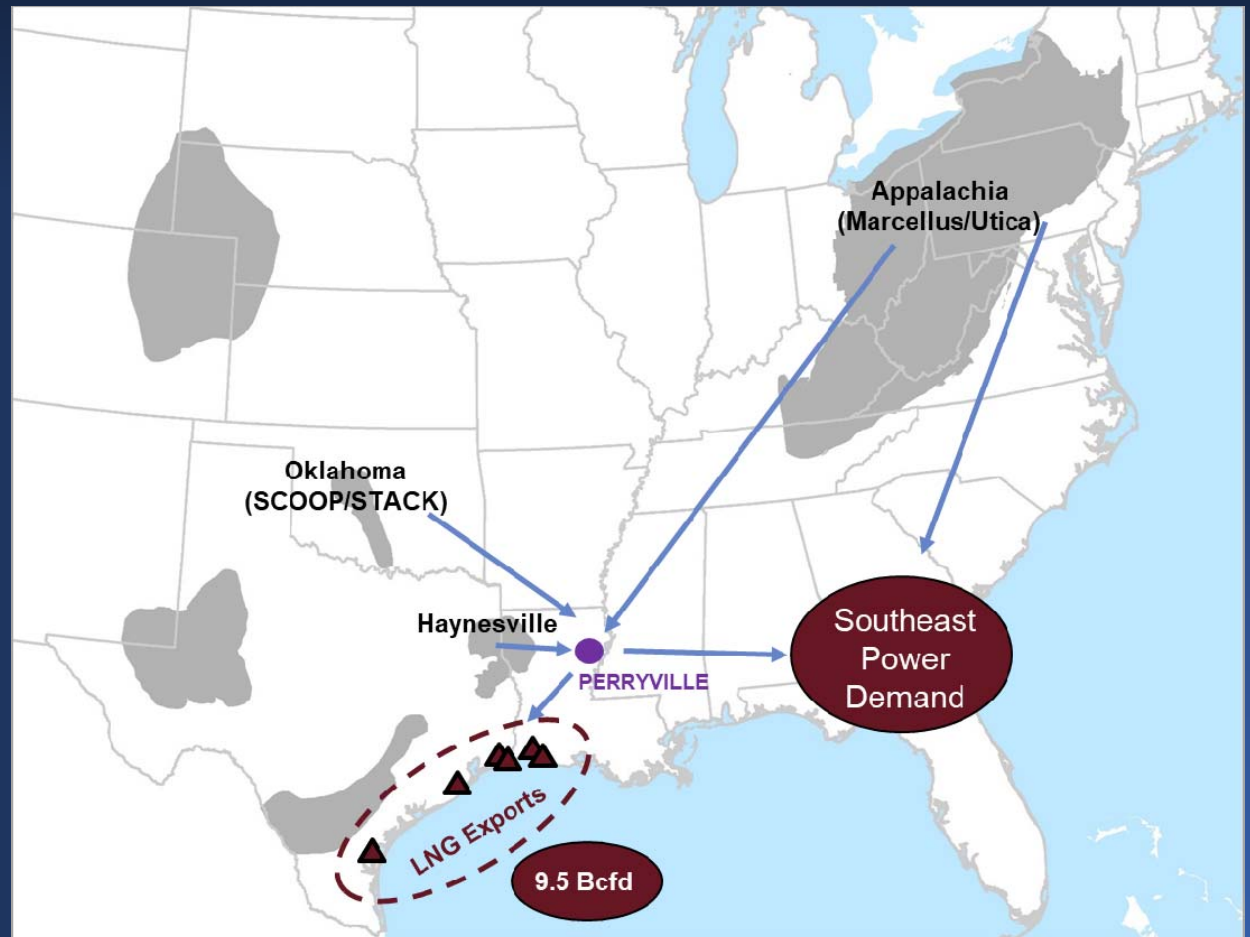
- ◆ Prior to the Haynesville and US Shale boom natural gas flowed from the Gulf Coast to demand centers in the Northeast, Midwest and Southeast
- ◆ Initial Haynesville development required new pipelines to move gas east to Perryville to access existing pipeline infrastructure
- ◆ US LNG facilities were import terminals providing supply to offset perceived shortfalls in future US production





## Appalachia production growth displacing traditional Haynesville markets

- ◆ Appalachia production growth completely changed the US gas market
  1. Saturated the Northeast heating demand market
  2. Reversed traditional north-to-south pipeline flow
  3. New pipelines built to access Midwest and Southeast markets
- ◆ Shale Gas development led to reversal of LNG facilities – import-to-export – and new greenfield sites
  - 9.5 Bcfd in-service or under construction today



# LNG Market Share

## Haynesville positioned to access growing LNG demand center on the US Gulf Coast

- ◆ LNG demand on the US Gulf Coast to increase 10+ Bcfd by 2030
- ◆ Haynesville proximity to the US Gulf Coast provides superior margins relative to competing dry gas basins
- ◆ New large diameter pipelines required to connect Haynesville to LNG demand

